

Good Practices in **South-South** and **Triangular Cooperation** for **Sustainable Development - Volume 3**



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Designed by Juan Pablo Ramos Valadez



EXECUTIVE SUMMARY

This year marks the 75th anniversary of the creation of the United Nations and ushers in the Decade of Action to deliver the Global Goals by 2030. For the achievement of ambitious goals, South-South and triangular cooperation has been further strengthened by developing countries in sharing ideas, knowledge, skills and experience in order to address common challenges and build shared future for all, leaving no one behind. Countries and development partners are increasingly embracing South-South and triangular cooperation as integral part of their inclusive global partnership to tackle development issues and to realize the global development agendas.

The BAPA+40 Outcome Document acknowledged the importance of sharing of knowledge, experiences and best practices, particularly homegrown development approaches, on South-South and triangular cooperation in the attainment of sustainable development and the implementation of the 2030 Agenda Sustainable Development. It invited all relevant stakeholders be it State or non-State actors to do so in order to intensify efforts towards the eradication of poverty in all its forms and dimensions through South-South and triangular cooperation.

Built on the first volume of this series of the “Good Practices in South-South and Triangular Cooperation for Sustainable Development” launched in 2016 and the second volume in 2018, this year the third volume continues to showcase and expand on how South-South and triangular cooperation is being leveraged to support the efforts of countries to accelerate the progress towards the attainment of 17 Sustainable Development Goals (SDGs). This volume features 195 good practices, nearly doubling the size of the previous volume, presented by 77 partners including Member States, intergovernmental organizations (IGOs), United Nations entities, and other development partners. This collection of good practices demonstrates the spirit of solidarity, peer-to-peer learning and collective efforts among countries and partners in order to address development challenges that would be difficult to tackle independently; and inspires how concrete solutions can be adapted and replicated in a wider geography.

In the presentation of the good practices, highlights are given to innovative initiatives that have led to the cross-country transfer of knowledge and experience between countries of the South for overcoming common challenges and for their mutual benefits; characterized of environmental, economic and social sustainability; tested technical feasibility; and their potential of replication to achieve impact at scale.

More than ever before, global solidarity and strengthened cooperation, especially in light of the COVID-19 pandemic, are required to overcome development-related challenges. Actionable solutions and concerted efforts made systematically and strategically by all development partners are key to a brighter development landscape.

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Strengthening Policies for Early Childhood Development in Argentina and Brazil

Developing technical exchange initiatives in Argentina and Brazil towards strengthening public policies for the promotion of early infant development

Challenge

Brazil has made great progress in recent years in the creation of public policies for women, mothers and children. With the implementation of the Unified Health System, the Unified Social Assistance System, the right to basic education and greater access to childcare centres, Brazilian children live in better conditions today than they did 30 years ago. Furthermore, the *Criança Feliz* (Happy Child) programme aims to promote the integral development of children through the strengthening of family skills, seeking to contribute to the breaking of the cycle of poverty, the reduction of violence, the reduction of truancy and other social benefits.

However, inequality persists in the country, and many poor families live in a situation of social risk and vulnerability. In this context, there is a great consensus on the need to invest in human development and economic growth, and in the fight against social inequalities, focusing on health, early childhood education and childcare, especially in early childhood, the age group from birth to six years.

Towards a Solution

This project aimed to develop knowledge exchange initiatives on early childhood development policies between the technical teams of *Primeros Años* programme of Argentina and the *Criança Feliz* programme of Brazil. The aim was to generate new knowledge about interventions in vulnerable families with young children, which could enhance the impact of public policies aimed at improving their living conditions. In doing so, this project fulfils Sustainable Development Goal (SDG) 1 – End poverty in all its forms everywhere, by promoting the optimization of social protection instruments to prevent and reduce poverty, and to provide a safety net for young children.

Multidisciplinary working teams of technicians from the Ministry of Social Development and the National Council for the Coordination of the *Primeros Años* Programme of Argentina, and the Ministry of Social Development and the Ministry of Citizenship of Brazil were created in order to share experiences and knowledge, as well as information about the challenges faced in the implementation of the early childhood development programmes in both countries. These teams also exchanged information on techniques and methodologies used in interventions with families with children of 0–6 years in the territory, as well as tools for monitoring and evaluating programmes. Visits were conducted to family homes in nine locations from eight states of Argentina, and seven locations from seven states of Brazil, where they were able to exchange with local technicians and facilitators and participate in community training meetings or community organizations.

Finally, and most importantly, the mission of the technicians involved in this initiative was to train local actors engaged in the implementation of the *Primeros Años* and *Criança Feliz* programmes in the respective countries: 130 Argentine technicians at the national and provincial levels, 35 technicians from the Federal Government of Brazil, and 2,500 municipal supervisors and 10,600 municipal visitors from Brazil.

One of the main results of the exchanges was the design and development of successful methodologies and techniques of intervention in families with children of 0–4 years in Argentina and

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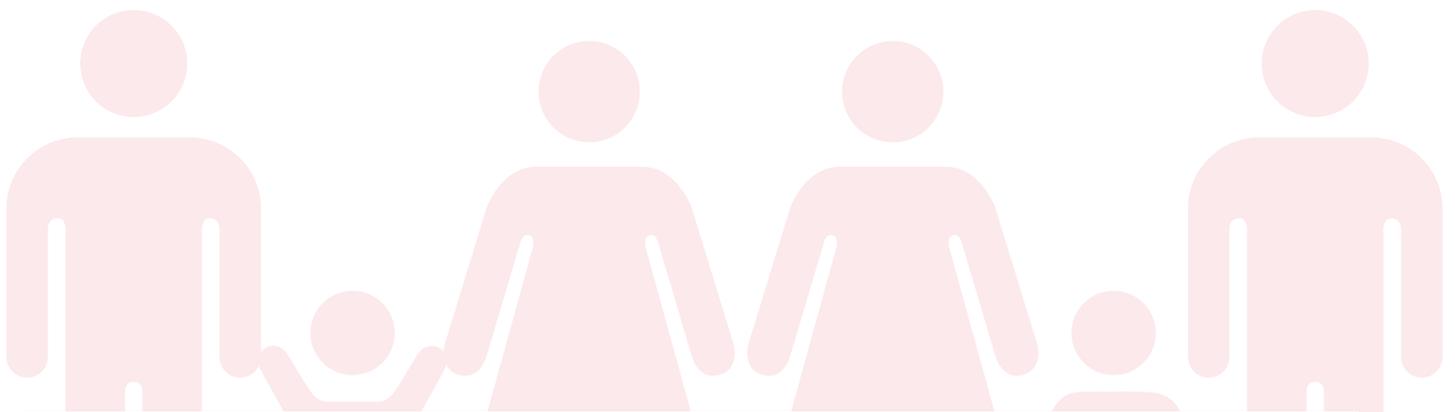
of 0–6 years in Brazil in vulnerable situations. The technical areas of the programmes (information production and evaluation, content, communication) broadened the teams' view on the scope of the respective practices, improving their development and local activities, contributing specifically to the systematization of the methodology of visits, parenting and support meetings, and the transmission of the network work approach.

Also, as a guarantee of the sustainability of the initiative, the national and local officials and technicians of both programmes who participated received the necessary training to be able to replicate and adapt what they learned to their practices and the respective local realities.

In Argentina, the initiative benefited 155,000 families with children of 0–4 who live in poverty and in Brazil, it benefited 3 million children of 0–3 years whose families are beneficiaries of the *Programa Bolsa Familia* (Family Grant Programme), 640,000 pregnant women from the same programme, 75,000 children whose families are beneficiaries of the continued payment benefits, as well as 8,600 children from families in shelter services in Brazil.

Contact:

Name: General Directorate for International Cooperation
Organization: Ministry of Foreign Affairs, International Trade and Worship, Argentina
Email: dgcin@mrecic.gov.ar



PROJECT NAME: Strengthening actions for the promotion of early infant development

COUNTRIES/REGIONS: Argentina, Brazil

NOMINATED BY: Government of Argentina and Government of Brazil

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.3, 3.2, 4.2

SUPPORTED BY: Argentine Fund for International Cooperation (FO.AR) and Brazilian Cooperation Agency (ABC)

IMPLEMENTING ENTITIES:

Argentina: General Directorate for International Cooperation (Ministry of Foreign Affairs, International Trade and Worship), Ministry of Social Development and National Council for the Coordination of the *Primeros Años* Programme

Brazil: Brazilian Cooperation Agency and Ministry of Social Development/Ministry of Citizenship

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2019

URL OF THE PRACTICE: Not available

African Agro-industry Inclusive Development through Bamboo

Developing a green bamboo agro-industry for greater poverty alleviation and ecological protection in Rwanda

Challenge

Landlocked and hilly, Rwanda is one of world's least developed countries and one of Nile River head-stream countries. It faces major social challenges such as a high poverty and unemployment rate, and major economic challenges, such as a weak industrial capacity, with over 95 percent of produce imported. In addition, it faces major ecological challenges with severe soil and water erosion, as well as a negative impact on countries downstream of the Nile River caused by a sharp decline in forest coverage from 75 percent before the 1994 genocide to 28 percent. Rwanda has rich bamboo resources but are untapped due to lack of technology.

Towards a Solution

The project's objective is to develop the bamboo sector as a new green alternative agro-industry to address severe poverty, unemployment and ecological problems, considering its unique advantages such as its fast growth, strong renewal, short cycle and large biomass.

The following innovative approaches were used:

- strong support provided by both the Governments of China and Rwanda;
- a holistic approach. The project is designed on the basis of the international principle of inclusive and sustainable development, as well as Rwanda Vision 2020, China National Bamboo Research Center (CBRC)'s intensive socioeconomic and ecological survey in Rwanda;
- a scientific approach. Bamboo species were introduced throughout the country and planted according to the scientific principles of site match, biosecurity and industrial end use; bamboo technologies were transferred, adapted and developed to ensure high bamboo productivity and realize ecological and commercial benefits;
- a streamlined process from bamboo research and development, pilot production, demonstration, technical transfer and service and training to promotion;
- effective training. Reciprocal training in Rwanda and in China, with around 1,512 trainees in 150 training programmes in Rwanda, and 12 trainees in China; methods of training in general together with order production;
- technical service tours to different bamboo firms;
- product exhibition and awareness exposition attended by Rwanda ministers, ambassadors, ministers/governors and officials, entrepreneurs and farmers from Rwanda and five other East Africa Community (EAC) countries.

The Ministry of Commerce of China (MOFCOM) and the Ministry of Lands and Forestry of Rwanda (MLF) were responsible for funding the project framework. CBRC and the Rwanda Water and Forestry Authority (RWFA) were authorized to implement the project with support from the Global South-South Development Centre; some non-governmental organizations (NGOs) in Rwanda have also joined.

Thirteen Chinese experts were deployed in Rwanda. Four sets of bamboo processing machines for toothpicks, curtains and furniture and for building concrete boards were imported from China; four large water-sprinkler systems were provided and all-year production green-house nurseries were

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established as bamboo propagation and production incubators (BPPIs) (2,000m² for each nursery); four selected bamboo species were introduced; up to 400 ha of bamboo plantation were established along river banks and degraded areas for soil and water conservation, and for providing a raw timber supply for value-added processing. Additionally, a comprehensive high-value bamboo processing technology incubator (HBPI) was set up and produced over 100 kinds of products in four lines of bamboo furniture, weaving, curtains/blinds and toothpicks of low-, middle- and high-class quality for markets and daily life. Moreover, around 30 small bamboo firms were incubated, and employees received at least US\$8 per day. **The bamboo agro-industry of supply chain and value addition was created and sustained from scratch, with a total annual production value of around US\$ 1 million, and over 2,000 jobs generated (around 80 percent women).** In 2019, a Chinese private company invested US\$5 million in bamboo concrete board production to replace its importation from China to Rwanda and other EAC countries due to its high construction market demands driven by the China Belt and Road Initiative.

The project is sustained and effectively operating. Both BPPI and HBPI effectively carry out research and development, pilot

production, demonstration and training. Bamboo seedlings produced by BPPT are to supply national afforestation; bamboo products produced by HBPI are in good marketing, including export to some nearby EAC countries. Bamboo will be further produced into fuel charcoal to meet high market demands.

The project has been successfully duplicated in EAC countries such as Burundi, Kenya, Uganda, and the United Republic of Tanzania. It has made a major contribution to their rural development by exploring their rich bamboo resource, since the project technologies are easy to learn and simple to operate, require low input and provide fast returns.

Contact:

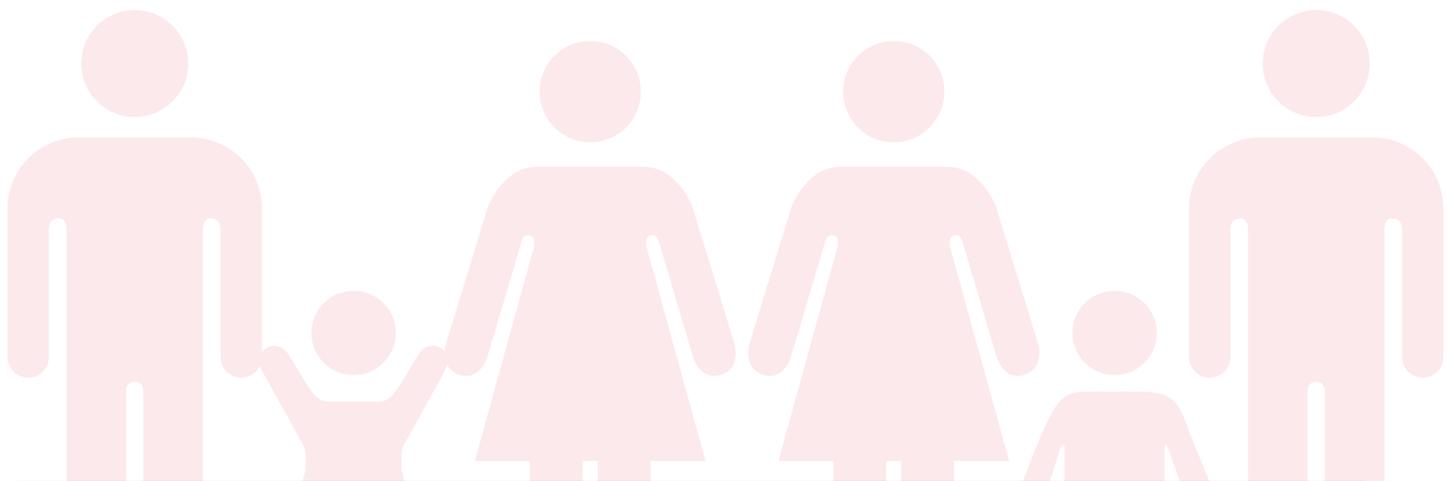
Name: Dr Xingcui Ding

Title: Professor and Director

Organization: International Cooperation Division, China National Bamboo Research Centre

Email: dxc01@hotmail.com, 13805791796@163.com

WeChat: dxc19630725



PROJECT NAME: Developing a Green Bamboo Agro-industry for Greater Poverty Alleviation and Ecological Protection in Rwanda

COUNTRIES/REGIONS: China, Rwanda and other East African Community countries

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.5, 13.1, 13.2, 15.1, 15.3, 15.4, 17.7, 17.8, 17.9

SUPPORTED BY: The Governments of China and Rwanda, Global South-South Development Centre Project

IMPLEMENTING ENTITIES: China National Bamboo Research Center (CBRC)

PROJECT STATUS: Completed

PROJECT PERIOD: 2009–2019

URL OF THE PRACTICE: Not available

The Forest-Fungi Agroforestry System

Enhancing rural livelihoods through climate-smart practices

Challenge

Agroforestry, or the use of trees in agriculture, is a traditional farming practice in India, Nepal and China that provides food, nutrition and ecosystem services to support livelihoods and agricultural production. The modern agricultural trend towards commercial monocultures has siphoned resources and attention from this indigenous system. Agroforestry systems require a longer waiting period before beginning production than annual crops. Therefore, the need for farmers to make both cash and time investments during the early years of planting presents major challenges. Consequently, adding seasonal and annual harvests available from the first year could be a vital boost to the viability of agroforestry systems for smallholders' livelihood security. This is possible through the integration of agroforestry with mushroom cultivation.

Towards a Solution

Mushroom consumption in China is high and increasing annually. Global trends also indicate a rising demand for mushroom consumption. The Centre for Mountain Futures (CMF), jointly established by the Chinese Academy of Sciences (CAS) and World Agroforestry (ICRAF), and hosted by Kunming Institute of Botany of CAS, believes, therefore, that responsible mushroom cultivation can play a key role in lifting communities in developing nations out of poverty, as per Sustainable Development Goal (SDG) 1 – No poverty.

The objectives of the project were to identify sites and provide mushroom identification and utilization training to agro-technicians and community forest members, who would then transmit the new knowledge through indigenous farmer networks. Training centred around cultivation and management techniques developed by CMF scientists. This transfer of knowledge regarding the cultivation, collection, seed production, drying and storage of valuable and edible mushrooms such as morels (*Morchella*) can generate new income-earning opportunities at project sites through their sustainable cultivation.

CMF has developed a unique agroforestry system in which various medicinal plants and mushrooms are intercropped with multipurpose trees. It incorporates new techniques for producing quality cultures, spawn, substrates and mushroom fruiting. Forest-fungi agroforestry demonstration sites have been established at a large phosphorus mining site near Kunming as well as on plots of land provided to CMF by the Honghe County Government to develop climate-smart practices.

Field work was first conducted across farming communities in India's Jorhat district in Assam, Nepal's Kathmandu Valley, and Myanmar's Chin and Shan States to assess mushroom production in the regions. It was observed that women were particularly enthusiastic about gaining new mushroom knowledge. Subsequently, representatives from India's Balipara Foundation, ex-government officials and private sector partners from Nepal, and representatives of Yezin Forestry University in Myanmar were invited to CMF to participate in five days of intensive training on the cultivation and production of mushrooms deemed viable for growing in their country of origin. The training covered solid-state cultivation and liquid-state cultivation.

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The five-day intensive training was a success. **Participating agrotechnicians demonstrated mastery of cultivation and production techniques for two high-demand species, *Ganoderma lucidum* and *Morchella*, as well as other edible and medicinal mushroom types. Empowered by this new knowledge, spawn was transferred to a national laboratory in Nepal, where it was grown and distributed to mushroom farmers in Kathmandu.**

Another important achievement was the recording of a mushroom cultivation training video. Part 1 has currently been uploaded to the organisation's website, and further media material will be distributed as it is made available. This video and others video serves as important references for participants after they return home. We have also drafted a manuscript for a handbook on the cultivation of commercial mushroom species (to be published in 2020). This will jumpstart rural capacities on a global scale.

Support from the China South-South Development Centre (SSDC) enabled needs assessment in CMF's partner countries and to provide targeted training to community forest members on high-value mushroom growing technologies. Community stakeholders are direct beneficiaries, with a considerable ripple effect across other community members. China, having emerged as a leader among countries in the Global South, is well-poised to assist in the development of other underdeveloped Global South members. The project represents an example of South-South knowledge- and skills-sharing, strengthening cooperative ties and technological expertise among a rapidly growing group of rising nations.

Mushroom cultivation is exactly the kind of sustainable practice the world needs to ensure a safe and healthy planet. Agricultural waste products, such as corn cobs and sawdust, can be used to create substrates. Spent substrates can then be used to fertilize crop soils, although some substrates must first be dried before entering soil systems, closing the production cycle. Mushroom cultivation also preserves mushrooms growing in the wild, reducing the need for wild foraging, mitigating risks of overharvesting and protecting natural ecosystem habitats.

To replicate the success of this project across other countries, start-up capital and personnel training are needed in conjunction with cheap and simple technologies. Mushroom cultivation does not have exorbitant costs, and financing mechanisms (subsidies, loans and grants) could help farmers access building materials, labour, equipment, etc. Ensuring that community members have access to in-depth technical training will be critical to maintain high-quality and high-yield crops. Finally, public awareness must be raised regarding the manifold benefits of mushroom production and consumption, with particular attention given to women, who stand to greatly profit from mushroom production as an income-enhancing activity.

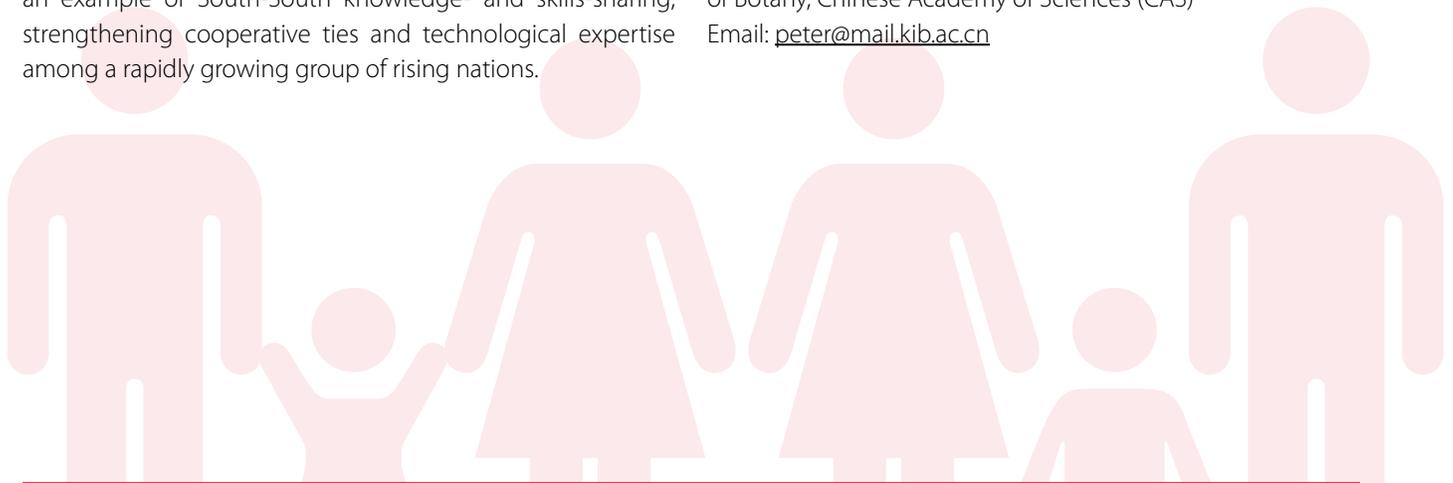
Contact:

Name: Prof & Dr Peter Mortimer

Title: Soil Biology Team Leader

Organization: Centre for Mountain Futures, Kunming Institute of Botany, Chinese Academy of Sciences (CAS)

Email: peter@mail.kib.ac.cn



PROJECT NAME: Training Stakeholders in the Forest-Fungi Agroforestry System in Nepal, India and China
COUNTRIES/REGIONS: China, India, Myanmar, Nepal
NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.a, 2.3, 2.4, 5.a, 5.b, 8.2, 8.3, 13.1, 15.2, 15.3, 15.4
SUPPORTED BY: China South-South Development Centre project
IMPLEMENTING ENTITIES: Centre for Mountain Futures (CMF), Kunming Institute of Botany (KIB), Chinese Academy of Sciences (CAS)
PROJECT STATUS: Completed
PROJECT PERIOD: June 2018 – November 2018
URL OF THE PRACTICE: <http://english.kib.cas.cn>

Integrated Solutions to the Sustainable Development of Lake Victoria Basin

Introducing integrated watershed management for poverty alleviation and environmental conservation in Lake Victoria Basin

Challenge

Over the last four decades, while the local economies have been developing, Lake Victoria has faced a number of environmental problems, including pollution, biodiversity loss, habitat destruction and soil erosion. It is estimated that the lake's indigenous fish species have been reduced by 80 per cent and that over 70 per cent of the forest cover in the catchment area has been lost. In addition, due to the poor water quality of the rivers flowing into the lake, amounts of silt and nutrients are increasing, which adds to the siltation problem of Lake Victoria. Environmental degradation forces locals back into extreme poverty and deep into the vicious circles of pollution and poverty. The project introduces the concept and strategy of integrated watershed management (IWM) of Poyang Lake Basin: "To manage the lake, the rivers must be harnessed; to harness the rivers, the mountains must be developed; to develop the mountains, poverty must be alleviated."

Towards a Solution

Poyang Lake and Lake Victoria are the largest freshwater lakes in China and Africa, respectively. It can be observed that both lake basins are facing similar challenges in balancing economic development with environmental protection. More than 30 years ago, Jiangxi Provincial Government, based on the knowledge of IWM, developed the Mountain-River-Lake Program (MRLP), which consists of strategies and measures on watershed administrative management, sustainable alternative livelihoods, eco-agricultural technologies and micro-finance, etc. Today, the ecological environment and people's living standards in the Poyang Lake Basin have been greatly improved. To introduce the strategies of IWM, the project aims to enhance the institutional capacities for the sustainable development of Lake Victoria Basin, with a special emphasis on exchanging appropriated IWM technologies.

With the platform of China South-South Cooperation Network (China SSC Network), two participating NGOs, Friends of Lake Victoria (OSIENALA) from Kenya and Civil Education is the Solution to Poverty and Environmental Management (CESOPE) from the United Republic of Tanzania, benefited from an experience sharing on the IWM practice of China. A feasibility study report for the best practices in the sustainable development of Lake Victoria Basin were jointly formulated. The capacities of the participating NGOs in the sustainable development of Lake Victoria Basin were further improved when a consultant mission of Chinese experts visited the two countries of the Lake Victoria Basin. Demonstration models, policy recommendations and international applications for the sustainable development of Lake Victoria Basin have been developed and proposed to the respective organizations with the assistance of Chinese IWM experts. The project is carried out according to the following steps:

- Formulating demand-driven planning. Based on the situations of the eco-environment and impoverishment in the Lake Victoria Basin of the United Republic of Tanzania and Kenya, the Promotion Association for Mountain-River-Lake Regional Sustainable Development (MRLSD) from China invited IWM experts to jointly develop two sub-projects -- one activity plan with CESOPE of United Republic of Tanzania, and one demonstration model with OSIENALA of Kenya.
- Supporting and guiding the participating NGOs in carrying out the sub-projects in their countries. CESOPE proposed the project 'Fact Finding Mission on the ecological status of Lake Victoria', whose

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main objectives include investigating the ecological situation and livelihood activities around Mara, Bukoba, Geita and Mwanza of Lake Victoria Basin, and determining the imminent challenges that the basin is facing in these regions. OSIENALA is implementing the Community-based strategy for the improvement of environment in the Lake Victoria basin project, which aims to develop a set of coordinated and sustainable activities that address the interconnection between human life and the Lake Victoria Basin ecosystem.

- Summarizing the project and formulating a model to replicate in other regions along the Lake Victoria Basin. The Chinese experts of IWM evaluated the two projects and helped the two NGOs, CESOPE and OSIENALA to formulate demonstrative models to be replicated in other areas of the Lake Victoria Basin.

The China SSC Network provided opportunities to promote knowledge and experience sharing on IWM between China and Africa. The significant achievements of the project are models based on the concept of IWM with the characteristics of operability, suitability and replicability.

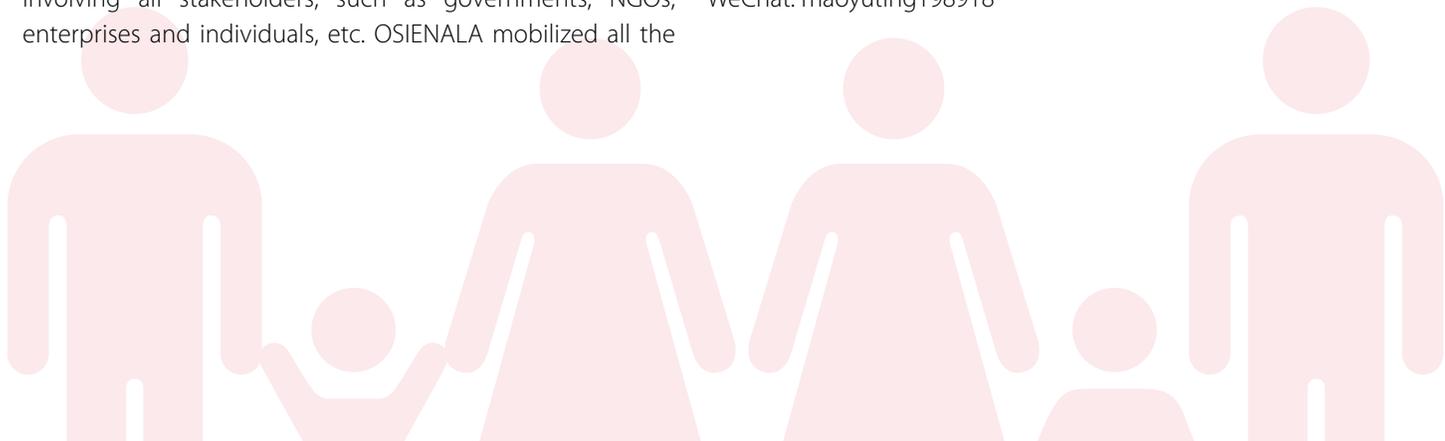
In addition to the Lake Victoria Basin area of the United Republic of Tanzania and Kenya, the sub-projects are designed in line with the situation of all the watershed areas of lake and river basins in Africa, such as in Uganda and Zambia; hence, the models can easily be introduced to other countries. CESOPE carried out extensive research and inspections, involving all stakeholders, such as governments, NGOs, enterprises and individuals, etc. OSIENALA mobilized all the

stakeholders, especially local farmers and women, to build Village Conservation Teams (VCTs) and Beach Management Units (BMU), which consist of the Village Environmental Teams (mainly farmers and women) who are trained on sustainable livelihood techniques and ecological conservation by OSIENALA. As the beneficiaries of the project, they are willing to share their success with other villagers through the schemes Community-managed Conservation and Improved Livelihoods and Community Agro-Forestry of OSIENALA. Additionally, the techniques taught by OSIENALA prioritize the utilization of local resources and labour, for instance, household clay stoves, pit toilet and rainwater storage systems, etc. As a result, the models are highly popular with the villagers and drive the whole village to improve their livelihoods, environment, hygiene and women's rights, among others.

With the support of China SSC Network, both CESOPE and OSIENALA are dedicated to raising awareness on other technologies and environmental protection through radio broadcasts. They also developed project applications and policy suggestions, and sought more resources to implement IWM.

Contact:

Name: Ms Yuting Mao
Title: Deputy Secretary-General
Organization: Mountain-River-Lake Regional Sustainable Development (MRLSD)
Email: myt@mrlsd.org.cn
WeChat: maoyuting198918



PROJECT NAME: Integrated Solutions to the Sustainable Development of Lake Victoria Basin
COUNTRIES/REGIONS: China, Kenya, United Republic of Tanzania
NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 15.1
SUPPORTED BY: Perez Guerrero Trust Fund
IMPLEMENTING ENTITIES: Promotion Association for Mountain-River-Lake Regional Sustainable Development (MRLSD) from China, OSIENALA (Friends of Lake Victoria) from Kenya and Civil Education is the Solution to Poverty and Environmental Management (CESOPE) from United Republic Tanzania
PROJECT STATUS: Ongoing
PROJECT PERIOD: June 2018 – June 2020
URL OF THE PRACTICE: www.mrlsd.org.cn (in Chinese)

Technical Demonstrations of a Standardized Rice-fish Farming System in Myanmar

Increasing fish output and farmers' income through technical demonstrations among local farmers

Challenge

Aquaculture in rice-based farming systems plays an important role for food security and poverty alleviation. Myanmar has extensive rice field resources, and rice-fish culture has been practised in the country since the mid-1990s. The Government observed that aquatic production, in addition to the rice crop, was a critically important product for rural livelihoods. However, although vast resources that can be utilized for rice-fish are available in Myanmar, this industry has not been highly successful. Its development has progressed at a slow rate, mainly due to some major constraints, e.g. lack of skilled technicians for selecting optimized fish species; lower farming management expertise; poor design of rice fish farming facility; insufficient qualified technicians on rice-fish culture; insufficient fish seed supplies; and lack of funds for rice-fish farming and other related projects.

Towards a Solution

To address the above challenges, the China South-South Development Centre together with the Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences (FFRC) and the Department of Fisheries, of the Ministry of Livestock, Fisheries and Rural Development (DoF/MLFRD) of Myanmar carried out technical demonstrations of a standardized rice-fish farming system in Myanmar. This can help increase farmers' income and fish supply, promote rice-fish industry development and create more job opportunities in Myanmar, which are closely in line with Sustainable Development Goal (SDG) 1 (No poverty), SDG 2 (Zero hunger) and SDG 8 (Decent work and economic growth). It can also help prevent overfishing by providing an alternative option in the fishing sector, which contributes to the achievement of SDG 14 (Life below water). Through the active participation of various fishery institutions, enterprises and farmers, it contributes to achieving SDG 17 (Partnerships for the goals).

A total of eight Chinese experts in two groups from FFRC were dispatched to conduct two ten-day technical missions in Myanmar to advise on rice-fish farming. They helped selected farmers in the standardized restructuring of paddy fields and in the improvement of farming techniques and management skills. Classroom lectures, laboratory works, and technical consultations were combined to help farmers acquire the basic theory and practical techniques of a standardized rice-fish system. Moreover, nine technical officers, programme managers and farmers from Myanmar were invited to China for a ten-day study tour and training on rice-fish farming. They became the key persons in assisting the demonstration project and in following the expansion of the innovative culture model.

This project helped establish two technical demonstration farms as a standardized rice-fish farming system in Yangon and Naypyitaw, focusing on making a valuable contribution to building the capacity of rice-fish farming technicians and officers from the DoF/MLFRD. It ultimately contributed to attracting more people to engage in this kind of enterprise, promoting the development of rice-fish farming, and improving household food and nutritional security in the country.

Throughout the project, the FFRC team focused on five aspects:

- increasing understanding of the rice-fish production system;

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- conducting training for technical staff of DoF/MLFRD on rice-fish farming technology, including the design of the rice-fish farming system, stocking of recommended species, feeding technology, etc.;
- providing technical consultation on rice-fish farming system design, disease prevention, feeding management and paddy field management to help technicians and farmers better manage farms and improve the productivity of the rice-fish farming system;
- facilitating Chinese fishery institutions and enterprises to cooperate with local fishery institutions for the improvement of fishery facilities;
- sharing with participants more funding channels for developing rice-fish farming industry.

In addition, in order to ensure sustainability and leadership of the project, a National Programme Officer (NPO) was appointed. The NPO was in charge of carrying out a series of coordination, consultancy and liaison activities, under the overall supervision of the China South-South Development Centre Project and FFRC in China, and the Department of Fisheries, Myanmar. Around 40 technical staff and local farmers under DoF/MLFRD were the target beneficiaries of this project. In 2016, the mission team examined a demonstration farm, which was redesigned in 2015. Among other species, the Yangon demonstration site stocked summerlings in 1.6 ha of paddy fields. After feeding for four months without reducing the rice yield, an additional harvest of 160 kg of large-sized fingerlings was obtained, for a value of over US\$120. The demonstration site of 0.8 ha in Naypyidaw was even more effective. An integrated farming model was adopted. Banana trees, tomatoes, peppers and other vegetables were planted on the field ridges. The rice yield increased by more than 60 per cent at the end of

the year. The average size of the stocked fingerlings exceeded 15 cm each, and total output exceeded 260 kg. FFRC experts have been actively committed to improving the economy of the rice and fishery industry in Myanmar, and helping the people of Myanmar to increase their income from rice fields and enrich the supply of aquatic products. Great interest was raised among many more of the local farmers.

This project taught the concept of 'one land with a double income' to rice farmers in Myanmar. Through the project, the beneficiaries are not only able to obtain income from the rice crops, but can also earn more from the additional fish products from the same land. The successful stories of beneficiaries attracted more rice farmers in Myanmar to engage in this industry, which is good example of poverty reduction for less developed countries. And, due to the very rich resources of paddy field and waters, Association of South-East Asian Nations (ASEAN) countries including Myanmar have great potential for rice-fish industry development. Moreover, the project encourages the full integration of women and the promotion of gender equality at all stages of rice-fish industry chain in Myanmar (SDG 5, Gender equality). The report on rice-fish industry development in Myanmar was drafted, which provides a helpful reference for those who expect to cooperate with various stakeholders in agriculture in Myanmar.

Contact:

Name: Dr Xiaojun Jing

Title: Director of the International Cooperation Division

Organization: Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences

Email: jingxiaojun@ffrc.cn

PROJECT NAME: Technical demonstration of a standardized rice-fish farming system in Myanmar

COUNTRIES/REGIONS: China, Myanmar

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 2.3, 2.4, 2.a, 5.4, 5.a, 8.2, 8.3, 8.6, 14.3, 14.4, 17.6, 17.7, 17.9, 17.16

SUPPORTED BY: China South-South Development Center Project

IMPLEMENTING ENTITIES: Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences (FFRC) and the Department of Fisheries, Ministry of Livestock, Fisheries and Rural Development (DoF/MLFRD), Myanmar

PROJECT STATUS: Completed

PROJECT PERIOD: 2014–2016

URL OF THE PRACTICE: <https://bit.ly/34uJYHa> (in Chinese)

The Intersectoral Commission for the Comprehensive Early Childhood Care

Exchanging experiences in early childhood protection and care to promote the development of capacities and opportunities to reduce poverty and prevent social exclusion

Challenge

When the Intersectoral Commission for Comprehensive Early Childhood Care (CIPI) was launched in 2011, almost 566,429 boys and girls in Colombia received different modalities of care. However, since they were under the responsibility of several institutions, a fragmented response was generated, which weakened the coverage and quality of actions on early childhood development. The recognition of boys and girls as subjects of rights and the definition of the comprehensive early childhood care must be a fundamental commitment by the Government.

Towards a Solution

The implementation of coordinated actions at the national and local levels aimed to promote and guarantee the full development of children 0–5 years in Colombia. This initiative seeks to reach national coverage to improve children's quality of life and generate local capacities, which require the involvement of the communities, as well as local and national entities.

In 2011, the National Government of Colombia established the National Intersectoral Commission for Comprehensive Early Childhood Care (CIPI) to serve as a platform for the promotion of early childhood policy and for gathering resources and expertise of existing public and private entities. CIPI also leads the Early Childhood Comprehensive Care Strategy, *De Cero a Siempre* (From Zero to Forever), which constitutes a set of national and local planned actions used to promote and ensure the full development of children from gestation to five years of age. This is achieved through unified and intersectoral work from a rights perspective and through a differential approach that includes disability. It details and promotes the definition and implementation of plans, programmes, projects and actions for the comprehensive care that should be ensured for each child according to their age, context and situation.

The interventions aimed to encourage the comprehensive development of boys and girls in their early years as a window of opportunity for social and economic development. These interventions generate lasting impacts regarding psychological strength, a reduction of crime in their life cycle, better academic performance, lower school drop-out and repetition rates when increasing the permanence of children in the educational system, and higher productivity and future income. It is a social investment with higher return rates (National Planning Department, 2011).

The objectives of the CIPI are to:

- strengthen the capacity of the local authorities and the national government;
- design and implement the Comprehensive Care Roadmap (RIA) in local entities;
- increase comprehension and generate knowledge concerning strategic issues in early childhood;
- qualify agents on comprehensive care for children and families;
- develop a technical approach for the appraisal of child development;
- integrate prospects for inclusion in local policies, among others.

CIPI's remarkable achievements has led to: the joint design of the Early Childhood Comprehensive Care Strategy; the development of guidelines and technical standards, as well as lines of action and management tools for the policy implementation in the territories; and the application of the

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Sistema de Seguimiento Niño a Niño (SSNN, Child to Child Monitoring System).

As of 2016, over 1,205,906 boys and girls had benefited from quality comprehensive care. By 2018, this number had increased to 1,374,423. Other main results between 2011 and 2016 were the enrolment of 4,081,320 boys and girls under six years of age into the social security health care system, and the provision of support to 20 ethnic communities in developing their comprehensive care roadmaps in line with rural and ethnic contexts.

Furthermore, according to the 2018 implementation evaluation of the Early Childhood Comprehensive Care Strategy *De Cero a Siempre*, **in 2018, almost 1,270 rural women and community leaders were trained to strengthen their knowledge on sexual and reproductive health, nutritional and mental health, and prevention of psychoactive substances use. Moreover, the number of boys and girls attending preschool with comprehensive care increased from 57,126 in 2017 to 71,500 children in 2018.**

Colombia shared this good practice with the Dominican Republic (2015–2017) to strengthen the latter's *Quisqueya Empieza Contigo* Plan, which caters to the needs of children 0–5 years. The Dominican entities involved were the Ministry of Planning and Development (MEPyD), the General Directorate of Special Programs of the Presidency (DIGEPEP) and the National Institute for Comprehensive Care of Early Childhood (INAIFI).

The activities included technical missions in both countries, and as an outcome of these exchanges, the Dominican Republic achieved the following:

- the identification of methodological mechanisms for strengthening the Family and Community Base modality in comprehensive early childhood care services;
- the identification of CIPI's inter-institutional coordination as a key element for strengthening early childhood policy;
- the strengthening of coordination, follow-up and monitoring mechanisms in the framework of early childhood policy, as well as its interaction with private sectors and civil society.

For this initiative to be replicated, the following conditions should be considered for the implementation of an entity such as the CIPI:

- the identification of early childhood situation and needs;
- the identification of the current institutional architecture.

Contact:

Name: Mr Luis Roa

Title: Triangular Cooperation Coordinator

Organization: Agencia Presidencial de Cooperación Internacional de Colombia (APC-Colombia)

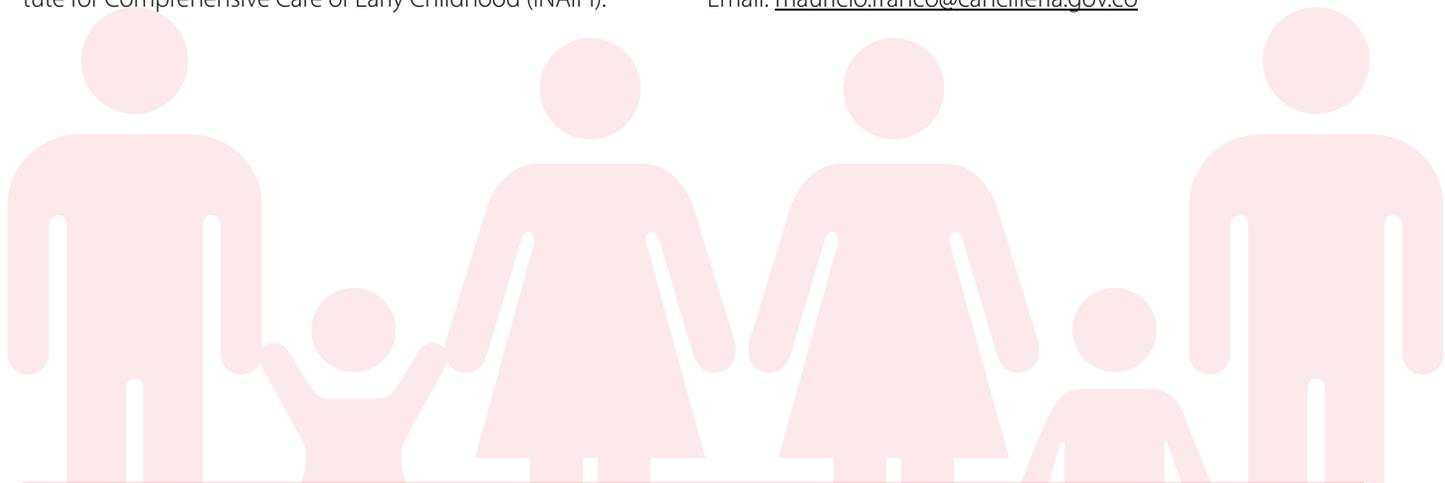
Email: luisroa@apccolombia.gov.co

Name: Mr Mauricio Franco De Armas

Title: South-South and Triangular Cooperation Coordinator

Organization: Ministry of Foreign Affairs of Colombia

Email: mauricio.franco@cancilleria.gov.co



PROJECT NAME: The Intersectoral Commission for the Comprehensive Early Childhood Care (CIPI)
COUNTRIES/REGIONS: Colombia, the Dominican Republic
NOMINATED BY: Ministry of Foreign Affairs of Colombia, Agencia Presidencial de Cooperación Internacional de Colombia (APC-Colombia)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 1.3, 2.2, 3.1, 3.2, 3.3, 3.8, 4.2, 4.5, 16.9
SUPPORTED BY: APC-Colombia
IMPLEMENTING ENTITIES: Intersectoral Commission for the Comprehensive Early Childhood Care
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2011 – Ongoing
URL OF THE PRACTICE: <https://bit.ly/3gy8Dxf> (in Spanish)

Uganda Development Bank Limited Programme

Providing financial resources to support small- and medium-sized projects

Challenge

Uganda, one of the least developed countries, seeks to promote economic and social development to raise its population standards of living and achieve the Sustainable Development Goals (SDGs). Principal among those is to reduce poverty and hunger through the implementation of development strategies aimed at supporting the role of the private sector in the desired development and diversification of income sources. Uganda Development Bank Limited (UDBL) is the only financial institution in the country which specializes in supporting the role of the private sector in development by providing necessary loans, at a relatively low cost, to finance its investments in various economic and social sectors. It also finances projects and provides advisory services necessary to ensure their proper implementation. This advice is based on financially feasible and sound technical grounds and has positive impacts on the country's economy.

The success of the Bank depends on the success of the projects that it will finance. It was therefore necessary for the Bank to have an administrative, technical and financial framework in order to achieve the desired goals.

Towards a Solution

By setting a proper administrative, technical and financial framework, the Bank is able to study and evaluate development projects submitted for financing. This assists in identifying projects of paramount importance to the Ugandan economy and helps in the optimal allocation of scarce financial resources. In addition, installing a proper financial accounting and reporting system promotes transparency and helps in determining responsibility and accountability. This is expected to help in transferring the Bank's experience to other development institutions inside and outside Uganda.

The main objective of UDBL Programme is to promote and finance development in various sectors of the economy, with a particular emphasis on agriculture, industry, tourism, housing and commerce.

UDBL obtains large credits from external financiers such as the Kuwait Fund for Arab Economic Development and uses them to finance medium- and long-term projects in the agriculture, manufacturing, tourism, education and health sectors. The Kuwait Fund participates with other development institutions such as the African Development Bank, the Organization of the Petroleum Exporting Countries Fund for International Development (OFID), the Arab Bank for Economic Development in Africa (BADEA), and the International Trade Organization in implementing the UDBL programme for the 2020–2025 period by contributing around US\$20 million. Kuwait Fund's contribution is extended to the Ministry of Finance in Uganda to support its development programme. The Fund also supported the proper financial and administrative arrangements of the project during the design phase.

In utilizing the loan provided by Kuwait Fund and other development institutions, the UDBL is expected to approve 979 development projects in the amount of US\$379 million (37 percent in the primary agriculture and agriculture processing sectors; 24 percent in the manufacturing sector; 8 percent in the education and health sectors; 7 percent in the infrastructure sector; 4 percent in tourism

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and hospitality; and 20 percent in others). The projects were spread over Central Region (69 percent), Eastern Region (13 percent), Western Region (12 percent) and Northern Region (6 percent). In addition, **projects funded by the Uganda Development Bank during 2018 created job opportunities for 77,000 Ugandans, 46 percent of whom were women.**

It is important to highlight that, although the programme was completed in 2017, the funds provided by the Kuwait Fund together with other development institutions are revolving funds, which continue after the end of the programme.

UDBL ensures its sustainability through sound financial management. The Bank provides concessional loans for carefully studied projects that are economically feasible. The Bank also requires beneficiaries to provide the necessary guarantees to service the loan. This ensures efficient allocation of resources and fund availability.

The idea of UDB can be adopted in any developing country. Other countries can establish development banks and ask

development institutions to participate in financing feasible development projects.

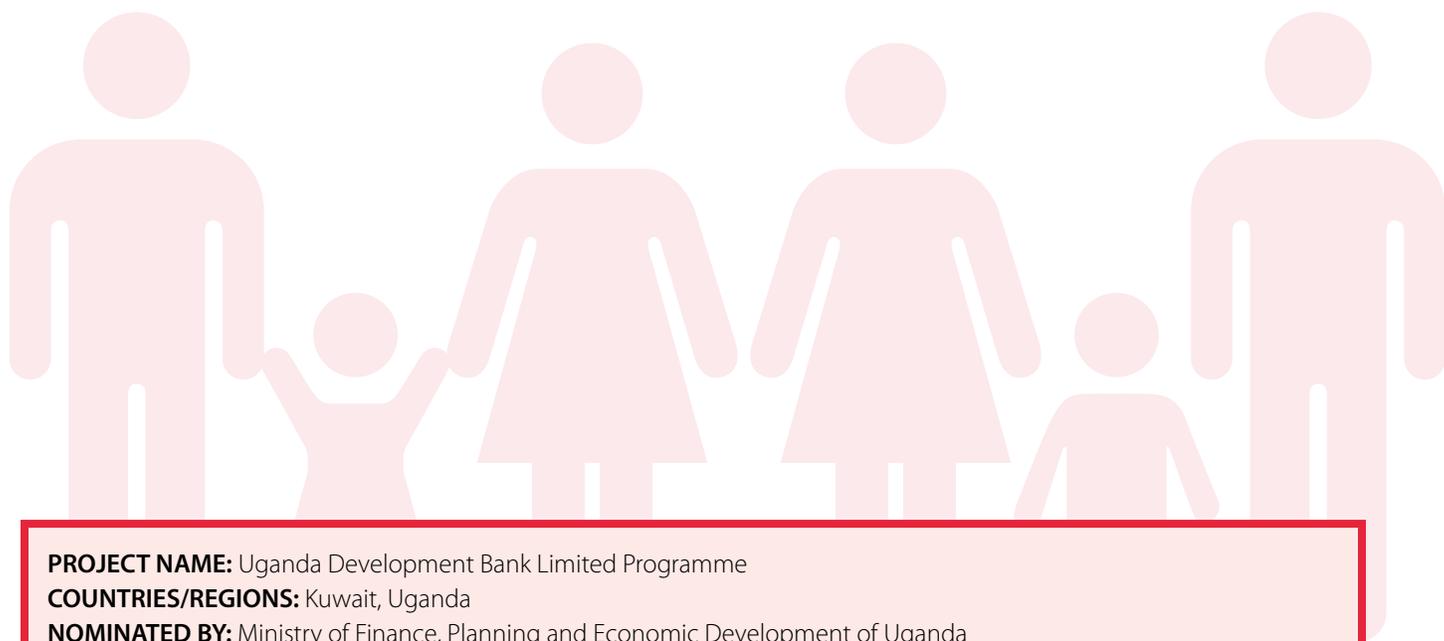
In sum, by utilizing a similar administrative, financial and technical framework, the Kuwait Fund for Arab Economic Development provided 21 concessional loans in the development banking sector, amounting to US\$494 million and benefiting 13 additional countries, including Bahrain, Bosnia and Herzegovina, Bhutan, Djibouti, Egypt, Jordan, Mauritania, Morocco, Sudan, Syrian Arab Republic, Togo, Tunisia and Yemen. The Kuwait Fund facilitated knowledge sharing by replicating this model and improving on it in its successive interventions. This contributed to creating many job opportunities, providing income and raising the standards of living for citizens of the beneficiary countries, helping them fight hunger and reduce poverty.

Contact:

Name: Mr Khaled F. Alkhaled

Organization: Kuwait Fund for Arab Economic Development

Email: alkhaledk@kuwait-fund.org



PROJECT NAME: Uganda Development Bank Limited Programme

COUNTRIES/REGIONS: Kuwait, Uganda

NOMINATED BY: Ministry of Finance, Planning and Economic Development of Uganda

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 4.1, 8.1, 8.2, 9.1, 9.2, 17.1, 17.6

SUPPORTED BY: Kuwait Fund for Arab Economic Development

IMPLEMENTING ENTITIES: Uganda Development Bank Limited

PROJECT STATUS: Completed

PROJECT PERIOD: 2010–2017

URL OF THE PRACTICE: Not available

Microfinance Development for Improved Livelihoods

Promoting sustainable and inclusive access to financial services for all in order to secure development and end poverty

Challenge

Although a marked progress in reducing poverty can be observed over the past decades, there is still an unacceptably large number of people struggling to meet their basic needs. People's lack of access to financial services is a major hindrance for development in the world today. This challenge applies to both Kenya and Ethiopia. The majority of the global poor live in rural areas, are poorly educated, and employed in the agricultural sector. In order to end poverty in all its forms everywhere, it is necessary to ensure that all men and women have access to financial services, including microfinance.

Towards a Solution

The Microfinance Development for Improved Livelihoods project, supported by the Norwegian Agency for Exchange Cooperation (Norec), aims to promote access to finance for small-scale farmers, low-income households, and micro- and small-scale enterprises through sustainable and inclusive microfinance. By developing financial products that are responsive to the customer's needs, improving customer services, providing technological financial services and efficient training of clients, K-Rep Development Agency from Kenya and Wasasa Microfinance from Ethiopia aim to achieve financial inclusion and offer financial services to wider segments of the population. The two different institutions, K-Rep Development Agency and Wasasa Microfinance, both working with microfinance, exchange personnel, knowledge, skills and experience to promote financial inclusion in the region. The initiative contributes towards achieving Sustainable Development Goal 1 (No poverty), specifically target 1.4, by improving accessibility of financial services to low-income people.

Key outcomes in the project include a higher degree of financial inclusion of low-income people. The role that technology plays in microfinance greatly varies between the two countries, and the institutions have learned the importance of technology as a tool for financial services.

Given that Kenya and Ethiopia have very different approaches to microfinance, all participants from both institutions are exposed to new perspectives on microfinance, and the institutions have learned new skills in portfolio management and gained knowledge on repayment procedures. On a personal level, the exchange participants report higher levels of confidence, increased level of flexibility and adaptability, and better communication and language skills.

The key methodology used in this project is the mutual exchange of professional staff within the framework of cooperation between private institutions. In the 2018–2020 period, 20 employees, ten from K-rep Development Agency in Kenya and ten from Wasasa Microfinance in Ethiopia, were exchanged for a minimum period of seven months. The employees were internally recruited. They also had a minimum of three years of contract time remaining at the time of the exchange. Both of these factors increase the chances of sustainable results. For the programme to have a wide and long-term impact, a sizeable number of staff will need to participate in the exchange programme to replace those who will leave the institutions due to natural attrition. The staff participating in an exchange are recruited from different departments of the institutions in order to bring on board a diversity of experiences, which therefore leads to improved and increased productivity at the institutional level.

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A number of other steps have also been made in order to increase the chances of sustainable results. These steps include: assigning the people participate in an exchange programme with a mentor to ensure better integration and transfer of knowledge at their new workplace, training staff not involved in the exchange, and documenting key lessons learned.

Norec's facilitation concept for triangular cooperation is well established. It provides funds to the institutions that recruit the personnel for the project as well as funds for development. Norec plans meetings, conducts mid-term project reviews, and provides training to those participating in exchange programmes as well as those coordinating the projects. The concept of reciprocal exchange of skilled personnel within a variety of sectors is a highly versatile model to upgrade skills, knowledge and capacity.

Focusing on reciprocity and the horizontal design of the project are innovative aspects of the project. The two institutions have jointly identified the needs that the exchange programme will help them fulfil. Some of the results that

the private institutions aim to achieve are specific to each of them, and some are common to all. Both partners contribute with respective strengths and learn from each other. Often in development cooperation, projects are designed based on the transfer of technologies from a donor to a recipient country. But the recognition of the value of everyone's knowledge confers greater ownership of, participation in and sustainability for the project.

Contact:

Name: Mr Helge Espe

Title: Senior Adviser

Organization: The Norwegian Agency for Exchange Cooperation (Norec)

Email address: helge.espe@norec.no

Name: Ms Marit Bakken

Title: Director of Programmes

Organization: Norec

Email address: marit.bakken@norec.no



PROJECT NAME: Microfinance Development for Improved Livelihoods

COUNTRIES/REGIONS: Ethiopia, Kenya, Norway

NOMINATED BY: Norwegian Agency for Exchange Cooperation (Norec)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 17.9

SUPPORTED BY: Norec

IMPLEMENTING ENTITIES: K-Rep Development Agency (Kenya), Wasasa Microfinance Ltd. (Ethiopia)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <https://bit.ly/3hsRTZj>

The One Gewog One Product (OGOP) Development Project

Empowering rural communities and uplifting Bhutanese farmers' livelihoods towards the attainment of *Bhutan 2020: A vision for peace, prosperity and happiness*

Challenge

Constrained by limited expertise and exposure, Bhutanese farmers lacked opportunities to create and develop products that could serve other commercial purposes beyond their household consumption. Indeed, there were few economic opportunities and low employment in rural areas despite ample natural resources and their rich indigenous art, craft and food. Accordingly, development of local agricultural products based on Thailand's experience was addressed by His Majesty King Jigme Khesar Namgyel Wangchuck of Bhutan during an audience H.M. granted to the Thai Ministry of Foreign Affairs' delegation in 2014. This was one of the initiatives where Bhutanese farmers could learn to improve their agricultural productivity and upgrade their products to meet national and even international markets.

Towards a Solution

To support Bhutan in its efforts to tackle the underlying issues – poverty reduction, self-reliance, enhancement of rural income and employment – reflected in the *Bhutan 2020: A vision for peace, prosperity and happiness*, Thailand, through the Thailand International Cooperation Agency (TICA), proposed two models: the Resource-based Market Promotion Model, which was mutually agreed and became the basis of the One Gewog One Product (OGOP) Model I Project (2016–2019); and the Tourism Attraction-based Market Promotion Model, which was later developed and called the 'Sustainable Community Development Model based on the Application of the Sufficiency Economy Philosophy (SEP) for OGOP villages in Bhutan', or the OGOP Model II Project (2019–2022).

The OGOP Model I Project was implemented with the overall goal to improve the livelihoods and increase the incomes of Bhutanese rural communities, and its purpose was to develop quality, local productions for the local and international market, in line with Sustainable Development Goal (SDG) 1 (No poverty) and SDG 8 (Decent work and economic growth). Since the project's formulation stage, stakeholders from both sides including experts, relevant government agencies and the target communities in Bhutan were engaged to discuss and share valuable insights. Embracing the demand-driven and participatory approaches at its core, these consultative and planning processes took almost one year. As a result, the Project was agreed and founded upon the Resource-based Market Promotion Model similar to the One Tambon One Product (OTOP) Programme of Thailand. Launched in 2001 with the aim to eradicate poverty, the OTOP Programme has continued to be one of Thailand's important local economy's stimulus initiatives through the promotion of entrepreneurship at the community level. Built on Thailand's best practices and tried solutions, the Project under the Queen's Project Office's leadership was deliberately studied by both sides and hence tailored to meet specificities required by the Bhutanese context.

In this light, the Project aimed to deliver three outputs: quality OGOP products; improved markets for OGOP products; and enhanced cooperation among OGOP communities and partnerships encompassing a variety of activities. These activities include workshops, study visits, a dispatching of experts and volunteers, provision of equipment and materials, OGOP publication and promotion, marketing and business planning, and monitoring and evaluation (M&E). Moreover, Bhutanese delegates also

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gained hands-on experience at the annual OTOP City Fairs held in Thailand in 2017 and 2018, in which the OGOP products were featured, attracting a large number of visitors each year. In 2017, the OGOP products were sold for around Nu. 1.7 million (approximately US\$29,900) at the City Fair. In addition, the OGOP products were exhibited at global-wide markets including during Bhutan Week in Delhi, India and the Global Forum on Inclusive Trade for Least Developed Countries at the World Trade Organization in Geneva, Switzerland, which is in line with the 'Bhutan Everywhere' Policy.

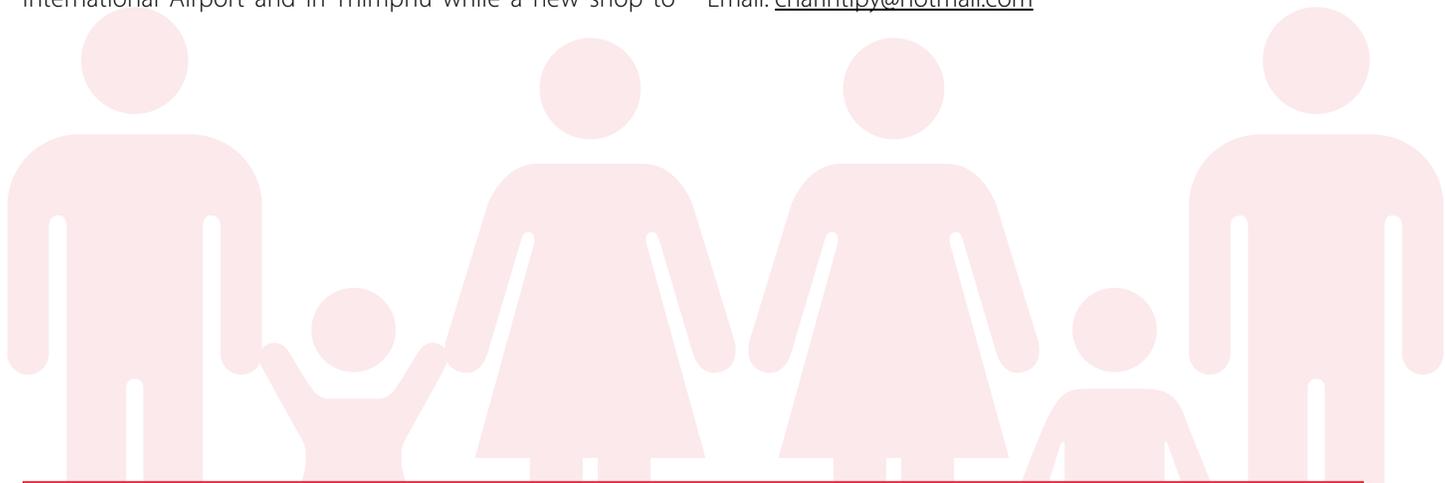
The Project's achievements to date are remarkable in both qualitative and quantitative terms, outcomes and outputs, surpassing both countries' expectations. As of September 2019, 148 OGOP products (48 over the target) and 65 innovative products (30 over the target) or products that are new to the Bhutanese market have been developed. Publications on OGOP products' marketing strategy as well as guidelines and standards have been released. Revenue from the export of OGOP products, whose target was only Nu. 2 million, actually totalled Nu. 16.41 million. **Indeed, the number of OGOP groups created to form a network of producers and suppliers was 72 against the target of 60, and the number of self-reliant farmers and employees created (1,132) was 1,032 over the target of 100. Cash income of OGOP producers totalled Nu. 30.32 million (or around Nu. 0.32 million over the target).** Moreover, two OGOP shops operated by the Queen's Project Office were established at Paro International Airport and in Thimphu while a new shop to

be located at the craft bazaar in Thimphu is under construction. In addition to these verifiable indicators, the Project has brought an unexpected positive impact: lessons from developing OGOP products help provide recommendations for Bhutan Agriculture and Food Regulatory Authority's (BAFRA) existing guidelines and standards. They also help increase demand for local raw materials, i.e. honey and buckwheat, and hence production, which helps boost the local economy.

From the Thai perspective, the lessons learned have been mutually reinforcing, and Thailand has also acquired innovative ideas and solutions. Moreover, these outputs, outcomes and positive impacts highlight the multiplier effect that this development cooperation has brought, despite its short timeframe. These led to the implementation of the OGOP Model II Project, which was followed up by Bhutan in order to build on the Model I's developments and expand benefits to wider Bhutanese rural communities. This is achieved by embracing the SEP as a guiding principle in planning and decision-making, and in the path towards a self-reliant and sustainable community development, which is in line with Bhutan's Gross National Happiness (GNH) approach to development.

Contact:

Name: Ms Charintip Yosthasan
Title: Director, Thai Cooperation Branch II
Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs
Email: charintipy@hotmail.com



PROJECT NAME: The One Gewog One Product (OGOP) Development Project between the Kingdom of Thailand and the Kingdom of Bhutan (OGOP Model I)
COUNTRIES/REGIONS: Bhutan, Thailand
NOMINATED BY: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 8.3, 8.5, 8.9
SUPPORTED BY: TICA, The Queen's Project Office of Her Majesty the Queen of Bhutan
IMPLEMENTING ENTITIES: TICA
PROJECT STATUS: Completed
PROJECT PERIOD: 2016 – 2019
URL OF THE PRACTICE: Not available

The Sufficiency Economy and Business Promotion in the Agricultural Sector

Applying the Sufficiency Economy Philosophy for Sustainable Development Goal Partnerships: A successful example of South-South and Thailand-Germany-Timor-Leste triangular cooperation

Challenge

Since its independence in 1999, Timor-Leste has faced development challenges in all dimensions. One of the priorities of the country is to reduce poverty and improve the lives of Timorese people. Since agriculture is the primary source of livelihood for approximately 80 percent of the population of Timor-Leste, it is important to enhance the livelihoods of Timorese farmers in order to tackle these challenges.

Yet, there are many challenges that Timorese farmers are facing; for example, most farmers do not own the land they are farming. They also have limited access to the technologies and practices needed for sustainable and efficient agricultural production. The use of chemical pesticides and fertilizers is still widespread. Crop production is not sufficiently varied. Finally, post-harvest losses are common, since fresh produce is being sold directly without being processed.

Towards a Solution

In 2003, Thailand and Timor-Leste signed a Memorandum of Understanding (MOU) on Economic and Technical Cooperation, reflecting Thailand's determination to help Timor-Leste's development in various fields, particularly in agriculture, in which Thailand has expertise. The Sufficiency Economy Philosophy (SEP), defined and presented by His Majesty the late King Bhumibol Adulyadej, has been the core of Thailand's development for over 40 years. It is one of the alternative approaches to realize the Sustainable Development Goals (SDGs) that Thailand has been sharing with the international community.

Building on the MoU, the 'Establishment of Model Village and Technology Transfer Centre based on the SEP in Hera' was one of the projects launched by the Thailand International Cooperation Agency (TICA). The project initiated the application of SEP as a means to reduce poverty and to promote sustainable development in Hera, a sub-district near Dili.

The project features a unique characteristic: it is a hybrid of South-South and triangular cooperation. The bilateral cooperation took place from 2010 to 2015, and later on, was extended and run under the trilateral framework, 'The Sufficiency Economy and Business Promotion in the Agricultural Sector Project between Thailand-Germany (GIZ)-Timor-Leste' from 2016 to 2017.

During the first phase of bilateral cooperation, a sustainable model village in Hera was established. Efforts were focused on improving the capabilities of Timorese agriculturists and farmers in practices needed for sustainable and efficient agricultural production based on the SEP, for example, the growing of multiple crops, local production and use of organic fertilizer, organic animal feeds, aquaculture, and value-added production. The training was organized for Timorese farmers, including promising young farmers, by Thai experts in an interactive way, with the involvement with local people to promote the sense of ownership.

Viewing triangular cooperation as an innovative form of South-South cooperation that can help effectively mobilize resources and expertise of each party involved and thus bring greater development

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benefits than each party acting alone, Thailand sought to further strengthen the project through the trilateral partnership. Germany, through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), was invited to join the project to share its expertise in efficiency in planning and management through tools such as Results-based Management (RBM).

The joint training sessions were organized to promote a holistic understanding of both the SEP and project management through the concept of RBM. Farmers who joined the training were encouraged to apply these concepts to concrete actions, including the development and implementation of a community plan that would upgrade their selected champion products to match the demands of the market. It was interesting to note that more than 60 percent of the population in Timor-Leste was under 30 years of age. This emerging active and younger generation brought potential and opportunities for innovative ideas and approaches, as evidenced by the perspective of the project team and coordinator.

The benefits were two-fold. First, **the triangular cooperation led to an increase of income of selected rural communities through higher agricultural productivity and commercial businesses. Project participants reported that their income was increased by around 50 percent. The costs of production decreased as they learned how to turn local resources into materials needed for agricultural productions such as organic pesticides and fertilizers; the income increased as they learned about better farming management and marketing.** Second, not only did Timorese farmers have an opportunity to learn about German-style project planning and management, but so did Thai trainers and

experts, who could further apply the concept in other development cooperation programmes.

Furthermore, these young Timorese farmers were committed to become role models for others. They were eager to share their holistic understanding on the SEP and the project management methodology as well as its practical application in business development gained from their first-hand experience. To ensure sustainable outcomes from this development cooperation, workshops and follow-up activities have been organized to develop a standard curriculum and manuals on the SEP and the RBM. These curriculum and manuals help ensure that the success and lessons learned from the project, 'Establishment of Model Village and Technology Transfer Centre based on His Majesty King's SEP in Hera' can be replicated in other areas. With the success in Hera, the project has later been extended to other areas, i.e. Ulmera, Lihu and Metinaro.

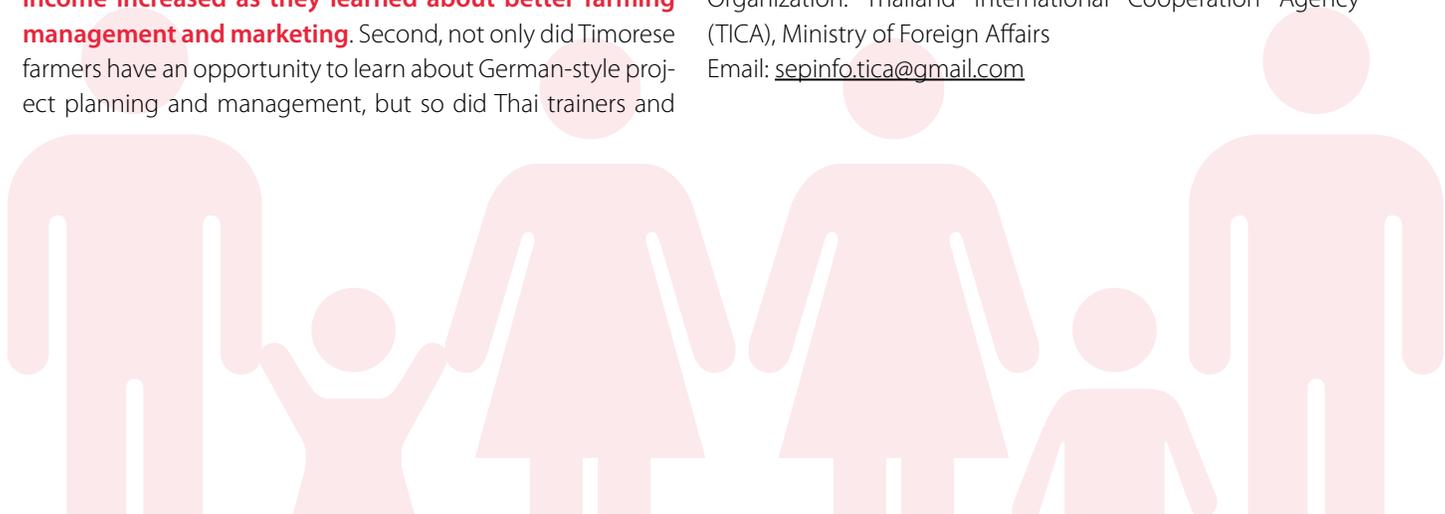
As a result of this project, not only has Sustainable Development Goal (SDG) 1 been achieved, but also SDGs 2, 4, 6, as well as 17 through the trilateral partnership forged between Thailand-Timor-Leste and Germany at both official and individual levels.

Contact:

Name: Sufficiency Economy Philosophy (SEP) and Development Unit

Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs

Email: sepinfo.tica@gmail.com



PROJECT NAME: The Sufficiency Economy and Business Promotion in the Agricultural Sector
COUNTRIES/REGIONS: Germany, Thailand, Timor-Leste
NOMINATED BY: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 2.1, 2.2, 2.3, 2.4, 4.4, 6.b, 17.6, 17.9
SUPPORTED BY: TICA, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
IMPLEMENTING ENTITIES: TICA
PROJECT STATUS: Completed
PROJECT PERIOD: 2015–2017
URL OF THE PRACTICE: <https://bit.ly/3hp0n3O>

The Sustainable Community Development Model Based on the Application of the Sufficiency Economy Philosophy in Sri Lanka

Using the Sufficiency Economy Philosophy as an alternative development approach

Challenge

Although the local poverty rate has continued to fall in Sri Lanka, the Sri Lankan Government sees the need to continue development activities geared towards the village level where the majority of the Sri Lankan people live and among whom the poverty level is high. These activities should also be more market-oriented with effective enterprise programmes. Failure to do so might entail falling back into poverty.

To this end, the Sri Lankan Government sought collaboration with countries in the region to learn from their best practices. Thailand's experiences from developing the Sufficiency Economy Villages whose core activities relied on community empowerment can be applied to the Sri Lankan context as part of its efforts to achieve resilient livelihoods at the local, community level.

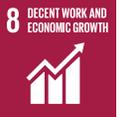
Towards a Solution

The 'Sustainable Community Development Model Based on the Application of the Philosophy of Sufficiency Economy Project in Sri Lanka' addresses the above challenge after the Sri Lankan high-level delegates' study visit at various project sites demonstrating the Sufficiency Economy Philosophy's (SEP) application in Thailand in early 2016. It is the cultural affinity inculcated by the Buddhist philosophy – a guiding basis of the SEP – that bonds these two countries together.

The overall goal was to improve the quality of life in three communities in Sri Lanka, namely, Delthota Pahalagama Village in Kandy District, Laksha Uyana Village in Polonnaruwa District, and Wathupola Village in Puttalam District, through the development of value-added local products, thus also addressing the Sustainable Development Goals (SDGs) 1 and 8. Activities were designed to strengthen community leaders, upgrade local products, and develop markets and a network of participating agencies. In order to keep the communities' learning alive and the project sustainable and also to replicate Thailand's experience, the Community Learning Centres (CLCs) were established. They serve as disseminating centres to share, preserve and build on local knowledge, experiences and wisdom for future generations.

The SEP is based the concept of moderation, reasonableness and resilience based on the conditions of knowledge and integrity as underlying factors when making a reasonable and resilient decision. With this in mind, the Project started with an activity to prepare a group of leaders with an understanding of the SEP and its relevant knowledge and skills that could be applied in Sri Lanka. In 2017, this group of 23 Sri Lankan officials and selected community leaders from the target communities participated in the 'SEP S-M-A-R-T Mobilizing Team' workshop in Thailand. It was expected that these 'SEP S-M-A-R-T' leaders would be able to act as 'multipliers' who would lead activities under the Project's work plan in their respective communities. The workshop resulted in individual community development plans that were designed and concluded by the participants themselves. In a similar manner, the plans were to share the acquired knowledge on applying SEP in developing sustainable community and income-generating skills that were deemed new to, but applicable in the Sri Lankan context with their peers in the villages. The participants also had a plan to set up their own CLCs in the future.

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Thailand International Cooperation Agency (TICA) acknowledges the many challenges that the application of the SEP in development projects in different contexts could bring. And because of this, the Project has, since the very beginning, strongly relied on a participatory and demand-driven approach, with an aim to create a sense of ownership perceived by beneficiaries to ensure its long-term benefits and sustainability.

According to progress reports and a monitoring visit in the following year, in 2018, it was noted that the Department of Samurdhi Development (DSD) in Sri Lanka had taken the lead in guiding and providing the required additional technical and financial support for the communities to build on the ideas that the participants gained during their exposure in Thailand. It was also noted that DSD had made efforts to establish production groups. To accommodate these initiatives, another workshop on community development based on the SEP and skills development in fruit and food processing and sewing was organized in Sri Lanka in 2019, where villagers from the three communities participated. During the latest monitoring visit in early 2020, **it was noted that various production groups had been established, contributing to additional household income and thus an increase in social status as addressed by the Project's beneficiaries. These groups were engaged in: organic farming, cultivation and ornamental fish farming in Polonnaruwa; production of Sri Lankan deserts, organic farming and home gardening, husbandry, garments and miscellaneous items in Kandy; and orchid farming, banana cultivation and banana byproducts in Puttalam.** The acquired skills in the value-added production of food and fruits and sewing in particular have equipped

them with proper know-how. For some female members, the project has enabled them to earn extra income for the family; before they were engaged in the project, their husbands had been the sole income earners. Although not envisaged initially, the project has brought an evident women's empowerment impact on Sri Lankan rural societies. One of the key success factors of these achievements is reflected in the significant facilitator role of DSD staff in each locality in connecting people. Another lesson learned is that complementarity with national policy and action plans has greatly contributed to actions on the ground.

Observing the project's potential and in order to respond to Sri Lanka's recent request for additional training on and support for the establishment of the CLC in Polonnaruwa District, Thailand agreed to extend the Project's duration for another one and a half years. The aim is to maximize the communities' potential and build on the achievements to date. The focus will be on strengthening the capacities of SEP S-M-A-R-T leaders in knowledge management of the CLC. Applying the SEP will also be enhanced in business planning and marketing to help reduce associated risks when making the respective decisions.

Contact:

Name: Ms Orndaporn Pewngern

Title: Second Secretary

Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs

Email: or.pewngern@mfa.mail.go.th

PROJECT NAME: The Sustainable Community Development Model Based on the Application of the Sufficiency Economy Philosophy in Sri Lanka

COUNTRIES/REGIONS: Sri Lanka, Thailand

NOMINATED BY: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 8.3, 8.5, 8.9

SUPPORTED BY: TICA

IMPLEMENTING ENTITIES: TICA, Department of Samurdhi Development (DSD) of the Ministry of Women, Child Affairs and Social Security of Sri Lanka

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017 –2021

URL OF THE PRACTICE: Not available

Improved Quality of Life of Urban, Retired, Elderly and Disabled Peoples with Soilless Vertical Farming Practices

Providing agricultural production to urban, retired, elderly, and disabled people at home with hydroponic vertical farming practices

Challenge

Although Bosnia and Herzegovina has taken important steps towards development in the post-war period, poverty still remains a problem. The rural poverty rate is higher than the urban poverty rate. But the situation of the poor living in rural areas is better than the urban poor because they have the opportunity to produce enough to feed their families. For a long time, the pension fund available in Bosnia and Herzegovina has been unsustainable, and the State's debt to retired citizens is constantly increasing; 60 per cent of people over the age of 65 are not receiving salaries or old-age pensions. In addition, with the increase in the elderly population and malnutrition, the number of chronic diseases also increases, a situation that puts the country's health fund in distress.

Towards a Solution

The project, 'Improving the Quality of Life of Urban, Retired, Elderly and Disabled People with Soilless Vertical Farming Practices', supported by the Turkish Cooperation and Coordination Agency (TIKA), started with 50 people in the first stage in its first implementation in Bosnia and Herzegovina, and in the second year was expanded to 500 people after the pilot implementation in five different municipalities. The project aims to support disadvantaged groups, to ensure the access of urban people to cheap and healthy food, and to support academic studies. The selected beneficiaries of the project were retired people, people with disabilities, and elderly people living in the city centres. Beneficiaries were regularly followed up by academics from the Faculty of Agriculture at Sarajevo University. In the project, implemented under the supervision of the members of Faculty of Agriculture of Sarajevo University who worked as consultants, vertical hydroponic farming systems were established for the families, and in the first season, ten kinds of fruits and vegetables were grown, including strawberries, colourful leaf lettuce, spinach, basil, tomato and celery.

In the first stage, six months of prototype work and trial production were carried out with the project consultant for the vertical farming system. After successful results were obtained from the production, installations were set up for the pilot beneficiaries. In the second phase, a training, monitoring and support programme for beneficiaries was developed and launched by Sarajevo University, and the Production Implementation Guide was distributed to the project users after the training. At the final stage, Sarajevo University developed a plan for the development and dissemination of the system, according to the results and statistical data obtained after one year of the project's implementation.

The results obtained during the first applications were effective in disseminating the project, which expanded to other municipalities that were communicating with the project team of the Faculty of Agriculture of Sarajevo University.

The advantage of this system is that it provides new, vertical and dense agricultural production systems, especially for small areas. It eliminates the problem of restricted areas for agriculture in urban environments, and can be used in areas such as balconies, house surroundings, small greenhouses and terraces. For example, the yield to be obtained in an open area of 10 m² is obtained from an area of 1 m² with vertical farming systems. Through this system, approximately 40 strawberry plants are planted on a 2 m by 30 cm board in an area of 1 m², with a minimum yield of 12 kg, compared to

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the same number of strawberry plants in an open area of 10 m². With vertical farming systems, a family's food needs can be met by using only 18 m². The project aims to create long-term economic sustainability for socially disadvantaged groups. The usage period of the system is a minimum of ten years. The benefits of the project can be listed as follows:

- **It provides access to agricultural products at more affordable costs;**
- **It supports the production of fresh products at home;**
- **It prevents the use of pesticides and plant preservatives;**
- **It allows agricultural activities to be combined with household chores;**
- **It is suitable for disabled or less mobile people;**
- **Gardens built in city environments and apartments help reduce environmental pollution, create biological habitats and act as a natural isolation, thereby helping**

to reduce heating and cooling costs in the winter and summer periods.

The experience of Sarajevo University academics and practitioners engaged in the project can be replicated by other stakeholders who call for the elimination of the agricultural production deficit created by urbanization and an increase in the quality of urban life. Local ownership will be the most important component during the implementation of the project in accordance with local conditions and implementation.

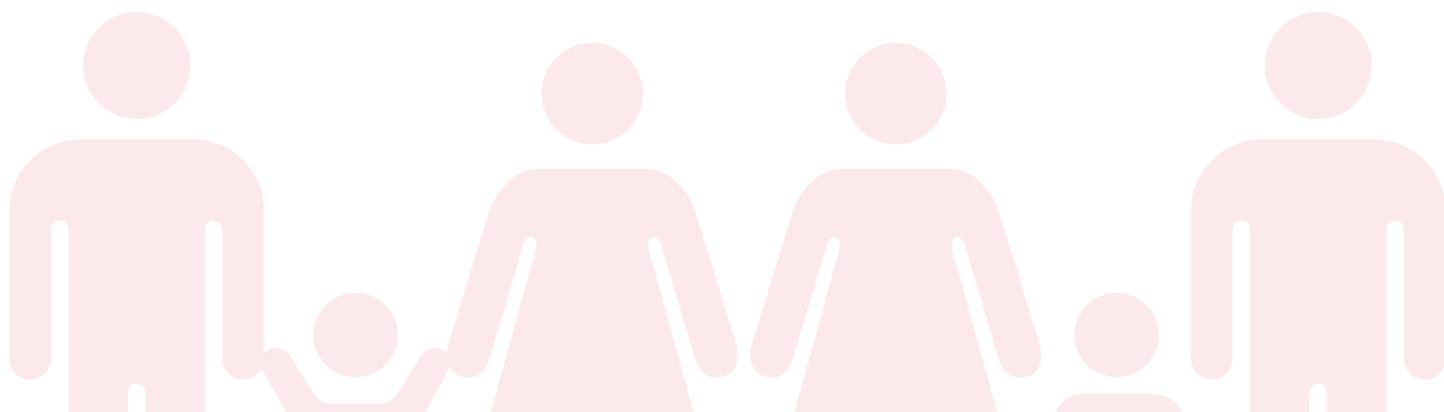
Contact:

Name: Strategy Development Department

Organization: Turkish Cooperation and Coordination Agency

Email: sgdb@tika.gov.tr

Phone: +90 312 939 70 00



PROJECT NAME: Improved Quality of Life of Urban, Retired and Elderly and Disabled People with Soilless Vertical Farming Practices: Providing agricultural production to urban, retired, elderly and disabled people at home with hydroponic vertical farming practices

COUNTRIES/REGIONS: Bosnia and Herzegovina, Turkey

NOMINATED BY: Turkish Cooperation and Coordination Agency (TIKA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 1.a, 8.1, 8.9, 9.4, 11.a, 12.2, 12.3

SUPPORTED BY: TIKA

IMPLEMENTING ENTITIES: Bosnia and Herzegovina Municipalities of Stari Grad, Centar, Novi Grad, Novo Sarajevo, Mostar municipalities, and Faculty of Agriculture, Sarajevo University

PROJECT STATUS: Completed

PROJECT PERIOD: 2017 – 2019

URL OF THE PRACTICE: <https://bit.ly/34s8icL>

YouthConnekt Africa: A Youth Empowerment Programme in Africa

Connecting African youth for socio-economic transformation

Challenge

Over the last several decades, Africa has been experiencing rapid technological and economic development, creating new opportunities for millions of people all over the continent. However, with more than 226 million people aged 15–24, Africa has the youngest population and the highest youth unemployment rate (60 percent) in the world.

Lack of employment opportunities, low levels of education and skills, combined with limited access to sexual and reproductive health services have resulted in a generation of young people with limited association to the formal job market. However, Africa's youth could represent a significant asset for sustainable growth if the demographic transition (characterized by an increase in the working age population) would be appropriately harnessed.

Towards a Solution

YouthConnekt is a youth empowerment programme that was launched in Rwanda in 2012 and is currently being rolled out across Africa. Before it became continental in 2017, YouthConnekt was launched by the Government of Rwanda through the Ministry of Youth and Information and Communication Technology (ICT) in partnership with the United Nations Development Programme (UNDP) as a multifaceted initiative aimed at providing a comprehensive answer to the several challenges faced by the youth. It aims at connecting young people with peers and role models, skills development, access to finance and entrepreneurship.

YouthConnekt takes a 'platform approach' to solving challenging development issues, and brings together a wide range of stakeholders, including heads of states, business leaders, development partners and the civil society, to address the multiple needs of young people while also fully involving them in the solution-building process. More specifically, UNDP and the Ministry of Youth and Culture coordinate the entire project, while the District Authorities and National Youth Council identify young innovators. Coaching and capacity building on entrepreneurship skills are supported by civil society organizations and public institutions (e.g. Business Development Foundation). The competition panel is also represented by public institutions (Rwanda Development Board, Rwanda Cooperating Agency, etc.), the private sector (mainly banks), civil society (Akilah Institute), and development partners (e.g. UNDP). The seed funding or financial award is provided and managed through the private sector (Brasseries et Limonaderies du Rwanda, Bank of Kigali, Tigo), CSOs (World Vision, Techno Serve, DOT, etc.). YouthConnekt is a great manifestation of partnership for shared goals.

Some of the project results are as follows:

- YouthConnekt Dialogue aims at providing a platform for young people to address dimensions of unity and reconciliation based on truth and trust.
Results/Impact (since 2013): More than 1,000,000 youth in Rwanda and abroad participated.
- YouthConnekt Hangout uses Google+ Hangout and other technologies to connect youth with role models, resources, skills and socio-economic opportunities.
Results/Impact (since 2013): Twenty YouthConnekt Hangout sessions have been conducted on various topics, where 13,000 youth have been engaged.
- YouthConnekt Convention is an annual event for youth throughout the country to discuss their de-

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velopment and innovations and showcase their achievements. Results/impact (Since 2012): Around 24,000 youth have participated in the Convention and shared their ideas.

- YouthConnekt Month & Holiday Program is marked by youth-led activities that are innovative and that impact positively on society while raising awareness among communities about the youth's contribution to nation-building. Results/impact (since 2012): **More than 4,000,000 youth have been involved in YouthConnekt Month activities. They constructed 30 houses for vulnerable families, worked on the rehabilitation of 789 houses, and on planting 1,000,000 trees across the country.**
- YouthConnekt Champions aims to celebrate young achievers and awards extraordinary accomplishments by youth at the forefront of innovative businesses, and social and civic innovations. This programme also recognizes significant institutional efforts to promote youth employment. Results/impact (since 2015): Three champions and seven young achievers have been recognized.
- YouthConnekt Boot Camp and Award aims to encourage innovation and entrepreneurship among youth. Three best innovators from all over country are trained in business development and given the opportunity to pitch their projects to potential investors. Results/impact (since 2012): More than 1,200 young innovators were trained through bootcamps, which created more than 10,000 jobs.
- YouthConnekt Africa Summit is an annual meeting that connects youth from across the continent. It provides a platform for all partners involved in youth development to synergize efforts in policies, programmes and partnerships that will connect youth for continental transformation. Results/impact (since 2017): three editions of the summit have been organized in collaboration with the Government of Rwanda, UNDP, the African Union, the African Development Bank, the Korea International Cooperation Agency (KOICA) and other partners, including United Nations agencies, private sector companies, donors, and non-government organizations. The YCA Summit 2019 brought together 10,000 participants from 91 countries, making it the largest Pan-African youth event to date.

In terms of sustainability, more than 20 partnerships have been established with government, development partners, civil society, academia and private sector organizations (Liquid Telecom, KOICA, United Nations agencies, Higher Life Foundation, Steward Bank, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Japan International Cooperation Agency (JICA). For instance, in 2019, the Rwandan Ministry of Youth, UNDP and the United Nations Population Fund (UNFPA) signed a partnership agreement with KOICA to support the scaling-up of the YouthConnekt initiative in Rwanda through a four-year programme (2019–2022).

The YCA provides extensive technical support to forge effective partnerships, design implementation mechanisms, assist in implementing policies and systems, and develop institutional capabilities for the national YCA programmes to operationalize and fulfil its mandate. Through the YCA network, partnerships are forged among national YCA initiatives to learn, replicate and implement relevant good practices and initiatives that improve the lives of young people.

Inspired by the achievements of the YouthConnekt Rwanda initiative, several other African countries and UNDP country offices have demonstrated strong interest in learning about and replicating its model in their respective countries. As a result, YouthConnekt has scaled up beyond Rwanda to 17 African countries (Cameroon, Cabo Verde, Democratic Republic of the Congo, Ethiopia, Ghana, Guinea, Liberia, Madagascar, Republic of the Congo, the Republic of the Gambia, Sao Tome and Principe, Sierra Leone, Senegal, Togo, Uganda, Zambia, and Zimbabwe), while numerous other countries are in advance stage of launching YouthConnekt country programmes.

Contact:

Name: Mr Qamer Jatoi

Title: Programme Specialist YouthConnekt Africa

Organization: United Nations Development Programme, Rwanda

Email: Qamer.jatoi@undp.org

PROJECT NAME: YouthConnekt Africa

COUNTRIES/REGIONS: Cameroon, Cabo Verde, Democratic Republic of the Congo, Ethiopia, Gambia, Ghana, Guinea, Liberia, Madagascar, Rwanda, Republic of the Congo, Sao Tome and Principe, Senegal, Sierra Leone, Togo, Uganda, Zambia, Zimbabwe

NOMINATED BY: United Nations Development Programme (UNDP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1., 1.2, 1.4, 4.3, 4.4, 4.7, 5.1, 5.5, 5.6, 8.2, 8.3, 8.4.2, 8.5, 8.6, 9.2, 9.3, 9.3.1, 9.b, 10.1, 10.3, 13.2, 13.3, 16.1, 16.2, 16.7, 17.11, 17.12, 17.17

SUPPORTED BY: UNDP, Korea International Cooperation Agency (KOICA), African Development Bank, African Union, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

IMPLEMENTING ENTITIES: Ministry of Youth, Government of Rwanda

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2012–2022

URL OF THE PRACTICE: www.youthconnektafrica.org

Enhanced Institutionalization of Participatory Local Development and Service Delivery

Strengthening francophone Africa's Community-Driven Development Network

Challenge

In response to the challenges of poverty, fragility and weak governance, the Governments of Cameroon, Guinea and Senegal have been pursuing a decentralization strategy, which strengthens the social contract between state and citizens. The decentralization has been focused on improving the delivery of basic services and infrastructure, promoting local ownership, and generating a more efficient and equitable use of resources. In alignment with their respective Country Partnership Frameworks, each of these Governments has undertaken projects applying a community-driven development (CDD) approach to promote participatory local development processes. By involving local communities more actively and directly, the projects' participatory approaches to local development support poverty-reducing investments, avoid elite capture, and promote accountability and social cohesion.

Although the Governments have been considerably successful in delivering services and promoting bottom-up and transparent governance at the project level, they have been struggling with how to: (i) institutionalize the bottom-up financial and administrative modalities; (ii) strengthen capacity building of the local authorities; and (iii) promote coordination and ownership of stakeholders at the various levels of government. Resolving these issues is imperative to achieve sustained impact and momentum for their country's vision for decentralization. Achieving a successful devolution of competences to local governments and sound public financial management were also part of the challenge.

Towards a Solution

Due to language barriers, the Governments of Cameroon, Guinea and Senegal have had limited access to international best practices of decentralization. Since these countries share similar decentralization contexts and challenges, a knowledge exchange among them was deemed a good approach. The exchange was especially timely as the Governments were seeking to institutionalize their bottom-up financial and administrative models under ongoing World Bank-funded projects (albeit with different levels of maturity).

The initiative began with three videoconferences with the project teams from the three countries, World Bank technical specialists, and other partners such as the French Development Agency (AFD) and the Institute for State Effectiveness. These videoconferences covered the operational strategies of the projects and included in-depth technical discussions on citizen engagement and fiscal transfer and capacity requirements for CDD approaches/decentralization. These topics were selected based on the participants' preferences from a previously conducted online survey. The three videoconferences allowed for dynamic exchanges on the effective implementation of citizen engagement mechanisms and alternatives for institutionalizing good practices.

The videoconferences were followed by study visits between Cameroon and Guinea, allowing the two countries to build more personal relational ties and have first-hand, deeper policy and technical discussions.

After the study visits, the Governments and the projects teams continued their technical discussions on performance-based financing to further support this effort, as well as on the projects' database, which would be institutionalized beyond the project, and the newly expanded support to urban

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communes (since the previous project was only focusing on rural communes). An assessment of community engagement tools and mechanisms utilized under the target projects was prepared to further strengthen the practice based on franco-phone Africa's experience in institutionalizing CDD models.

Learning from each other's CDD experience allowed the participants to understand practical lessons and opportunities for institutionalizing bottom-up models, and the strategic advancement of a long-term decentralization vision. Moreover, participants became better equipped to introduce reforms for the social inclusion of vulnerable and disadvantaged population groups such as indigenous populations, returnees, refugees and women. Particularly, the exchange allowed Cameroon to learn from Guinea's robust use of citizen engagement mechanisms; the Government of Cameroon is now keen to adapt them to improve their own participatory processes. Moreover, Cameroon recognized that Guinea's use of participatory budgeting and community-developed annual investment programmes can be highly effective in promoting community ownership and accountability for the implementation of local development plans.

Similarly, Guinea has identified how to improve action to enhance participatory practices and institutionalization, including scaling up citizen engagement tools. Based on the experiences of the Community Development Program Support Project in Cameroon, Guinea was made aware of the importance of providing basic supporting infrastructure (e.g. computers, solar kits and motorcycles) to local governments for effective management of community micro-projects. Guinea was also highly inspired by Cameroon's examples of how the community collectively developed indigenous solutions to address local challenges. For example, a lack of local government funding for a bridge was resolved by a community in Cameroon through the pooling of resources. Thus, in bolstering community ownership and fostering civic engagement, Guinea is keen to initiate assessment and implement new programmatic approaches to promote indigenous solutions in communities.

Key lessons learned:

- Citizen engagement tools such as participatory budgeting and

participatory monitoring and evaluation can be highly effective in promoting community ownership and accountability for the sustainable implementation of local development plans.

- Budget planning at the local level should inform the preparation of the national public investment budget for a more optimal use of national resources.
- Monitoring of local budget expenditure and relevant socio-economic data are strategic functions to achieve better policy decision-making, greater cost-effectiveness and enhanced visibility to advance the decentralization agenda.
- The quality of local development investments is greatly enhanced by involving line ministries, state decentralized services, and relevant technical agencies in the participatory planning processes. This strengthens ownership, accountability and mobilization of resources.
- Promoting indigenous solutions to local development challenges can not only circumvent budgetary constraints, but can also foster civic engagement.
- Building local technical capacity, particularly of young persons in the community, is essential in sustaining efforts to institutionalize bottom-up local development and decentralization.

Building on this network, the Governments intend to continue sharing knowledge on participatory decentralization practices through regular videoconference meetings organized for CDD practitioners and project implementation teams.

Several concrete actions are already underway. For example, the Guinea team is securing specific budgets to provide the basic infrastructure to the local governments and is conducting an assessment on citizen engagement tools. The Cameroon team has organized a workshop on awareness raising among the stakeholders on the project's participatory approaches and is exploring ways to improve involvement of local authorities, key line ministries and technical agencies in the participatory planning processes.

Contact:

Name: Mr Laurent Porte

Title: Program Manager, South-South Facility

Organization: World Bank

Email: lporte@worldbank.org

PROJECT NAME: Enhanced institutionalization of participatory local development and service delivery

COUNTRIES/REGIONS: Cameroon, Guinea, Senegal

NOMINATED BY: World Bank

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 10.2, 16.7, 17.9

SUPPORTED BY: World Bank South-South Facility

IMPLEMENTING ENTITIES: Government of Cameroon, Guinea and Senegal, World Bank, French Development Agency (AFD)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017 – 2018

URL OF THE PRACTICE: <https://bit.ly/31m0DuK>

Poverty Alleviation through Charitable Vocational Education

Empowering young people of underprivileged backgrounds to realize better futures by providing them with quality and relevant vocational education

Challenge

Over nearly three decades of civil war, 1975–2002, Angola was left with economic and social challenges, the displacement of millions of people and the destruction of its entire infrastructure. To rebuild the country's infrastructure and re-boot its economy, skilled workers are in high demand in various industries. However, most Angolans had never lived in a peaceful, stable environment during the prolonged civil strife, nor had access to education and employment opportunities. Specifically, none of the potential of the young generation, who were trapped in unrest and poverty, was developed.

To address this problem, vocational education is proved an effective approach to reintegrate youth into the work force based on BN Vocational School's (BNVS) good practice in China.

Towards a Solution

This initiative aims to provide youth aged 17–24 from impoverished families in Angola with access to charitable, vocational education and employment opportunities. By mastering vocational skills and obtaining employability skills, they can help lift their families out of poverty and shape their own future.

BN Vocational School (BNVS) was established in Beijing in 2005 as China's first tuition-free, non-profit vocational school at the senior secondary level. It is also the targeted school subsidized by the Project Hope of the China Youth Development Foundation and the Project Hope's Vocational Education Fund. Since established, BNVS has been experimenting with a holistic approach to whole-person education and an innovative curriculum development. The focus is not only on technical skills to ensure immediate employment, but also on life-long, development-oriented soft skills to help youth fully integrate into society and succeed as citizens.

In 2014, BNVS Angola was established in Luanda with the sponsorship of CITIC Construction Co. Ltd., a Chinese company, China Youth Development and BNVS School Board. CITIC Construction provides financial and material support, and BNVS provides an effective system that integrates its charitable management model and education concepts.

BNVS works actively with the Angolan Government and public sector to promote local participation and engagement. It also cooperates closely with local enterprises to provide employment-oriented training to students with courses designed according to market demand, which also helps ensure immediate employment after graduation. At the very beginning, only electrical, mechanical and construction engineering training sessions were offered at the school. However, a course on hospitality services was later offered to engage further students and empower them to be independent and change their own fate through education and training.

The teaching and management teams have also been established through close collaboration with multiple channels in the business sector. Only two out of the entire full-time staff of 12 in the Angola campus are Chinese; they are mainly in charge of school management and communication with headquarters. The integration of local talents and resources ensures the localization of BNVS practice

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4 QUALITY EDUCATION



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to suit the needs of targeted groups and effectively contributes to community development.

In addition to cooperation with government and private sectors, BNVS actively approaches local philanthropic organizations and volunteers to ensure sustainable development and an extensive impact. The school has established a good cooperative relationship with Lwini Foundation, founded by the First Lady of Angola.

For continuous improvement of the quality of replication, BNVS has been developing the 'BN Tree' online information system, covering all school operations using a comprehensive database and applying the blockchain philosophy on education management. Annual training and administration meetings are also organized to provide the team with up-to-date knowledge and support.

To date, BNVS has replicated its best practice worldwide, with campuses established in Beijing, Chengdu, Dalian, Sanya,

Wuhan, Yinchuan, Zhengzhou, Lijiang, Meizhou and Leishan in China and in Angola in Africa. The practice in Angola is a joint effort by BNVS and the Angolan Government, enterprises and local communities. **As of March 2020, 380 youth graduated from BNVS Angola, 95 percent of whom obtained employment in their localities.**

BNVS, which has been in operation for 15 years, was recognized as one of the "Best Practices in Global Poverty Reduction" by the 2018 campaign jointly hosted by the World Bank, the Asian Development Bank, the International Poverty Reduction Center in China (IPRCC) and four other international non-governmental organizations (NGOs).

Contact:

Name: Mr Bo Wen

Title: Principal

Organization: BN Vocational School

Email: wenbo@bnvs.cn



PROJECT NAME: Poverty Alleviation through Charitable Vocational Education

COUNTRIES/REGIONS: Angola, China

NOMINATED BY: BN Vocational School

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 4.3

SUPPORTED BY: CITIC Construction Co., Ltd. (Chinese company)

IMPLEMENTING ENTITIES: BN Vocational School

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014 – ongoing

URL OF THE PRACTICE: www.bnvs.cn

The Double One Project: The Tanzania-China Joint Programme for Scaling-up the Maize Labour Intensification System in Morogoro Region

Using Chinese experience to address low production, productivity and value addition

Challenge

The United Republic of Tanzania has maintained a relatively stable, high economic growth over the last decade, with a gross domestic product (GDP) growth rate of slightly over 7 percent in 2018. However, the agricultural sector experiences growth that is lower than the overall economy and far below the desired target of at least 6 percent per annum. The agricultural growth rate has remained low, with an average increase of around 3 percent during the 2006–2016 period, which failed to meet the Tanzania Development Vision (TDV) 2025 targets that aim at poverty reduction and improved livelihoods. In view of the prevailing situation, the Government, in collaboration with its development partners, has aimed to revamp the agricultural sector, in particular the crops sub-sector. Notwithstanding efforts made by the Government to promote crop production and productivity, challenges remain in farmers' access to productivity-enhancing technologies and services, value addition and reliable markets. This resulted in the failure of commodities to reach desired targets, as set out in the Agricultural Sector Development Programme.

Towards a Solution

The Tanzania-China Joint Program of Scaling-up Maize Labour Intensification System in Morogoro Region, or the 'Double One Project' (*Qian Hu Wan Mu*), aims at the effective interaction among four levels of governments, research institutions including universities, and target farmers to create situation-specific community development solutions that aim at improved maize productivity, incomes, food security and livelihoods. The solution aims to address Sustainable Development Goals (SDGs) 1 (No poverty), 2 (Zero hunger) and 7 (Affordable and clean energy).

The Merit-based Public Management System (MPMS) for enhancing the performance of local agricultural staff was established, piloted, and underpinned by the introduction of performance-based incentives for extension officers.

The ability of the regional government and district councils to support agricultural development in their areas of jurisdiction has been enhanced as a result of various capacity-building activities, such as training and effective communication through WeChat. In addition, linkages between central and local governments, universities and rural communities were strengthened.

Appropriate low-cost/low-capital-input technologies were identified and introduced in target villages for adoption supported by participatory action research and farmer-centred training.

Overall, results demonstrate that the Morogoro Project Management team, the seven participating District Councils, and the target beneficiaries efficiently utilized project funds from the China Agricultural University (CAU)/China Institute for South-South Cooperation in Agriculture (CISSCA), with almost a 100 percent achievement, leading to the full realization of project objectives.

The project is effectively operational in all ten planned villages, with a coverage of 1,432 target farmers (around 72 percent achievement out of the planned 2,000 farmers) cultivating 1,432

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acres (580 ha) (equivalent to 80 percent achievement against the overall target of 1,800 acres [729 ha], or 10,000 mu). The project that made use of the innovative MPMS and called for the strengthening of partnership among various key stakeholders, namely: universities, governments (central and local), research institutes and farmers and local communities. It emerged that the project contributed directly toward the realization of Tanzania's Agriculture Sector Development Programme II (ASDP II) objective to improve productivity of priority commodity value chains, and in particular the maize crop. Additionally, implementation of the project was embedded in the local circumstances and socio-economic context, while emphasizing the use of locally available resources or inputs.

Sustainability of project's interventions has been ensured by making effective use of existing central and local government structures, systems and procedures, as well as ensuring that all the four levels of government discharge their duties diligently, underpinned by effective utilization of the MPMS. Additionally, sustainability of the project interventions was enhanced through the emphasis on using locally available resources and focusing on beneficiaries' priority needs, constraints, opportunities and threats inherent in their socio-cultural, political and economic environment. The compatibility of project's interventions with beneficiaries socio-cultural and economical systems has increased beneficiaries' enthusiasm and enhanced ownership, and hence sustainability of interventions.

Since the project has been effectively operational in all ten planned villages with a coverage of 1,432 target farmers, good practices can be extended more widely within Tanzania, in which there is an efficient management team with academic expertise consisting in stakeholders within the local government leadership. The key lessons learned can be summarized as follows for further possible replicability:

- Effective project management is enhanced where there is a well-defined coordination and management structure, in-

cluding visionary and proactive leadership (e.g. CAU/CISSCA team and Morogoro Regional and District leadership), and a competent and committed managerial cadre (e.g. RAS and Councils' technical teams) underpinned by proper planning and regular monitoring.

- Effective implementation of the project activities involving key stakeholders from regional to lower levels, including universities/research institutes and the target farmers, requires sound coordination and collaboration mechanisms (e.g. a Memorandum of Understanding between CISSCA and Morogoro Regional Administrative Secretary), with clearly defined roles and responsibilities, and financing rules.
- Agricultural (e.g. maize) technologies and practices that are appropriate, compatible, simple-to-apply, affordable and cost-effective, and minimize risk while making use of locally available resources are readily adopted and maintained. Indeed, China's small farmer-centred, community-based development model accompanied by bottom-up participatory approaches have had a positive impact on poor farmers, by demonstrating the application of agricultural technologies and tangible benefits in maize productivity. The sustainability of development interventions requires the integration of activities and modalities into the Local Government Authorities LGA structure, alignment with central government planning and budgeting arrangements, and the involvement of genuine and empowered, local community farmer groups, including youth.

Contact:

Name: Dr Lanlan Ji
Title: Assistant Dean
Organization: China Institute for South-South Cooperation in Agriculture (CISSCA)
Email: lan.cissca@cau.edu.cn
WhatsApp: +8615010139980
WeChat: 15010139980

PROJECT NAME: The Double One Project: Tanzania-China Joint Program for Scaling-up Maize Labour Intensification System in Morogoro Region

COUNTRIES/REGIONS: China, United Republic of Tanzania

NOMINATED BY: Network of Southern Think Tanks

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.6, 2.3, 17.3, 17.6

SUPPORTED BY: International Poverty Reduction Center in China, Ministry of Science and Technology, Embassy of the People's Republic of China in Tanzania, Economic and Commercial Counsellor's Office of the People's Republic of China Embassy in Tanzania, China National Agricultural Development Group, Bill & Melinda Gates Foundation

IMPLEMENTING ENTITIES: China Institute for South-South Cooperation in Agriculture (CISSCA) at China Agricultural University

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: Not available

Addressing the Philippine Dairy Sector Challenges

Exchanging knowledge between Argentina and the Philippines to improve Philippine local dairy production

Challenge

The dairy sector in the Philippines has been recently established and is not yet sufficiently developed. Most of the producers are small-scale, with five to ten cows in their herds, working on farms that are usually not more than three hectares. The collection, processing and redistribution of production are carried out by cooperatives. The main challenges that the sector faces are water scarcity, poor mechanization, low reproductive efficiency, low forage production and lack of records that would help track the evolution of the dairy farms' production. As a result, the total production can only support 1.8 per cent of domestic consumption and therefore the rest must be imported.

Towards a Solution

The project aims to address the various challenges facing the dairy sector in the Philippines, providing innovative solutions based on the experience and technical knowledge achieved by Argentina, and adapted to the local context, and the needs and interests of Filipino producers, based on a participatory approach. With the ultimate goal to end hunger and achieve food security for the Filipino population while promoting sustainable practices among local dairy farmers, it contributes to the achievement of Sustainable Development Goal (SDG) 2. The project also makes progress towards the fulfillment of SDG 8, since it promotes productive employment and decent work for the Philippines population, providing the dairy sector technical solutions to address its challenges and increase production.

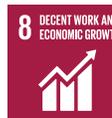
The National Directorate of Dairy, Ministry of Agriculture, Livestock and Fisheries of Argentina, and the National Dairy Authority of the Philippines worked together to design the project and applied *Bayanihan*, a concept in Filipino culture that refers to the spirit of communal unity, work and cooperation to achieve a particular objective. The *Bayanihan* spirit reflects the values of the Filipinos to help each other, especially in times of adversity and without expecting anything in return. This socio-cultural characteristic turned out to be a valuable feature to replicate in future projects in Argentina and the region, where there is usually a weak spirit of association in the agricultural and livestock sector.

The project adopted the methodology of group work to generate changes in management practices and knowledge and technology transfer. This methodology is widely used in Argentina through the Rural Change programme and constitutes a successful public policy that, through the advice and technical support of extension agents, enables both producers and cooperatives to improve their productive indicators and their management capacity, and achieve scale and competitiveness from associativism.

Groups of around ten producers each were formed, coordinated by an agent of the National Dairy Authority who received training in group work methodology. Working in groups facilitates extension tasks and is very important for the transmission of knowledge, making a more efficient use of technicians' time and available resources.

The local dairy farmers and members of the processing cooperatives, together with the National Dairy Authority (NDA) agents, participated in training activities on livestock feeding, reproductive manage-

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ment and milk quality, as well as data collection and uploading in the online database. **In total, seven groups of dairy producers from four Philippine provinces were formed and strengthened, and 26 NDA technicians were trained in order to generate changes in the management and transfer practices of technologies applicable to the dairy sector.**

One of the main expected outcomes of this initiative is the creation of an online database that will provide objective and accessible information on the evolution of production by cooperatives and producers. This will make it possible to evaluate, monitor and design projects and public policies specific to the sector. Hence, this constitutes a concrete solution to the lack of reliable information presented by the dairy sector in the Philippines.

The training of the NDA technicians is of particular importance in terms of the sustainability of the project, since the existence

of a territorially distributed technical team guarantees the continuity of the extension activities once the project is completed, based on the capacities installed in the framework of this cooperation initiative.

Moreover, the group work methodology used can be applied to a variety of topics and productions in the agricultural and agri-food sector, and is replicable in different contexts and countries. For its implementation, the only necessary condition is the existence of a local institution with a territorial presence that carries out extension work.

Contact:

Name: General Directorate for International Cooperation
Organization: Ministry of Foreign Affairs, International Trade and Worship, Argentina
Email address: dgcin@mrecic.gov.ar



PROJECT NAME: Addressing the Philippine dairy sector challenges

COUNTRIES/REGIONS: Argentina, the Philippines

NOMINATED BY: Argentina

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.3, 2.4, 8.3, 17.9

SUPPORTED BY: Argentine Fund for International Cooperation (FO.AR)

IMPLEMENTING ENTITIES:

ARGENTINA: General Directorate for International Cooperation (Ministry of Foreign Affairs, International Trade and Worship); National Directorate of Dairy (Ministry of Agriculture, Livestock and Fisheries)

THE PHILIPPINES: National Dairy Authority

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2020

URL OF THE PRACTICE: Not available

Strategies to Control the South American Migratory Locust

Argentina and Bolivia working together to control the locust plague outbreak and design a regional locust control plan

Challenge

In South America, the migratory locust is distributed in an extensive area of around 4 million km², including the north of Argentina, the Plurinational State of Bolivia, the south of Brazil, Uruguay, Paraguay and the north of Chile, which presents the maximum invasion rate registered. In 2017, the Department of Santa Cruz de la Sierra, the Plurinational State of Bolivia declared a phytosanitary emergency due to the invasion of this plague and was forced to fumigate more than 1,000 ha of maize, sorghum, soybean, bean and cotton. These insects have great dispersion capacity (up to 150 km/day) and great voracity, and represent a huge menace for all agriculture activity in the region, putting food security at serious risk.

Towards a Solution

The main objective of this project was to build monitoring and plague control methodologies through the exchange of knowledge and joint work between Argentina and the Plurinational State of Bolivia in order to address the food security challenge that the migratory locust represents to the population of the Plurinational State of Bolivia, hence contributing to the achievement of Sustainable Development Goal (SDG) 2.

In the context of the phytosanitary emergency in the Plurinational State of Bolivia, Argentine experts from the National Institute of Agricultural Technology (INTA) and the National Service of Agricultural Health and Quality (SENASA) provided technical assistance and worked together with the the Plurinational State of Bolivian authorities and technicians in order to fight the locust, adjusting the contingency plan to the specific characteristics of the affected area so as to have a more effective and timely control of the plague outbreak. A total of 50 the Plurinational State of Bolivian technicians were trained in modern plague monitoring methodologies, which contributed to the development of systematized and unified monitoring, as well as studies on population dynamics and locust feeding. Within the framework of the project, research projects were developed that allowed to acquire knowledge about the biological cycle of the pest.

These exchanges aimed to allow the Plurinational State of Bolivia to adopt technical and administrative measures to develop effective intervention strategies against the plague. As a result, the national authorities designed and implemented the the Plurinational State of Bolivian National Program for Locust Control.

As a direct consequence of the implementation of this project, and with the aim of addressing the plague in a sustainable and collaborative manner, Argentina, the Plurinational State of Bolivia and Paraguay signed the Regional Working Plan for Locust Management. This Plan will help coordinate and implement joint phytosanitary actions among the countries for the management of the plague in order to contribute to the sustainability of the agricultural production and native forest of the region.

Also as a result of the successful implementation of the project, the three countries agreed to develop two projects with regional impact: one project consists in setting up interconnected computer

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systems to improve the availability of phytosanitary digital information at the regional level; and the other project consists in implementing the necessary mechanisms between the technical offices of the three countries to contain the plague of the South American locust at a regional level, minimizing the risk for agricultural activity.

These three initiatives will favour cooperation between countries in order to avoid the spread of plagues, protect the environment, and provide phytosanitary security for exports and greater transparency to regulations. Having accessible information on the main crops and natural ecosystems of a country

and the plagues that affect them is the basis for establishing a joint phytosanitary surveillance mechanism, which will help reduce the negative effects of plagues on food production, protecting employment, industry and the service sector, as central parts of the productive chain.

Contact:

Name: General Directorate for International Cooperation
Organization: Ministry of Foreign Affairs, International Trade and Worship, Argentina
Email: dgcin@mrecic.gov.ar



PROJECT NAME: Strategies to Control the South American Migratory Locust

COUNTRIES/REGIONS: Argentina, the Plurinational State of Bolivia, Paraguay

NOMINATED BY: Argentina

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.3, 2.4, 17.9

SUPPORTED BY: Argentine Fund for International Cooperation (FO.AR)

IMPLEMENTING ENTITIES:

ARGENTINA: General Directorate for International Cooperation (Ministry of Foreign Affairs, International Trade and Worship), National Service of Agri-Food Health and Quality (SENASA) and the National Institute of Agricultural Technology (INTA)

THE PLURINATIONAL STATE OF BOLIVIA: Vice Ministry of Public Investment and External Financing (Ministry of Development Planning), National Service of Agricultural Health and Food Safety (SENASAG)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2019

URL OF THE PRACTICE: Not available

Scaling-Up Conservation Agriculture in East Africa

A five-year programme leveraging a triangular cooperation approach to enable smallholder farmers in Ethiopia, Kenya and United Republic of Tanzania to practise conservation agriculture

Challenge

One-third of the agricultural land in Ethiopia, Kenya and United Republic of Tanzania is severely degraded. Food insecurity is already high among smallholder farmers practising rainfed agriculture and is expected to increase as rainfall becomes more erratic. Conservation agriculture has proven effective at restoring soil health, improving the capture and use of rainfall, increasing crop yields and farm profitability, and contributing to climate resilience. Conservation agriculture has been promoted in East Africa to varying degrees by civil society organizations, governments and agencies such as the Food and Agriculture Organization of the United Nations (FAO), and there is an opportunity for more extension work to increase adoption by farmers, as well as coordination work with multiple actors to bring about policy change at the national level.

Towards a Solution

This project, implemented by the Canadian Foodgrains Bank with the financial support of Global Affairs Canada, aims to scale up conservation agriculture among male and female smallholder farmers in East Africa. Traditional practices of subsistence agriculture are characterized by low use of inputs, high vulnerability to soil deterioration, and increasingly variable climatic conditions. Conservation agriculture focuses on enhancing soil fertility, improving moisture retention, and reducing soil erosion and tillage through environmentally responsible agricultural practices. The project therefore improves the food security and livelihoods of smallholder farmers while encouraging sustainability, strengthening the empowerment of women, and reducing financial barriers. Activities within the project provide an effective way to address Sustainable Development Goal (SDG) 2, particularly target 2.4, which focuses on sustainable food production systems and climate-resilient agricultural practices that increase productivity and production. The project's triangular approach is also beneficial to the realization of SDG 17 (Partnerships for the goals) because it strengthens the means of implementation through a more inclusive and dynamic partnership.

The project includes a partnership with the African Conservation Tillage Network, a regional entity that works across the three recipient countries (Ethiopia, Kenya and United Republic of Tanzania) to create supportive policy and programme environments for conservation agriculture by engaging local, regional and national government officials. The Network serves as a pivotal partner, providing expertise on culturally relevant policy engagement in the region. It has not only engaged successfully with governments in conservation agriculture, but more importantly, has highlighted concerns and insights of farmers, further boosting the need for policy changes. The Network's leadership and management brought fruitful and unexpected results in terms of realizing significant progress on the project's policy objectives. In Ethiopia, this included broad relationships between numerous government departments, enabling continued progress on policy dialogue despite government restructuring and staff turnover. The field-level successes in Ethiopia enabled Canadian Foodgrains Bank to secure funding from other sources to scale up conservation agriculture in different regions of the country, and these successes have been sufficiently convincing that the Government of Ethiopia is now looking to other donors for further scale-up.

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17 PARTNERSHIPS FOR THE GOALS



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In the course of this project, a conservation agriculture curriculum was developed and then used by partner organizations to train farmers, government extension agents and other local non-governmental organization (NGO) staff. Partners provided ongoing support to farmers through workshops, farmer field days and farmer-to-farmer exchanges. Savings groups were established to facilitate local savings and credit access. In partnership with Farm Radio International, radio content was developed and broadcast in Ethiopia and United Republic of Tanzania to promote conservation agriculture principles.

This resulted in several innovative and sustainable outcomes in support of the SDGs. Triangular cooperation created mutual benefit for the Canadian Foodgrains Bank and the African Conservation Tillage Network to work together across the three countries. The Canadian Foodgrains Bank gained access to the region and sector, assisted by the African Conservation Tillage Network as a credible, knowledgeable and renowned organization. The Network, in turn, was able to elevate its profile by working with the Canadian organization. The adoption of policies that are more favourable to conservation agriculture, a goal shared by both organizations, was enhanced through the collaboration. Knowledge-sharing platforms were created in each country, bringing together local and international NGOs, government institutions, academics and the private sector to foster collaboration and strengthen sector capacity.

As of March 2019, 42,495 farmers (21,450 women) were practising two out of three conservation agriculture principles, and nearly half of the conservation agriculture farming households had 12 months of sufficient food. In addition

to time saved through conservation agriculture, farmers reported a net profit of CAD\$999 from crop yields, and just over half of the participants stated that their household was able to pay for household needs. Participation in the programme has contributed to women's empowerment of by increasing their access to household finances. The project also led to the establishment of 1,091 savings and credit groups with 24,329 members (18,677 women), and radio campaigns promoting conservation agriculture have been conducted in a number of regions.

The sustainability of this project is demonstrated by the inclusion of conservation agriculture in the training curriculum for all agriculture extension staff in Ethiopia and a commitment to do the same in United Republic of Tanzania, and the presence of a multi-stakeholder hub dedicated to conservation agriculture in Kenya. Results from this project are already being replicated in other regions of Ethiopia with support from other funders. The African Conservation Tillage Network will apply learning from this project to conduct research and policy dialogue in other countries. Canadian Foodgrains Bank is conducting a detailed evaluation of this project, to include lessons learned in policy dialogue and to inform work in other countries.

Contact:

Name: Ms Theresa Rempel Mulaire

Title: Conservation Agriculture Program Manager

Organization: Canadian Foodgrains Bank

Email: trempeulaire@foodgrainsbank.ca

PROJECT NAME: Scaling up Conservation Agriculture in East Africa

COUNTRIES/REGIONS: Canada, Ethiopia, Kenya, United Republic of Tanzania

NOMINATED BY: Global Affairs Canada

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.4, 17.16, 17.17

SUPPORTED BY: Global Affairs Canada

IMPLEMENTING ENTITIES: The Canadian Foodgrains Bank, the African Conservation Tillage Network

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2015–2020

URL FOR THE GOOD PRACTICE: Not available

Capacity-building Programmes on Irrigation Systems Development, Water Resources Management, Agricultural Productivity, Fisheries Resources Management, Animal Health and Post-harvest Management

Establishing partnerships to provide regional solutions with a global perspective

Challenge

Continuous population growth, urban sprawl and climate change increase the demand for food. Over many decades, there has been a declining global interest in the issues of agricultural development and food security. Indeed, food security is one of the major challenges facing humanity, and it is expected to intensify over the coming decades; with its strong multidimensionality, it is linked to poverty and hunger, health, economic development, energy, water, climate change, desertification, trade and technology transfer.

Ensuring food security – the basic right of people to the food they need – is one of the greatest challenges facing the world community. The challenge is most critical in low-income, food-deficit countries.

In the current era of sustainable development, a more integrated approach is needed in the face of global challenges, one that recognizes inter-linkages, avoids separate paths, and incorporates economic, environmental and social dimensions.

In Africa, agricultural and rural development problems have been related to underdeveloped policies, weak institutions and a lack of well-trained human resources. A critical factor in meeting the challenge of ensuring food security in Africa is human resource development through knowledge building and information sharing.

Towards a Solution

Since its establishment, the Egyptian Agency of Partnership for Development (EAPD), together with its national, regional and international partners, has aimed to put Egypt's many comparative advantages into play in order to harness the continent's immense potential for all.

Supporting the development aspirations of EAPD's partner countries has always been among Egypt's top foreign policy goals, and the successful cooperation that Egypt is witnessing proves that countries of the Global South can and do help one another to achieve the Sustainable Development Goals (SDGs) through the sharing of their precious knowledge and valuable resources.

In this regard, EAPD remains mindful of the local environment and culture, opting to be flexible and adaptable, and having a learning mindset, because different contexts require different approaches and interventions.

Since its establishment, EAPD has developed integrated programmes in cooperation with many national institutions, such as The Egyptian International Center for Agricultural, the National Water Research Center and the Animal Health Research Institute, to support the efforts of Africans through the organization of capacity-building programmes. These programmes cover irrigation systems development, water resources management, agricultural productivity, fisheries resources management, animal health and post-harvest management.

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In addition, EAPD engages in tripartite cooperation programmes with several regional and international organizations, which contributes significantly to supplying African countries with expertise and knowledge in line with the latest international standards in food security.

In this vein, Egypt, together with Japan International Cooperation Agency (JICA), implements 12 capacity-building programmes yearly, targeting 21 sub-Saharan African countries (Benin, Burundi, Cameroon, Comoro, Democratic Republic of the Congo, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, South Sudan, Sudan, Togo, Uganda, United Republic Tanzania and Zambia) in agriculture, fisheries resources management, animal health, post-harvest management and irrigation techniques.

The training programme, 'Third Country Training Program' (TCTP), implemented with JICA under an agreement on the 'Egypt-Japan Triangular Technical Cooperation Program for the Promotion of South-South Cooperation in Africa'.

These capacity-building programmes, implemented in cooperation with JICA in various fields including irrigation systems development, water resources management, agricultural productivity, fisheries resources management, animal health and post-harvest management, helped to build capacities of local farmers through practical training and knowledge. They provided a functional platform to African trainees to benefit from the training course and exchange opinions and practices towards the application of the course contents in home countries.

A full three-month training course has been conducted annually since 2014. The training is delivered in Egypt, in a group format with practical exercises in the above-mentioned fields.

Almost one third of the course (i.e. one month) is spent in the classroom on theoretical lectures, group discussions and

workshops in modules. Each module starts with conceptual lectures addressing specific topics in the field. The remaining portion of the course provides two months of practical training in which participants visit laboratories for demonstrations and participate in field visits and study tours.

Participants obtain hands-on experience by managing their assigned ponds to conduct experiments on male: female ratio, population intensity and the concentration of different nutrients.

To ensure the sustainability of this initiative, selected participants in the country should hold a position that allows them to disseminate knowledge such as extension officers or instructors at a relevant institution. In some cases, graduates participate in the selection of new candidates because this can help to strengthen the relationship between former and new participants, allowing the latter to become leaders in their countries.

A similar programme is implemented in collaboration with the Food and Agriculture Organization of the United Nations (FAO) in the field of agriculture, specifically on post-harvesting crops and aquaculture.

EAPD welcomes new partnerships and new triangular activities with international partners, aspiring to achieve greater South-South cooperation, fulfill the SDGs, and work towards ensuring the global community's support to the implementation of our regional sustainable development commitments and plans, such as the African Union's Agenda 2063.

Contact:

Name: Ambassador Mahmoud Elmaghraby

Title: Secretary General

Organization: Egyptian Agency of Partnership for Development (EAPD)

Email: marwa.mahmoud@mfa.gov.eg

PROJECT NAME: Capacity-building programmes on irrigation systems development, water resources management, agricultural productivity, fisheries resources management, animal health and post-harvest management

COUNTRIES/REGIONS: Benin, Burundi, Cameroon, Comoros, Democratic Republic of the Congo, Egypt, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania, Zambia

NOMINATED BY: Egyptian embassies in Africa in collaboration with the Ministry of Foreign Affairs in the countries involved and other competent national institutions

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 14.2, 14.7, 17.6, 17.7

IMPLEMENTING ENTITIES: Japan International Cooperation Agency (JICA), Food and Agriculture Organization of the United Nations (FAO), Egyptian National Centre of Excellence

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014 – ongoing

URL OF THE PRACTICE: <https://bit.ly/3aQsPZS>

Water Farming for Climate-Resilient Agriculture and Disaster Preparedness in India and Bangladesh

Providing climate-resilient livelihood opportunities for farmers in India and Bangladesh by growing crops on floodplains

Challenge

The flooding of the floodplains of India and coastal Bangladesh are an almost yearly occurrence: 35 percent of the land is submerged with 25 percent of the cultivable land remaining inundated in flood waters for about seven to eight months. The flooding threatens the livelihoods and food security of communities; farmers and their families struggle with poverty, impoverishment and social disparity; agrarian communities are forced to migrate; young farmers are unemployed; and there is a limited number of agricultural business opportunities.

In 2019, floods in Assam, India are reported to have caused thousands of deaths, owing to numerous landslides, devastations and road blockages affecting up to 5.8 million people in 21 districts, of whom 78 percent are marginal communities in rural settings. In the same year, floods affected 2,100 villages and destroyed standing crops across an area of up to 212,123 ha. As an aftermath, livelihoods of almost one million people were at stake, and more than 1,700 villages faced an acute food crisis.

Since 2017, 87 percent of land holdings in Satkhira district of Bangladesh were abandoned due to salinity ingress, and 94 percent of male farmers of 20–45 years migrated as labourers in the Middle East. Impacts are multiplied in the scarcity of adaptive farming alternatives, disaster-resilient technology and real-time contingency planning. According to official estimates in 2018, nearly 220,000 hectares of farmlands in low-lying coastal areas have been rendered unproductive due to salinity ingress.

Towards a Solution

The South Asian Forum for Environment (SAFE)¹ implemented the project, 'Water Farming for Climate Resilient Agriculture and Disaster Preparedness in India and Bangladesh', with the support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in order to address food security and climate preparedness for flood-stricken communities in India and Bangladesh. The direct beneficiaries are indigenous and often marginalized farmers and fishers, 90 percent of whom live below the poverty line and are excluded from mainstream economic activities. The project trains vulnerable people in establishing float farms and aquaculture as a flood-resilient practice and business opportunity. Float farms also provide alternative livelihoods for migrants displaced from floods or the COVID-19 pandemic and increase food security during lockdowns.

The initiative contributes to the achievement of at least eight Sustainable Development Goals (SDGs): It promotes agricultural productivity and climate-adaptive food production systems (SDG 2, targets 2.3 and 2.4); equal rights to economic, social and natural resources (SDG 1, targets 1.4 and 1.5); women's participation (SDG 5, target 5.5); and international cooperation and capacity-building in water-and sanitation-related areas (SDG 6; targets 6.5, 6.6, 6.a). It sustains income growth of the bottom 40 percent of the population and reduces inequalities of outcome (SDG 10; targets 10.1, 10.2, 10.3). It also enhances the resilience of human settlements (SDG 11), ensures sustainable production

1 SAFE is a regional civil society organization working at the community-ecosystem interface towards sustainable development solutions through community-based interventions on the climate in South Asia

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patterns (SDG 12), and strengthens resilience to climate-related hazards (SDG 13; target 13.1).

SAFE used targeting methods to identify the direct beneficiaries who are the most vulnerable to floods such as a sociometric survey for needs assessment and livelihood vulnerability, as well as resource mapping and disaster zoning using geospatial tools and techniques. Beneficiaries were trained by agricultural and fisheries experts in India and Bangladesh to build their capacities in hydroponic float farming and aquafarming. The training materials were developed through a South-South exchange of traditional float farming methods and informed by a participatory planning phase that involved all beneficiaries. Subsequently, the float farms were built with the active participation of the trained float farmers and inaugurated by communities. Farmers were encouraged to create new agricultural business opportunities and were provided with support in collective crop cycle planning, aquafarming with livestock and hatchery management as well as information on credit linkages, financing mechanisms and insurance coverage. Master trainers were identified and trained to mainstream float-farming techniques in the communities and support the maintenance and expansion of aquafarms.

The project achieved the following outcomes over 15 months:

- 785 hydroponic trays were placed in 18 different locations covering nearly 8.75 hectares of float farms and 72 hectares of fish farms;
- 620 project beneficiaries successfully grew 37 metric tonnes of horticultural crops, seedlings and cut-flowers, and farmed 128 metric tonnes of table fish throughout the project span;
- 68 Joint Liability Groups with seven to ten members were established, of which 25 are now credit-linked as registered cooperatives;
- 60 capacity-building workshops were conducted to train 1,500 farmers in adaptive resilient agriculture and 120 master trainers.

Most importantly, flood farming allowed beneficiaries to secure their livelihoods: each float farm produced around

130–170 kg of vegetables and 150–200 kg fish for a total value of EUR 500 every three months. At the household level, float farming secured food and raised farmers' earnings by 65–70 percent.

The sustainability of the project is based on a business plan that ensures collective financing, access to markets, and training of local 'master trainers' who support the maintenance and expansion of float farming and aquaculture enterprises. Additionally, float farms are equipped with solar micro-irrigation systems to ensure environmental sustainability.

This intervention has tremendous potential for scale-up on the Asian coast as well as in Small Island Developing States (SIDS) and floodplains in which inundation has been a serious concern. Locations with water abundance (such as inundated or water-logged areas) or a water crisis, communities unaware of water resources management, and agrarian marginal communities can adopt the technology for sustainable growth after they have been sensitized for the issue. Since this is a closed-system farming practice, it is also ideal for carbon-neutral organic farming, an adaptive method that advances the goals of the Agenda 2030. Local administrations throughout the course of the project have extended their support, and the Japan Social Development Fund stated its interest in extending it to other parts of South Asia. The successful methodology has already been transferred from India to Bangladesh with the support of GIZ and can be replicated in other countries – including as COVID-19 emergency measure to provide food security in flood-stricken communities affected by lockdowns.

Contact:

Name: Dr Dipayan Dey

Title: Project Leader

Organization: South Asian Forum for Environment (SAFE)

Email: chair@safeinch.org

Skype: dey9903181171

WhatsApp: +91 990 318 1171

PROJECT NAME: Water Farming for Climate-Resilient Agriculture and Disaster Preparedness in India and Bangladesh

COUNTRIES/REGIONS: Bangladesh, Germany, India

NOMINATED BY: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 1.5, 2.1, 2.3, 2.4, 5.5, 6.5, 6.6, 6.a, 10.1, 10.3, 11.b, 12.2, 13.1

SUPPORTED BY: GIZ

IMPLEMENTING ENTITIES: South Asian Forum for Environment (SAFE)

PROJECT STATUS: Pilot phase completed; scale-up phase ongoing

PROJECT PERIOD: 2018–2021

URL OF THE PRACTICE: www.safeinch.org

The Smiling Children School Feeding Programme in Schools in Ethiopia and Sudan

Implementing a school feeding programme of international cooperation that targets zero hunger

Challenge

The proportion of starved population in Africa remains as high as 16 percent, and there are still millions of children at the primary school age attending school in a state of hunger. According to a survey conducted by the Office of the First Lady of the Federal Democratic Republic of Ethiopia, in 2015, in 220 public primary schools in Addis Ababa, the capital of Ethiopia, there were more than 30,000 students without sufficient food. Long-standing starvation has brought multiple problems to impoverished students in terms of education, health and security. Impoverished families cannot provide children with three meals a day, so some of the students are forced to drop out of school to work or beg on the street. Those who stay at school are also unable to focus in class due to hunger and often pass out. Efforts are needed to fulfil Sustainable Development Goal (SDG) 2 (Zero hunger).

Towards a Solution

The Smiling Children School Feeding Program aims to support impoverished school-age students who lack sufficient food by providing free meals at schools, primarily targeting SDG 2 (Zero hunger). With further goals of improving children's nutrition, increasing their educational participation, and reducing their families' burdens, the Initiative also aims to address SDG 1 (No poverty), SDG 3 (Good health and well-being) and SDG 4 (Quality education).

The successful implementation of the initiative relies on the experience and wisdom of both Chinese and Ethiopian/Sudanese parties. In addition to raising programme funds, the China Foundation for Poverty Alleviation (CFPA) shared valuable experience learned from the Nutritious Meals Program carried out in rural China in the past years. For example, at the local level, the Ethiopian Government and non-governmental organizations (NGOs) provided a reliable mapping of the status quo and needs, thus targeting the most needed populations and maximizing the impact. Moreover, CFPA incorporated and systematized the localized 'mother group model' into programme management. As a result, joint cooperation led to a most effective solution to address the problems.

Different participants strictly perform their duties and obligations to ensure the orderly operation of the programme. In Ethiopia, for instance, the programme's Chinese team is fully responsible for programme design, implementation, daily management, monitoring and feedback. The Office of the First Lady of the Federal Democratic Republic of Ethiopia assists the team in programme implementation and monitoring, and in the coordination of local agencies and partners. Yeenatweg Charitable Organization, an Ethiopian partner, is responsible for the overall management of the programme. Beneficiary schools select qualified students in accordance with the standard, provide corresponding equipment, supervise and examine the quality of the meals, and report back in a timely manner. Each 'mother group' purchases ingredients and prepares quality meals according to menus and the meal standard.

The criteria for selecting beneficiary students vary according to the different executive parties. When CFPA is the executive party, it carries out the whole-school coverage principle; i.e. all students from candidate beneficiary schools (public/government-funded) that meet the following requirements will benefit from the programme:

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- The schools are located in densely populated, poor areas.
- The malnutrition rate of the students reaches more than 30 percent, according to the local health authorities.
- The schools are located in easy-to-access areas, which is relatively convenient for food transportation.
- Priority will be given to schools with a higher percentage of girls.

When Yeenatweg Charitable Organization is the executive party, the beneficiary students that meet the following requirements will benefit from the programme:

- be an orphan;
- have a disability;
- come from single-parent families;
- be living with AIDS or come from an AIDS-affected family;
- have parents who have a disability or who are seriously ill;
- come from a migrant family living in a remote mountainous village;
- come from a family with other problems.

As an innovative approach, the mother group model was adopted to ensure that meals would be reasonably priced, healthy and safe, and to provide some women with employment. Yeenatweg Charitable Organization recruits the parents of each targeted school's students into a mother group, formulates the rules and regulations of the group, organizes and trains them, and provides them with necessary kitchenware. In turn, with monthly funds for food from Yeenatweg Charitable Organization, the mother group purchases ingredients on the market and cooks in the school kitchen. The school and partners monitor its expenditures to ensure that it supplies quality food at a reasonable price. The adoption of the mother group model has enabled unemployed women to access employment and provided them with appropriate living allowances. Moreover, cooking and distributing meals for students can stimulate the mothers' enthusiasm for the programme, thus ensuring food quality and safety.

Since 2015, the programme has been successfully implemented in Ethiopia and Sudan. **By the end of 2019, a total of 38,164 person-years (number of beneficiary students multiplied by the number of years benefited) of poor children benefited (23,621 in Ethiopia and 14,543 in Sudan). School feeding**

has improved both school attendance and performance, improved students' nutrition and immunity, and guaranteed the safety of students. A midline survey shows that in all academic years, beneficiary students outweighed students without school feeding by an average of 6.125 kg (female) and 5.9 kg (male). The beneficiary students' drop-out rate in 2018 was reduced by 76 percent with respect to the rate prior to the programme. In addition, the programme has provided employment opportunities for women; each school provided 30 to 50 jobs in the mother group, which enabled some impoverished women to earn a living.

Observing its effectiveness, the Education Bureau of Addis Ababa decided to adopt the model and expand school feeding to all Addis's public schools. CFPA has also expanded the programme to more schools in other areas of Ethiopia, including Somalia State refugee camps and Amhara State. Involvement of the local government, together with continuous support from Chinese NGOs and other partners, guarantees the programme's strong sustainability.

The replicability of the programme may be high when there is a combination of international cooperation and localization. Before the School Feeding Program was launched, the Chinese investigation team visited a number of Ethiopian and Sudanese government agencies, charitable organizations and schools to fully understand local conditions. During the implementation stage, the Chinese team also worked closely with various local partners and stakeholders to guarantee the quality and effectiveness of the programme. To date, the Smiling Children School Feeding Program has been carried out in Ethiopia and Sudan and will soon be launched in Nepal and Myanmar where CFPA has officially registered as an international NGO and worked closely with local partners since 2015. With a tailored programme design and strong local partnerships, the initiative can definitely be extended to more developing countries in need.

Contact:

Name: Mr Peng Wu
 Title: Director of the International Development Department
 Organization: China Foundation for Poverty Alleviation
 Email: idd@fupin.org.cn

PROJECT NAME: Smiling Children School Feeding Program in Ethiopia and Sudan
COUNTRIES/REGIONS: China, Ethiopia, Sudan
NOMINATED BY: China Foundation for Poverty Alleviation
SUSTANABLE DEVELOPMENT GOAL TARGET(S): 1.2, 2.1, 2.2, 3.4, 4.1
SUPPORTED BY: Alibaba Philanthropy
IMPLEMENTING ENTITIES: China Foundation for Poverty Alleviation
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2015–2020
URL OF THE PRACTICE: <https://bit.ly/2QjBASP>

The Smallholder Horticulture Project in Ethiopia

Improving smallholder farmers' livelihoods through the competitive and sustainable development of the avocado sector

Challenge

The agricultural sector is the Ethiopian economy's largest sector, primarily consisting of small farms. In recent years, population growth and the depletion of land and water resources have deteriorated the condition of these farms, causing poverty and triggering migration to cities. In order to find solutions for improving smallholders' livelihoods and generating income, all aspects of agriculture should be addressed, including soil quality and irrigation systems, better crops and plant materials, agro-techniques, agricultural extension, post-harvesting and marketing. Adding horticultural crops, both fruits and vegetables, to the smallholders' production basket can greatly improve their economic situation and avoid the risks involved in monoculture farming.

Towards a Solution

The Smallholder Horticulture Project (SHP) is a Joint Technical Cooperation Programme between Israel, the United States and Ethiopia. Implementing partners are Israel's Agency for International Development Cooperation (MASHAV), the United States Agency for International Development (USAID), and Ethiopia's Ministry of Agriculture (MoANR). The programme was mainly implemented in five *woredas* (administrative divisions in Ethiopia): Mecha, Meskan, Boloso Sore, Raya Alamata and Kersa, and provided technical assistance to avocado growers in the country.

The project was designed to identify and access new domestic and export markets for avocados, as well as to provide technical support to improve phytosanitary regulations for Ethiopian horticultural crops. The project's ultimate goal was to promote economic growth in rural areas by strengthening the commercialization of horticulture production through the competitive and sustainable development of the avocado sector. The project aimed to increase smallholder farmers' income by allowing access to new markets through the sharing of Israeli expertise in high-value horticultural production, the establishment of tissue labs and horticultural nurseries, the scaling up of production and supply of improved plant material, the capacity building of extension agents and smallholder farmers, and through the improvement of production and marketing skills.

This initiative addressed all steps of production including: the introduction of new high-quality avocado varieties; quality training and consultancies; capacity-building for nursery and tissue culture lab management and extension services; and the establishment of tissue culture laboratories, new nurseries and demonstration plots for the propagation of avocado trees. The Ethiopian Government provided administrative coordination and nursery equipment; USAID, in its role as partner, directed the project including allocation of budget, monitoring and evaluation; and MASHAV provided knowledge, budget, training (in Israel and Ethiopia) and long-term expertise from the establishment of the project until April 2020.

The project was navigated by a steering committee that met twice a year (once per year toward the project's conclusion). The Committee was chaired by the Ethiopian State Minister of Agriculture, the USAID representative, and the MASHAV representative with the Israeli Embassy.

The project underwent different phases, which were adjusted according to Steering Committee decisions.

The project was based on the demonstration of innovative agricultural technologies, training and capacity building, transfer of know-how and management skills, and the application of a training of trainers approach. Activities included:

- the introduction of new, high-quality Israeli avocado varieties for the domestic and export market (the supply of Israeli avocado scions, grafting seedlings in nurseries);
- the provision of quality training and consultancies, both in Ethiopia and on working visits to Israel;

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- capacity-building for nursery and tissue culture lab management and extension;
- the establishment of tissue culture laboratories;
- the establishment of new nurseries and demonstration plots for the propagation of avocado trees;
- the development of professional instructional materials addressing local conditions.

The project also worked to provide adequate production and supply of planting materials, specifically that of the grafted Hass avocado variety. In order to overcome shortages of Hass planting material in the country, the project imported more than 280,000 scions from Israel between 2017 and 2019, grafting them at nurseries in four regions. The project also provided several hundred thousand scions to the nursery centres from local sources beginning in 2016.

In total, more than 600,000 grafted avocado seedlings were delivered to the growers between 2016 and 2019. Most of the seedlings were supplied by the nurseries involved in the project.

At the last stage of the project, six avocado nurseries were managed by the project in the areas mentioned previously. In the areas surrounding these nurseries, Ethiopian farmers planted commercial avocado plantations purchased from the project's nurseries.

The project also set up pilot solar drip irrigation systems in four regions.

More than 2,500 smallholder farmers were trained on improved orchard management practices, specifically on compost preparation and application, tree pruning and top working, pest and weed management, and mulching. The farmers also received training on post-harvest handling of fruit.

A total of 413 experts, development agents and grafting technicians have been trained since May 2016. Specifically, training was provided on commercial agriculture project development as well as on post-harvest handling techniques.

Focusing on five *woredas*, **5,000 farmers participated in capacity-building activities, and there were a total of 6,308 direct project beneficiaries.**

Nurseries and extension activities were documented to fulfil the Global Good Agricultural Practices requirements for the export of avocado fruits. In 2019, about 16.3 metric tons of avocado fruit

were exported to Europe, and around 46 farmers were linked to the export market in Amhara and in Southern Nations, Nationalities, and Peoples' Region (SNNPR) in 2019. However, only around 13 percent of the export plan was achieved in 2019 (the plan was to reach 125 metric tons) due to various reasons, including lack of tree maturity and hail damage in August 2019.

In general, the project was focused on capacity-building, i.e. providing training both on-the-ground and overseas, in both production and marketing. Still, greater efforts are needed to sustain the project's achievements and to lay a strong foundation for the export of avocados from the country.

The sustainability and replicability of the initiative is reflected in MASHAV's approach of 'training of trainers', resulting in a cadre of local professionals who continue training local plant propagation technicians for nurseries and micro-propagation laboratories, transfer knowledge and plant material to the farmers, and accompany them while accessing local and export markets. The roles of these trainers include: transferring of know-how regarding fruit tree production; visiting the farmers regularly and suggesting improvements; following up on the implementation of these recommendations; organizing demonstrations of new technologies; and providing information on prices, markets and inputs.

At the time of the initiative's completion in 2019, over 3,000 smallholders were applying the new technologies and improved techniques, and were seeing increasing productivity.

The project can be replicated in other developing countries after adjustments to the local conditions. Activities can either be built on an existing project, or the two sides can jointly design and implement a new initiative. Each side contributes their expertise and comparative advantage to the project.

Our cooperation focuses on providing developing countries with the tools for sustainable capacity building. In its triangular cooperation, Israel's main focus is on capacity building. By cooperating with a funding state and a developing country, the parties are able to achieve their goals of the triangular cooperation.

Contact:

Name: Ms Shulamit Kurzon van Gelder

Title: Director, Department of Planning, Evaluation and Partnerships

Organization: Israel's Agency for International Development Cooperation (MASHAV)

Email: shuli.kurzon@mfa.gov.il

PROJECT NAME: The Smallholder Horticulture Project in Ethiopia

COUNTRIES/REGIONS: Ethiopia, Israel

NOMINATED BY: Israel's Agency for International Development Cooperation (MASHAV)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 1.4, 1.b, 2.1, 2.3, 2.4, 2.a, 2.c, 8.2, 8.3, 8.5

SUPPORTED BY: MASHAV and United States Agency for International Development (USAID)

IMPLEMENTING ENTITIES: Financially supported by MASHAV and USAID, with Ethiopia's Ministry of Agriculture, as host, providing in-kind support such as office space and staff.

PROJECT STATUS: Completed

PROJECT PERIOD: 2005 –2019

URL OF THE PRACTICE: <http://shpmashavethiopia.com>

The Kuwait Goodwill Fund for the Promotion of Food Security

Assisting countries in achieving food security and assuring the basic right to food

Challenge

Today, more than 820 million people regularly go to bed hungry, of whom about 135 million suffer from acute hunger, largely due to man-made conflicts, climate change and economic downturns. One of the main problems facing developing countries is the fluctuation in international food prices, due to the difficulty in securing foreign currencies to import it. This impacts imports of food, food production, food processing and other related services, leading to food insecurity and severe health issues, especially among children.

Towards a Solution

To assist countries in addressing this problem, the State of Kuwait announced an initiative, at the Forth Islamic Economic Forum held in Kuwait from 28 April to 1 May 2008, to establish the Kuwait Goodwill Fund for the Promotion of Food Security in Muslim Majority Countries, for the total amount of US\$ 100 million. The Fund assists these countries in achieving food security by diversifying and increasing the productivity of agricultural products together with livestock and fishing.

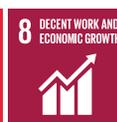
The grant was distributed to 22 countries with low per capita income and high population.

The Fund works by signing grant agreements with partner countries, which then require that the receiving country open an account with a bank with expertise in financing agricultural projects approved by the Kuwait Fund, where the total amount of the grant will be deposited. To monitor the activities of the chosen bank and follow up on the financed projects, Kuwait Fund signs another agreement with the bank. The bank, in cooperation with government representatives, appraises funding applications received from the farmers. Projects qualified for financing from the Fund will be either classified as 'small loans' (i.e. loans not exceeding the equivalent of US\$25,000) or 'micro-credits' (i.e. credits not exceeding the equivalent of US\$3,000). Financing from the special account is provided in the form of concessional loans to be repaid with interest within an agreed time. Part of the revenues earned on the farmers' loans repayments is spent on administration fees, while the remaining revenue is retained and added to the principal amount. Retaining the surplus in revenues and adding it to the original value of the grant provided by the State of Kuwait guarantee the sustainability of the Special Fund. For example, an agreement was signed with the Coris Bank in Burkina Faso to administer the Goodwill Fund due to its expertise in financing agricultural projects and because it has branches throughout the country, with close to 24 branches throughout the country.

As of 2013, the Fund has benefited 22 countries (Afghanistan, Bangladesh, Benin, Burkina Faso, Chad, Comoros, Djibouti, Gambia, Guinea, Guinea-Bissau, Mali, Maldives, Mauritania, Mozambique, Niger, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, and Yemen) for the total amount of US\$100 million.

This initiative contributed to creating a large number of job opportunities in the beneficiary countries where many farmers became entrepreneurs and created new jobs. They obtained relevant knowledge and expertise through training provided by the Ministry of Agriculture in their respective countries. It also secured a decent source of income for numerous families and

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improved their standards of living, especially women. More importantly, it assisted in enhancing food security in the beneficiary countries, minimized the impact of fluctuations in food prices, reduced imports and saved foreign currency. This has had a significant positive impact on the current account and the balance of payments of beneficiary countries. For example, a group of women in Guinea-Bissau took out a loan from the Goodwill Fund and created a partnership to fish, freeze and market their catch. This required employing a number of workers to assist in fishing as well as transporting, freezing, storing and marketing fish, which provided income

for all those working on this project. In addition, the project promotes food security. Furthermore, women in charge of this project stated that the project contributed to their empowerment and provided them with the necessary income to educate their children and offer them good healthcare.

Contact:

Name: Mr Khaled F. Alkhaled

Title: Regional Manager for International Organizations

Organization: Kuwait Fund for Arab Economic Development

Email: alkhaledk@kuwait-fund.org



PROJECT NAME: The Kuwait Goodwill Fund for Promotion of Food Security

COUNTRIES/REGIONS: Afghanistan, Bangladesh, Benin, Burkina Faso, Chad, Comoros, Djibouti, the Gambia, Guinea, Guinea-Bissau, Kuwait, Mali, Maldives, Mauritania, Mozambique, Niger, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, Yemen

NOMINATED BY: Kuwait Fund for Arab Economic Development

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 2.1, 8.1, 8.2, 8.3, 17.1, 17.6

SUPPORTED BY: Kuwait Fund for Arab Economic Development

IMPLEMENTING ENTITIES: Ministry of Finance and specialized banks within the beneficiary countries

PROJECT STATUS: Completed

PROJECT PERIOD: 2008–2013

URL OF THE PRACTICE: Not available

Working Together to Increase Agricultural Production, Productivity and Profitability in Madagascar

Technical Assistance under South-South Cooperation with China in Support of the Implementation of Agriculture Livestock and Fisheries Sector Programme and the FAO Country Programming Framework in Madagascar

Challenge

Agriculture, which accounts for 26.4 percent of gross domestic product (GDP) and employs more than 75 percent of the working force, is one of the main drivers of the Malagasy economy. However, it is clear that despite the island's potential for agricultural land availability and young labour, production is still insufficient to meet the needs of the ever-growing population. Indeed, low productivity, lack of infrastructure, poor access to the market, lack of access to capital, seeds and inputs as well as technical services and training still persist.

Increasing production and productivity in agriculture, building technical capacity for farmers and other involved actors and stakeholders, and promoting investment and trade in agriculture between Madagascar and other countries are essential to tackle the above-mentioned issues in order to achieve one or more of the Sustainable Development Goals (SDGs), namely, SDGs 1 (No poverty) and 2 (Zero hunger).

Towards a Solution

A tripartite agreement between the People's Republic of China, the Republic of Madagascar and the Food and Agriculture Organization of the United Nations (FAO) was signed in November 2018 to implement the China-FAO-Madagascar South-South Cooperation (SSC) project for a period of two years, from 2019 to 2021. The SSC project aims to increase production, productivity and agricultural profitability by supporting the implementation of the Agriculture, Livestock and Fisheries Sector Program (PSAEP) by the Ministry of Agriculture, Livestock and Fisheries (MAEP) and FAO's Country Programming Framework (CPF). The initiative will: (i) contribute to the national food security and household incomes; (ii) contribute to the achievement of Madagascar self-sufficiency while reducing the outflow of currency in importing rice; and (iii) promote investment, agribusiness and trade in agriculture. These impacts will contribute to the achievement of SDG 1 (No poverty), SDG 2 (Zero hunger) and SDG 17 (Partnership for the goals).

China has developed strong expertise and technologies in some areas that could be adapted to the situation in Madagascar in terms of agriculture. Three priority areas have been selected for Madagascar: hybrid rice production, livestock (sheep and goat) and agribusiness. During the two years of the project, 17 Chinese cooperants are engaged in the main producing regions of Madagascar. They will later transfer knowledge and technologies to farmers and their organizations who will be directly involved in the training and demonstration activities, as well as to civil servants, local technicians and research institutions.

The MAEP coordinates and implements in close collaboration with the Chinese experts and technicians and under the overall support of FAO. As such, the Chinese experts and technicians closely work with their national counterparts, who are officially appointed by the Government. These counterparts provide an enabling environment to the cooperants in order to optimize the knowledge and technology transfer. FAO ensures smooth implementation of activities through the provision of necessary inputs, technical guidance and monitoring. In order to ensure harmonized implementation,

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main tools such as the annual work plan, the procurement plan and the training plan were jointly developed by cooperants, counterparts and FAO. These tools were debated and endorsed by various sets of actors and stakeholders, including in the private sector, as well as government officials during the inception workshop held at the beginning of the project. This participatory approach ensures that the project is perfectly in line with government demands and the local environment.

It is expected that at least 1,000 farmers will be trained and will adopt the transferred Chinese technologies. They will also have their socio-organizational and entrepreneurial capacities strengthened. At least 100 technical staff and high-level officials within MAEP will benefit from local training in hybrid rice, livestock, agribusiness, policy and governance in agriculture. To date, it has already been proven through demonstrations that significant yield improvement has been achieved in rice cultivation, from 2.8 tonnes per ha with local varieties to at least 8 to 10 tons per ha with the use of hybrid rice. For livestock, interventions on animal disease control, improved nutrition and breed selection will significantly improve productivity for sheep and cattle farming. **To date, a demonstration on forage crops resulted in a tenfold yield increase with the use of Chinese new techniques and technologies. By the end of the project, it is also expected that at least two new business models, and trade and investment linkages will be established between China and Madagascar.**

Madagascar aims to be the Indian Ocean granary in the next few years, which implies producing more than what its population consume. Indeed, the technology transfer in terms of hybrid rice allows to increase the local rice yield by four or even five times. If most of the farmers adopt the techniques, self-sufficiency in rice could easily be achieved. The training

packages provided on small ruminant production enhance the comparative advantage of Madagascar in the highly flourishing national and international market. Moreover, the major innovations brought by this initiative is that it does not limit its interventions to basic production, but it also trains people throughout the value chain, from downstream to upstream. This is perfectly in line with the country's ambition to be an exporter.

The mission of this SSC initiative is to upscale the transferred knowledge and technologies even after the end of the project. For this reason, the training of trainers plays a major role in the project. The counterparts who closely work with the cooperants will become fully expert in the field in the future. They will be responsible for disseminating the knowledge once the Chinese experts leave the country. At this stage, the project is still limited to three main regions out of 22. Upon the achievement of the expected outcome, it is expected that it will be replicated in other regions of Madagascar and other countries. Other regions of the country have full potential for rice cultivation and small ruminant breeding. Furthermore, in addition to the strong trade relationship that will be created with China, Madagascar can use its comparative advantage in regional markets such as the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC).

Contact:

Name: Ms Lanto Rahajarizafy

Title: Director-General of Partnership and Development Coordination

Organization: Ministry of Foreign Affairs of Madagascar

Email: lanto.rahajarizafy@gmail.com

WhatsApp: +261 347142533; +261 320501675

PROJECT NAME: Working Together to Increase Agricultural Production, Productivity and Profitability in Madagascar

COUNTRIES/REGIONS: China, Madagascar

NOMINATED BY: Government of Madagascar

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 2.3, 2.4, 2.5, 2.a, 17.6

SUPPORTED BY: Government of China, Government of Madagascar, Food and Agriculture Organization of the United Nations (FAO)

IMPLEMENTING ENTITIES: Ministry of Agriculture, Livestock and Fisheries of Madagascar, FAO

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019-2021

URL OF THE PRACTICE: <https://bit.ly/31mM1eC>

Palestinian International Cooperation Agency's Agricultural Projects in Nicaragua and El Salvador

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Transferring Palestinian agricultural development knowledge to Nicaragua and El Salvador

Challenge

Central America's economy is composed of two main economic sectors: agriculture and mining. Land, minerals, and tropical and temperate climates make it ideal for growing a variety of agricultural products, a potential for economic growth.

Both Nicaragua and El Salvador have prioritized the focus on improving agricultural technologies and techniques to boost quality and efficiency. The improvement will strategically strengthen the economy and will have a direct effect on peoples' living standards and self-sufficiency.

The challenges facing the agricultural sector in both countries are low efficiency and limited technologies. The low efficiency is due to the gap between the desired outcomes of the agricultural cycle and the high resource consumption of human and natural resources. Moreover, the technology used in many production lines is very limited, and some are outdated. This has contributed to the high cost and poor variety of outcomes.

Towards a Solution

The Palestinian International Cooperation Agency (PICA) has designed agricultural programmes aimed at enhancing the knowledge accessible to local farmers in order to develop individual small-scale projects. This will increase families' income and their production of healthy crops in integrated agricultural societies. PICA also aims to increase production efficiency and optimize the use of resources.

The project aims to contribute toward achieving Sustainable Development Goal (SDG) 2 (Zero hunger), achieve good security and improved nutrition, and promote sustainable agriculture. It will also contribute to SDG 1 (End poverty in all its forms everywhere).

Project goals are to:

- increase farmers' income;
- produce healthy food;
- enhance the capabilities of agricultural cadres, raise their capacities and improve agricultural production;
- equip livestock engineers with both theoretical and practical aspects of aquaponic production and silage making;
- spread awareness of the importance of applying biosecurity in farms, institutions and laboratories, of early detection of veterinary diseases through laboratory testing, and of taking appropriate samples;
- disseminate the improved genetic traits of elite male livestock by using artificial insemination techniques to improve meat and milk productivity.

With respect to methodology, PICA's experts together with key players in the host countries drafted a needs assessment through:

- Research: collecting information from local engineers and farmers, observing current farming techniques, weighting potential economical choices, and being informed on the current challenges faced;
- Identification of the needs and solutions: establishing the goals and timeline to deploy;
- Monitoring and feedback: providing continuous feedback before, during and after each phase of the project from local farmers and engineers.



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Capacity-building programmes: Based on the needs assessment, PICA's experts designed and deployed accumulative practical training courses in each project phase for local farmers and engineers in the following topics:

- Small-scale Aquaponic Production and Silage Making
- Home-made Food Manufacturing
- Innovate Techniques for Tomato, Cucumber and Pepper Cultivated under Greenhouses and Vegetable Grafting
- The Biosecurity, Risk Analysis and In the Laboratory
- Artificial Insemination in Cattle, Sheep and Goats.

The Palestinian experts provided the training, and the host government provided the laboratories, field and coordination.

There is a great momentum in the South-South Cooperation between PICA and Nicaragua and El Salvador. PICA and the host countries jointly designed the capacity-building programme that is adapted to the needs of the host countries and the know-how of the Palestinian experts. The host countries facilitated logistics and provided the experts' team with the needed laboratories. PICA's experts utilized the recent agricultural know-how to serve the host countries' needs.

Palestinian know-how is specialized in maximizing results from limited resources. Palestinian experts have provided engineering tools, processes and techniques, assuring an overall boost in quality and efficiency.

In order to strategically design a plan to fulfil exact needs, PICA started the programme with exploratory missions to assess local need; the delegation consisted in agricultural engineers and senior government experts who all work with the relevant ministers of health and agriculture, as well as economic sectors in the host countries. All the Palestinian efforts were coordinated by PICA.

The outcomes achieved after the first phase of the project were the training of over 120 engineers in the above-mentioned courses in Nicaragua. During the second phase of the project and over eight working days in Nicaragua, over 140 local engineers participated in the training courses. In El Salvador, over five working days, over 110 trainees participated. During the second phase only, PICA was able to reach out and coach more than 250 agricultural engineers,

veterinarians as well as agricultural entrepreneurs who are all fully or partially involved with and employed by the ministries of agriculture or the affiliated centres and agencies.

The Project is ongoing and aims to create a sustainable effect to the agricultural production cycle in host countries. In five years, Nicaragua, for example, could build the capacities of more than a 1,000 technical staff and improve their networking methods between farmers, societies and the government, equipped with the most recent, productive, efficient and effective know-how that can be applied in houses, farms, schools and factories.

PICA has signed many cooperation agreements on health, agriculture and education, as well as a general memorandum of understanding with an umbrella organization for the different fields of cooperation with the Nicaraguan Ministry of Foreign Affairs. PICA accordingly launched two agricultural missions to capacitate the Nicaraguan counterparts with Palestinian know-how, which will sustain at least a five-year plan in the already existing fields of cooperation as well as cooperation in the fields of irrigation, water and wastewater management, and any other agricultural need that the Palestinians can satisfy.

PICA plans on designing replicable missions and promotes sustainable cooperation within the country and across the continents within principles of geographical clustering of cooperation and best utilization of resources while maintaining the quality of the missions. The clustering of missions can be widely beneficial by deploying customized but similar programmes previously tested in countries with similar needs and resources.

Also, within the same host country, replication of the processes will be smooth due to a clear systematic needs assessment, strategy and dynamic monitoring system.

Contact:

Name: Ms Hiba Ismail
Title: Diplomat, Programme officer
Organization: Palestinian International Cooperation Agency (PICA), Ministry of Foreign Affairs
Email: Hismail@mofa.pna.ps
Skype: hiba.m.ismail
WhatsApp: +970598353603

PROJECT NAME: Transferring Palestinian Agricultural Development Knowledge to Nicaragua and El Salvador

COUNTRIES/REGIONS: El Salvador, Nicaragua, State of Palestine

NOMINATED BY: Palestinian International Cooperation Agency (PICA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.4, 2.5

SUPPORTED BY: The State of Palestine – Governmental fund through PICA

IMPLEMENTING ENTITIES: PICA

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019 – 2024

URL OF THE PRACTICE: <https://bit.ly/3jcxKHv> ; youtu.be/BuzRdOlyXP8

The +Cotton Project

Working for the sustainable development of cotton in Latin American and the Caribbean

Challenge

Cotton is one of the most important agricultural products in the world. An estimated 350 million people around the world carry out economic cotton-related activities, which makes it one of the 20 most important commodities for exportation. This sector helps smallholder farmers and their families gain access to food, health services, housing and many other goods and services. Furthermore, through value addition and export of textiles, cotton contributes to the growth of the economy, thereby multiplying its effects on job creation and income in the sector. During the last 20 years, project partner countries, including Argentina, the Plurinational State of Bolivia, Colombia, Ecuador, Paraguay and Peru, where 80 per cent of cotton production comes from family farmers or small-scale agriculture, have faced a decrease in cotton production, affecting the potential of thousands of farming families to generate income.

Towards a Solution

In order to address this challenge, cooperation was established between the Brazilian Cooperation Agency (ABC), Ministry of External Relations (MRE) and its Brazilian cooperating institutions (Embrapa, Abrapa, Empaer-PB, Asbraer, solidarity economy organizations and universities), in collaboration with the Food and Agriculture Organization of the United Nations (FAO) and the governments of seven partner countries. The project aims to contribute to the sustainable development of the cotton value chain in the partner countries, drawing on the experience of Brazilian institutions engaged in the sector. The project is built around four components: sustainable production of cotton; promotion of policy dialogue, policy development and strategic alliances, including public-private partnerships; enhanced competitiveness of the sector and its actors involved including women, youth and indigenous people; and the promotion of markets and sustainable development of the cotton value chain.

In the framework of South-South cooperation, activities undertaken through the project include: technical support to participating countries focused on the adoption of cotton varieties resistant to pests and disease, soil management and integrated pest management; technology and innovation for the modernization of cotton cultivation; sustainable management of natural resources; technical support to rural extension services for family farmers; and exchange of experiences and good practices and technologies and others.

Through this project, a regional network of more than 70 public and private sector actors have been mobilized in the partner countries, uniting efforts to make the cotton value chain competitive, and supporting family farmers' access to markets, resulting in an increase in their quality of life and their livelihoods. More than US\$14 million have been invested to expand governments' technical and management capacities towards a sustainable cotton sector in Argentina, the Plurinational State of Bolivia, Colombia, Ecuador, Haiti, Paraguay and Peru.

This has led to the following outcomes:

- Income generation: Cotton as an integrated crop in a diversified production system plays an important role in income generation, with potential by-products and new uses in the value chain.

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There are 36 demonstration and validation best practices in cotton production.

- Capacity development: More than 70 public institutions in partner countries were provided with new capacities and knowledge and increased their levels of public and public/private coordination to support the development and organization of the cotton value chain.
- Agricultural techniques: Good agricultural practices were adopted in rural extension, the efficient use of inputs, integrated pest management, mechanization and development of the first prototype of a one-line cotton-harvesting machine for small areas, all of which in collaboration with Embrapa.
- Strengthened biodiversity: The ancestral identity of countries, and their indigenous, rural and artisan communities were restored through the recovery of cotton varieties, training in production and processing, value addition, management and sale.
- Access to market: Production was connected to the market by expanding certification alternatives for fiber and its processed products and taking advantage of the diversity of cotton in the region looking for niche markets.

Through the South-South cooperation mechanism, the +Cotton project has developed a model of sustainable system of

cotton production, adaptable to other countries and other crops with family farming production. Recovering cotton production systems on a sustainable basis has social implications, which add to the economic and environmental perspective. As a crop resistant to climatic adversities, it can be planted in dry and arid zones, reducing the vulnerability of families to climate change. It can be a valid alternative for communities that inhabit indigenous territories as well as those displaced by conflicts, and where there is a high level of rural poverty.

Contact:

Name: Ms Adriana Gregolin

Title: Regional Project Coordinator, Regional Office for Latin America and Caribbean,

Organization: Food and Agriculture Organization of the United Nations (FAO)

Email: Adriana.Gregolin@fao.org

Name: Office of South-South and Triangular Cooperation (OSS)

Organization: Food and Agriculture Organization of the United Nations (FAO)

E-mail: South-South-cooperation@fao.org



PROJECT NAME: The +Cotton Project

COUNTRIES/REGIONS: Argentina, Bolivia (Plurinational State of), Colombia, Ecuador, Haiti, Paraguay, Peru

NOMINATED BY: Food and Agriculture Organization of the United Nations (FAO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 2.3, 2.4, 2.5, 8.6, 8.7, 10.1, 13.b, 17.1

SUPPORTED BY: FAO

IMPLEMENTING ENTITIES: Brazilian Cooperation Agency (ABC), Ministry of External Relations (MRE), Brazilian cooperating institutions (Embrapa, Abrapa, Empaer-PB, Asbraer, solidarity economy organizations and universities) and FAO

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2012–2020

URL OF THE PRACTICE: <https://bit.ly/3j8ePxq>

FAO–China South–South Cooperation Project in the Democratic Republic of the Congo

2 ZERO HUNGER



Supporting smallholder farmers enhance their production, productivity and profitability through sustainable agriculture

Challenge

While the Democratic Republic of the Congo has immense agricultural potential, its population of 90 million faces one of the most serious food and nutrition crises in the world. This is due to increased intercommunal conflicts, which in turn have triggered massive population displacement, infrastructure destruction, high food prices, loss of livelihoods, undiversified diets, pest infestations and health epidemics such as Ebola, cholera and measles. As over 75 percent of rural families rely on agriculture for their livelihoods, ensuring access to inputs and new technologies is essential for enhancing agricultural production and food security.

Towards a Solution

The objective of this Food and Agriculture Organization of the United Nations (FAO)-China South-South Cooperation project in the Democratic Republic of the Congo is to contribute to the implementation of the National Agricultural Investment Plan (NAIP) over a period of two years. The project gives direct support to the priority area of promoting the agricultural sectors and developing agri-business in order to ensure sustainable food security for the populations and improve the income of farmers and other operators in the sector. More specific objectives of the project include:

- strengthening national capacities in the areas of: development of rice cultivation, including production and multiplication of seeds; development of the cultivation of soybeans, corn, vegetable crops; development of fish farming and short cycle farming;
- selecting and disseminating different varieties of rice, soybeans and other legumes and vegetable crops, and introducing suitable techniques and technologies for fish farming, rice and corn cultivation.

FAO was responsible for the project's overall management, facilitating the coordination among all partners, providing procedure guidance, etc. The Chinese Government funded the project through the FAO-China South-South cooperation Programme, while Chinese experts and cooperants conducted field training and demonstration sessions in the Democratic Republic of the Congo and provided hand-in-hand guidance to local technicians and farmers. The Government of the Democratic Republic of the Congo assigned counterparts to directly work with the Chinese experts and cooperants and provided in-kind contributions to the project implementation.

This project has provided technical assistance for enhancing the agricultural production, productivity and profitability of nearly 2,260 households. Over a two-year period, thirteen Chinese experts and technicians were deployed to the Democratic Republic of the Congo to provide technical assistance to local farmers on crop production, plant protection, horticulture, livestock and aquaculture development, as well as on the use of agricultural machinery.

The project has helped households meet their cereal and vegetable consumption needs, increase their net income and acquire new agricultural technologies. It has also enhanced the efficiency of national extension services through cross-country exchange of expertise.

The deployment of experts to local communities and the active involvement of beneficiaries brought tangible results in a number of areas:



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- **Crop production:** Chinese experts introduced practical technologies and carried out demonstrations on various crop production techniques, including rice, soybean, millet, maize and vegetables. Local farmers also learned how to detect and prevent pests such as fall armyworms and aphids. As a result, rice yield saw increases of 133 to 466 percent. The increase in millet yield has also been substantial, with an average of 6.3 tons per hectare.
- **Horticulture:** Chinese technicians provided assistance to local farmers on soil loosening, land preparation, seedbed construction and seeding techniques. This resulted in a significant increase in the harvest of cabbage, tomatoes, peppers and onions.
- **Livestock production:** Local farmers adopted Chinese livestock breeding techniques and received technical training on raising and management systems for broilers, goats, pigs and rabbits. In addition, the Veterinary Inspection and Quarantine Bureau of Haut Katanga was provided with veterinary medicine products for distribution to poultry farms.
- **Aquaculture:** During the project, hand-operated fish pellet feed machinery was introduced. Aquatic experts wove five cages of 24 cubic meters and 30 kilograms of fish fry were put into the cage for demonstration.
- **Other technologies:** Smallholder farmers also received training on post-harvest processing. By transforming maize into fodder and soybean into milk, families were able to introduce new products to the market, thereby improving their monthly income. Furthermore, labour-saving production

tools and equipment tailored to local conditions were introduced to local farmers.

This project effectively transferred agricultural knowledge and technologies at the local level and will further enhance food security at local and national levels, including through agricultural intensification and diversification, throughout the Democratic Republic of the Congo. Achieving impact at scale will require a renewal of relevant partnerships and increased investments in local agriculture. Given adequate resources, the technologies and varieties introduced through the FAO-China South-South Cooperation Programme could be utilized on a larger scale, reaching more beneficiaries throughout the Democratic Republic of the Congo.

Contact:

Name: Mr Jinbiao Wang

Title: Senior Programme Officer and FAO-China South-South Cooperation Programme Coordinator

Organization: Food and Agriculture Organization of the United Nations (FAO)

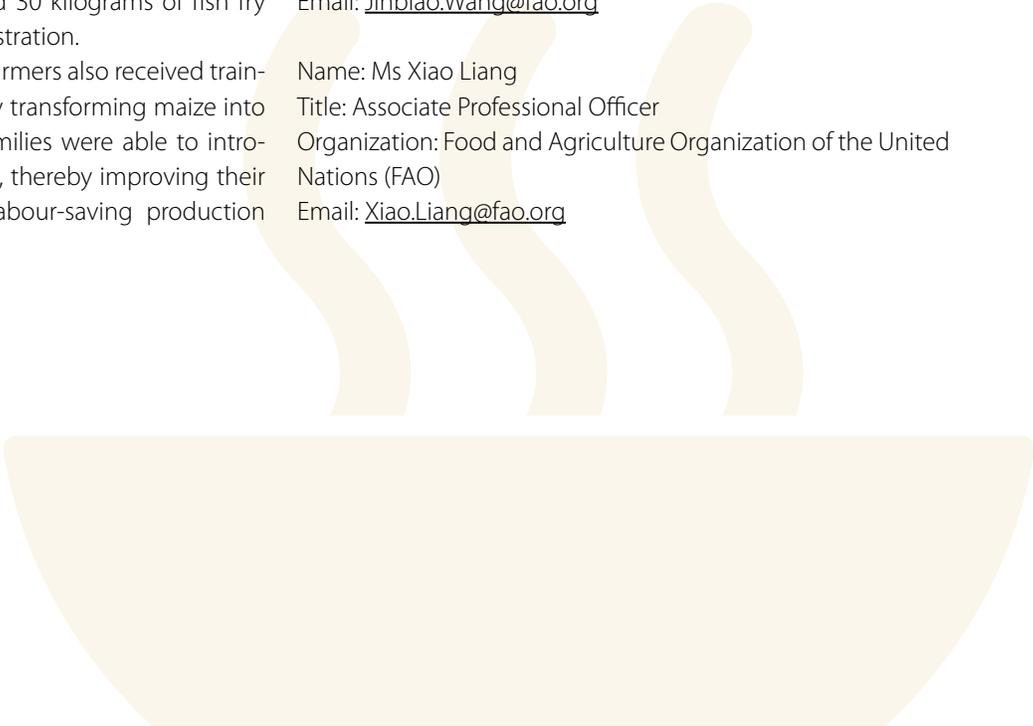
Email: Jinbiao.Wang@fao.org

Name: Ms Xiao Liang

Title: Associate Professional Officer

Organization: Food and Agriculture Organization of the United Nations (FAO)

Email: Xiao.Liang@fao.org



PROJECT NAME: FAO–China South–South Cooperation Project in the Democratic Republic of the Congo
COUNTRIES/REGIONS: China, Democratic Republic of the Congo
NOMINATED BY: Food and Agriculture Organization of the United Nations (FAO)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.3, 2.4
SUPPORTED BY: Government of China, through the FAO-China South-South Cooperation Programme
IMPLEMENTING ENTITIES: FAO, Ministry of Agriculture of the Democratic Republic of the Congo, Ministry of Agriculture and Rural Affairs of the People’s Republic of China
PROJECT STATUS: Completed
PROJECT PERIOD: July 2017–August 2019
URL OF THE PRACTICE: <https://bit.ly/34DrHYj>

Sustainable Rice Value Chain Development in Africa

Building capacities for sustainable rice production and value chain through South-South cooperation

Challenge

As in many other developing countries, small- and medium-sized agricultural enterprises (SMAEs) and traders in sub-Saharan Africa provide an important gateway for smallholders to access markets. Beyond markets, they also support smallholders in responding to modern market demands. However, SMAEs frequently lack the capacity to provide the technical and financial assistance necessary to bring smallholders' produce up to a standard that satisfies the needs of the market. Despite the important role they occupy in the value chain in regards to employment and income generation, they lack institutional support from the public sector, and have very little impact on policies related to agricultural markets.

Towards a Solution

In view of the above, the Food and Agriculture Organization of the United Nations' (FAO) 'Capacity Development and Experience Sharing for Sustainable Rice Value Chain Development in Africa through South-South Cooperation' project was implemented in Nigeria, Burkina Faso and Côte d'Ivoire with financial support of the Government of the Republic of Korea to enable partners to develop competitive and inclusive rice value chains.

The specific objectives of the project include:

- Develop programmes to facilitate knowledge exchange and experience sharing in sustainable rice value chains between participating countries and the Association of South East Nations (ASEAN).
- Strengthen capacity of policy makers, technicians, and stakeholders in rice value chains in partner countries.
- Promote knowledge exchange on private-public partnership models and cooperation of stakeholders in support of rural development.

Since the launching of the project activities in the three beneficiary countries, agribusiness entrepreneurship skills have been developed through extensive training programmes targeting the main stakeholders (rice producers, rice processors and rice sellers groups). Furthermore, rice production technologies and good practices have been promoted and adopted by the farmers in the project's selected sites in the three countries. The project supported numerous activities aimed at developing the rice value chain and strengthening private-public partnerships. This was achieved by collaborating with institutions such as the International Rice Research Institute (IRRI) and the Africa Rice Center, which have collaborated in providing capacity-building training to key stakeholders. Furthermore, the Rural Development Administration (RDA) of the Republic of Korea provided experts and training programmes to key stakeholders in the three countries.

Some project achievements in the three countries can be summarized as follows:

- Burkina Faso: The capacity of key stakeholders was enhanced on post-harvest handling, quality management, processing, storage and packaging through three training sessions. Around 60 women engaged in rice processing were trained in the use of modern processing technologies. Also, 90 participants from three regions in the countries gained skills in business management, ac-

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counting, contracts, negotiation and marketing. Three training sessions were organized in three regions in the country for 66 stakeholders to learn about post-harvest handling, quality management, processing, storage and packaging. Furthermore, 83 millers and local equipment manufactures were offered training on maintenance and repairing of processing equipment.

- Côte d'Ivoire: Government officials, rice producers, dealers and rice millers learned about the "system of rice intensification" and the Republic of Korea's mechanization and seed management technology. A rice processing machine was installed in the Centre de formation la mécanisation agricole de Grand-Lahou (CFMAG) and was used for training stakeholders. A rice value chain platform comprising farmers, rice millers, marketers, chemicals sellers, and researchers was established. The National Rice Development Agency (ONDR) learned about the seed management and distribution system of the Republic of Korea. Furthermore, rice millers were trained on criteria to improve the quality of rice, while experts visited Republic of Korea to learn about rice production and harvesting techniques, extension systems, planning for research and training, and cooperation with private sectors.
- Nigeria: Key stakeholders, including farmers, millers, local government agencies researchers, and vendors, participated in the training and learned about rice harvest and post-harvest technologies. Three Nigerian experts visited the

Republic of Korea and participated in a training workshop where they were trained on rice production and harvesting techniques, extension systems, planning for research and training, and cooperation with private sectors. Equipment and machineries were distributed to beneficiaries' groups, who were trained to increase the capacity of harvest, par-boiling, maintenance, irrigation, seed production and business management.

Sustainability is ensured because the project is built on existing structures and mechanisms, including national government agencies and relevant regional institutions. Strengthening the capacity of national government agencies also enables these institutions to provide high quality and timely services well beyond the timeframe of the project. Furthermore, stakeholder ownership of project activities was promoted throughout the lifecycle of the project. In particular, the role of the relevant national agencies in the target countries was strengthened, which will have input into the project main activities ensuring the sustainability of the initiative.

Contact:

Name: Office of South-South and Triangular Cooperation (OSS)
Organization: Food and Agriculture Organization of the United Nations (FAO)
E-mail: South-South-cooperation@fao.org

PROJECT NAME: Capacity Development and Experience Sharing for Sustainable Rice Value Chain Development in Africa through South-South Cooperation

COUNTRIES/REGIONS: Association of South East Nations (ASEAN), Burkina Faso, Côte d'Ivoire, Nigeria, Republic of Korea

NOMINATED BY: Food and Agriculture Organization of the United Nations (FAO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.3, 12.3, 17.11

SUPPORTED BY: FAO

IMPLEMENTING ENTITIES: FAO

PROJECT STATUS: Completed

PROJECT PERIOD: 2014–2019

URL OF THE PRACTICE: <https://bit.ly/2QimfSu>

The Brazil-Mexico Exchange Programme: Agroforestry and Sustainable Production Systems

Employing agroforestry systems as a productive instrument for poor family farmers in semi-arid regions of Brazil and Mexico

Challenge

Semi-arid regions in Latin America have some of the largest pockets of poverty in the world and are among those most affected by climate change. In these regions, rural development projects that promote water access and production infrastructure face serious challenges because there are but few options for production diversification. In Mexico, small-scale farmers are particularly susceptible to adverse climate conditions, which are compounded by a relatively extensive livestock system, irregular topography and poor rainfall. Furthermore, there are few examples of sustainable management practices of natural resources in semi-arid areas, in addition to difficulty in coordination between producers living in similar biomes. The reliance on livestock production and the lack of alternative income sources in the Mexico's driest rural areas demand new solutions that connect water access with sustainable production and consumption systems in order to raise productivity, food security and income for poor family farmers.

Towards a Solution

New solutions using agro-ecological and agroforestry systems have proven effective in streamlining the connection between water access and sustainable, diversified production systems by raising productivity, food security and income for poor family farmers. Accordingly, the Sustainable Development Project for Communities in Semiarid Areas (PRODESZA) and the Cariri and Seridó Sustainable Development Project (PROCASE) supported by the International Fund for Agricultural Development (IFAD), and with co-financing from the Governments of Mexico and Brazil, respectively, focus on improving agricultural production and poverty alleviation in semi-arid regions. PROCASE is implemented in Brazil's driest state –Paraíba – to tackle climate change using agroforestry mitigation systems combined with sustainable agricultural production and environmental awareness.

The approach employs the syntropic agroforestry system, which can be defined as a model of agricultural production that combines native tree species (fruit and/or timber) of the semi-arid biome with agricultural crops and livestock, promoting both economic and ecological benefits. Seedlings are planted using intercropping systems, with harvesting occurring soon after the start of the project, so that the farmer obtains immediate income from vegetables, fruit, animal forage and crop sales while increasing the soil carbon stock and avoiding desertification.

The exchange programme between Brazil and Mexico emerged from activities already executed by PROCASE in the context of Paraíba's climate resilience emergency plan, which includes the following water infrastructure for agricultural production:

- 539 water wells and 222 underground reservoirs, with water extraction through renewable energy (solar and wind power);
- four medium-sized conventional dams;
- 31 agroforestry units;
- 61 desalinators.

The agroforestry systems have been integrated into the plan to increase the carbon stock and forage production in order to minimize water wastage using water reserves from wells and reservoirs. The

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systems result in an increase in animal production through their consumption of high-quality forage, and also favour biodiversity in general due to the formation of ecological corridors and the increased benefit of pollinating agents. They serve to mitigate the effects of climate change and improve food and nutritional security, in compliance with Sustainable Development Goals (SDGs) 1 (No poverty), 2 (Zero hunger), 6 (Clean water and sanitation), 13 (Climate action), 15 (Life on land) and 17 (Partnerships for the Goals).

From a socio-economic perspective, the agroforestry systems also enable a reduction in agricultural herbicide input use, ensuring more sustainable production and consumption. The results obtained to date show enhanced food security among households as well as a positive impact on the conservation of natural resources and diversification of crop and animal production, leading to climate resilience and improved incomes.

To date, 31 systems have been implemented with an average area of 0.5 ha per farmer containing 20,000 seedlings, and directly benefiting 345 families.

In November 2019, in response to a demand from Mexico for Brazilian expertise, IFAD promoted the first Mexico-Brazil agroforestry exchange programme in the state of Paraíba. The exchange visit was organized by the Semear International Programme with an IFAD grant in Brazil for knowledge management, monitoring and evaluation, and South-South cooperation towards the sustainable development of the Brazilian semi-arid region. The delegation comprised 30 participants from Mexico and Brazil, including technical staff, researchers, producers and farmers linked to the two projects and from local universities.

The activity included visits to agroforestry research institutions, animal fodder production units, native seed banks, water collection and storage stations. At the debriefing meeting, the participants agreed that both countries would maintain a running dialogue on cooperation and on sharing experiences on agroforestry systems, and a string of follow-up activities have been implemented in 2020. In particular, a Brazilian PRO-CASE member of staff contributed to the Mexican Forum on Renewable Energy and Technical Assistance in April 2020. The main focus of the Forum was on adapting successful Brazilian experiences to the current needs of family farmers in Mexico, especially among groups led by women and small cooperatives working with non-timber forest products, as well as on the new COVID-19 challenges.

In addition, as a new follow-up activity, one of the host farmers of the exchange, Mr Rivaldo, will contribute to a new capacity-building event, Agroecological Transition, promoted by the Agriculture Secretary of Mexico, which is scheduled to take place in the second half of 2020.

Contact:

Name: Mr Leonardo Bichara Rocha

Title: Country Programme Officer

Organization: International Fund for Agricultural Development (IFAD)

Email: l.bichararocha@ifad.org

WhatsApp: + 55 71 99192 4924

PROJECT NAME: Brazil-Mexico Exchange Programme: Agroforestry and Sustainable Production Systems

COUNTRIES/REGIONS: Brazil, Mexico

NOMINATED BY: International Fund for Agricultural Development (IFAD), Brazil

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.5, 2.4, 2.a, 6.6, 6.a, 8.4, 12.2, 12.8, 13.1, 13.b, 15.1, 15.3, 17.6, 17.7

SUPPORTED BY: IFAD, Sustainable Development Project for Communities in Semiarid Areas (PRODESZA, Mexico) and Cariri and Seridó Sustainable Development Project (PROCASE, Paraíba, Brazil)

IMPLEMENTING ENTITIES: Semear International Programme (implemented by Inter-American Institute for Cooperation on Agriculture (IICA))

PROJECT STATUS: Completed

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: <https://bit.ly/3hmnax0> (in Portuguese)

Small Grants, Important Achievements: How Morocco's Commitment to South-South and Triangular Cooperation is Paving the Way for Institutional Reforms and Rural Transformation in Madagascar

Fostering knowledge sharing and exporting Morocco's lessons learned through the implementation of Plan Maroc Vert (PMV) in sub-Saharan Africa to achieve Sustainable Development Goals 1 and 2

Challenge

Africa is a vast continent that shows remarkably diverse levels of economic growth. While some countries are developing new important instruments and policies resulting in a significant improvement of their living conditions, others are still progressing towards the achievement of Sustainable Development Goals (SDGs) 1 (No poverty) and 2 (Zero hunger).

A modern and sustainable approach to agriculture is key to addressing rural poverty and ending hunger. To successfully achieve those objectives, new policies, advanced technologies and modern social schemes in agriculture are needed. The shift towards new agricultural systems based on public-private partnerships is essential to build inclusive and sustainable collaborations with a positive impact on small-scale producers. In this context, South-South and triangular cooperation (SSTC) plays a crucial role in fostering regional integration and knowledge sharing.

Towards a Solution

In 2008, Morocco launched the *Plan Maroc Vert* (PMV), an ambitious strategy aimed at transforming the Moroccan agricultural sector into a substantial leveraging agent for socio-economic development.

The implementation of the PMV has led to significant improvements: indeed, as a result of its proactive policy, Morocco increased the rate of public and private investments in agriculture, creating new job opportunities and improving the performance of the agricultural sector, both economically and socially. Building on the positive results achieved over the past decade, Morocco is now focused on assuming a leadership role in sharing its experience and expertise with other African countries.

In this context, within the framework of the Atlas Mountain Rural Development Project, the International Fund for Agricultural Development (IFAD) allocated a US\$ 1,000,000 grant to the Government of Morocco to pursue this vision and to play an active role in the Atlas Mountain Rural Development/ South-South and Triangular Cooperation Programme. The aim is to promote the transfer of Morocco's lessons learned through a scaling-up of best practices and agricultural development policies in sub-Saharan African countries.

The initial phase of this programme started in 2018 with Madagascar and Côte d'Ivoire, with an intensive phase of meetings, consultations and missions, which led all actors to clearly identify the needs and specific areas for engagement.

These initial activities introduced a participatory mechanism that led to a concrete action plan which identified the following priority thematic areas: (i) a cross-cutting pillar on strategies and policies; (ii) a second pillar focused on production and value chain development; and (iii) a third pillar focused on the territorial dimension and the adoption of the 'agropole' concept. Morocco established the agropoles as public entities that aim at creating agri-food competitiveness clusters to foster linkages

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with the private sector and promote private investments while creating employment opportunities through modernized agricultural production systems.

Morocco's Ministry of Agriculture, Fisheries, Rural Development, Water and Forests is working in close collaboration with Madagascar's Ministry of Agriculture, Livestock and Fisheries to develop policy support tools through a diversified approach for smallholder farming and private sector engagement.

As a result of this process, a landmark achievement is the drafting of the agriculture orientation law in Madagascar, providing an enabling legal framework for private sector engagement with smallholder farmers. Other important processes are still underway, such as the drafting of an aggregation law that will relate to the agriculture inter-professional regulatory frameworks in Madagascar.

Inspired by the Moroccan experience, Madagascar is also looking into financial instruments that can revitalize and optimize the performance of the Agricultural Development Fund. Morocco shared its knowledge on the *guichet unique* (one-stop shop), the traceability of files and computer-based systems that ensure coherence between agricultural financing and public budgeting systems.

This work entails the development of innovative tools for effective partnerships between government, the private sector, financial institutions and insurance companies, with toolkits and learning packages based on the experience of the Moroccan Agricultural Development Fund and other agricultural credit instruments.

In terms of good production practices and value chain development, a series of workshops took place in Morocco, Mad-

agascar and Côte d'Ivoire, and provided technicians and trainers with training in the fields of artificial insemination, irrigation practices and product labelling.

In addition, this project has been instrumental in the creation of the Ifrane Centre of Excellence for Agricultural South-South Cooperation (Morocco), a fully-fledged institution for implementing the strategic vision of the Government of Morocco in pursuing its SSTC agenda and ensuring the sustainability of the project.

This project has a strong focus on policy and is twinned with training, technical backstopping and technology transfer for sustainable and climate-resilient agricultural practices to ensure the environmental sustainability of the proposed changes.

Not only is the initiative sustainable, but it is also largely replicable. Indeed, the Union of the Comoros and Niger have already expressed a strong interest in pursuing a similar approach with Morocco. The variety of innovative tools that the PMV involves and the commitment that the Moroccan Government has demonstrated that this initiative is a good practice, one in which IFAD plays a fundamental role in brokering and financing for a mutual benefit. This is a triple win-win cooperation that can be further scaled up.

Contact:

Name: Mr Naoufel Telahigue

Title: Country Director

Organization: International Fund for Agricultural Development (IFAD)

Email: n.telahigue@ifad.org

WhatsApp: +393319871648

PROJECT NAME: Atlas Mountain Rural Development Project (PDRMA)/SSTC Grant

COUNTRIES/REGIONS: Côte d'Ivoire, Madagascar, Morocco

NOMINATED BY: International Fund for Agricultural Development (IFAD)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 2.3, 17.8, 17.9

SUPPORTED BY: IFAD

IMPLEMENTING ENTITIES: Government of Morocco

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2024

URL OF THE PRACTICE: Not available

Private Sector Engagement in Sustainable Agricultural Mechanization for the Sustainable Development Goals

Fostering food security and rural development through private sector engagement in South-South cooperation

Challenge

Availability of and access to appropriate machinery and equipment for sustainable agricultural mechanization is one of the major challenges in Asia and the Pacific, where poverty predominantly affects people living in rural areas. With the exception of a few countries that have a well-developed industry for agricultural machinery manufacturing, many countries have limited capacity to manufacture such machinery and equipment, and often rely predominantly on imports to meet their domestic needs. Limited domestic capacities and weak linkages among private sector players of this industry across countries in the region often lead to the use of outdated machines and technologies, which often unsuitable for local contexts or for the needs of poor smallholder farmers in importing countries. To address these challenges, there is need to strengthen capacities, enable knowledge exchange, and strengthen business and trade linkages among private sector agricultural machinery manufacturer and distributor associations. Such actions would result in accelerating progress towards Sustainable Development Goal (SDG) 1 (No poverty), SDG 2 (Zero hunger) and other SDGs in the region.

Towards a Solution

In 2014, the Regional Council of Agricultural Machinery Associations (ReCAMA) was established by the Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) in response to a request by the Member States and other stakeholders at the first regional forum on sustainable agricultural mechanization in Asia and the Pacific. At its core, ReCAMA represents a network of private sector agricultural machinery associations in the Asia-Pacific region including manufacturers, distributors and other relevant stakeholders. Its objective is to promote the use of sustainable agricultural mechanization in the region by: (i) strengthening the capacity of national agricultural machinery associations; (ii) facilitating the exchange of knowledge and good practices; and (iii) enhancing collaboration and business linkages among the associations and their members, including through the means of South-South and triangular cooperation.

ReCAMA is a participatory network and its activities are guided by members' needs. Currently, it has 20 members from 14 countries, including Bangladesh, China, India, Indonesia, Malaysia, Mongolia, Nepal, Pakistan, the Philippines, Russian Federation, Sri Lanka, Thailand, Turkey and Viet Nam. **It has contributed to scaling-up the availability, adoption and sustainable use of agricultural machinery at the regional level through South-South cooperation, using a demand-driven model closely involving the private sector.** It has supported SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 12 (Responsible consumption and production), SDG 13 (Climate action), SDG 15 (Life on Land) and SDG 17 (Partnerships to achieve the goal). The network has three core functions:

- To provide capacity building: Five rounds of regional training and study tours for agricultural machinery manufacturers and distributors have been successfully organized annually since 2015. They have enhanced national capacities on technologies aligned with SDGs 1, 2, 13 and 15, such as conservation agriculture, precision agriculture and climate-smart mechanization. Participants' feedback confirmed that the training had equipped them with knowledge to improve their work and that they further shared the acquired knowledge with peers and partners.
- To facilitate the creation of business linkages and knowledge exchange: CSAM has facilitated the participation of ReCAMA participants in key agricultural machinery exhibitions in China, Nepal, Thailand and Turkey, in addition to the training and study tour and other ReCAMA events, which have provided exposure to a wide range of modern agricultural machinery and equipment suitable for

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enhancing farmers' productivity and incomes. Side-events tailored for matching businesses were held to better link demand and supply among the associations, facilitate connections for potential trade and investment, and exchange of experience and knowledge. Moreover, as an innovative community of practice on sustainable agricultural mechanization in the region, an active online ReCAMA community Wechat group has been established with over 240 members, which supports a regular exchange of new developments and technologies among participants.

- To develop knowledge products to support decision-making: To enable a better understanding of national policy landscapes to guide business decisions and assist policymakers in identifying current gaps, knowledge products on trade and investment policies for agricultural machinery have been launched in five countries. These include a study on investment policies, which is now being extended to cover more countries. There is also a new study underway on the market dynamics of agricultural machinery in selected countries.

Some key achievements of ReCAMA include:

- Private sector agricultural machinery associations from four countries (China, India, Nepal and Sri Lanka) have established cooperation arrangements with each other for the regular exchange of delegations or have set up other linkages for promoting sustainable agricultural mechanization.
- Following engagement in CSAM's programmes and learning from the experience of other ReCAMA members, the Government of Cambodia is establishing the country's first national agricultural machinery association, which will enable the country to set up a platform to provide services for the agricultural machinery industry and smallholders.
- Through the ReCAMA network, CSAM has facilitated the donation of agricultural machinery by the private sector to women farmers and farmer cooperatives in China and Nepal in support of poverty alleviation and the demonstration of appropriate technologies in rural areas (SDG target 1.4).
- In a follow-up survey of ReCAMA activities conducted in August 2018, over 75 percent of respondents said that they had adopted a practice with a higher level of technology as a result of the ReCAMA initiative. Two specific examples of impact are as follows:

- A ReCAMA participant from the Philippines indicated that the project motivated him to hire more agricultural engineers, which in turn improved the company's after-sales services. He met new agricultural engine manufacturers and increased business with Indian suppliers. He also has ongoing business deals with other Chinese manufacturers of agricultural machinery.
- A ReCAMA participant from Bangladesh indicated that the project enabled him to introduce higher levels of harvesting technology into the agricultural mechanization industry in Bangladesh.

ReCAMA is a member-driven network based on the principle of South-South cooperation that has provided increased opportunities for collaboration among network participants. It has benefited from significant in-kind contribution from partners and co-organizers to sustain its activities. It is also witnessing a significant number of self-funded participants, thus further promoting sustainability. Moreover, it represents a readily replicable model, particularly in regions or subregions with a nascent agricultural machinery industry. Furthermore, government initiative and policy support for catalysing the formation of associations where needed and strengthening them, as well as active stakeholder engagement for expanding membership at the national and regional levels are key to achieving desired outcomes.

Contact:

Name: Dr Yutong Li

Title: Head

Organization: Centre for Sustainable Agricultural Mechanization of the Economic and Social Commission for Asia and the Pacific

E-mail: li78@un.org

Name: Mr Anshuman Varma

Title: Programme Officer

Organization: Centre for Sustainable Agricultural Mechanization of the Economic and Social Commission for Asia and the Pacific

E-mail: varmaa@un.org

Name: Ms Yuee Feng

Title: Senior Programme Management Assistant

Organization: Centre for Sustainable Agricultural Mechanization of the Economic and Social Commission for Asia and the Pacific

E-mail: feng1@un.org

PROJECT NAME: Private Sector Engagement in Sustainable Agricultural Mechanization for the Sustainable Development Goals

COUNTRIES/REGIONS: Bangladesh, China, India, Indonesia, Malaysia, Mongolia, Nepal, Pakistan, the Philippines, Russian Federation, Sri Lanka, Thailand, Turkey, Viet Nam

NOMINATED BY: United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 2.3, 2.4, 12.2, 12.3, 12.4, 13.1, 15.3, 17.9

SUPPORTED BY: Private sector agricultural machinery manufacturer and distributor associations

IMPLEMENTING ENTITIES: Centre for Sustainable Agricultural Mechanization of ESCAP

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014–2024

URL OF THE PRACTICE: <http://recama.un-csam.org>



Harvest IT Application for Farmers

Providing a 'gateway to information' for farmers in the Arab States, Europe and the Commonwealth of Independent States (CIS) region

Challenge

Sustainable natural resources management is of particular importance in dry land areas where, due to the increasing effects of climate change, water is becoming a scarce and precious resource. This is particularly true for the Arab countries, which have the lowest per capita water availability in the world. But it is also true in other countries in the Near East, North Africa, Europe and Central Asia (NEN) Region that do not have a history of water shortage. Another serious challenge for the NEN Region is that more populous countries with higher concentrations of human and income poverty face declining levels of natural resource rents-based incomes.

The strengthening of collaborated efforts in the NEN Region through South-South and triangular cooperation (SSTC) is crucial for the achievement of increased food security and rural poverty reduction.

Towards a Solution

The 'South-South and Triangular Cooperation for Agricultural Development and Food Security (SSTC-ADFS)' project, jointly supported by the International Fund for Agricultural Development (IFAD), the Islamic Development Bank (IsDB) and the United Nations Office for South-South Cooperation (UNOSSC), aimed to contribute to addressing the above challenges. The main focus was placed on further advancing South-South and triangular cooperation among the countries of the NEN Region and beyond through the identification, pilot-testing, and documentation of successful models and approaches that would be ready for replication within the Arab States, Europe and the CIS region. In facilitating South-South knowledge exchanges and other forms of cooperation, *inter alia*, the project worked to fill the gap in: youth's and women's access to appropriate innovative solutions; self-organization skills quality business and employment training; and access to minimum required production facilities.

The Harvest IT Application is one of the knowledge products developed within the SSTC-ADFS project. It provides a 'gateway to information' for farmers in the Arab States, Europe and the CIS region. The information, communication and technology (ICT) solution offers a range of agricultural topics, which includes, depending on the country, good administration of farms, effective water use for irrigation, important dimensions of forage and milk production, and soil management. Information is presented through interactive displays that are complete with pictures, customized calculators to support decision-making, safety information, and links to additional resources. Farmers benefit from practical solutions through the practical tips and tricks section, and background knowledge through the manuals and publications section. Once downloaded, the application does not require an Internet connection to operate. Farmers can also share the application with their peers through Bluetooth.

The idea was inspired by the MEVA mobile application, developed in Uzbekistan. The topics covered in each country were defined by the national partners of the project – Ministries of Agriculture, which referred to the expert assessment of the demand for the information from the farmer communities. They also delegated and approved national experts to work on the country-specific content.



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Through this application, rural agricultural producers in Hungary, the Kyrgyz Republic, Sudan and Turkey receive the opportunity to easily access to up-to-date information on the successful management of their farms. The respective ministries of agriculture further promoted the application for the benefit of the rural producers to reach out to the target communities. For instance, in Hungary, the series of training for farmers' cooperatives integrated a component devoted to the use of the application to ensure that rural producers can follow recommended administration and sanitary standards, and even verify the relevancy and adequacy of the measures taken. While the exact numbers of farmers who installed and used the app is not traceable, the indirect reflection of the application impact is in the appreciation expressed and highlighted by the national partners. Currently, the application provides knowledge and practical tips relevant to the environmental, natural and socio-economic conditions of the Arab States, Europe and the CIS region.

Targeting farmers, the application is free for download for Android and iOS¹. All content is also available online on a dedicated website²

It is also important in the conditions of poor Internet connectivity in the remote regions and low digital literacy of the rural inhabitants that once downloaded, the application can be shared with other farmers as often as needed, thus, ensuring the multiplying effect on the impact.

Easy access to knowledge and practical tips above all benefits youth and women, specifically, those who have fewer

- 1 iOS: www.apps.apple.com/us/app/harvest-it-app-practical-info/id1413174710?ls=1 Android: www.play.google.com/store/apps/details?id=com.iziss.unssc.harvestit
- 2 www.sstc-ads.southsouthworld.org/knowledge-products/harvest-it-country-components

opportunities for education. Knowing and implementing the practices, calculations and advice contained in the application for enriching the nutritional qualities of lands, following sanitary standards, and selecting proper ways of melioration serve as an additional, direct factor of improving food security and nutrition of the target communities.

The Ministries of Agriculture and the lead centres of excellence in the field of agriculture are best positioned to identify the agricultural production area for the application and adaptation of the application with respect to the multi-country SSC project. The production of knowledge and ICT tools to ensure farmers' easy access to information reflects the high level of expertise and of coordinated efforts of the national institutions. However, the promotion of the use of this tool should be improved. This can be achieved by spreading information about this new application in various national agricultural events, public and private training courses, and other capacity-building events.

In the context of SSC, the application is:

- a replication of a southern solution, adapted and enriched with new knowledge, topics and countries covered, extended innovations and value added;
- a tool supporting and promoting exchange in knowledge among rural communities in the Arab States, Europe and the CIS region, with functionalities anticipating regular updates and extending countries' coverage;
- the technology used assumes replicability and the opportunity for the content and for extending the application's coverage to other countries.

Contact:

Name: Division for Arab States, Europe and the Commonwealth of Independent States (CIS)
Organization: United Nations Office for South-South Cooperation
Email: ssc.arabstates@unssc.org

PROJECT NAME: South-South and Triangular Cooperation for Agricultural Development and Enhanced Food Security (SSTC-ADFS)

COUNTRIES/REGIONS: Algeria, Hungary, the Kyrgyz Republic, Sudan, Tunisia, Turkey, Uzbekistan

NOMINATED BY: United Nations Office for South-South Cooperation (UNOSSC)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.3, 2.4

SUPPORTED BY: International Fund for Agricultural Development (IFAD), Islamic Development Bank (IsDB)

IMPLEMENTING ENTITIES: UNOSSC, Ministries of Agriculture of participating countries

PROJECT STATUS: Completed

PROJECT PERIOD: 2015–2019

URL OF THE PRACTICE: <https://bit.ly/32jQXjO>

Cassava Value Chain Improvement to Strengthen Food Security and Nutrition in Congo

Strengthening rural communities' capacities to diversify and improve their food systems, sources of incomes, and food production quality with improved equipment and tools

Challenge

As a large producer and consumer of cassava, the Republic of the Congo prioritizes exchanges on improved technologies and innovation for the cassava value chain. Despite cassava's importance for food security and nutrition in the country, most of the population still relies on traditional, manual methods to process it and to produce derived products such as gari.

The rudimentary processing method is very time-consuming, exhausting and inefficient in terms of cost benefits for rural farmers. Some of the processes, such as roasting and grating, require intense physical labour with high risks of injury. In addition, there is a lack of diversity of cassava-derived products, which limits access to markets and income. Investing in exchanges within African countries for new technologies and products, which would adapt to the Republic of the Congo's context and manufactured locally with improved machines would help improve food and nutrition security and reduce poverty in rural areas.

Towards a Solution

Upon the joint request of the World Food Programme (WFP) and the Government of the Republic of the Congo, and facilitated by the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM) in Côte d'Ivoire, experts and technicians from Côte d'Ivoire and Benin are working with national and local entities of the Republic of the Congo to increase the performance of the agricultural sector, improve the value chain of cassava, and increase the productivity of farmers whose sources of income could be diversified in a very near future. The experts and beneficiaries collaborate by sharing resources and techniques. Since November 2019, the beginning of the project, this has helped introduce new technologies, exchange good practices, and share knowledge and experience in some fields such as the manufacture of machines (equipment and tools to boost production of good quality gari and attiéké) and the processing of cassava.

This South-South cooperation initiative between the Republic of the Congo, Côte d'Ivoire and Benin aims at empowering rural communities, especially women and young men, to benefit equally from agri-food including the processing of cassava. This is achieved by strengthening their capacities and skills to diversify and improve their food systems, vary their sources of income, and improve the quality of food produced with the use of local agricultural raw materials in their regions with the manufactured equipment and tools. The technical assistance assembled experts from the Ministries of Agriculture of Côte d'Ivoire and Benin, the Institute of Technology in Côte d'Ivoire and CERFAM, which is the first Centre of Excellence in Africa. This is the result of a partnership between the Government of Côte d'Ivoire and WFP to support countries in their national efforts to develop and implement sustainable policies and programmes to achieve Sustainable Development Goal (SDG) 2 (Zero hunger) and combat all forms of malnutrition in line with the 2030 Agenda.

The initiative's approach includes a strong human capacity development component, which ensures the assimilation and a long-term sustainability of new and innovative techniques and expertise, guaranteeing adequate food security and nutrition, as well as the availability of financial resources.

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The technical support consisted of three parts: (i) an analysis on the needs of local populations and the situation of local production; (ii) training on the production of cassava processing machines; and (iii) training in cassava processing into gari and attiéké. After this mission, the target groups were able to capitalize on the learned technique and acquired technology to process cassava, improving their food and nutrition security, increasing their income and promoting rural development.

After discussions with the Minister of Agriculture and local stakeholders, the assessment mission was able to capture the key and immediate needs of the target population and develop adequate and locally based solutions for improving the cassava value chain. The experts observed field demonstrations of the local production of gari, specifically the type of machine used and how it was operated. This resulted in an in-depth understanding of the local production methods, challenges, and how, with a very simple adjustment in the machines, they could impact farmers' lives and relieve their workload. These exchanges contributed to better tailoring of the training, which respects context and adapts the equipment to local constraints, such as type of fuel and materials available.

After the analysis, the first phase of training was to teach the production of more modern machine for cassava processing. Twenty-six technicians from the local areas learned theoretical knowledge about the different parts of equipment and applied it by producing a line of cassava processing machines with the experts' assistance. At the end of the training, seven machines were produced to create lines of production for cassava-derived products. The second training aimed to train members from different farmer organizations to process cassava with the newly introduced equipment. In theoretical sessions, participants learned about the specific procedure to produce gari, which has been consumed in Congo since the 1970s. Attiéké, which is very popular cassava-derived product in Côte d'Ivoire, was also introduced to the participants in the training. Following the theoretical session, the participants

tested the new machines and produced 40 kg of gari and 32 kg of attiéké of high quality.

The participatory approach is a key component of sustainability of the initiative by involving the local government and community in designing the assistance initiative, which can respond better to the needs of local population with context-related solutions. The African-to-African learning and exchange played a crucial role to focus on the step by step of implementation and concrete actions to achieve the goals of the collaboration. Côte d'Ivoire and Benin have faced these challenges and knew the path to overcome them, but needed to interact with Congolese stakeholders to understand the context of their support and shape it accordingly.

This initiative encourages knowledge and technology sharing to improve the cassava value chain. It also promotes contacts and networking among experts and authorities in the agricultural sector, exploring further opportunities to work together in the future. The proposed solutions could be adapted further, since the neighbouring countries experience similar challenges and share similar cultures. Such activities could be replicated in the sub-region, as cassava is largely consumed there, by adapting to the local context and constraints (e.g. the availability of raw materials for equipment production and of electricity).

Contact:

Name: Mr Issa Sanogo
Title: Director of the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)
Organization: World Food Programme (WFP) Côte d'Ivoire
Email: Issa.sanogo@wfp.org

Name: Ms Christiani Buani
Title: Head of Operation, CERFAM
Organization: World Food Programme (WFP) Côte d'Ivoire
Email: Christiani.buani@wfp.org

PROJECT NAME: Technical assistance from Côte d'Ivoire and Benin to support the improvement of the cassava value chain in the Republic of Congo

COUNTRIES/REGIONS: Benin, Côte d'Ivoire, Republic of the Congo

NOMINATED BY: Regional Centre of Excellence against Hunger and Malnutrition (CERFAM)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.4, 2.1, 4.4, 9.2, 12.2, 17.3, 17.6, 17.9

SUPPORTED BY: World Food Programme (WFP)

IMPLEMENTING ENTITIES: Ministry of Agriculture and Rural Development of Côte d'Ivoire, Ivorian company specialized in tropical technology and the Ministry of Agriculture, Livestock and Fishery of Benin

PROJECT STATUS: Ongoing

PROJECT PERIOD: November 2019–December 2020

URL OF THE PRACTICE: cerfam.org



India's Role in Fostering Intra-regional Collaboration in Rice Fortification

Leveraging the Experiences from Latin America to Reduce Micronutrient Deficiencies

Challenge

Micronutrient deficiencies are most common in areas where rice is an important contributor to people's diets. These can pose a threat to people's health, especially children, whose development can be affected in the long term. In the past several years, the fortification of rice with vitamins and minerals has gained momentum in India and other Asian countries affected by high prevalence rates of micronutrient deficiencies. Successful rice fortification requires careful planning and analysis, multisectoral partnerships, and the engagement of the private and public sectors.

In addressing the needs of large populations, countries face similar challenges in scaling up the production of high-quality fortified rice, such as a scattered and decentralized milling landscape. As a result, many countries are working towards the consolidation of the rice value chain. In addition, advocacy and information-sharing are essential to drive the political will to develop and scale up a rice fortification programme.

Towards a Solution

With the aim of tackling micronutrient deficiencies, since 2013 the World Food Programme (WFP) has been working with the Indian government to introduce fortification across the rice value chain. Key areas of collaboration have included introducing rice fortification into safety net programmes, conducting policy advocacy, devising evidence-based standards, facilitating knowledge-sharing events, and sensitizing the private sector to scale up production.

Building on this experience, WFP was able to successfully make the case for including fortified rice in government safety nets. This led to the development of a Centre Sector Scheme (CSS) for the distribution of fortified rice in the public distribution system under the Indian Ministry of Food, Consumer Affairs and Public Distribution, as well as in the Integrated Child Development Services (ICDS) scheme and the Mid-Day Meal scheme. These schemes reach almost 800 million people in India who are most at risk of malnutrition.

Recognizing India's achievements in reducing micronutrient deficiencies through rice fortification, neighbouring countries demonstrated interest in tapping into South-South and triangular cooperation (SSTC) to learn from this experience. India's expertise in quality assurance, food labelling efforts and strategies adopted to promote fortified rice are considered an example for many neighbouring countries in the region. To respond to government requests, WFP facilitated SSTC with Sri Lanka and Bhutan as an effective means of spurring peer learning among countries with similar contexts in order to enhance rice fortification efforts, improve food security and inform national policies. These South-South exchanges included not only promoting technical dialogue and advocacy, but also helping these countries to then contextualize the Indian best practices.

With support from WFP, for example, Sri Lanka visited the Food Safety and Standards Authority of India (FSSAI) in 2019 to learn about the principles of setting minimum fortification standards and specifications in India. The study visit to India had a special focus on the creation of the F+ logo that



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certifies that a fortified product respects the standards and specifications set by Indian authorities. In addition, Sri Lanka dedicated special attention to the social behavioural change campaign (Eat Right India) developed by FSSAI to promote fortified food use by consumers and a healthy lifestyle for the people of India. For Sri Lanka, the visit helped enhance the knowledge base at policy level on fortified rice. Other lessons from the visit included a better understanding of the process for food fortification standard setting, monitoring of quality of fortified rice and fortified rice kernels and need for domestic production of fortified rice. The visit is part of a series of study tours, each of which focusing on a specific aspect of the policy in India.

Bhutan also leveraged India's expertise to make progress on its rice fortification programme. In Bhutan, non-communicable diseases are a growing health concern, responsible for more than half of all deaths in the country. Awareness raising and advocacy programmes on diet, food habits and health are central to reduce the risk of disease from foodborne illnesses. Through WFP-facilitated SSTC, in 2019, a senior delegation from Bhutan visited food testing laboratories and food establishments in India. It aimed at supporting quality assurance for the food fortification programme implemented by FSSAI and to learn about India's Eat Right Movement. This study visit allowed Bhutan to better understand the Eat Right India campaign and to introduce some of these lessons learned in their own National Nutrition Strategy.

In addition to being a reference for other countries, India has also leveraged South-South exchanges to advance progress towards an enabling environment and to promote learning on how to implement mandatory rice fortification in order to scale up fortification efforts in government social safety nets and open market. For example, in 2019, WFP facilitated a high-level study visit of senior officials from the Indian Government to Costa Rica, which has the most successful mandatory rice fortification programme in the world, with 100 percent rice fortified. The visit allowed Indian Government representatives to identify the key legislative and regulatory milestones in making

rice mandatorily fortified. After its exchange with Costa Rica, India is considering replicating the practice of creating a National Commission of Micronutrients that would bring together cross-sector stakeholders responsible for all decision-making on food fortification with a focus on fortified rice.

The multiple exchanges on rice fortification within and outside Asia demonstrate the strength of SSTC as a modality for peer learning to help countries advance efforts towards achieving food security and nutrition for all. Further, with WFP support, **these exchanges are allowing contextualization in participating countries and deliberations in their respective policy space to put mechanisms in place that they consider most effective.**

Decades of experience have proven that large-scale food fortification is a sustainable, safe and effective intervention with significant public health impact. Leveraging the cost-effective modalities of SSTC to reach the sustainable production of fortified rice supported the Government of India to establish a multi-stakeholder and multi-dimensional approach (technical, political and business). Using SSTC also ensured government commitment and consistent funding. This project can be adapted to countries with a similar context and that promote political advocacy for mainstreaming rice fortification in government safety nets. As requirements, the country should have good practices to share with experts for facilitation, and there should be a clear demand from the host government to implement the SSTC initiative.

Contact:

Name: Ms Adriana Bianco
Title: Nutrition Consultant
Organization: World Food Programme (WFP)
Email: adriana.Bianco@wfp.org

Name: Ms Shariqua Yunus
Title: Senior Nutrition Adviser
Organization: WFP India
Email: shariqua.yunus@wfp.org

PROJECT NAME: India's Role in Fostering Intra-Regional Collaboration in Rice Fortification and Leveraging on the Experiences from Latin America to Reduce Micronutrient Deficiencies

COUNTRIES/REGIONS: Bhutan, Costa Rica, India, Sri Lanka

NOMINATED BY: Government of India

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.2

SUPPORTED BY: World Food Programme (WFP)

IMPLEMENTING ENTITIES: WFP, Government of India, Government of Costa Rica, Government of Sri Lanka

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2013 – ongoing

URL OF THE PRACTICE: Not available

Postharvest Management and Market Expansion Opportunities for Rice and Maize Smallholder Farmers

2 ZERO HUNGER



Strengthening the resilience of vulnerable smallholder farmers to climate-related shocks in Sri Lanka through WFP-facilitated South-South cooperation with China

Challenge

Sri Lanka is the sixth most affected country globally by extreme weather events. Recurrent droughts and sudden rains result in major losses for smallholder farmers, especially for the two main crops, rice and maize. In this scenario, smallholder farmers in Sri Lanka face multiple challenges from production to post-harvest management, which put their food security and livelihoods at risk.

In post-harvest management, key challenges posed by inadequate technology and techniques to harvest, dry/process the rice and maize, lack of aggregation systems, and limited access to markets contribute to a vicious cycle of debt and poverty among smallholder farmers.

Towards a Solution

In response to Sri Lanka's request, the World Food Programme (WFP), in collaboration with the Food and Agriculture Organization of the United Nations (FAO), has been working together with the Ministry of Finance, Economy and Policy Development and the Ministry of Agriculture in Sri Lanka to implement a South-South field pilot project to address key challenges faced by smallholder farmers on the ground, with funding support from the Ministry of Agriculture and Rural Affairs (MARA) of the People's Republic of China. Technical support has been enabled by the WFP China Centre of Excellence (CoE) and the Jiangsu Academy of Agricultural Sciences (JAAS), with a view at enhancing the resilience and livelihoods of rice- and maize-growing smallholder farmers to cope with climate-related shocks in selected dry zones in Sri Lanka.

By facilitating South-South and triangular Cooperation (SSTC), the project aims to address capacity gaps of Sri Lankan smallholder farmers by equipping them with innovative technology and expertise in post-harvest management from China, a key South-South partner in this field. The project also seeks to strengthen the capacity of relevant government officials in the Sri Lankan Ministry of Finance, Economy & Policy development and Ministry of Agriculture to support climate-resilient farming. Following an innovative approach, this project is the first WFP-FAO pilot initiative in SSTC in the field, and helps build the capacity of the WFP Sri Lanka 'R5n project'.

The project was rolled out in a phased approach:

- It started with a joint WFP and FAO scoping mission to Sri Lanka in July 2019. In a strong spirit of collaboration, the Rome-based agencies (RBAs) held joint consultations with national and district-level authorities to identify the host government's needs, and visited two farmer organizations in order to dialogue with smallholder farmers and identify key challenges on the ground. The joint WFP-FAO mission enabled the agencies to identify the main areas of collaboration and the way to leverage their comparative advantages to support the Government of Sri Lanka through SSTC with China.
- The mission was followed by a rapid assessment to identify learning needs and capacity gaps from production to post-harvest management. Key findings from the assessment confirmed that smallholder farmers had been using inefficient harvesting and drying methods and outdated tools, which impacts quality, increases post-harvest losses and lowers prices on the market. This



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informed the development of a project proposal with a detailed request for SSTC with China.

- In December 2019, ten Sri Lankan smallholder farmer leaders and government officials participated in a learning visit to China. With training and in-field demonstrations, Sri Lankan participants, hosted by JAAS, learned about China's model of rice processing practices and equipment, basic storage, farmer's cooperatives, value aggregation and market access support for smallholders, as well as the Chinese policy framework for rural development.

The key learnings contribute to improving Sri Lankan grain production efficiency and yields, which concretely work towards improving the rice and maize value chain, as well as achieving Sustainable Development Goal (SDG) 2 (Zero hunger). Following the visit to China, smallholder farmers and government representatives have been engaged in dialogues and workshops to share their lessons learned with others following a training of trainer approach.

The project activities have contributed to exploring and identifying the capacity gaps from production to post-harvest management, and to addressing those gaps in rice processing practices, equipment, storage, value chain development, farmer aggregation and policy development.

- Currently, a technical mission of JAAS experts to Sri Lanka is being prepared. Chinese experts will deliver a series of Training of Trainers programmes (ToT) for leaders of smallholder farmer organizations and government officers. In response to COVID-19 impact, online training sessions are being developed.

- These representatives will then replicate the training for 1,000 farmers in two project locations, focusing on climate-resilient agriculture production practices, post-harvest management and value aggregation systems. Training and peer learning sessions will help foster a support network among smallholders to integrate the new techniques in the ongoing work in the other four districts where the WFP's R5n Project is being implemented.
- By leveraging comparative advantages of WFP and FAO, the results of this pilot will inform a scale-up phase to further expand a jointly designed, WFP-FAO facilitated SSTC project. The scale-up phase can focus on additional districts and provide holistic support to smallholder farmers throughout the value chain cycle by leveraging Chinese expertise. This pilot phase will also inform future RBA collaboration in the field through joint SSTC initiatives.

Contact:

Name: Ms Carola Kenngott
Title: Coordinator for South-South Cooperation, Programme Division
Organization: World Food Programme (WFP)
Email: carola.kenngott@wfp.org

Name: Ms Rohini Singarayer
Title: Programme and Policy Consultant
Organization: World Food Programme (WFP) Bangkok Regional Bureau
Email: rohini.singarayer@wfp.org

PROJECT NAME: Postharvest management and market opportunities expansion for rice and maize smallholder farmers China
COUNTRIES/REGIONS: China, Sri Lanka
NOMINATED BY: Government of Sri Lanka
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.3
SUPPORTED BY: World Food Programme (WFP), Food and Agriculture Organization of the United Nations (FAO), Government of China
IMPLEMENTING ENTITIES: WFP Country Office Sri Lanka, WFP China Centre of Excellence, Ministry of Agriculture and Rural Affairs (MARA) of China, the Government of Sri Lanka, FAO
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2019–2020
URL OF THE PRACTICE: Not available

Scaling up of School-Feeding in Mozambique through South-South and Triangular Cooperation

2 ZERO HUNGER



Reaching the most vulnerable and contributing to achieving Sustainable Development Goal 2

Challenge

Access to food in Mozambique is a challenge for the population due to poverty and an unstable domestic food system that is vulnerable to shocks. Internal conflict and natural disasters create a complex environment that impacts food security and nutrition. In 2010, 80 percent of the population could not afford the minimum cost for an adequate diet. Micronutrient deficiencies are widespread, and chronic malnutrition remains the central nutrition concern, affecting 43 percent of children under five years of age.

Towards a Solution

Since 1977, the World Food Programme (WFP) has been implementing and managing school feeding programmes in Mozambique in order to address food security and nutrition deficiencies for the most vulnerable children. Its programme in Mozambique has grown to reach over 190,000 children, and remains one of WFP's longest standing programmes. For over a decade, WFP has supported the Government of Mozambique in leveraging South-South and triangular cooperation (SSTC) as a vehicle to facilitate the transition from a WFP-led school feeding programme to a nationally owned programme.

As part of this effort, SSTC has been identified as key means to support this transition by enabling Mozambique to tap into the Brazilian experience in school feeding to promote policy change and potential institutional capacity strengthening.

Driven by host government demand, WFP started to facilitate SSTC with the Brazilian Government in 2010. The Brazilian home-grown school feeding programme (PNAE) is one of the oldest and largest globally. It is internationally known as a good practice for integrating procurement of fresh food from local smallholders, context-specific school menus and nutrition education. Tapping into the experience and expertise of the Government of Brazil, WFP has been supporting the Government of Mozambique to establish and scale-up its national home-grown school feeding (PRONAE).

Accordingly, this tripartite partnership between Mozambique, Brazil and WFP is contributing to the transition from the WFP-implemented school feeding programme to a national programme for a sustainable school feeding programme (PRONAE). The national programme was officially approved by the Council of Ministers in 2013. PRONAE's multi-sector approach supports the provision of balanced and diversified food baskets in schools, deworming, food and nutrition education, school gardens and local food purchases. PRONAE was established with three concrete objectives: to improve the nutritional and health status of students; to provide food and nutrition education in schools; and to develop skills for agricultural and livestock production. To catalyse the bilateral knowledge exchanges, in 2011, the WFP Centre of Excellence (CoE) Against Hunger in Brazil was requested by both governments to provide technical assistance to Mozambique and to promote further venues for policy dialogue in specific PRONAE phases.

Phase I of the SSTC pilot project (2013–2015) emphasized a multisector approach, community participation and institutional purchasing of locally produced food. The phase involved 12 schools and



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tested two implementing models, one school-centred and one district-centred. The Brazilian Government provided technical support, funding and policy advocacy support through policy dialogue, the deployment of experts and training workshops.

In 2016, an evaluation of the SSTC project informed a second phase of PRONAE and a SSTC project that aimed at scaling up PRONAE, starting in 2018. The second phase included support to develop a cost-benefit analysis, which was subsequently completed. Also, the creation of a school feeding law, as well as capacity development activities, aimed at improving government's operational capacity, accountability and monitoring at all levels have been initiated but delayed due to climate disasters and the pandemic crisis. WFP-facilitated SSTC continues to be a key mechanism to leverage these efforts with the Government of Brazil by providing technical assistance and policy support for the Government of Mozambique in order to strengthen PRONAE's systems and frameworks. Between 2016 and 2020, Brazil brought its experience in food and nutrition education, local procurement and institutional coordination.

An innovative arrangement between WFP, the Russian Federation and the Government of Mozambique provided US\$ 40 million for school feeding in Mozambique from 2018 to 2021.

The funds are dedicated to expanding PRONAE to a total of 150,000 students in all ten provinces in Mozambique. This includes investments in strengthening government capacities to sustainably implement homegrown school feeding throughout the country, in line with the other cooperation activities in place.

Building on this collaboration, new SSTC opportunities are arising for local development and capacity strengthening of PRONAE in synergy with another initiative between Brazil and Mozambique. For example, the Beyond Cotton project aims to support cotton producers to commercialize cotton by-products such as oil and associated crops (e.g. corn, sorghum, and beans) also through institutional markets such as PRONAE. In 2019, the WFP CoE in Brazil supported the Government of Mozambique in a feasibility assessment that will guide the next steps of the implementation of the Beyond Cotton project.

Through a long-standing SSTC partnership, good practices from Brazil to Mozambique contributed to the establishment of a national programme with support from WFP-facilitated SSTC. Leveraging SSTC and WFP's experience in school feeding in Mozambique has led to the adoption of PRONAE as a state policy led by the Ministry of Education, ensuring the sustainability of the programme.

Contact:

Name: Ms Carola Kenngott
Title: Coordinator for South-South Cooperation, Programme Division
Organization: World Food Programme (WFP)
Email: carola.kenngott@wfp.org

Name: Mr Bruno Magalhaes
Title: Programme and Policy Officer
Organization: WFP Brazil
Email: bruno.magalhaes@wfp.org

PROJECT NAME: Scaling Up of School-Feeding in Mozambique through South-South and Triangular Cooperation

COUNTRIES/REGIONS: Brazil, Mozambique, Russian Federation

NOMINATED BY: Government of Mozambique

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.3

SUPPORTED BY: Council of Ministers of the National School Feeding Programme (PRONAE), World Food Programme (WFP) Centre of Excellence (CoE) Brazil, Government of Mozambique, Government of the Russian Federation, Brazilian Cooperation Agency (ABC), Brazilian Fund for Education Development (FNDE)

IMPLEMENTING ENTITIES: PRONAE, WFP CoE Brazil, Government of Mozambique

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2010–2020

URL OF THE PRACTICE: Not available

Effective Gender-Sensitive Rural Services to Rural Communities in Ecuador

Strengthening the role of rural women in smallholder farming in Ecuador through WFP-facilitated peer learning and advocacy support from China

Challenge

In Ecuador, smallholder farmers' livelihoods are threatened by low productive capacity and high dependence on rice cultivation, which is creating an unsustainable and shock-sensitive monoculture, as well as restricted access to market and credit opportunities. Furthermore, the dependence on rice limits farmers' access to a diversified and nutritious diet. Rural women in Ecuador often face a triple condition of exclusion — as women, as agricultural workers with limited resources, and as indigenous people.

Against this backdrop, the Government of Ecuador has identified the need to strengthen its own capacity to provide effective and gender-sensitive rural services to farmers, taking into consideration the multiple challenges rural women face.

Towards a Solution

The World Food Programme (WFP) has been enabling Ecuador to tap into South-South and triangular cooperation in order to strengthen country capacities and enhance the resilience of smallholder farmers. This project includes funding support from the Ministry of Agriculture and Rural Affairs (MARA) of China. Through a South-South field pilot, the Ministry of Agriculture and Livestock in Ecuador (MAG) is engaging with the Government of China, with support from the WFP China Centre of Excellence (CoE) and the Food and Agriculture Organization of the United Nations (FAO).

With the aim of strengthening the role of rural women in smallholder farming in Ecuador, the field pilot has adopted a two-tier approach: (i) strengthening capacities at the technical and institutional levels of the Ministry of Agriculture of Ecuador through knowledge transfer with China; and (ii) promoting a gender-transformative approach to rural development by facilitating policy dialogues between rural smallholder women leaders from Guatemala, Honduras, Ecuador and Peru.

In September 2019, WFP enabled representatives from rice farmers' organizations and technicians from MAG to engage in in-field demonstrations and peer learning sessions with the Hunan Agricultural University in China. The Ecuadorian delegation learned how to plan for and manage innovative integrated rice systems technologies to diversify their income sources and food consumption, increase productivity rates and strengthen resilience against rice prices volatility and extreme weather events.

Upon return from the study visit to China, MAG technicians and WFP staff from Ecuador supported smallholder farmers in organizing a series of socialization and follow-up activities including three training sessions directed by two smallholders and two MAG technicians, in December 2019. The aim was to disseminate knowledge between smallholder farmers from their areas and technicians from local decentralized autonomous governments (GADs) (Balzar, Macará). The Ecuador National Institute of Agricultural Research (INIAP) also showed interest in collaborating in this initiative, which represents a key success of the project mobilization and awareness-raising efforts.

To ensure a close follow-up of the learning outcomes generated during the study visit, Chinese experts from the Hunan Agriculture University will be providing online training and coaching to

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35 technicians from MAG, INIAP, GAD and local universities. Five training sessions were held virtually between August and September 2020, with a view to support smallholders in the application of the integrated rice system in their farms and to institutionalize this new technology in national rural assistance programmes.

From 1 to 3 October 2019, 54 Ecuadorian women leaders and 42 MAG officials participated in a workshop on public policy guidelines for rural women. The aim was to socialize and analyse the findings from the peer-learning sessions for women as well as to define the use of key recommendations to shape the policies' design. The findings from the peer learning discussions inform knowledge products and recommendations for the formulation of Ecuador's upcoming public policies in order to strengthen the role of female smallholders.

In January 2020, WFP organized a workshop on marketing strategies for smallholder farmer organizations, with 51 participants including well-known Latin American experts in this field ranging from government officials to academia. The workshop, jointly organized with FAO, also covered topics such as climate change and climate risk management for agriculture, comprehensive pest management and the gender-sensitive approach to climate change adaptation and food and nutrition security.

WFP and FAO supported the Government of Ecuador in developing an evidence base to strengthen the role of rural women in public policymaking and increase their access to market opportunities. Peer learning sessions between rural women leaders were facilitated with countries from Latin America and the Caribbean (Peru, Honduras and Guatemala) providing a platform for learning and networking. In total, 744 rural women from Ecuador, 77 MAG's authorities and technicians,

13 non-governmental organizations (NGO) delegates and international organizations participated in the learning sessions. This provides a sustainable element to the project because the peer learning sessions can be brought back to local areas and replicated in the field.

Two videos to document the project and its key results, focusing on government officials' and smallholder farmers' perspectives, are being developed and will be used to give visibility to this innovative SSTC partnership involving China, Ecuador and WFP, and will contribute to future opportunities for replication. Conditions for replication include political mobilization, similar country contexts, and concrete support for SSTC on the ground.

The pilot project has been successful in strengthening country capacities at the individual and institutional levels in the area of integrated rice systems to diversify crop production and income sources. The project also effectively advocated for the importance of investment in rural development and the role of rural smallholder women. Due to the successful experience, in 2020 the project is entering a scale-up phase, with an additional generous contribution from MARA, China.

Contact:

Name: Ms Carola Kenngott
Title: Coordinator for South-South Cooperation, Programme Division
Organization: World Food Programme (WFP)
Email: Carola.kenngott@wfp.org

Name: Ms Carmen Galarza
Title: Programme and Policy Consultant
Organization: WFP Ecuador
Email: carmen.galarza@wfp.org

PROJECT NAME: Strengthening the role of rural women in smallholder farming in Ecuador
COUNTRIES/REGIONS: China, Ecuador, Guatemala, Honduras, Peru
NOMINATED BY: Government of Ecuador
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.3, 2.4, 5.1, 5.a, 10.4
SUPPORTED BY: World Food Programme (WFP), Food and Agriculture Organization of the United Nations (FAO), People's Republic of China, Government of Ecuador
IMPLEMENTING ENTITIES: FAO, WFP, Government of Ecuador
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2019–2020
URL OF THE PRACTICE: Not available



Research and Capacity Building for a Sustainable Agriculture

Growing crops that are more resilient towards biotic and abiotic stresses through genomics, genome editing and plant microbiomes

Challenge

It is estimated that the world's population could reach an estimated ten billion people by 2050. It is evident that agriculture must make huge strides forward in order to feed the increasing population. In addition, agriculture in the future has to cope with climate change, and crops will need to be resilient in changed climates or support the migration of agriculture to new regions. The main targets of research in plant science therefore need to focus on increasing crop productivity, improving the quality of agricultural products, and safeguarding the environment. Each of these targets has important economic value and are interconnected.

Towards a Solution

The International Centre for Genetic Engineering and Biotechnology's (ICGEB) research is aligned to Sustainable Development Goal (SDG) 2.4, because it contributes to more sustainable food production systems and resilient agricultural practices.

The key objectives of the project are to increase crop yields by: (i) generating new crop varieties that are more resistant to biotic and abiotic stresses; (ii) increasing the crop nutritional values; and (iii) reducing the use or need of fertilizers and pesticides and increasing crop productivity. Three technology approaches that are being studied in ICGEB's laboratories will be used to increase the value of seeds and result in more sustainable agriculture: plant genomics, genome editing and plant microbiomes.

Genomics allows assigning gene functions and then accelerates the application of gene technology to agriculture via genome editing. Plant microbiome studies will lead to improved plant health through the beneficial microbes that are associated with the crop. Plant genomics provides a general outlook and analysis on gene identification and function.

The identification of a few key genes that encode for proteins that are involved in resistance to the abiotic (e.g. cold, heat, salinity and drought) or biotic stresses (diseases caused by fungi, bacteria, viruses, insects or nematodes) can lead to their application in crop plants in specific habitats as a result of techniques such as genome editing. Genome editing or gene editing refers to modifications (insertions, deletions, substitutions) in the genome of a living organism. The novel and revolutionary methodology is based on clustered regularly interspaced short palindromic repeats and associated protein 9 (CRISPR-Cas9). It is accepted that the most promising applications of this technology will be used in a growing number of monocot and dicot plant species. By making nutrients available to plants, secreting phytohormones and improving soil structure, microbial communities confer multiple beneficial effects on overall plant growth. Plant microbiome studies are at very early stages; hence, understanding the plant microbiome and pathobiome will help devise ways to precisely tailor this extended genome of plants (or microbiome) in order to develop biofertilizers and/or bio-control agents of disease.

Within the broader scope of the project, the role of ICGEB is to enhance and assist with knowledge transfer in crop improvement and productivity, and to ensure that capacity building in plant ge-



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nomics and microbiomes is followed through in developing countries. The multinational agricultural companies as well as the local companies from implementing countries contribute to the project by pooling resources and knowledge, and supporting the implementation of the project at the local level. This collaborative approach requires state-of-the-art research facility platforms, which are expensive and require specialized know-how; hence, South-South cooperation is paramount since not all countries have them in place. ICGEB can facilitate access and joint use of the necessary instruments and knowledge through its own state-of-the-art platforms and facilities, but more importantly, by providing support and assistance in setting them up in countries in the Global South, hence ensuring both the sustainability and the reproducibility of the project in the medium to long term. The factors that condition the reproducibility are the presence of one or several research institutions in an ICGEB member country that engage in collaborative work as well as networking with local companies and start-ups.

In 2019 alone, the ICGEB has co-sponsored events related to this project in Argentina, India, Pakistan, Peru and Viet Nam, which ensures knowledge transfer and capacity building. Additionally, the ICGEB Regional Research Centres (RRCs) and the 41 affiliated centres, most in the Global South, serve as shared facility hubs for research and technology sharing. The role of the RRCs and affiliated centres is to provide platforms for education and training, and to promote technology transfer to

foster local biotech industry. The annual allocation of funding by the ICGEB for collaborative activities in the Global South amounts to US\$ 1 million.

ICGEB has established networks and ongoing collaborations with many laboratories in crop improvement in the South (Burundi, Colombia, India, South Africa, Viet Nam, etc.), thus playing a role in creating multi-layered sustainability. This pipeline will therefore allow the sustainable implementation of state-of-the-art technologies and promote South-South cooperation. Other countries may join and harness existing platforms to either screen their compounds, set up a screening for their diseases of interest or produce recombinant proteins. Countries that already have the technology in place can receive assistance in setting new screenings or improving the different steps of protein production and entry into the market. Finally, countries willing to set up local platforms could benefit from this project as a model to follow during implementation and as hub for future collaborations.

Contact:

Name: Ms Marianna Maculan

Title: Chief, External Relations

Organization: International Centre for Genetic Engineering and Biotechnology (ICGEB)

Email: maculan@icgeb.org

Tel: +39 040 3757216

PROJECT NAME: Plant Biology and Biotechnology

COUNTRIES/REGIONS: Afghanistan, Algeria, Argentina, Bangladesh, Bhutan, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Costa Rica, Côte D'Ivoire, Croatia, Cuba, Ecuador, Egypt, Eritrea, Ethiopia, Hungary, India, Iran, Iraq, Italy, Jordan, Kenya, Kuwait, Kyrgyzstan, Liberia, Libya, Malaysia, Mauritius, Mexico, Moldova, Montenegro, Morocco, Namibia, Nigeria, North Macedonia, Pakistan, Panama, Peru, Qatar, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Zimbabwe

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.4

SUPPORTED BY: European Union Interreg Programmes, Italian Ministry of Foreign Affairs, Fondazione AGER, the private sector (large companies such as Syngenta, DSM, Novozymes, BayerCropScience, Indigo, and other small local companies hosting the different project activities)

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2010–2030

URL OF THE PRACTICE: <https://bit.ly/32hQDSu>



Promotion of the Use of Beneficial Fungus Trichoderma in Agriculture

Promoting and adopting the Trichoderma species in Asia and East Africa



Challenge

In developed countries, farmers often buy their seedlings from commercial nurseries that produce them in sterile media. In contrast, in developing countries, farmers prepare their seedlings that grow in the soil of their farms and inevitably lose 50 percent of the seedlings to soil-borne pathogens; hence, they raise poor seedlings due to placing seeds because they are planted too closely together and are not fertilized properly. By treating the beds with Trichoderma, a beneficial fungus, soil-borne fungal diseases are prevented from affecting seedlings. Additionally, the Integrated Pest Management (IPM) Innovation Lab has introduced cocopeat as a medium in plastic trays for raising seedlings. Cocopeat is sterile and amenable for the planting of seeds, and can be treated with Trichoderma and fertilizers.

Towards a Solution

To address the above challenge, the Integrated Pest Management (IPM) Innovation Lab at Virginia Polytechnic Institute and State University (Virginia Tech), with the support of the U.S. Agency for International Development (USAID), conducted several workshops on Trichoderma for scientists, extension agents, staff of value chain projects, and private entrepreneurs from Bangladesh, Cambodia, Ethiopia, Kenya, Nepal and United Republic of Tanzania, working with experts from an Indian university.

The IPM Innovation Lab has promoted the use of Trichoderma in South and South-East Asia, and East African countries. This technology has resulted in reduced chemical pesticide use, increased crop yields, reduced input costs, and improved human and environmental safety. It addresses Sustainable Development Goals (SDGs) 1 (No poverty) and 2 (Zero hunger) by increasing crop production, leading to reduced poverty and hunger; SDG 15 (Life on land) by reducing use of chemical pesticides and increasing biodiversity on land; and SDG 17 (Partnerships for the goals) by enhancing collaboration and partnerships within the developing world.

Trichoderma is a beneficial fungus: when seeds or seedlings are treated with it and planted in the field, they are protected from plant pathogenic fungi, which cause fungal diseases. The fungus also induces defence in plants against pathogenic bacteria and viruses. The IPM Innovation Lab promoted its use in all IPM packages developed for different crops in these countries.

As a result, one company each in Cambodia and Nepal, and two companies in Bangladesh, are producing Trichoderma and marketing it locally. Also, some companies in these countries secured an agreement to import Trichoderma from India and distribute locally. A multinational company in Kenya is producing Trichoderma and supplying it to farmers in East Africa. Local entrepreneurs are yet to take up this activity.

The IPM Innovation Lab conducted workshops and assisted companies that would be inclined to produce Trichoderma, and also developed a demand, hence a market, for it by educating farmers on the benefits of the product. Agricare in Nepal, Ispahani and Grameen Krishok Sohayak Sangstha (GKSS) in Bangladesh, Bayon Heritage, Natural Agriculture Village and Khmer Organic in Cambodia,



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and Real IPM in Kenya are companies producing and/or selling Trichoderma in their respective countries and regions. Companies from India sell this product in Asia.

Seven WhatsApp groups have been formed by Real IPM Kenya to train lead farmers in IPM systems, including Trichoderma application. Images of over 1,000 diseases on different vegetable crops have been collected and managed in a database.

The IPM Innovation Lab has also conducted a free webinar for international participants to learn about Trichoderma's application and beneficial properties.

As a result of Trichoderma implementation in Bangladesh, and the increase in plant nurseries, women's work opportunities have flourished. GKSS, a Trichoderma production company, is led by a woman who is the first to sell the fungus in compost form in the country. She also develops Trichoderma as a leachate so that it can be sprayed on plant leaves.

In United Republic of Tanzania, in on-farm trials, the combination of Trichoderma with neem was observed to reduce the population of nematodes by over 50 percent.

The Trichoderma technology introduced by the IPM Innovation Lab has become a sustained and permanent factor in crop production in the developing world. Farmers understand the benefits derived by treating seeds and seedlings with Trichoderma, and it has now become a common practice.

This technology was taken up by farmers in Asia, including Bangladesh, Cambodia, India and Nepal, and is expanding by leaps and bounds. Further work is required in East Africa in Ethiopia, Kenya and United Republic of Tanzania in educating government officials, private entrepreneurs, non-governmental organizations (NGOs) and others on the benefits of the beneficial fungus.

Contact:

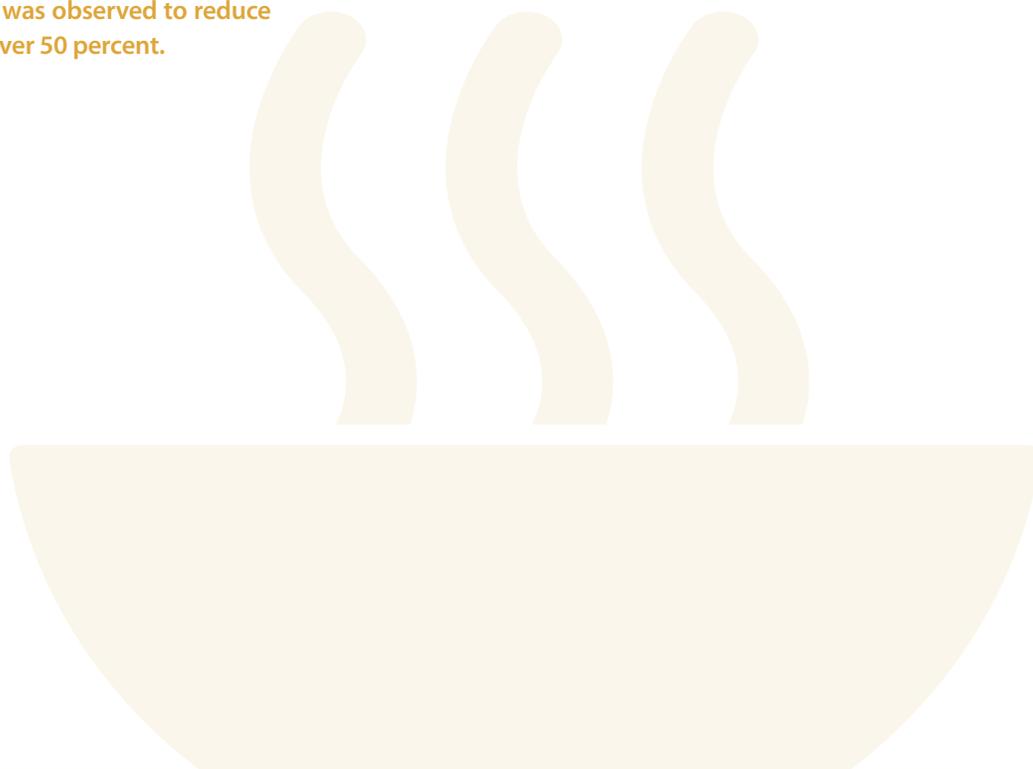
Name: Mr Muni Muniappan

Title: Director

Organization: Feed the Future Innovation Lab for Integrated Pest Management

Email: rmuni@vt.edu

Skype: Rangaswamy Muniappan



PROJECT NAME: Promotion of the Use of Beneficial Fungus Trichoderma in Agriculture
COUNTRIES/REGIONS: Bangladesh, Cambodia, Ethiopia, India, Kenya, Nepal, United Republic of Tanzania
NOMINATED BY: Virginia Polytechnic Institute and State University (Virginia Tech)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.4, 2.a, 17.6, 17.7, 17.9
SUPPORTED BY: U.S. Agency for International Development (USAID)
IMPLEMENTING ENTITIES: Virginia Tech
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2014– 2020
URL OF THE PRACTICE: <https://ipmil.cired.vt.edu/>

Promotion of IPM Products for Sustainable Agriculture

Increasing smallholder farmers' access and business opportunities for ecological farming solutions

Challenge

In the South Asian countries of Bangladesh and Nepal, the availability of Integrated Pest Management (IPM) products such as pheromone lures, traps and bio-pesticides, which include *Trichoderma*, *Beauveria* and *Metarhizium*, is limited or unavailable to farmers. As a result, farmers are not able to protect their crops from pests and diseases with safe technologies. This leads to the use of chemical pesticides that have adverse effects on human and environmental health.

Towards a Solution

To address the above challenge, the Integrated Pest Management (IPM) Innovation Lab at Virginia Tech, with the support of the U.S. Agency for International Development (USAID), facilitated workshops and knowledge exchange visits between India, which has been producing and marketing bio-pesticides that include *Trichoderma*, *Beauveria* and *Metarhizium*, and Nepal and Bangladesh to learn about the usage of bio-pesticides. IPM is a proven, efficient method to fight pests and diseases of crops, of which pheromone lures and traps and bio-pesticides are integral components. These products help to reduce the use of chemical pesticides, which have adverse impacts on human health and environment. The aim of this initiative is to develop business partnerships between the countries and catalyse a productive and healthy environment for controlling crop pests and diseases.

This initiative aims to achieve increased crop productivity, leading to reduced poverty (SDG 1) and hunger (SDG 2), by reducing or eliminating use of toxic pesticides. The initiative improves human and environmental health (SDGs 3, 6, 14, 15), enhances business activities that lead to economic growth (SDG 8) and creates collaboration and development partnerships between the three countries (SDG 17).

Both Bangladesh and Nepal are resource-poor countries, and IPM products are not available locally. The IPM Innovation Lab arranged for entrepreneurs from Bangladesh and Nepal to visit India to meet with one another, develop contacts, and observe the productivity of IPM products developed by different companies. Cross-country travels and in-country workshops connected partners. The IPM Innovation Lab educated farmers in both countries on the benefits of using IPM products and developed local demand for them. Setting up pheromone lures and traps in farmers' fields led to recognizing the occurrence of pests and taking timely action to prevent crop loss, and the use of bio-pesticides reduced the need to use chemical pesticides, thus reducing water and soil contamination and improving human and environmental health.

As a result of the activity, farmers use methyl eugenol and cue lures for the monitoring of fruit flies and controlling mango and cucurbit crop fields. The incidence of fall armyworm, South American tomato leaf miner, tomato fruit worm, cut worm, banana weevil, sweet potato weevil, eggplant fruit and shoot borer, okra fruit borer and other pests are monitored using pheromone traps, and timely interventions are conducted. Two companies in each of these countries are producing bio-pesticides. The number of dealers who import and supply the IPM products have increased in both countries.

2 ZERO HUNGER



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The IPM Innovation Lab, through collaboration with organizations such as Nepal Agricultural Research Council (NARC) and Plant Quarantine and Pesticide Management Centre (PQPMC), **has trained over 1,000 private sector providers on South American tomato leafminer technologies in Nepal alone. In Nepal, at least 153,000 households have been introduced to IPM products. From 2013 to 2017, the IPM Innovation Lab conducted 20 awareness workshops on the pest, bringing together participants from 50 different countries. IPM practices, including the implementation of pheromone traps, biopesticides and other sustainable solutions, have created valuable economic impacts.**

The concept of IPM began in California in the 1960s and has become highly effective, sustainable and economical. Due to the IPM Innovation Lab's promotion of triangular trade and implementation, Bangladesh can export some bio-pesticides to Nepal, which in turn can assist Bhutan in IPM. The promotion has also led to policy changes in pesticide registration and regulation, ensuring the sustainability of the initiative. People

in these countries have become aware of the adverse effects of chemical pesticides.

This programme has been implemented with the extramural support from United States Agency for International Development (USAID); however, its extension to Bhutan was a bilateral collaboration between Nepal and Bhutan. The IPM Innovation Lab is also extending this programme to Cambodia. The promotion of policy changes in bio-pesticide registration, developing a business case, and educating farmers on benefits of bio-pesticides are the conditions that need to be met for its replication in Cambodia and other developing countries.

Contact:

Name: Mr Muni Muniappan

Title: Director

Organization: Feed the Future Innovation Lab for Integrated Pest Management

Email: rmuni@vt.edu

Skype: Rangaswamy Muniappan



PROJECT NAME: Promotion of Integrated Pest Management (IPM) Products for Sustainable Agriculture

COUNTRIES/REGIONS: Bangladesh, Bhutan, India, Nepal

NOMINATED BY: Virginia Polytechnic Institute and State University (Virginia Tech)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.4, 2.a, 10.2, 15.4, 15.8, 15.9, 15.a, 17.6, 17.7, 17.9, 17.16, 17.17

SUPPORTED BY: U.S. Agency for International Development (USAID)

IMPLEMENTING ENTITIES: Virginia Tech

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014-2020

URL OF THE PRACTICE: www.ipmil.cired.vt.edu



A Strategic Partnership within the “Alliance to Fight Avoidable Blindness Campaign”

The Azerbaijan International Development Agency and the Islamic Development Bank cooperating to bring light to the lives of sub-Saharan Africans



Challenge

There are more than 40 million people who completely, and over 300 million people who partially, lost their eyesight worldwide. In Africa, due to the cost and shortage of ophthalmologists, not everyone can afford treatment and recover their sight. Cataracts is a widely spread disease in the sub-Saharan region. Millions of people suffer from it, yet they cannot afford treatment due to their economic condition. In addition, lack of educational and healthcare resources worsen the situation. In some countries, there is only one ophthalmologist for one million people.

Towards a Solution

Azerbaijan is an active participant of South–South cooperation and widely shares its experience and know-how with interested parties. Since 2012, the Azerbaijan International Development Agency (AIDA) and the Islamic Development Bank (IsDB) have been strategic partners in the Alliance to Fight Avoidable Blindness campaign. This campaign is one of the long-lasting and successful programmes that AIDA is proud to be part of. Taking into consideration that cataracts are one of the most widely spread eye diseases in African countries, especially in the sub-Sahara region, as well as the lack of local ophthalmologist surgeons in this area, the campaign addresses a very important challenge for these communities. Every year, from 2012 to 2016 (the first phase), the ‘Alliance to Fight Avoidable Blindness’ campaign has been successfully carried out in several African countries, including Burkina Faso, Chad, Comoros, Côte d’Ivoire, Djibouti, Guinea-Bissau, Mozambique, Mali, Mauritania, Niger, Somalia and Togo.

On the initiative of AIDA, Azerbaijani ophthalmologists from the National Eye Center, named after academician Zarifa Aliyeva, have participated in the campaign by sharing their knowledge and experience with their colleagues from aid receiving countries. This centre has been operating for more than 70 years and providing the Azerbaijani population with high-level medical services. The ophthalmologists of this and other leading ophthalmological centres of Azerbaijan are ready to contribute to future campaigns and to assist the Islamic Development Bank (IsDB) member countries in increasing the capacity of their medical specialists.

In continuation of Azerbaijan’s committed support to the Alliance to Fight Avoidable Blindness campaign, the main partners of this noble mission – Azerbaijan International Development Agency (AIDA) of the Ministry of Foreign Affairs, IsDB, Egyptian Agency of Partnership for Development (EAPD), Humanitarian Relief Foundation (Turkey), as well as the prominent non-governmental organizations (NGOs) specialized in ophthalmology, Nadi Al-Basar (Tunisia), Prevention of Blindness Union (Saudi Arabia) – and the national coordinators of campaign countries met in Baku between 31 May and 1 June 2016. The main purpose of the meeting was to review the outcomes of the campaign held during the 2012–2016 period, discuss the forthcoming objectives and prospects for enlarging cooperation, as well as elaborate on the recommendations made during the initial meeting held on 6–7 January 2016 in Rabat, Morocco, in preparation for the second phase of the campaign. Due to the positive impact of the campaign, the programme was deemed successful, and specific areas of its second generation were approved as the core activities to be held during the next five years. The



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participants visited the National Eye Centre, which also played an active role in the campaign.

During the first phase of the campaign, more than 300,000 persons had their eyes examined, and more than 56,000 patients who had partially or fully lost their eyesight regained their vision as a result of cataract surgeries carried out free of charge. The campaign brought light to the lives of these people by making it possible for them to see their families, and integrate into society by regaining the ability to earn their livelihoods.

In addition, 177 local doctors have benefited from professional training organized during the campaign. The capacity-building part of this campaign addressed the urgent needs and facilitated sustainability of the provision of necessary medical services by local specialists in the long term. It is a significant advantage of the campaign, because achieving sustainable results and finding enduring solutions for the current problems is much more important than short-term accomplishments.

During the second phase of the campaign (2018–2022), which is carried out in 12 African countries, **100,000 persons will be operated on; more than 1,000,000 school children will have eye examinations and be provided with eyeglasses; and 90 local doctors will participate in the capacity-building training in the African countries involved.** In 2019, as part of the campaign, more than 20,000 persons had eye examinations;

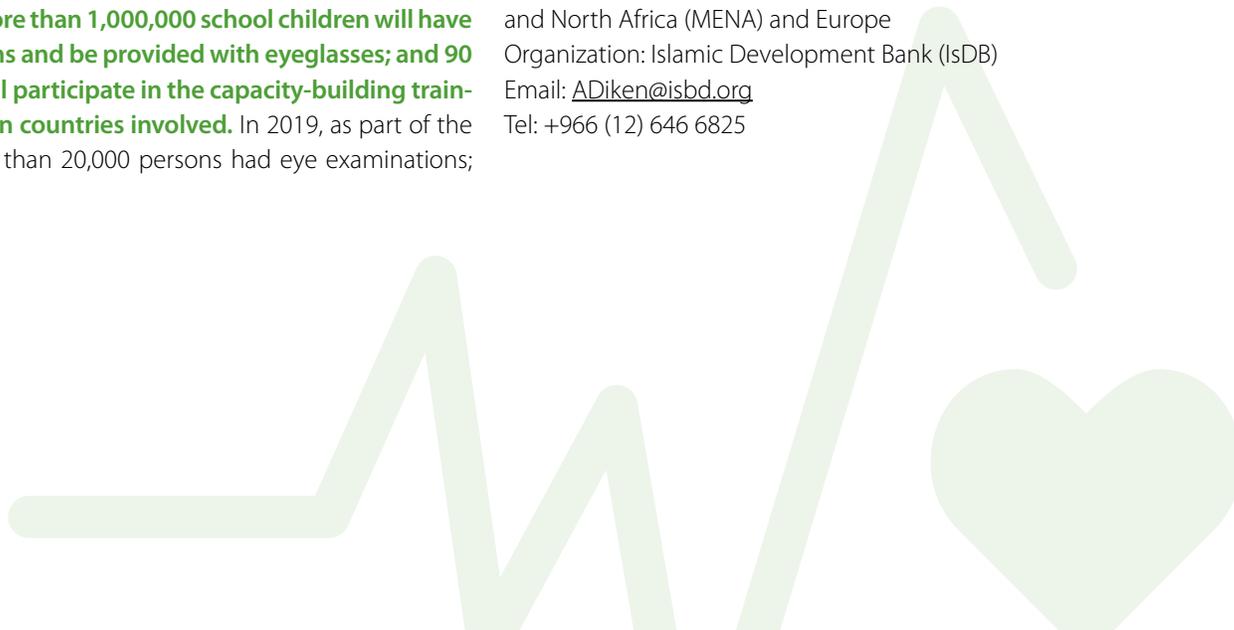
8,000 patients were operated on; and 26 local doctors were provided with the professional training in Burkina Faso, Chad, Comoros, Guinea-Bissau, Mali, Niger and Togo.

At present, the project is implemented by IsDB while AIDA provides the financial contribution. Similar projects can be implemented through other international organizations, taking into account the specific needs of different countries. Thus, this model of cooperation can be used in various contexts.

Azerbaijan's development assistance and humanitarian aid policy are strongly focused on South-South cooperation. In accordance with this general framework, AIDA is strongly interested in continuing its cooperation with the IsDB in the Alliance to Fight Avoidable Blindness campaign in the second phase of this campaign. As enshrined in AIDA's motto, it is improving the world together with its partners; its collaboration with IsDB is also aimed at achieving this noble goal.

Contact:

Name: Mr Ahmed Faruk Diken
Title: Senior Technical Cooperation Coordinator, Middle East and North Africa (MENA) and Europe
Organization: Islamic Development Bank (IsDB)
Email: ADiken@isbd.org
Tel: +966 (12) 646 6825



PROJECT NAME: A Strategic Partnership within the Alliance to Fight Avoidable Blindness Campaign
COUNTRIES/REGIONS: Azerbaijan Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Djibouti, Guinea, Libya, Mali, Mozambique, Niger, Saudi Arabia, Tunisia, Turkey
NOMINATED BY: Islamic Development Bank (IsDB)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.8, 3.c, 17.9, 17.16
SUPPORTED BY: Islamic Development Bank, Azerbaijan International Development Agency (AIDA) of the Ministry of Foreign Affairs, Egyptian Agency of Partnership for Development (EAPD), Humanitarian Relief Foundation (Turkey), Prevention of Blindness Union (Saudi Arabia)
IMPLEMENTING ENTITIES: Nadi Al-Basar (Tunisia)
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2012–2022
URL OF THE PRACTICE: www.aida.mfa.gov.az/en/health/38

The Establishment and Operation of Medical Units Dispatching Experts and Convoys to Africa

3 GOOD HEALTH AND WELL-BEING



Forging partnerships in the health sector and capitalizing on Egypt's wealth of experience



Challenge

Africa faces the world's most dramatic public health crisis, with less than 1 percent of global health expenditure and only 3 percent of the world's health workers. The continent accounts for almost half the world's deaths of children under five, has the highest maternal mortality rate, and bears a heavy toll from HIV/AIDS, tuberculosis and malaria.

Major hurdles, such as the high rate of maternal and newborn mortality, are still found throughout the continent; 19 of the 20 countries with the highest maternal mortality rates worldwide are in Africa. In addition, it has the highest neonatal death rate in the world.

Basic sanitation needs remain unmet for many: only 58 percent of people living in sub-Saharan Africa have access to safe water supplies. Non-communicable diseases, such as hypertension, heart disease and diabetes, are on the rise; and injuries remain among the top causes of death in Africa.

Towards a Solution

Since its creation in 2014, the Egyptian Agency of Partnership for Development (EAPD) through partnerships, has been keen to support the efforts of African countries to achieve the Sustainable Development Goals (SDGs), specifically SDG 3 (Good health and well-being). EAPD has always sought to capitalize on Egypt's comparative advantage in medical expertise by engaging with the country's national centres of excellence of international standing in various medical fields. Partnerships were quickly forged because all parties involved saw the potential benefits to human development.

Delivering a mobile clinic to Kenya

On behalf of the Egyptian Government, the agency has delivered a fully equipped mobile clinic to the Government of Kenya in support of the 'Beyond Zero Campaign' launched by the First Lady of Kenya. The aim is to help decrease child mortality rates and deploy medical services in various remote areas of the country.

These South-South cooperation partnerships have proven successful and promising, with a high impact on many lives in African countries.

EAPD has developed capacity-building programmes in urological and nephrological diseases for African member countries of the Organization of Islamic Cooperation (OIC), in partnership with the Mohamed Ghoneim Urology & Nephrology Mansoura Center, an Egyptian centre of excellence in the medical field.

An intensive training programme is being organized at the Mansoura Center for urologists from the Mulago Hospital in Uganda, which is a first step towards establishing a Urology and Nephrology Centre in the Ugandan hospital. The long-term aim is to gradually expand it into a regional centre to serve communities across East Africa.

In addition to EAPD's work to establish the Urology & Nephrology Center in Mulago Hospital, it has conducted a number of training programmes in partnership with the Magdy Yacoub Heart Foundation (MYF) in Egypt, headed by the world-renowned Egyptian heart surgeon Sir Magdy Yacoub. The Foundation offers free, state-of-the-art health services to the least privileged at international standards, mainly through its Aswan Heart Centre.

EAPD has been working closely with MYF to develop African expertise in cardiovascular diseases. This partnership has taken many forms, all with positive results. Promising African surgeons are being trained for extended periods at no cost in the Aswan Heart Centre. Once they return home, they are not only able to perform complex heart interventions, but also to pass on the knowledge they acquired in Egypt to fellow doctors.

With Egyptian health capabilities, EAPD has intensified its activities to support the Egyptian medical units and clinics located in African countries, including 21 medical centres, in addition to dispatching medical convoys and providing medical assistance. EAPD deployed several medical convoys, which included doctors specializing in general surgery, vascular surgery, ophthalmology and anaesthesia; **provided medical services to over 2,000 African citizens and performed over 300 surgeries in various specialties. EAPD also gave special attention to women's care and reproductive health.**

EAPD's partnership with the "Egyptian Children Cancer Hospital 57357", the only specialized children's cancer hospital in the

Middle East and Africa and the largest of its kind in the world, is another success story. Together, EAPD and the Hospital are implementing a capacity-building programme aiming at training 600 African medical practitioners and providing expertise and equipment to hospitals in African cities. Hospital 57357 is currently offering expertise to Sudan in establishing the Sudanese Children's Cancer Hospital 7979. Moreover, it provides free treatment for a number of African children suffering from cancer.

In July 2017, the EAPD sponsored a visit to Ethiopia by a medical team of 27 surgeons, doctors and nurses from the Foundation. During their short stay, they performed 45 heart operations, free of charge, on underprivileged Ethiopian citizens at the Black Lion hospital. It only took a few days for the Egyptian medical team to change the lives of so many Ethiopian families forever.

All of these examples prove that the South can and does help one another to achieve sustainable development through the sharing of knowledge and resources. While EAPD's partnerships with non-governmental organizations (NGOs) in the health sector are a case in point, there are other successful models of South-South cooperation in other vital areas.

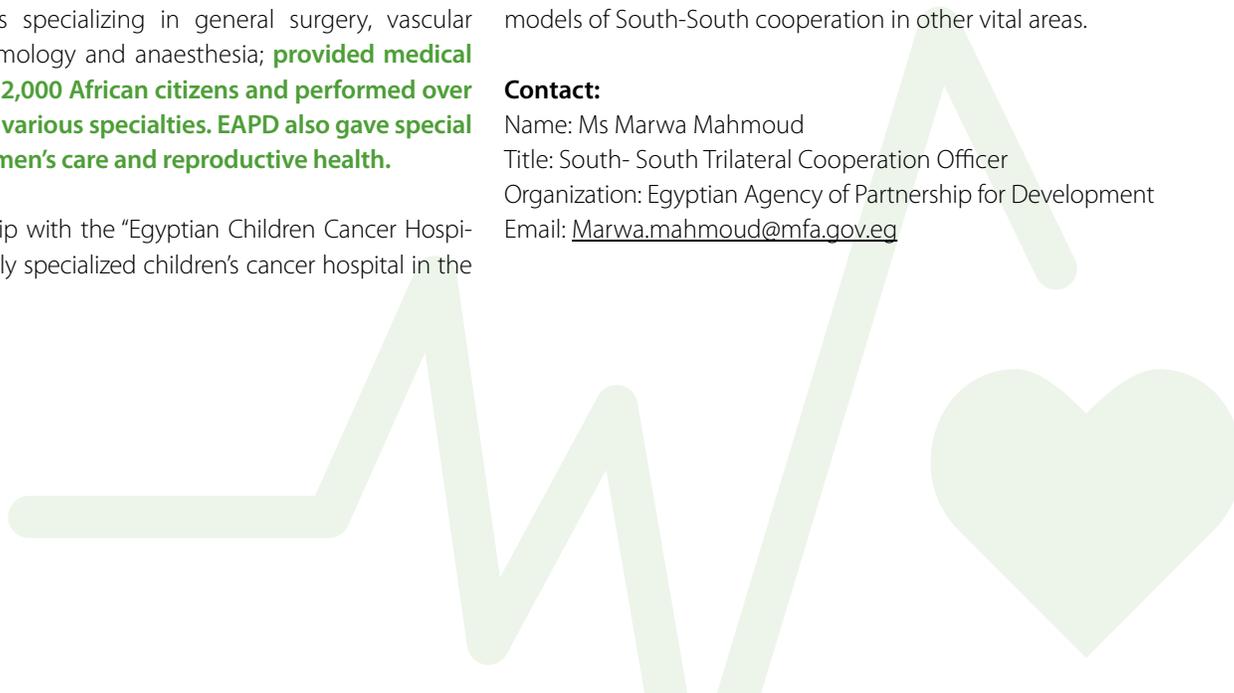
Contact:

Name: Ms Marwa Mahmoud

Title: South- South Trilateral Cooperation Officer

Organization: Egyptian Agency of Partnership for Development

Email: Marwa.mahmoud@mfa.gov.eg



PROJECT NAME: The Establishment and Operation of Medical Units Dispatching Experts and Convoys to Africa

COUNTRIES/REGIONS: All African countries.

NOMINATED BY: Egyptian embassies in Africa, in collaboration with the Ministry of Foreign Affairs in the respective countries and other relevant national medical institutions administered by the governments.

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.2, 3.3, 3.4, 17.6, 17.9

IMPLEMENTING ENTITIES: Medical centres of excellence located in Egypt, Mansoura Medical Center in Egypt, and the Magdy Yacoub Cardiology Center in Aswan, Egypt

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014 – ongoing

URL OF THE PRACTICE: <https://bit.ly/3hC5fmc>



Mauritius' Demonstrated Capacity in Controlling Communicable Diseases

Preventing vector-borne and other communicable diseases such as malaria, dengue, chikungunya, whooping cough, diphtheria, leprosy, schistosomiasis and poliomyelitis

Challenge

A few decades ago, Mauritius was facing several communicable diseases, such as malaria, childhood infectious diseases, and tuberculosis. The country has since embarked on important measures as per World Health Organization (WHO) guidelines to eradicate the diseases or to contain them at their present low level.

Presently, Mauritius has acquired rich and varied expertise in responding to disease outbreaks and other public health threats, through both real cases and simulation exercises. Its success in controlling communicable diseases is attributed mainly to the implementation of an efficient surveillance programme as well as to the National Expanded Immunization Programme.

However, Mauritius' extensive air and trade links with endemic countries have increased the risk of importation of pathogens and the country's vulnerability to epidemic-prone diseases. In addition, the country is also subject to climate change and its impact on its vector distribution, with increasing threat from vector-borne diseases, which requires constant and heightened vigilance.

Towards a Solution

To address the above challenge, the Ministry of Health and Wellness (MOHW) in Mauritius developed an operational plan for the prevention and control for communicable diseases. The objective of the plan is to control the spread of diseases, enhance the quality of life of the population and contribute to economic development.

As part of its efforts, the MOHW implemented an efficient surveillance programme through the screening of all passengers incoming at port and airport, and health surveillance of passengers from high-risk countries as per the established protocol. The control of communicable diseases is implemented by the Communicable Disease Control Unit and the Public Health and Food Safety Inspectorate of the MOHW, under the responsibility of the respective Director of Health Services. The MOHW also collaborates with the Mauritius Ports Authority, the Passport and Immigration Office, Airports of Mauritius Ltd., Airport Terminal Operations Ltd. (ATOL), and the Civil Aviation Department for port and airport surveillance. Around 80,000 blood samples from asymptomatic passengers are taken and screened for malaria yearly. All positive cases are isolated in medical centres and treated accordingly. Mauritius has also implemented appropriate public health measures to control vectors and prevent local transmissions, for example fogging, larviciding, peri-domestic and rooftop inspections, indoor residual spraying, fever surveys and health education for the public.

In regards to immunization and vaccination measures, the country implemented a National Expanded Immunization Programme. There are six health regions, including the Island of Rodrigues, and each region has a vaccination coordination centre, manned by trained personnel with the necessary logistic support. At present, there are 159 active centres in Mauritius and 15 on the island of Rodrigues, with the aim to provide immunization services at a walking distance.



© Ministry of Health and Wellness, Mauritius

Furthermore, new vaccines have recently been introduced in Mauritius, recently namely rotavirus vaccine in 2015, pneumococcal vaccines in 2016, and human papilloma virus (HPV) vaccine in 2016. The hexavalent vaccine was introduced in 2018, which confers immunity against diphtheria, tetanus, pertussis, hepatitis, poliomyelitis (inactivated) and Haemophilus type B influenza. The presence of a good road network, adequate transport facilities and other modern communication tools have also contributed significantly to the success of the immunization programme. Measles, mumps and rubella (MMR) vaccination has been extended to the population in high-risk areas and to the workforce of both public and private sectors, targeting specifically the 15–45 year age group. Over 50,000 persons were vaccinated against measles during the supplementary immunization activities. Due to the measles outbreak in April 2018, the vaccination schedule for MMR has been reviewed, with the first dose at nine months and the second dose at 17 months. Other public health measures taken include contact tracing and supplementary immunization activities.

The Vector Biology Control Division has conducted 516 mosquito surveys across the island. Entomological Surveys were reinforced during the dengue outbreaks in the affected regions.

In addition, in July 2018, a Geographic Information System (GIS) Unit was set up at the MOHW. The aim of this unit is to provide mapping, analysis and data management to support more informed decision-making as well as enabling collaboration across the MOHW. The importance of building GIS capabilities was demonstrated during surveillance and response activities for the measles outbreaks to visualize geographical distribution of cases in high-level situation reports, and the dengue outbreaks to assist in the identification of sites for fogging activities. Furthermore, in March 2019, the Integrated Disease Surveillance and Response (IDSR) was initiated as part of the strategy to strengthen the core capacities of the International

Health Regulations (2005). It provides the Communicable Diseases Control Unit at headquarters with information for the 11 priority diseases in real time, from all across the island¹.

For many years, Mauritius has been successfully using several formal and ad hoc multisectoral mechanisms under the rubric of the broader National Disaster Risk Reduction and Management Act (2016) and the updated Public Health and Quarantine Acts to respond to public health emergencies. A fully operational National Disasters Risk Reduction and Management Centre is in place under the aegis of the Ministry of Social Integration, Social Security and National Solidarity to prepare for and respond to natural disasters and epidemics.

In terms of South-South cooperation, **the country has cross-border agreements, protocols and memoranda of understanding (MOUs) on public health emergencies with neighbouring countries. Through the Indian Ocean Commission (IOC) Mauritius is aiming to advance a genuine One Health agenda.**

It has also signed a charter for the weekly sharing of data on epidemic-prone diseases occurring within the Indian Ocean islands of the Comoros, Madagascar, Mauritius, Reunion and Seychelles. The country is also required to share data with the Africa Centres for Disease Control and Prevention (Africa CDC) via the Zoom platform.

Contact:

Name: Dr V Gujadhur

Title: Director Health Services (Public Health)

Organization: Ministry of Health and Wellness of Mauritius

Email: vgujadhur@live.com

1 <https://apps.who.int/iris/bitstream/handle/10665/324830/WHO-WHE-CPI-2019.55-eng.pdf?sequence=1>

PROJECT NAME: Control of Communicable Diseases

COUNTRIES/REGIONS: Mauritius

NOMINATED BY: Government of Mauritius

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3, 3.d

SUPPORTED BY: Government of Mauritius (Ministry of Finance, Economic Planning and Development) and Donor partners, such as World Health Organization (WHO) and other partners

IMPLEMENTING ENTITIES: Ministry of Health and Wellness, Mauritius

PROJECT STATUS: Ongoing

PROJECT PERIOD: Ongoing (whole year)

URL OF THE PRACTICE: <https://bit.ly/3jpJcjd>



Improved Healthcare in Rural Areas

Improving access and utilization of health clinics in marginalized communities in Uganda and Kenya



Challenge

Health inequalities between rural and urban areas is a major challenge in both Uganda and Kenya. Most people in both countries live in rural areas, yet a majority of skilled health personnel work in urban areas. Many diseases affecting the rural population are easily treatable, but there is a lack of healthcare services available. Providing health services as well as training people in prevention will be necessary in order to bridge the gap in health outcomes between rural and urban areas. In order to attain the goal set by the United Nations of leaving no one behind, it is necessary to focus on those furthest behind.

Towards a Solution

The 'Improved Healthcare in Rural Areas' project, supported by the Norwegian Agency for Exchange Cooperation (Norec), aims to improve access to and utilization of health services in marginalized communities in Uganda and Kenya. The organizations involved reopen and staff old health clinics in rural areas, left by the former colonial rulers. These clinics are located in marginalized communities where there are either insufficient resources to offer healthcare services, or where it is challenging to find qualified professionals. Through the exchange of skilled health personnel, the project offers primary healthcare services in these marginalized communities. Furthermore, the young professional health workers train the locals in basic healthcare, thus ensuring sustainability in the provision of healthcare services.

The project contributes directly to Sustainable Development Goal (SDG) 3 (Good health and well-being), and more specifically to target 3.8. The overall objective is to: improve preventive health education and services for maternal and child health; improve preventive health education and services for HIV and Hepatitis B; improve knowledge of malaria prevention in project placements; improve hygiene and sanitation; improve nutrition for children under five and breastfeeding mothers; update the guiding principles for health facility management; develop capacity in managing community development projects; increase knowledge and practice of community-directed intervention projects; and improve professionalism in cross-cultural settings.

The key methodology used in this project is the mutual exchange of professional staff within the framework of institutional cooperation.

To date, a total of 36 skilled health and administrative personnel from Uganda and Kenya, 18 each, were exchanged for a period of 12 months, including nurses, clinical officers, midwives, nutritionists, pharmacists and biomedical technologists. After going home, there is one month of follow-up work to secure that the knowledge the health personnel has gained abroad is transferred to their own workplace. This increases the chances of organizational learning, and thus of a greater sustainability of results. The project has gradually scaled up the number of health personnel sent. It started with the exchange of four people per year in 2017, and gradually increased to 12 people per year today.

Key results from the project include improved access to and utilization of primary health-care services in six marginalized communities in Kenya and Uganda, capacity building for



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local staff and increased health advocacy work in local communities. By training the local community in prevention, and building capacity of the local staff, the chances of sustainable results are also increased after the end of the project.

Norec's role in this initiative is to facilitate planning for meetings, the carrying out mid-term project reviews, as well as partner training, preparatory courses, and debriefing health personnel prior to the exchange abroad. The concept of exchange of health personnel within the framework of institutional cooperation is a highly versatile model to upgrade skills, knowledge and capacity. Since 2001, Norec has supported exchanges of personnel in the health sector in a variety of developing countries. The methodology of exchange can easily be applied in a variety of settings, and is easy to scale up or down in response to the needs on the ground, thus making it a technically feasible solution.

The innovative aspects of the project are its horizontal design and focus on reciprocity. Both partners are fully engaged in designing and implementing the project, and both partners

contribute with their respective strengths and learn from each other. A joint sense of ownership and actions is the result of joint planning and implementation of the project. Development cooperation projects are often designed based on a transfer of technologies from a donor to a recipient country. The recognition of the value of all stakeholders' knowledge creates greater ownership, participation and sustainability in the project.

Contact:

Name: Mr Helge Espe

Title: Senior Adviser

Organization: Norwegian Agency for Exchange Cooperation (Norec)

Email: helge.espe@norec.no

Name: Ms Marit Bakken

Title: Director of Programmes

Organization: Norwegian Agency for Exchange Cooperation (Norec)

Email: marit.bakken@norec.no



PROJECT NAME: Improved Healthcare in Rural Areas: Improved Access and Utilization of Health Clinics in Marginalized Communities in Uganda and Kenya

COUNTRIES/REGIONS: Kenya, Norway, Uganda

NOMINATED BY: Norwegian Agency for Exchange Cooperation (Norec)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.8, 17.9

SUPPORTED BY: Norec

IMPLEMENTING ENTITIES: Global Link Africa and iServe Afrika

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016 – 2022

URL OF THE PRACTICE: <https://bit.ly/32wGYro>

Improvement in the Quality of Leprosy and Disability Services

Building the capacities of health personnel to secure improved health, living conditions and dignity for people affected by leprosy and disabilities

Challenge

Leprosy is a chronic infectious disease that leads to disability if left untreated. Nepal, Bangladesh and Myanmar are all affected by the disease, and are regarded as leprosy priority countries by the World Health Organization (WHO). Disability is a challenge to public health, and social and rehabilitation services in all three countries. It is more than a mere physical dysfunction; it includes stigma, discrimination, activity limitations and social participation restrictions. Securing improved treatment, stopping discrimination, promoting inclusion of those affected by leprosy and disability in general, and building strong partnerships across borders to share knowledge are all key to address the challenge.

Towards a Solution

The 'Improvement in the Quality of Leprosy and Disability Services' project aims to improve the quality of leprosy and disability services in Nepal, Bangladesh and Myanmar. With support from the Norwegian Agency for Exchange Cooperation (Norec), the project strives to help people overcome the physical, social and psychological effects of leprosy and other disabilities. This is achieved through the exchange of skilled health personnel between the three countries.

The initiative seeks to achieve the following Sustainable Development Goals (SDGs): SDG 3 (Good health and well-being), SDG 10 (Reduced inequalities) and SDG 19 (Partnerships for the goals). More specifically, the project aims to promote the social inclusion of people with disabilities (target 10.2), implement capacity building in developing countries through South-South cooperation (target 17.9) and secure improved treatment of a communicable disease, namely leprosy (target 3.3).

The methodology used in this project is the mutual exchange of skilled health personnel within the framework of institutional cooperation between the three countries. Fifteen skilled health personnel, five from each country, including doctors, nurses and physiotherapists, are exchanged for a period of at least six months. Learning gained through such exchange is shared with the respective staff in each of the three countries. Learning outcomes from the project are also shared with national governments, civil society organizations and at international forums. Upon return to their home country and respective affiliated organization, the health personnel have a period of two weeks to carry out follow-up work. This period helps ensure that the knowledge gained and skills acquired are further transferred to their own workplace. This increases the chances of organizational learning, and thus a greater sustainability of results.

The project has been running for two years, and **key results to date include a large increase in the percentage of people with disabilities accessing quality disability services. In the hospital, surgical camps and outpatient clinics run by the organizations, there has been an increase of 17 percent in the number of persons with disabilities receiving needed assistive technologies and an increase of 48 percent in the number of people receiving reconstructive surgeries. In the communities, there has been increased social integration of people affected by leprosy and people with disability.** Concrete skills learned through the project include but are not limited to: training in orthopaedics and leprosy surgeries; electrotherapy management; and deeper knowledge

3 GOOD HEALTH AND WELL-BEING



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on and skills in assessing the need for physiotherapy for people with disabilities. The health personnel have also contributed to developing several research proposals on stigma and social integration, which have been accepted in a conference.

Norec's role in South-South cooperation is to facilitate planning for meetings, the carrying out mid-term project reviews, as well as partner training, preparatory courses, and debriefing health personnel prior to the exchange abroad. The concept of exchanging health personnel within the framework of institutional cooperation is a highly versatile model to upgrade skills, knowledge and capacity. Since 2001, Norec has supported the exchange of personnel in the health sector in a variety of developing countries. The methodology of exchange can easily be replicated in a variety of settings, and is easy to scale up or down in response to the needs on the ground, thus making it a technically feasible solution.

The innovative aspects of the project are its completely horizontal design and focus on reciprocity. All three partners have been fully engaged in designing and implementing the project. All three partners contribute with respective strengths and

learn from each other. The organizations report that they have been able to identify the best practices that can be applied to the various countries' contexts. A joint sense of ownership and actions is the result of joint planning and implementation of the project. The recognition of the value of all of all stakeholders' knowledge creates greater ownership, participation and sustainability in the project. It also builds the organizations' confidence and competence.

Contact:

Name: Mr Helge Espe

Title: Senior Adviser

Organization: Norwegian Agency for Exchange Cooperation (Norec)

Email: helge.espe@norec.no

Name: Ms Marit Bakken

Title: Director of Programmes

Organization: Norwegian Agency for Exchange Cooperation (Norec)

Email: marit.bakken@norec.no



PROJECT NAME: Improvement in the Quality of Leprosy and Disability Services

COUNTRIES/REGIONS: Bangladesh, Myanmar, Nepal, Norway

NOMINATED BY: Norwegian Agency for Exchange Cooperation (Norec)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3, 10.2, 17.9

SUPPORTED BY: Norec

IMPLEMENTING ENTITIES: Leprosy Mission International Bangladesh, Leprosy Mission Myanmar, Leprosy Mission Nepal

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2021

URL OF THE PRACTICE: <https://bit.ly/2Qyc784>



PICA's Medical Projects in Guinea and Sierra Leone

Performing over 100 critical surgeries and over 120 medical examinations, and providing a series of training courses for local doctors and medical students

Challenge

African countries and communities are the most vulnerable to health challenges and crises. Five children under age five die every minute in the Africa, mainly due to weak medical infrastructure and capacities. This requires the strengthening of the medical sector and medical professionals in order to ensure the well-being of their citizens and minimize human loss.

Both host countries are suffering from the shortage of surgeons and doctors in certain medical specialties. Many critical cases in villages and vulnerable areas are seeking medical help. Moreover, the local doctor and medical workers needed advanced training and capacity-building programmes due to a lack of senior experts in many medical areas.

Towards a Solution

Following the exploratory mission and the need assessment research with health sectors in Guinea and Sierra Leone, the Palestinian International Cooperation Agency (PICA) concluded that there was a need for certain medical specialties to perform medical surgeries and examinations, and provide training for local doctors through the transfer of specific knowledge to ensure sustainability.

PICA considers the contribution toward developing the health sector in Africa countries as a geographic priority. The programme aims to contribute in SDG 3 (Good health and well-being)). Both programmes in each Guinea Conakry and Sierra Leone aim to improve health sector capabilities in paediatrics and ophthalmologic surgeries through:

- Capacity-building programmes: Medical knowledge is transferred to local doctors and surgeons by the collaboration with five local hospitals in both countries to strengthen capacity in the needed fields. The aim is to create a sustainable source of knowledge and expertise for both target countries.
- Medical weeks: To contribute to the medical needs in targeted countries, Palestinian expert doctors and surgeons perform surgeries and conduct medical examinations for local citizens from villages and vulnerable areas through medical weeks, over the programme timeline.
- The building of open communication mechanism between:
 - the medical system in the targeted countries and the Palestinian system to provide updated research knowledge and pool of resources as a basis for long-term cooperation;
 - experts and doctors to ensure a smooth, genuine channel of communication to overcome limitations of the traditional channels.

PICA, with expert doctors and partners from the Palestinian Ministry of Health and the Ministries of Health in both Guinea and Sierra Leone studied the health sector's current capacity from bottom up. Targeting the vulnerable areas and the shortage in medical specialization and expertise could improve the quality of medical capability to serve a large number of people. The experts found that there was need for several medical specialties including ophthalmology and paediatrics. In addition, there is shortage of senior experts and supervision in main cities hospitals.



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The methodology used is horizontal cooperation with host countries and local communities. Stakeholders' efforts were effective and harmonized. The host countries were genuine and welcoming, and never hesitated to provide technical and logistics needs when possible. Experts and doctors are committed and devoted to creating an impact on the ground.

The missions led to successful medical weeks, **in Guinea Conakry surgeons performed 30+ critical surgeries, five paediatrics surgeries, and over 50 medical examination. Moreover, a series of medical sessions were provided to over 70 local doctors, medical students and medical support staff in both Donka Hospital and Ignace Deen. In addition, other local hospitals providing medical consultations were visited and their medical needs were assessed for the next phases of the project. In Sierra Leone surgeons performed over 60 ophthalmological surgeries, 12 paediatrics Surgeries, and over 70 medical examinations.**

It is always essential to create sustainable impact from a development project. Combining medical weeks with capacity-building programmes will ensure the effective transfer of knowledge and the project's sustainability. The network of the experts dynamically communicated with local doctors and medical students after the mission; the project prioritizes extending the pool of experts. This will open up the potential for sharing knowledge.

In order to reach the desired network-sharing dynamic, PICA started with signing medical and technical cooperation agree-

ments with the Foundation for Maternal and Child Social Promotion (PROSMI) in Guinea, a foundation that focuses on family and women health, the environment, women's empowerment, and schooling. Cooperation with civil society organizations enables PICA to learn about the needs, challenges and priorities directly from communities.

Moreover, PICA built a technical network with local hospitals and communities, starting from the Lebanese community and hospital in Guinea.

To facilitate the systematic, cross-country transfer of good practices and knowledge, PICA believes that the optimal benefit will not come from a single cooperation programme or an overnight intervention, because we live in a changing world with new challenges every day. PICA decided to divide the programme into phases based on a priority assessment. The establishment of a clear technical process, experts' readiness, and an active network will assure a smooth replication of the programme throughout its timeline.

Contact:

Name: Ms Hiba Ismail

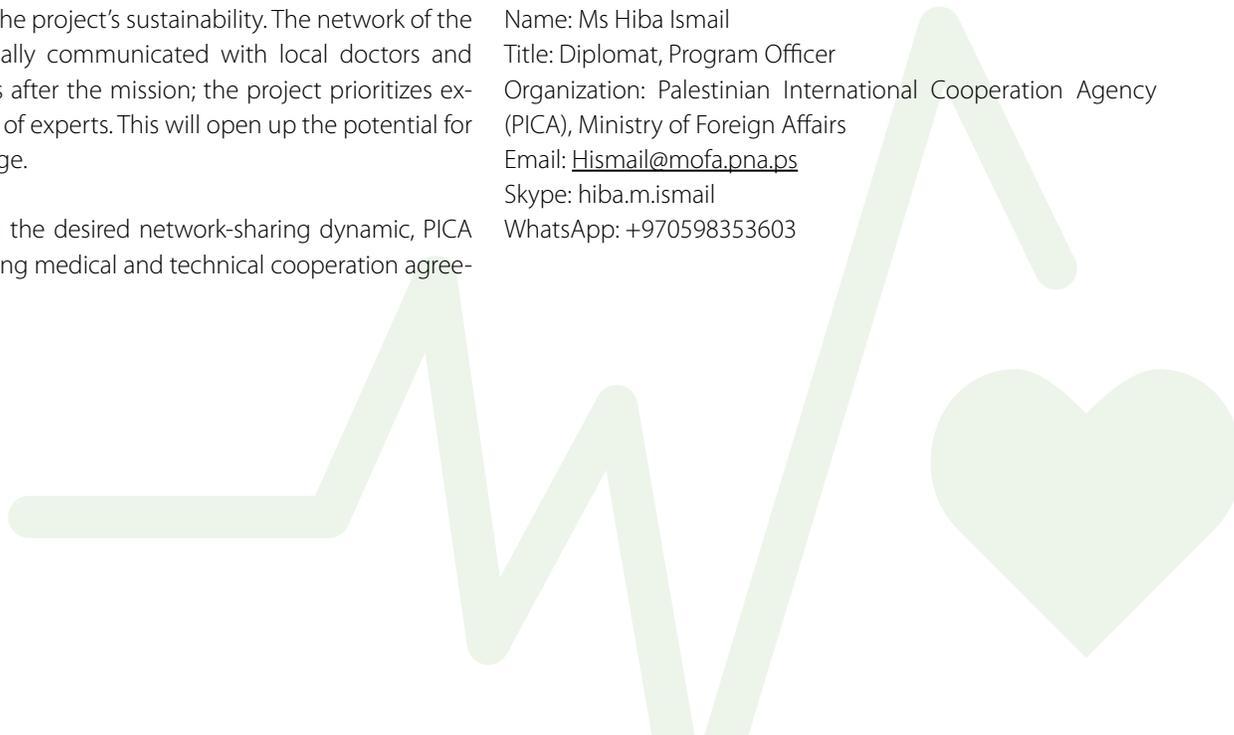
Title: Diplomat, Program Officer

Organization: Palestinian International Cooperation Agency (PICA), Ministry of Foreign Affairs

Email: Hismail@mofa.pna.ps

Skype: hiba.m.ismail

WhatsApp: +970598353603



PROJECT NAME: Medical Projects in Guinea and Sierra Leone
COUNTRIES/REGIONS: Guinea, Sierra Leone, State of Palestine
NOMINATED BY: Palestinian International Cooperation Agency (PICA)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.2, 3.c, 3.d
SUPPORTED BY: The State of Palestine - Governmental fund through PICA
IMPLEMENTING ENTITIES: PICA
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2020-2022
URL OF THE PRACTICE: <https://bit.ly/3b2AR1Q> ; <https://bit.ly/2YvxPhG> ; <https://bit.ly/34AET0Z>

Capacity Building on Emergency Medicine in the Member States of the Organization of Islamic Cooperation (OIC)

3 GOOD HEALTH AND WELL-BEING



Training of healthcare professionals who respond to disasters and emergencies in the OIC member countries



Challenge

Due to lack of capacity in disaster preparedness, many countries need foreign aid when disasters occur. Faced with similar problem areas, Sudan has taken a leadership role in the field of emergency health services within the Organization of Islamic Cooperation (OIC). Within the scope of the task undertaken by Sudan, the need to increase its capacity in the field of emergency health services has emerged. After developing its own capacity in this context, Sudan should lead other OIC countries.

Towards a Solution

As a continuation of the activities initiated at the end of 2017 as part of TIKA's Emergency Medicine Capacity Building Program (ATKAP), Sudan and Turkey continue to collaborate in carrying out training activities for other developing countries. The first implementations of the ATKAP programme were carried out in Bosnia and Herzegovina. ATKAP includes the implementation of short-term modules, such as emergency medical aid, first aid practices and pre- and post-disaster organization.

The aim of the programme is to increase human capacity in emergency medical interventions and to ensure the sustainability of the project by creating trainer capacity. Providing training in third countries through human capacity created for Sudan is among the objectives of building disaster and emergency resilience through international cooperation. These activities will also contribute to the OIC's emergency response initiatives.

The expert trainer pool needed by Sudan to fulfil its leadership role in the field of emergency health services under OIC, has been created, and training has started in other OIC member countries. As of March 2020, 'Introduction to Disaster and Emergency Response (ADG +)' training was provided to Djibouti, Chad, Somalia, Guinea, Gambia and Niger by Sudanese and Turkish experts. The demands within the OIC countries where TIKA Program Coordination Offices are located were evaluated, taking into account the difficulties of the third countries' training. **A total of 172 healthcare professionals working in these six countries participated in the training. The objective is to encourage them to train in their own country by creating the capacity of at least five local trainers in each country. Thus, emergency response capacity has been increased (Sustainable Development Goal [SDG] 3) and health services, which is a public service, have been improved (SDG 6).**

Demand, need, and ease of coordination were determined as the basic parameters in choosing the countries where the programme would be implemented. TIKA Program Coordination Offices in the countries where the projects are implemented provided coordination in the field with the relevant national authorities. Overall coordination of the project was provided by TIKA. Allowances, logistical costs and equipment costs were shared by the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), the Ministry of Health of the Republic of Turkey and TIKA.

In the first phase of the project, a total of 231 Sudanese healthcare professionals received ADG + training, of whom 58 were selected among them for training of trainers. In the second phase, a total of 172 healthcare personnel received ADG + training for six of the 12 countries (Chad, Djibouti,



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Gambia, Guinea, Niger and Somalia), and five trainer candidates from each country were chosen. ADG+ training sessions are designed and implemented by the Turkish Ministry of Health. Training sessions in Algeria, Cameroon, Libya, Senegal, Tunisia and Uganda have been planned for 2020; however, the COVID-19 outbreak will cause delays. Trainings will continue as pandemic conditions lessen.

Priority has been given to building local trainer capacity in each country, especially in Sudan. With the local institutions adopting the project, the training to be carried out by the local trainers in their country will be supported. In addition, the fact that Sudanese local trainers, trained in approximately one year, take an active role in the training organized in the third country and in their own country, and that the other countries use their gains are the most important output of the project.

This programme is also implemented in the Balkan region. Within the scope of the project, disaster and emergency, and first aid training of trainer capacity were created in Bosnia and Herzegovina. Although a first aid trainer team from Bosnia and Herzegovina was planned to implement training in Croatia in March 2020, training was delayed due to the COVID-19

pandemic. In addition, it is envisaged to organize disaster and emergency response training in Bosnia and Herzegovina by local trainers, with the participation of healthcare professionals from Serbia, Montenegro and Croatia.

In addition, as part of an ongoing project in Bosnia and Herzegovina, the building of local training of trainer capacity continues in nature search and rescue, and urban search and rescue. Therefore, the project can be implemented in different regions.

Upon request, it is possible to implement the program in every region of the world. Partner's demand is the most important and initiating factor for the implementation of the program with other stakeholders, in line with TIKA's demand-oriented working principles. It is expected that programme implementation will lead to local ownership, adaptability and sharing experience with partner countries.

Contact:

Name: Strategy Development Department

Organization: Turkish Cooperation and Coordination Agency

Email: sgdb@tika.gov.tr

Phone: +90 312 939 70 00



PROJECT NAME: Increasing the Capacity of Emergency Medicine in the Member States of the Organization of Islamic Cooperation (OIC)

COUNTRIES/REGIONS: Algeria, Cameroon, Chad, Djibouti, Gambia, Guinea, Libya, Niger, Senegal, Somalia, Sudan, Tunisia, Turkey, Uganda

NOMINATED BY: Turkish Cooperation and Coordination Agency (TIKA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.d, 16.6

SUPPORTED BY: TIKA

IMPLEMENTING ENTITIES: TIKA, Statistical, Economic and Social Research and Training Centre for Islamic Countries (SES- RIC), Ministry of Health of the Republic of Turkey, Federal Ministry of Health of Sudan

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017-2021

URL OF THE PRACTICE: <https://bit.ly/2YHyXP5> ; <https://bit.ly/2Ex2dkQ>



Newborn Hearing Screening Project

Establishing a hearing screening system for the development of intelligence and social skills in newborn babies

Challenge

The problems of children born with hearing impairments are usually noticed late, so delays in diagnosis and treatment may be experienced. A child's congenital hearing problems can be detected by trained medical staff through tests performed with a number of special devices. If this problem can be detected early, it can be resolved with timely attention; if the problem is not detected early, there may be delays in the cognitive development of children which tends to be linked to hearing. At this point, it is vital that a child's hearing problems can be detected immediately after birth.

Towards a Solution

Turkey is one of the leading countries in the world in implementing hearing screening tests for newborn infants. It has therefore accumulated experience in this field that can be shared with countries that face the above challenges. The Mother-Child Health Program (ACSAP) was launched in 2017 by the Turkish Cooperation and Coordination Agency (TIKA). The aim of the project is to raise the level of awareness among the public on the importance of conducting hearing screening for newborns while offering the necessary medical training and equipment to health professionals on early detection in recipient countries. Within the scope of the programme, awareness is increased through leaflets distributed in relevant health institutions while training is provided to medical professionals in the recipient country by the experts from Turkey. Grants are also provided for medical equipment that is not readily available in recipient countries.

ACSAP focuses on SDG Target 3.2 (By 2030, end preventable deaths of newborns and children under five years of age), which envisages the improvement of newborn and maternal health, within the scope of SDG 3 (Ensure healthy life). The Newborn Hearing Screening Project is one of ACSAP's sub-modules.

Starting from the regions selected by partner country governments, it is planned to carry out hearing screening tests for each child, especially those born in the hospital, and to raise awareness among the families of children who were not born in the hospital through booklets and brochures.

Within the scope of the project, training for healthcare workers working in neonatology in the recipient countries, equipment grants, informative activities and awareness-raising methods were applied. It was ensured that all these processes were owned by local personnel and health ministries in the relevant countries. Monitoring studies regarding the training provided and the medical equipment grants were also monitored by TIKA Programme Coordination Offices. The project was implemented with the coordination and financial support of TIKA, and physicians from the Alliance of International Doctors, a Turkey-based non-governmental organization, shared their knowledge and experience with their Kyrgyz and Tajik colleagues, and the health ministries of the recipient countries also assigned their staff to participate in the training.

Training sessions were organized in three different centres in Osh and Bishkek from 9–14 April 2017 in Kyrgyz Republic; hearing screening training was provided to 160 healthcare professionals. Following



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these training sessions, two Kyrgyz audiologists were provided with a one-month advanced training and two Kyrgyz doctors were provided with a one-month training on Cochlear implants in Istanbul. Within the scope of the project, TIKA presented four hearing screening devices to the Kyrgyz Republic Ministry of Health by TIKA. **With the donated devices, 25,000 babies were tested in Bishkek and 16,000 babies in Osh. As a result of these scans, 200 babies who were found to have hearing loss were subjected to further tests and started treatment.**

A training programme was organized in Dushanbe, the capital of Tajikistan, on 4–5 December 2018, to raise awareness about the importance of hearing screening tests, where 33 doctors from different regions of Tajikistan participated. Later, a nine-person delegation consisting of otolaryngologists and neonatologists selected from four different regions of Tajiki-

stan participated in practical training held in Istanbul on 13–24 May 2019.

The ministries of health of the recipient countries, which are project partners, owned the projects, which led to their sustainability in the short term, due to TIKA contributions.

The project can be replicated and applied in any region. It is sufficient for the prospective project stakeholders to request and own the project in order to initiate it.

Contact:

Name: Strategy Development Department

Organization: Turkish Cooperation and Coordination Agency

Email: sgdb@tika.gov.tr

Phone: +90 312 939 70 00



PROJECT NAME: The Newborn Hearing Screening Project

COUNTRIES/REGIONS: Kyrgyz Republic, Tajikistan, Turkey

NOMINATED BY: Turkish Cooperation and Coordination Agency (TIKA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.2, 3.8, 16.6

SUPPORTED BY: TIKA

IMPLEMENTING ENTITIES: TIKA, Alliance of International Doctors (AID), The Ministry of Health of Kyrgyz Republic, Ministry of Health of Tajikistan

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2021

URL OF THE PRACTICE: <https://bit.ly/3gmpGIG> ; <https://bit.ly/2CW6bmb>

The Telehealth Programme of the Commission on Science and Technology for Sustainable Development in the South (COMSATS)



Striving for sustainable healthcare delivery

Challenge

Countries of the Global South and, to some extent, the developed countries face several challenges in the equitable provision of healthcare, especially to the marginalized communities living in remote, hard-to-reach areas. These include: limited access to healthcare; scarcity of human and technical resources; a high patient-to-doctor ratio; and a cultural, behavioural and rural-urban divide. Like many Member States of the Commission on Science and Technology for Sustainable Development in the South (COMSATS), Pakistan faces these challenges, in particular a high population growth in the last few decades and underprivileged segments of its population in terms of access to healthcare.

Towards a Solution

The advent of modern-day information and communication technologies (ICTs) created the means to develop new forms of healthcare delivery, to fill in the gaps and strengthen the existing healthcare systems. One innovative model that emerged over time is Telehealth, which promotes the use of telecommunications and virtual technology to deliver healthcare outside or in adjunct to traditional healthcare facilities. COMSATS has been a pioneer in implementing synchronous telehealth in Pakistan using latest ICTs, showcasing how the challenge of equitable provision of healthcare can be met and sustained while operating in marginalized communities and in hard-to-reach and remote areas. Its objective is to help address the challenge of equitable healthcare delivery in a cost-effective manner to underprivileged communities there.

COMSATS initiated telehealth in Gujjar Khan, Pakistan as an indigenous pilot activity in 2001. The objective was to implement telehealth and provide medical consultations to patients at a remote site which had no or few doctors. The activity was upscaled in size and scope in 2004 when COMSATS signed a joint agreement with the International Development Research Centre (IDRC) of Canada, and a community-based organization (CBO) based in Skardu, the Baltistan Health and Education Foundation (BHEF). IDRC funded the project activity with a view to promote growth, reduce poverty, and drive large-scale positive change in terms of healthcare delivery.

The project's broad objective was to undertake action-based research in order to provide healthcare services to underprivileged and marginalized communities in the northern areas of Pakistan and assess the efficacy of telehealth as a means and model of cost-effective and highly accessible healthcare system. Under this project activity, COMSATS established a Resource Centre at its premises in Islamabad (capital of Pakistan) and a distant Telehealth Centre in the premises of a community hospital in Skardu (capital city of the region of Gilgit-Baltistan) under the administrative control of BHEF. Skardu is located in a mountainous range with a desert terrain and extreme weather. For this phase of telehealth activity, COMSATS used a satellite link to connect the two telehealth nodes, i.e. the Telehealth Resource Centre and the Telehealth Centre. Patients from marginalized and remote communities of Gilgit-Baltistan, received medical care from specialist doctors visiting the Telehealth Resource Centre (in Islamabad). Medical consultations were initially provided in the areas of cardiology, gastroenterology, dermatology, paediatrics as well as gynaecology. COMSATS acquired a great deal of knowledge through the project activity, in particular in terms of setting up technical infrastructure, and operating in diverse cultural



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settings. Due to the knowledge acquired, COMSATS was then able to also intervene in other parts of the country. The Telehealth Service was subsequently scaled up further, and over a dozen basic health units (BHU) in different cities and surrounding communities were connected as telehealth centres to the Telehealth Resource Centre in Islamabad, including the BHUs in: Zhob (2011); Islamabad – Gokina (2013); Sawabi – Dagai (2013); Islamabad D-10 (2014); Quetta – Wahdat Colony (2014); Multan – Muzaffarabad (2015); Peshawar – Sangu (2015); Lahore (2015); Khairpur – Ubhri (2015); Gawadar – Shadoband (2015); Multan – Panjfaiz (2015); Mansehra – Behali (2017); Mardan – Dera Lakhpani (2018); Sawabi – Tarakai (2018); and Jhelum – Swika (2019). With time, medical services were included to provide general outpatient care and to fight chronic diseases.

COMSATS's Telehealth programme has proved its worth as one of the most cost-effective solutions to increase outreach and provide equitable healthcare across different remote, hard-to-reach regions, areas and communities. **More than 65,000 medical consultations were given to patients from marginalized and unprivileged areas and communities.**

In terms of the innovative aspect of the programme, when COMSATS initiated its Telehealth Programme, it based its services on using a satellite link for Internet connectivity and carried out videoconferencing to enable medical consultations between patients and medical specialists. Understanding the growing need for basic health services, COMSATS developed a patient information system and an e-portal for sharing patient data, which is maintained using servers. This innovative mechanism enables patients to present their problems directly to the doctor, be examined and diagnosed, and eventually treated. The e-portal has features for patient registration, the updating and maintenance of patients' medical history and basic examination, patient documents (pictures, previous tests and

reports), scheduling of appointments with specialist doctors, doctor's prescriptions, as well as secure data transfer.

The Programme is sustainable because COMSATS is supporting the running expenses for Telehealth Resource Centre (using medical resources from tertiary care facilities), while the running expenses of Telehealth Centre(s) are being borne by local health organizations or authorities of the area benefiting from the service. Telehealth Resource Centre, which is well-established in Islamabad, combined with the Patient Information System and e-portal in place, make it possible to replicate these services with the support of local health organizations and partners. Partners provide funds, share resources and jointly organize capacity-building events.

Potential collaboration areas with partners include: resource and expertise sharing among the organizations already working in Telehealth; the establishment of a Telehealth system for a selected region; sharing and provision of healthcare opinions through Telehealth across the regions and borders; and courses and capacity-building programmes arranged for health professionals through Telehealth.

As an intergovernmental organization, COMSATS intends to take this learning and experience to other interested Member States in Asia, Africa and Latin America, in the spirit of South-South cooperation.

Contact:

Name: Dr Azeema Fareed

Designation: Principal Medical Officer

Organization: Commission on Science and Technology for Sustainable Development in the South (COMSATS)

Email: dazeema@comsats.org

PROJECT NAME: The Telehealth Programme of the Commission on Science and Technology for Sustainable Development in the South (COMSATS)

COUNTRIES/REGIONS: Pakistan

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.8

SUPPORTED BY: Initially by International Development Research Centre (IDRC)-Canada and now by The Commission on Science and Technology for Sustainable Development in the South (COMSATS)

IMPLEMENTING ENTITIES: COMSATS; Baltistan Health and Education Foundation (BHEF); COMSATS Internet Services.

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2001 – ongoing

URL OF THE PRACTICE: <https://bit.ly/3b1Jnyd>



Gene Editing to Cure

Strengthening Current methods to treat non-communicable diseases through innovative technologies of genome editing

Challenge

Achieving the Sustainable Development Goal (SDG) target of reducing premature deaths from non-communicable diseases by one-third by 2030 requires innovative and efficient technologies. However, many research institutes in the Global South often lack technical equipment and capacity for the most novel technologies. Although it is now common in non-communicable disease research to correlate disease incidence with expression of a particular gene(s), studies are rarely continued beyond this. Researchers in ICGEB Member Countries need to learn techniques that can drive this research further, to develop animal and cellular models of human diseases, so that development of innovative therapies can become possible also in the laboratories in the South.

Towards a Solution

Traditional practices and methods used to treat many non-communicable diseases are not sufficient to tackle their increasing burden throughout the world. It is becoming clear that new developments and approaches in health research can offer innovative and efficient solutions to these problems. Through the cooperation and training spearheaded by the ICGEB, innovative therapies and the means to develop them are now becoming available in low-resource settings.

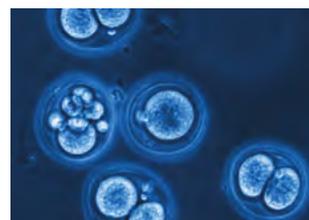
Gene editing is emerging as one of the key new technologies in this arena. It is a technology that allows the genetic information of mammalian cells to be edited with great precision, thus potentially allowing the correction of mutations linked to human diseases. It is a relatively easy to implement and inexpensive technology that can be implemented in any molecular biology laboratory.

Since 2016, the ICGEB has been instrumental in creating South-South platforms to share knowledge on the most modern technologies in gene editing and their application in the medical field through the organization of theoretical and practical workshops. The areas covered by these workshops are:

- the generation of animal models carrying the mutations associated with human diseases in order to gain insights into the molecular mechanisms responsible for disease onset and progression;
- the introduction of these mutations into embryonic stem cells and induced pluripotent stem (iPS) cells in order to create cellular models of the disease and use them to screen for the efficacy of particular drugs, or to understand the inter-individual variability in the manifestations of a disease caused by the same genetic mutation (precision medicine);
- the development of innovative therapies based on gene editing.

This technology can be applied to the development of simple, cost-effective models in such organisms as zebrafish and *C. elegans* worms, which can be used to study the implications of gene modification in non-communicable diseases. This leads to more impactful science and thus an improved ability to apply for research funding; more importantly, it leads to results that are more likely to be translated into applicable therapeutics.

These ICGEB international workshops allow scientists from Member States to understand the most recent gene editing procedures and to apply them in their own countries and laboratories. During



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these workshops, scientists from the ICGEB constituency learn from each other, share technology, start new collaborations, and have the opportunity to discuss the ethical and regulatory issues associated with the technology. One tangible example is the 'ICGEB – Joint Research Centre (JRC) Workshop on Genome Editing', which gathered expertise from Belgium, Italy, Kenya, Latvia, Nigeria, Thailand and the United Kingdom, and strengthened collaboration among various academic institutions and laboratories in an effort to provide consultancy on the regulatory, ethical and societal challenges driven by the technology and its applications. South-South and triangular cooperation are nurtured also via technology transfer and collaborations with the industry in Argentina, Brazil, Egypt, Iran, Lebanon, Syrian Arab Republic, among others.

International workshops represent a unique opportunity to gain the knowledge necessary to extend the impact of correlation studies on the gene expression, which are increasingly being performed in the Global South, as documented by the numbers of grant applications on this subject that have been received by the ICGEB in the current year.

The outcome of the practice is ultimately capacity building and knowledge transfer in the Global South, which goes beyond the traditional practices and methods used to treat non-communicable diseases and to the vanguard field of gene editing.

Being directly linked with the aim of reducing mortality rates of non-communicable diseases, gene editing contributes to improving treatment plans and enriching genetic information about the onset and progression of diseases.

The sustainability of the practice is ensured both by the spill-over effect of the international workshops as well as the cooperation established between research institutions and researchers.

The initiative is scalable and replicable in other countries in the Global South, because the ICGEB has a strong scientific network worldwide, and its Programme management structure has been working effectively for decades. The model of ICGEB's standard procedures and infrastructure, which have a reputation for neutrality, integrity and transparency, are easily reproduced.

Contact:

Name: Ms Marianna Maculan

Title: Chief, External Relations

Organization: International Centre for Genetic Engineering and Biotechnology (ICGEB)

Email: maculan@icgeb.org

Tel: +39 040 3757216

PROJECT NAME: Gene Editing to Cure

COUNTRIES/REGIONS: 65 ICGEB Member Countries across world regions: Afghanistan, Algeria, Argentina, Bangladesh, Bhutan, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Costa Rica, Côte D'Ivoire, Croatia, Cuba, Ecuador, Egypt, Eritrea, Ethiopia, Hungary, India, Iran, Iraq, Italy, Jordan, Kenya, Kuwait, Kyrgyzstan, Liberia, Libya, Malaysia, Mauritius, Mexico, Moldova, Montenegro, Morocco, Namibia, Nigeria, North Macedonia, Pakistan, Panama, Peru, Qatar, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Zimbabwe

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4

SUPPORTED BY: ICGEB, Italy, India, South Africa, European Union

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2020 – 2030

URL OF THE PRACTICE: www.icgeb.org/genome-editing ; <https://bit.ly/3aV1lwy> ; <https://bit.ly/3hsvM5t>



High-throughput Sequencing (HTS) and Biosimilars

Increasing access to affordable medicines by technological development in industries through South-South knowledge sharing and technology transfer

Challenge

Non-communicable diseases such as cancer and cardiovascular diseases are a worldwide health burden, warranting the identification of new drugs. Repurposing of existing and approved drugs for new therapeutic applications is ever-more relevant. The research institutes of the International Centre for Genetic Engineering and Biotechnology (ICGEB) Member States in the Global South are often poorly equipped, without the capability of performing large-scale drug screens. There is thus an increasing need for laboratories in Member Countries to collaborate and share screening technology, as well as share the technology needed to produce and market biological drugs.

Towards a Solution

The project aims primarily to enhance the capacity of the Global South to screen for novel, improved and available drug therapies and share the knowledge among the countries and partners. High-throughput screening (HTS) technologies allow the investigation of the therapeutic effects of biological molecules (either drugs, genes or proteins) that could represent novel biotherapeutics. Screens using genetic and drug libraries are expected to enable South-South collaborations to develop novel biotherapeutics and to repurpose already-approved drugs for new therapeutic uses.

The objective is to increase the access of the Global South to similar biotherapeutic products (SBPs), commonly known as 'biosimilars', as alternatives to more expensive recombinant protein drugs. Recombinant therapeutic proteins are a class of medicinal drugs with high potential to serve as novel therapies. Since several of them are poised to go off-patent, it has become clear that the successful model of generic pharmaceuticals can be effectively transposed to biotherapeutics. This is expected to reduce the costs, meet worldwide demand, promote market competition, and maintain the incentives for innovation.

The ICGEB collaborates with laboratories in the Global South in the set-up of HTS, opening the way for South-South collaborations in this endeavour. HTS is an experimental drug discovery process that allows to rapidly test a large number of samples for biological activity at the organism, cellular, pathway or molecular level. In cooperation with the Joint Research Centre (JRC), the ICGEB has been working with scientists in various countries to set up and perform screening programmes to analyse libraries of natural compounds for their potential in the treatment of infectious diseases. These screening processes also aim to identify natural compounds that can interfere with biological processes relevant for non-communicable diseases. The role of the ICGEB is to provide scientific knowledge and technological skills, whereas the JRC's main function is to identify specific research arenas and local needs that can benefit from the combination of high-throughput workflows with automated high content imaging, with a particular interest in developing in vitro techniques to reduce animal testing.

The ICGEB focuses on the development of biosimilars, copies of previously authorized biotherapeutic drugs with comparable biological activity, physicochemical characteristics, efficacy and safety. This definition implies that biosimilars do not need to be exact copies of the original biological drugs, but



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should have almost identical activities. Developers of biosimilars usually do not have access to the protocol used for the production of the original. The ICGEB has been active for several years in facilitating the transfer of technology for the production of several biosimilars to pharmaceutical industries in the Global South.

These capacity-building activities have enabled companies to establish the good manufacturing practices (GMP) for clean production of biosimilars. Fifty biosimilars are currently in development and will likely result in a highly competitive marketplace over the next five years. Between 2005 and 2018, 89 technology transfers were successfully conducted in 14 countries of the Global South.

South-South cooperation is promoted through technology transfer for the production of biosimilars (e.g. China, Bangladesh, Iran). Biosimilars offer an unprecedented opportunity since they can be produced and marketed by a new class of biotech companies that are small and focused, and thus can rely on relatively limited economic support to achieve competitive success. The ICGEB aims to transfer knowledge of intellectual property protection, regulatory and entrepreneurship skills.

The project is sustainable since technology transfer and capacity building in these fields are expected to generate novel targets for biological therapies and foster the development of

local companies for their commercialization. Scientific advances will generate publications in top journals and thus higher chances to attract additional funds. This will generate revenues that will be re-invested in the project to attract a higher number of countries.

The project can be replicated in countries interested in developing novel biological products. Others can join and exploit existing platforms to either screen their compounds, set up a screening for their diseases of interests or produce recombinant proteins. Countries that already have the technology in place can receive assistance in setting new screens or improving the different steps of protein production and entry into the market. Finally, countries willing to set up local platforms could benefit from this project as a model to follow during implementation and as hub for future collaborations.

Contact:

Name: Ms Marianna Maculan

Title: Chief, External Relations

Organization: International Centre for Genetic Engineering and Biotechnology (ICGEB)

Email: maculan@icgeb.org

Tel: +39 040 3757216

PROJECT NAME: High-throughput Sequencing (HTS) and Biosimilars

COUNTRIES/REGIONS: Afghanistan, Algeria, Argentina, Bangladesh, Bhutan, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Costa Rica, Côte D'Ivoire, Croatia, Cuba, Ecuador, Egypt, Eritrea, Ethiopia, Hungary, India, Iran, Iraq, Italy, Jordan, Kenya, Kuwait, Kyrgyzstan, Liberia, Libya, Malaysia, Mauritius, Mexico, Moldova, Montenegro, Morocco, Namibia, Nigeria, North Macedonia, Pakistan, Panama, Peru, Qatar, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Zimbabwe

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.8, 3.b, 9.5, 9.b

SUPPORTED BY: China, India, Italy, South Africa, ICGEB

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Seven programmes – all ongoing

PROJECT PERIOD: 2015–2030

URL OF THE PRACTICE: www.icgeb.org/science/medical-biotechnology



Moderating the Effects of Neurodegenerative Diseases

Tackling Neurodegeneration in the South to reduce the burden of non-communicable diseases worldwide

Challenge

The World Health Organization (WHO) estimates that, by 2040, as a result of a growing and ageing world population, neurodegenerative diseases, a group of related conditions resulting from the progressive degeneration of various regions of the human brain, will be the world's second leading cause of death, after cardiovascular diseases. Therefore, from a national health policy perspective, investigating neurodegenerative diseases is highly worthwhile. However, in many cases, countries of the Global South are not equipped to develop these investigations: they are not able to determine the genetic variations associated with these conditions, nor to develop animal and cellular models mimicking human diseases. Moreover, coordination and intelligence sharing between health and research centres across countries are often lacking. In order to achieving the Sustainable Development Goal (SDG) Target 3.4, 'By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being', there is need for innovation and new, efficient technologies on neurodegeneration. It is key that this is inclusive, i.e. taking into account the genetic background and studies of people from the Global South.

Towards a Solution

Neurodegenerative diseases are a group of related conditions resulting from the progressive degeneration of various regions of the human brain. From stroke to headache, neurodegenerative diseases affect up to one billion people worldwide (World Health Organization, 2006¹). This is especially true for countries in the Global South, many of which are experiencing rapid increases in life expectancy.

In recent years, research in this area has allowed to map the most important genes involved in the origin of neurodegeneration. However, this has mostly involved the analysis of patients from developed countries who share the similar genetic ancestry. The main aim of the project in the Global South, especially in Africa and South-East Asia, is to acquire information on the genetic background of people affected by neurodegenerative diseases and the genetic variations that may predispose subjects to develop them, potentially leading to the development of more efficient therapeutic approaches. In parallel, patients and their caregivers are always at risk of not receiving proper support from institutions (i.e. facilitation, treatment plans support aids). The International Center for Genetic Engineering and Biotechnology (ICGEB) contributes to achieving the project objective by: (i) fostering training in leading-edge technical and conceptual advances that may arise from the study of early- and late-stage pathological neurodegeneration; (ii) organizing workshops and meetings to bring together researchers from different regions; and (iii) promoting the formation of South-South local and trans-national professional and patient societies that will not only promote research, but will also ensure that there is a rapid legislative development in countries that will soon be facing these new challenges.

1 World Health Organisation report (2006) "Neurological Disorders: Public Health Challenges". Available at https://www.who.int/mental_health/publications/neurological_disorders_ph_challenges/en/. Accessed August 13, 2020.



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To help fill this gap, the ICGEB provides access to networks of global leading experts in key aspects of research for these disorders. The ICGEB exercises a leading role in empowering the domestic scientific communities in its Member Countries to foster research in targeted emerging areas.

ICGEB researchers are well embedded in the scientific communities of many countries of the Global South, through their hosting and training of students and young researchers from ICGEB Member States in ICGEB Component Laboratories. ICGEB researchers actively participate in and organize meetings (e.g. Genomics and Human Health in Africa, 2–7 December 2018) that are attended by researchers from the Global South on various types of scientific approaches. These meetings (sponsored up to 50 percent by the ICGEB), usually gather a minimum of 150 participants and are scheduled regularly every three to four years. The next meeting is scheduled for 2021. The ICGEB is the main initiator and organizer of the project, in its lead role of promoting collaborative research in the ICGEB Component Laboratories and in enhancing training and knowledge-sharing through the organization of large-scale professional events focused on the Global South. The project partners co-fund the events and professional meetings and contribute with scientific input and applied insights from various geographical locations of the Global South. Additionally, the project partners enrich the target areas of the project by contributing with scientific research in a variety of specialties such as: cancer genomics, Mendelian and rare diseases, neurogenomics, microbial genomics, population genomics, and pregnancy and antenatal genomics.

The sustainability of the project is ensured primarily by the human capital development achieved both through the meetings and professional workshops within the projects as well as

the ICGEB fellows (PhD and PostDoc) performing collaborative research in the 41 ICGEB Affiliated Centres (particularly in Sudan, Iran, Egypt, Libya and Syrian Arab Republic). In 2019, over 600 scientists representing more than 47 nationalities were on board in the ICGEB laboratories, undertaking interdisciplinary research across macro-areas. In Trieste, 18 Research Groups, comprising over 170 researchers have been active in various fields of biomedical research, including projects on neurodegenerative and infectious diseases, as well as in immunology and human genetics. In terms of legislative regulation in the field, **the project has actively contributed to regulate the legislation on post-mortem tissue donation for research (20G00024) (GU Serie Generale n.55 del 04-03-2020). This legislative breakthrough is paving the way to build a brain bank that can be used in dementia research and represents a model to be promoted, implemented and replicated in countries of the Global South.** The ICGEB is uniquely positioned to provide the same kind of guidance to other scientists and decision-makers in all of its member countries, towards lessening the impact of neurodegenerative diseases both at the macro-economic and at the individual human level therefore ensuring the replicability of the project in the ICGEB Member Countries with specialized laboratories and facilities and with an interest in neurodegenerative research and knowledge sharing.

Contact:

Name: Ms Marianna Maculan

Title: Chief, External Relations

Organization: International Centre for Genetic Engineering and Biotechnology (ICGEB)

Email: maculan@icgeb.org

Tel: +39 040 3757216

PROJECT NAME: Moderating the Effects of Neurodegenerative Diseases

COUNTRIES/REGIONS: 65 ICGEB Member Countries: Afghanistan, Algeria, Argentina, Bangladesh, Bhutan, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Costa Rica, Côte D'Ivoire, Croatia, Cuba, Ecuador, Egypt, Eritrea, Ethiopia, Hungary, India, Iran, Iraq, Italy, Jordan, Kenya, Kuwait, Kyrgyzstan, Liberia, Libya, Malaysia, Mauritius, Mexico, Moldova, Montenegro, Morocco, Namibia, Nigeria, North Macedonia, Pakistan, Panama, Peru, Qatar, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Zimbabwe

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4

SUPPORTED BY: International Centre for Engineering and biotechnology (ICGEB), EU Joint Programme –Neurodegenerative Disease Research (JPND), Thierry Latran Foundation, France, Beneficientia Stiftung, Luxembourg, Italian Research Foundation for Amyotrophic Lateral Sclerosis (AriSLA), University of Western Ontario, Canada

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2030

URL OF THE PRACTICE: www.icgeb.org/molecular-pathology

The Mobile Services Strategy

Implementing a strategy for family planning and maternal health, drawing on lessons from the Tunisian programme for reproductive health: Evolution and development

Challenge

After the country's independence in 1956, the Tunisian political authorities chose to integrate Family Planning (FP) into the country's overall development strategy. At that time, Tunisia had neither the required health structures nor human resources to enable its population to benefit from FP services. FP was the solution for the Government of Tunisia to emancipate women and give them more opportunities to play key roles in the economic growth and social development. After independence in 1956, Tunisia adopted the Code of Personal Law, which prohibited polygamy and repudiation, set the limit for age of marriage for men and women, and regulated divorce. These are the founding pillars for launching the family planning programme together with authorization to sell contraceptives and legalize abortion. This project helps women make decisions on whether to become pregnant or make spacing, or inter-pregnancy interval which help to decrease maternal and child mortality and increase safe delivery.

Towards a Solution

The aim of the mobile health facilities is to increase contraceptive coverage and thus reduce fertility; provide health services to women such as gynecological and prenatal consultations; and increase awareness on sexual and reproductive health and rights (SRHR) among youth and adolescents. The project has contributed to Sustainable Development Goal (SDG) 3 (Good health and well-being), targets 3.1, 3.2, 3.4 and 3.7; and SDG 5 (Gender equality), target 5.6. The mobile strategy has helped to implement the national population policy, which covers family planning and reproductive health in Tunisia.

Five mobile teams (MTs) were created and deployed to a regional hospital, in five of the 13 governorates of the country. Their function consisted in offering family planning services to the populations in *Protection maternelle et infantile* (PMI, mother and child health centres) and health centres located in the relevant governorates. These MTs depended on the availability of a team that include a midwife, a nurse, a caregiver, and a driver. They would operate on the field, four working days a week and visit peripheral units that are provided with the minimum equipment to provide FP services, notably the gynecological examination tables. The rest of the essential equipment was provided by the hospital. The FP programme in Tunisia was launched by the Government of Tunisia with financial support from the United States Agency for International Development (USAID) and the United Nations Population Fund (UNFPA) during its initial period. USAID has provided contraceptives, medical equipment, vehicles and financial contribution; and UNFPA has ensured programmatic support specially brought intervention in communication and training. Since 1995, Partners in Population and Development (PPD) has contributed to sharing information, experiences and best practices of the programme for replication in other developing countries, mainly in sub-Saharan Africa and in Arab countries.

For effective monitoring and evaluation of the project activities, a standard medical record is made available to family planning/sexual reproductive health (FP/SRH) service providers, together with an archiving system that facilitates data collection and analysis. A statistical data collection register allows to evaluate medical acts are performed in compliance with the standards and procedures set out in the program.

It was shown after the end of the first phase of the project that the results exceed expectations and increased steadily: pre-natal consultations increased by 29.6 percent (from 60.7 to 90.3 percent); assisted childbirths by 19.1 percent (from 70.2 to 89.3 percent); post-natal consultations by 39.9 percent (from 46.2 to 86.1 percent); and contraceptive method use by 20 percent (from 43.6 to 63.6 percent). Results far exceeded the initial 10 percent targeted by the project, and knowledge improved by 17 percent.

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Also, attendance at family planning services reached 24 percent and contraceptive use, 20 percent. Similarly, at the second stage (1999 to 2001), figures and statistics show that the results were just as satisfactory as in the first stage. As regards to the results achieved within the framework of the 2004–2018 programme, the first downward trend reflects the gradual and continuous decrease in the share of mobile units.

Some African countries have benefited from the collaboration of the Tunisian National Board for Family and Population (ONFP) experts within the framework of a South-South cooperation from this mobile clinic project, as illustrated below:

- Niger has benefited from a three-year project, 'Project to support South-South cooperation in the field of reproductive health', with the support of the French Cooperation, in the Kollo district with a population of 350,000. The contraceptive prevalence rate (CPR) in Kollo in Niger reached 22.5 percent in 2005 (1.5 percent in 2000), and the coverage of the population by quality RH/FP services reached 80 percent in 2005 (27 percent in 2000). In 2008, the Niger Board of Family Planning (NBFP) received a UNDP award for its contribution to the success of the tripartite cooperation project in Kollo, Niger, which has motivated the World Bank, UNFPA and the Japan International Cooperation Agency (JICA) to support the promotion of family planning/sexual reproductive health (FP/SRH) services in several areas of Niger (Niamey, Dosso and Zinder).
- Chad implemented a project, 'Mobile strategy in reproductive health and family planning in the rural region of Mayo Kebbi'. The project was supported by the World Bank and the PPLS2. The results are: prenatal care at 419 percent, postnatal care at 242.8 percent, contraceptive methods at 118 percent, vaccination at 183 percent; and population coverage at 133.3 percent, which was higher than the set objectives.
- Mali implemented the project 'Support for the implementation of the reproductive health policy in the Kayes region' in partnership with the Spanish Agency for International Development Cooperation.
- Mauritania implemented the 'Support for a national health and reproduction program'. This programme was supported by the Spanish Agency for International Development Cooperation and covered the capital Nouakchott and the

Trarza region. It was scheduled for a period of five years (2007–2011). The organizers of this programme pledged to reduce maternal mortality by 25 percent.

Starting from the expressed need to bring activities closer to the target populations, mobile services made it possible to cover front-line health centres and provide the underprivileged rural areas with health facilities. By mobilizing substantial material resources and employing qualified personnel, this approach has proven worthwhile: **fertility has fallen to levels compatible with the country's means; population growth, once described as explosive, is now under control; and finally, the small size of households has largely contributed to the improvement of family living conditions.**

More than five decades after the inception of the national family planning programme, which was experimented with the government funds and supported by donors, and after undergoing several stages, it can be stated that the population policy, combined at the outset with the socio-economic development of the country, has proven a relevant and cost-effective approach in developing countries. As an inter-governmental organization of 27 developing countries promoting South-South cooperation in reproductive health including family planning and population, Partners in Population and Development (PPD) will share this best practice with its member countries through a ministerial forum and influence to replicate it in its member countries. If other developing countries willing to replicate the Tunisian experience can communicate with PPD to make the necessary arrangements, and PPD could support the signing of a bilateral agreement with the Tunisian National Board for Family and Population, expressing the commitment of both governments to engage in project development and ensure financial resources for its implementation.

Contact:

Name: Ms Tahrira Khan

Title: Senior Program Officer

Organization: Partners in Population and Development (PPD)

Email: tahrira@ppdsec.org

Skype: tahrira_khan

WhatsApp: +8801927135992

PROJECT NAME: The Mobile Services Strategy

COUNTRIES/REGIONS: Chad, Mali, Mauritania, Niger, Tunisia

NOMINATED BY: United Nations Population Fund (UNFPA), Partners in Population and Development (PPD)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.2, 3.4, 3.7, 5.6

SUPPORTED BY: Population Council and financial assistance from United States Agency for International Development (USAID)

IMPLEMENTING ENTITIES: National Board for Family and Population (ONFP) of the Ministry of Public Health, Government of Tunisia

PROJECT STATUS: Completed

PROJECT PERIOD: 1980–2018

URL OF THE PRACTICE: <https://bit.ly/3gAGeGR> (in French)

The Population, Health and Environment's (PHE) Eliminating National Gaps Advancing Global Equity (ENGAGE) Project

Addressing vulnerable and remote communities through policy advocacy

Challenge

From 1969 to 2019, Kenya's population has nearly quadrupled in size, from 10.9 million to an estimated 40 million. The large size of Kenya's young population and its rapid population growth are influenced by several factors that have serious consequences for the health and well-being of women and children, and the development of Kenya. One out of four women aged 20–24 is married by age 18, and one out of four give birth by age 18. One out of four married women aged 15–49 is in need of family planning, and the total fertility rate (TFR) is 4.6. Failing to address these challenges can hinder the achievement of Sustainable Development Goal 3 (SDG 3) i.e. Ensure healthy lives and promote wellbeing for all at all ages.

Towards a Solution

The Population, Health and Environment (PHE) approach recognizes the complex inter-connection between people, their health, and the natural resources on which they depend. In view of this inter-connection, a number of organizations globally initiated integrated programming to address both social and environmental challenges dating back to the mid-1980s. Since then, a subset of these programmes have employed the PHE integrated approach, aiming to simultaneously improve access to primary health care services, particularly family planning and reproductive health, while also helping communities conserve the critical ecosystems and natural resources on which they depend. The number of PHE projects increased throughout the early 2000s in the African Region, and proponents of these integrated approaches argue that they can be more effective and more efficient than single sector programmes for many reasons. Considering the outcome of the PHE approach, the United Nations Population Fund (UNFPA) and Partners in Population and Development (PPD) jointly supported the National Council for Population and Development (NCPD), Government of Kenya to document the PHE approach in Kenya in order to share it with other developing countries through South-South and triangular cooperation.

This approach mainly aimed to contribute to the achievement of: SDG 3 (Good health and well-being), Target 3.7 (By 2020, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes); SDG Targets 5.6 (Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences); and SDG 12.8 (By 2030 ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature).

In this project, the PHE approach for Eliminating National Gaps and Advancing Global Equity (ENGAGE), a multimedia presentation, was developed in both English and Kiswahili, highlighting many of Kenya's development successes, including national population policy. The ENGAGE presentation serves as an advocacy tool to promote the PHE approach. The main activities of the project are the organization, implementation and monitoring of policy and advocacy engagements for dialogue.

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The presentations are available online to stream or download for future use. Presenters at various engagement activities can choose to use narrated videos or to deliver ENGAGE presentations live. A separate PHE toolkit hosted by Knowledge for Health (K4Health), a project hosted at Johns Hopkins University in the United States of America, provides current and high-quality resources for the PHE community and others interested in learning more about the PHE approach and integrated development.

The project has proved that it can be used for high-level policy discussions at the national and global levels. Ten key-

- ways it can help to reach to policy makers which are as follows:
- Interpreting demographic and other data to provide the “so what”—the underlying stories and their implications for policy action.
 - communicating complex concepts such as the demographic dividend through well-crafted, accessible presentations.
 - producing multimedia-presentations, such as Kenyan Population Reference Bureau (PRB) ENGAGE, that can catalyze commitment to FP/RH goals among decision-makers at global conferences, and in-country policy training;
 - constructing a roadmap for policy-focused work to achieve the agenda of Family Planning 2020 and SDGs
 - creating infographics for telling stories about the country.
 - conducting thematic media training for print, broadcast and digital journalists to ensure that relevant stories are told accurately.
 - developing new influencers and leaders in family planning/ reproductive health (FP/RH) through policy communication training.
 - conducting demographic analyses to help explain key trends.
 - explaining the linkages between population, health and the environment to inform integrated programmes.

- Increasing the focus on gender and highlight gender’s critical role for non-governmental organizations (NGOs), countries and communities.

The ENGAGE toolkit has been based on previous experiences by PRB, which span over 30 years of training and research as well as the development of policy communication tools worldwide. The goal is to improve access to quality, client-centered and linked healthcare services that include family planning and reproductive, maternal, newborn, child and adolescent health services. The project’s work is focused on Baringo and Nakuru counties in Kenya, but a similar project was implemented in Uganda, Ethiopia and Madagascar, and the experiences shared among these countries to modify further for achieving the results.

PPD, as an inter-Governmental organization of 27 countries promoting South-South cooperation in reproductive health including family planning and population areas, shares success stories of this project to its other member countries through its high-level ministerial forums such as its International Inter-ministerial Ministerial Conference.

The integrated PHE approach has major potential for increasing awareness among policymakers, family planning advocates, the media and religious leaders in Kenya on sustainable development issues.

Contact:

Name: Ms Tahrifa Khan
Title: Senior Program Officer
Organization: Partners in Population and Development (PPD)
Email: tahrifa@ppdsec.org
Skype: tahrifa_khan
WhatsApp: +8801927135992

PROJECT NAME: The Population, Health and Environment’s (PHE) Eliminating National Gaps Advancing Global Equity (ENGAGE) Project

COUNTRIES/REGIONS: Kenya

NOMINATED BY: United Nations Population Fund (UNFPA), Partners in Population and Development (PPD)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.7, 5.6, 12.8

SUPPORTED BY: USAID

IMPLEMENTING ENTITIES: National Council for Population and Development (NCPD), Kenya

PROJECT STATUS: Completed

PROJECT PERIOD: 2014–2019

URL OF THE PRACTICE: <https://bit.ly/2QIRL1J>



BeHe@lthy BeMobile

Integrating mobile health for non-communicable diseases in national health systems

Challenge

Noncommunicable diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease, are among the main health risks around the world. Collectively, they are responsible for killing an estimated 41 million people each year. With approximately 71 per cent of all deaths worldwide, they are responsible for more than all other causes of death combined. Low- and middle-income countries are particularly affected, where almost three-quarters of all NCD deaths occur, and 82 percent of those die prematurely or before reaching 70 years of age.

NCDs are the result of a combination of genetic, physiological, environmental and behavioural aspects, and their rise has been driven primarily by four major risk factors: tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets.

Towards a Solution

The Be He@lthy, Be Mobile initiative uses mobile phone technology to deliver disease prevention and management information directly to mobile phone users and strengthens health systems by providing training to health workers. It provides governments with best practices for mHealth interventions, based on available clinical evidence from trials around the world. It also catalyses the establishment of national and global partnerships to ensure the long-term sustainability of mHealth programmes within national health systems.

Governments can then launch national mHealth interventions, such as mDiabetes in Senegal, using the tools and support provided by the initiative.

The results and experiences of each country's programme are then fed back into the initiative's global toolkit and evidence base to support work in other countries.

The World Health Organization (WHO)/International Telecommunication Union (ITU) mHealth initiative for NCDs scales up these already successful and cost-effective technologies, which have been proven at a pilot level, and make them available to the world. The initiative harnesses proven technologies, made available to low- and middle-income countries to enable them to address their burden of NCDs by validating technology for results, quality assurance and its cost effectiveness. Furthermore, the initiative helps in developing cost-effective tools and devices, and innovative solutions as catalyst from the private sector and academia, working together with governments to provide necessary incentives. The initiative is creating standards and guiding principles that enable governments and their citizens to quickly access and adopt the new tools and devices. By focusing on the WHO's 'best buys' for NCDs, this initiative is saving millions of lives and reducing NCDs' economic burden on the society.

Be He@lthy, Be Mobile is currently being operated in 11 countries from different income groups and interest areas and has received requests for support from over 90 additional ones. Current countries are: Burkina Faso (mTobaccoCessation), Costa Rica (mTobaccoCessation), Egypt (mDia-



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betes, Mtb-Tobacco), India (mTobacco, mDiabetes), Norway (mBreatheFreely), Philippines (mTobaccoCessation), Sudan, Tunisia (mTobaccoCessation, mDiabetes), United Kingdom (digital health in general), (mCervicalCancer, mBreastCancer, mDiabetes), Tunisia (mTobaccoCessation, mDiabetes), United Kingdom (digital health in general), as well as the European Union (mHealth, Innovation, KnowledgeHub).

Be He@lthy, Be Mobile supports countries and governments by providing technical expertise to integrate mobile health interventions in their national health systems and sustainably scale it up to the national level.

Key tools used to this end include the mHealth handbooks, which consolidate all relevant information and background necessary on: how to set up and run programmes; how to deliver a desired health impact at scale; and how to integrate mHealth with non-digital health services in the form of plug-and-play, ready-to-use options for partners.

For the successful implementation of these services, a multi-stakeholder approach and collaboration with information and communication technology (ICT) providers has been the key. ITU helps in establishing lasting partnerships with telecom operators and provide technical expertise for the creation and implementation of the required operational frameworks. WHO on the other hand, acts as the provider of the health-related content to be used within the scope of the initiative. Together, ITU and WHO work to connect ministries of ICT, ministries of health and mobile network operators to deliver a coordinated response to the NCD epidemic.

Yet, it is important to note that the mHealth solutions implemented through the mHealth for NCDs initiative go beyond NCD prevention and control. As demonstrated during the ongoing COVID-19 pandemic, the mHealth solutions that have been created represent highly functional platforms upon which additional solutions can be built to deliver critical services to populations in need. For example, Tunisia used the mHealth messaging service to inform the public about the COVID-19 threat and to follow-up with inbound visitors to the country to minimize the risk of the virus spread.

Furthermore, under the mHealth for NCDs initiative, ITU and WHO have developed a range of technical materials, toolkits and recommendations that can inform and guide relevant stakeholders in developing and implementing their own mHealth solutions or replicating those that have already been deployed elsewhere. This wealth of knowledge has contributed towards: (i) enhancing country capacities to leverage ICT for the benefit of their populations; (ii) promoting an innovative and multisectoral approach to digital health interventions; (iii) disseminating useful technical standards; and (iv) increasing awareness among the public and the business world of mHealth utility and needs, which can foster innovation and the development of new SDG-relevant products.

South-South cooperation has been a prominent feature of the initiative, since the replication of the mHealth interventions in different countries has been largely made possible by the sharing of experiences of the countries within and beyond regions. Several forums and workshops have been organized within the scope of the initiative where experts from one country have shared their lessons learned with stakeholders from other countries

The initiative has proved highly sustainable as:

- it emphasizes, from the very start, a multi-stakeholder approach for the implementation and the establishment of lasting partnerships (with the full and gradual transfer of ownership to the national governments);
- it is highly cost-efficient due to the high return on investment of preventive NCD policy measures (as per the WHO NCD 'best buys') and the multi-functionality of the mHealth solutions created.

Contact:

Name: Mr Cosmas Zavazava
Title: Chief a.i. Partnerships for Digital Development Department
Organization: International Telecommunication Union – Telecommunication Development Bureau
Email: Cosmas.zavazava@itu.int

PROJECT NAME: BeHe@lthy BeMobile
COUNTRIES/REGIONS: Global
NOMINATED BY: The International Telecommunication Union (ITU)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4
SUPPORTED BY: World Health Organization (WHO)
IMPLEMENTING ENTITIES: ITU
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2013–2021
URL OF THE PRACTICE: <https://bit.ly/3gu2lhM>

Improvement of Maternal and Child Health on the Northern Border of the Dominican Republic and Haiti



Advancing towards the achievement of SDG3 by strengthening health services to reduce maternal and child mortality

Challenge

Between 2014 and 2016, 32 percent of the pregnant women who received care at the Dominican Hospital of Dajabón, Cibao Occidental Region were Haitian women, representing 44 percent of the total number of women who gave birth in the hospital. Additionally, this Region has one of the highest rates of maternal mortality in the Dominican Republic. The main causes of maternal death are hypertensive disorders of pregnancy and postpartum haemorrhage, which are preventable in more than 80 percent of cases through the provision of quality and people-centred care. To address the health problems of pregnant women, the two neighbouring countries embarked on a binational cooperation project supported by Pan American Health Organization (PAHO)/World Health Organization (WHO). The project aims to reduce maternal and neonatal mortality by focusing on improving prevention, early detection and adequate management of its main causes of death, in health facilities and at the community level.

Towards a Solution

The project 'Improvement of maternal and child health on the northern border of the Dominican Republic and Haiti' was developed as an initiative for the northern Dominican-Haitian border, planned by the national and regional authorities of both countries, with the support of PAHO/WHO. It also included local coordination and full participation of the health authorities in project implementation, supervision and monitoring. The aim is to reduce maternal and child mortality (particularly neonatal mortality) at the Dominican-Haitian border by strengthening the resolute capacity of the public health establishments coordinated with community interventions, as well as the strengthening binational coordination on health.

In terms of methodology, the authorities and health workers from the northern border of both countries conduct coordination meetings, keeping a smooth communication. The health team from the three levels of care (i.e. departmental, health facility and community levels) participated in collaborative learning, which allows to share good practices, with a follow-up from the local and regional health authorities that have participated in the project. Their experience could be used to provide technical cooperation, replicated at other cross-border regions. The methodology of training facilitators has strengthened the local health centres, assuring the sustainability of the interventions through functional mechanisms that will remain within the institutions and structures after finalizing the project.

The initiative used a three-level care approach to lead the transnational transfer of good practices. At the departmental level, a bilateral joint commission of the coordination mechanism for referral and counter-referral between Haiti and the Dominican Republic was created to establish operational links to transfer cares of pregnant women with obstetric complications from Haiti to the Dominican Republic in order to receive better care. At the level of the health facility, the rehabilitation of the hospital at the Haitian border allows pregnant women to give birth with dignity in a respectful and safe environment. This motivates pregnant women to seek and receive quality maternal care in a health facility provided by qualified health personnel. At the community level, joint meetings are held with youth



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and adolescents from both countries to raise awareness on the prevention of early pregnancies and sexually transmitted infections (STIs), and their right to receive sound care at the hospital. Binational networks of the two countries for integrated actions for adolescent and maternal health care for Haitian migrant women are being set up. In addition, joint meetings were held with community leaders and community health workers (CHW) from both countries to ensure ownership of the joint project, and to motivate and inform women of childbearing age on the availability of quality maternal health and family planning services in their respective communities. In addition, the *Servicio Regional de Salud Cibao Occidental* [Regional Health Service of Western Cibao] (SRSCO) has successfully coordinated efforts to improve maternal and childcare in their 16 hospitals, including the regional maternal child hospital ‘Francisco Peña Gómez from Mao-Valverde’. **This has strengthened their resolute capacity to comply with the maternal and neonatal protocols established by the Ministry of Health (MSP), using the collaborative learning methodology that uses a check list with explicit criteria to measure compliance.**

The exchange of experiences between the two countries takes place within binational meetings that are scheduled according to their need. Binational integration remains fundamental to the success of this project; it serves as a basis for maintaining and adding actions that benefit both nations. This project can serve as a reference for replication and upscale in other countries with the same border population challenges.

From 2018 to 2020, the project has achieved the following results:

- The number of maternal deaths was reduced by 23 percent, and the maternal mortality rate by 18 percent (from 13 to 10, and from 209 to 171 per 100,000 live births in 2019 against 2018).
- The number of neonatal deaths was reduced by 26 percent (from 148 to 110), and the neonatal mortality rate was reduced by 39 percent (from 23 to 14 per 1,000 live births).

- 595 health workers were trained on: triage; emergency and obstetric urgency; obstetric haemorrhage and red code; helping mothers survive pre-eclampsia/eclampsia; and community AIEPI, among other topics.
- 199 health workers, mainly from the community, were trained on priority topics identified in the intervention strategy designed from a baseline of recognition and search of professional care during pregnancy and childbirth; the identification of danger signs (signs and symptoms) during pregnancy, childbirth, puerperium and for neonates; and reproductive health and reduction of access barriers in health services.
- Health service capacity was improved in the activation and handling of the obstetric red code. This included training of 15 obstetricians and gynecologists, and 35 health workers who are not specialized in gynecology and obstetrics. Also, 20 non-pneumatic, anti-shock suits were assigned to the health services. In 2019, 33 Red Code cases were registered, where all the mothers and children survived.
- Blood supply and management were strengthened, including test equipment and supplies for screening and transfusion. In 2019, 421 units of blood were screened. Prior, patients had to be transferred to another region (Region 2) for transfusions.
- The Perinatal Information System (SIP Plus) was implemented in six hospitals in the region.
- Compliance with obstetric and neonatal protocol improved in 16 hospitals.
- The methodology to evaluate the Integrated Health Services Delivery Network (RISS) was applied.

Contact:

Name: Country and Subregional Coordination Office
 Organization: Pan American Health Organization/World Health Organization (PAHO/WHO)
 Email: csc@paho.org

PROJECT NAME: Improvement of Maternal and Child Health on the Northern Border of the Dominican Republic and Haiti
COUNTRIES/REGIONS: Dominican Republic, Haiti
NOMINATED BY: Pan American Health Organization/World Health Organization (PAHO/WHO) country offices in the Dominican Republic and Haiti
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.3, 3.1, 3.2, 3.7, 3.8, 3.c, 5.6, 17.9
SUPPORTED BY: PAHO/WHO
IMPLEMENTING ENTITIES: Ministry of Health and National Health Service of the Dominican Republic, Ministry of Health of Haiti
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2018–2020
URL OF THE PRACTICE: www.paho.org/CCHD



Improved Blood Transfusion Services to Strengthen Health System in Guyana

Transferring knowledge and state-of-the-art practices to improve the blood transfusion services in Guyana

Challenge

In Guyana, the National Blood Transfusion Services (NBTS) faced challenges that impacted the management of services for people needing blood transfusion. This was due to the rapid staff turnover and the subsequent loss of experienced personnel. This was aggravated by poor procurement systems, lack of quality governance structures such as blood transfusion committees, and lack of transfusion guidelines. There was also a lack of knowledge on the use of blood components at hospital facilities and low availability of reagents for antibodies testing. All this compromised quality assurance and led to low confidence in the system.

Towards a Solution

This South-South bilateral collaboration between Argentina and Guyana aimed at strengthening the blood transfusion system in Guyana between 2015 and 2018. Its objective was to strengthen the knowledge base on blood management and the professional skills of key staff working in the blood transfusion system in Guyana in order to strengthen the NBTS.

The collaboration aimed to enable the country to have a reliable blood transfusion service that would ensure the timely availability of a lifesaving health care input such as blood and its components in all health facilities that may require it. This directly contributes to the achievement of Sustainable Development Goal (SDG) 3, targets 3.1 (on the reduction in maternal mortality) and 3.8 (on universal access to quality health services).

Senior staff from Guyana's NBTS including its quality manager and director teamed up with experts and senior staff from the Hemotherapy Center of the Garrahan Pediatric Hospital in Buenos Aires, Argentina. The latter is the largest paediatric hospital in Argentina and the national referral paediatric centre for intensive care, with an average of 10,000 paediatric surgeries annually.

The collaboration ensured the systemic, cross-country transfer of knowledge by adopting a four-phase process that ensured the participation of the key stakeholders from both countries. In phase one, an expert from Argentina visited the NBTS in Guyana to undertake an audit to understand the gaps that needed to be addressed, which included donor recruitment, blood donor's support and guidance, blood component processing, as well as blood distribution. The audit was instrumental in transferring new knowledge to Guyanese professionals, and served to prepare a programme of work to strengthen blood services in Guyana as several opportunities for improvement were identified and lessons learned were drawn.

In the second phase, an Argentinean expert visited the same centre for two weeks in order to conduct a hands-on training in donor management procedures, serology and blood components processes and management. Several recommendations to improve management and quality were also made, which led to the adoption of an improvement plan that was implemented in a two-year process with specific timelines and milestones.



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In phase three of the collaboration, a senior staff member from the NBTS from Guyana visited the Garrahan Pediatric Hospital in Buenos Aires in June 2018 and participated in an intensive hands-on-training programme at the hemotherapy centre. The training focused on knowledge transfer in the areas of donor recruitment practices, quality assurance, immunohematology and blood collection. This phase later allowed for the dissemination of this new knowledge to Guyanese staff, thus ensuring the sustainability of the initiative.

In the final stage, an expert from the blood bank at the Garrahan Pediatric Hospital in Argentina visited Guyana for a final audit of the NBTS and provided final recommendations for the optimal operation of the service. In a final meeting with the Junior Minister at the Ministry of Public Health of Guyana, the expert provided recommendations for the consolidation of blood transfusion services and guidance to ensure the sustainability of the improvements achieved in Guyana.

Since the last visit of the Argentina experts, the NBTS has improved its operations in donor recruitment, blood processing and distribution. Although some aspects of the improvement process of these services require long-term implementation, Guyana took full advantage of this opportunity. Indeed, this South-South cooperation initiative was innovative because it brought new knowledge that enabled the beginning of a long-term process of structural improvement and innovation.

These innovations included the adoption of a strategic plan, the establishment of a new national blood policy, the

creation of transfusion committees in the most important hospitals in the country, as well as the gradual improvement of quality. The collaboration also highlighted the need for blood derivatives including plasma, plaques, hemoderivates, etc. at public and private health facilities that are currently in place in most of them. The collaboration was instrumental to the Government of Guyana to create a specialized immunohematology laboratory with capacity for platelets pooling and the adoption of standard of procedures (SOPs) for all stages of the blood transfusion cycle.

As a result of the collaboration, the Government of Guyana, in a firm commitment to ensure the sustainability of the progress attained, has embarked in a long-term process to improve the quality of its national blood system. This is an area that requires a considerable amount of human and financial resources that the Government has committed to invest. The next goal of the country towards ensuring the sustainability of results is to improve quality to an even greater extent and obtain the accreditation of its NBTS according to international standards. Since the Garrahan Pediatric Hospital's Hemotherapy Center is an internationally renowned blood bank, the plan is to upscale this collaboration.

Contact:

Name: Country and Subregional Coordination Office
Organization: Pan American Health Organization/World Health Organization (PAHO/WHO)
Email: csc@paho.org



PROJECT NAME: Improving Blood Transfusion Services to strengthen health system response in Guyana
COUNTRIES/REGIONS: Argentina, Guyana
NOMINATED BY: Ministry of Public Health Guyana, Pan American Health Organization/World Health Organization (PAHO/WHO) Guyana
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.8
SUPPORTED BY: PAHO/WHO
IMPLEMENTING ENTITIES: National Blood Transfusion Service of Guyana and the Ministry of Health of Argentina (Garrahan Pediatric Hospital)
PROJECT STATUS: Completed
PROJECT PERIOD: 2015–2018
URL OF THE PRACTICE: www.paho.org/CCHD

Institutional Strengthening for Planning and Monitoring of Cancer Control Programmes in Latin America



Improving the availability of information to support decision-making and policy development in cancer prevention and control

Challenge

In the global framework of surveillance of non-communicable diseases (NCDs) and as part of the Sustainable Development Goals (SDGs), the countries committed, among other measures, to reduce mortality from NCDs by 25 percent by 2025 as well as having information on cancer incidence (World Health Organization, Surveillance Framework). In developing countries, there is a notable increase in the burden of cancer, which calls for the need to develop evidence-based control plans for the disease. In this regard, it is essential to have reliable information sources that would serve as a basis for the planning, monitoring and evaluation of policy implementation. Vital statistics provide mortality information, and population-based cancer registries are the main mechanism for obtaining information on cancer incidence and survival in the population. However, although there are population-based cancer registries in some countries, they have problems of sustainability, data quality, and capacity for analysis and production. Hence, less than 10 percent of the population in Latin America being covered by high-quality population-based cancer registries.

Towards a Solution

Supported by Pan American Health Organization (PAHO)/World Health Organization (WHO), the 'Generation of key information for planning and monitoring of cancer control programmes in Latin America' aims to address the challenge above. This project seeks to strengthen local capacities to improve the coverage and quality of population-based cancer registries in five Latin American countries (El Salvador, Guatemala, Panama, Paraguay and Peru) by supporting the implementation of regional activities under the framework of the Global Initiative for the Improvement of Cancer Registries coordinated by the International Agency for Research on Cancer (IARC). The project aims to make epidemiological information available for decision makers through the development of population-based cancer registries.

The development of activities for this project relied on experts led by Argentina and Colombia, with the enabling policy frameworks, developed capacities in cancer control and prevention, and experience in the development of population-based cancer registries, as well as by the IARC. It is also important to note that the project has been implemented as a practical example of South-South cooperation where two centres of excellence in cancer management in Argentina and Colombia have been offering and implementing technical cooperation in five participating countries (Guatemala, El Salvador, Panama, Peru and Paraguay). Through this project, the participating countries will be able to improve the information available on cancer to be used by decision makers and for the development of improved cancer prevention and control programmes.

With the support of the PAHO/WHO Country Offices, the transfer of good practices has been done through the National Cancer Institutes of Argentina and Colombia. They have delivered training workshops and on-site visits to Ministry personnel in charge of non-communicable diseases in the 5 target countries. Additional visits and training have been conducted with the support of IARC to the target countries on the implementation and deployment of new tools for population-based cancer registries (i.e. CanReg5). The engagement of the Ministries of Health, National Cancer Insti-



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tutes and public health practitioners has shown high degree of commitment to the initiative, which ensures follow-up and sustainability of the project.

Although the project is still in early phases, all those responsible for the management of cancer registries in the participating countries have received a first round of training. Follow-up activities include additional basic, intermediate and advanced courses that will allow countries to have disaggregated cancer data not only at the national level, but also from sub-national levels, and at the municipal level. With the support of PAHO/WHO and IARC, each country will review and develop the case definitions, variables, data collection workflows and coding rules, having learned from the experience of their peers.

The project has been innovative as it is the first time that good practices and lessons learned in the development of population-based cancer registries are implemented to allow countries to have disaggregated data by levels, as well as incidence and survival data. These countries

will now be able to better support national, regional and global efforts in the fight against cancers and non-communicable diseases.

The progress achieved to date on cancer data is being shared with decision-makers for the development and implementation of policy solutions. The methodology of the project has allowed for PAHO/WHO to leverage economies of scale and include other interested stakeholders to raise awareness in the importance of the implementation of population-based cancer registries. This approach could be further expanded and scaled-up to other countries that find themselves in need to step-up the fight against non-communicable diseases by improving the quality of data for decision-making.

Contact:

Name: Country and Subregional Coordination Office
Organization: Pan American Health Organization/World Health Organization (PAHO/WHO)
Email: csc@paho.org



PROJECT NAME: Generation of key information for planning and monitoring of cancer control programs in Latin America
COUNTRIES/REGIONS: Argentina, Colombia, El Salvador, Guatemala, Panama, Paraguay, Peru
NOMINATED BY: Ministries of Health of El Salvador, Guatemala, Panama, Paraguay, Peru and National Cancer Institutes of Argentina and Colombia
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4, 3.8
SUPPORTED BY: Pan American Health Organization/World Health Organization (PAHO/WHO)
IMPLEMENTING ENTITIES: PAHO/WHO, International Agency for Research on Cancer, Ministries of Health of El Salvador, Guatemala, Panama, Paraguay, Peru and National Cancer Institutes of Argentina and Colombia
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2019–2021
URL OF THE PRACTICE: www.paho.org/cchd

Mental Health Services Reform: Successful experiences from South American communities

3 GOOD HEALTH AND WELL-BEING



Exchanging experiences between Chile, Peru and Paraguay: Strengthening mental health systems and services

Challenge

Mental, neurological and substance abuse disorders and suicide form a group of diseases and conditions that are a major cause of disability and mortality, causing a third of disability in the Region of the Americas. Due to the high burden of disease, there is often lack of appropriate health services that would provide an adequate response to people affected by these conditions. Therefore, many persons with mental health conditions do not receive treatment and care as needed.

Towards a Solution

Despite the enormous challenge of the mental health response, Chile, Paraguay and Peru have initiated and implemented community-based mental health reforms to bridge the gap in the treatment and care needed for the affected populations. Importantly, the three countries have drawn on each other's experiences to strengthen their respective mental health systems and services.

Community-based services are essential to ensure that people suffering from mental, neurological and substance use disorders receive appropriate treatment and care within their communities. The outdated psychiatric hospital-centred model is gradually being replaced by mental health multidisciplinary networks that are accessible and that respect the rights of population.

The mental health community-based reform project contributed to Sustainable Development Goals 3 (SDG 3); targets 3.4 (By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being) and target 3.5 (Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol).

Extensive collaboration was primarily carried out between Chile and Peru. The Chilean experience of establishing mental health networks at the community level greatly influenced the Peruvian mental health reform. Specific projects of intercountry cooperation between Chile and Peru were implemented and often funded by the Pan American Health Organization (PAHO).

The cooperation between countries took the following forms, including:

- informing and advising on the development and implementation of mental health policies, plans and legislations.
- promoting exchanges of health professionals from both countries with the overall aim to analyse local weaknesses, identify bottlenecks identify strengths and ultimately learn from each other.
- fostering collaborations with decision-makers and influencers to orient and reorient policies and services.
- strengthening the active and participatory role of civil society representatives, with a special focus on users of mental health services, family members, caregivers and human rights advocates.

The close collaboration between Chile and Peru not only resulted in enhancing the Peruvian mental health reform of policies and services, but also positioned Peru as a reference model for other South American countries such as Paraguay.



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In Paraguay, a renewed interest in reforming mental health services was manifested by the current Minister of Health. The current model, based on specialized mental health services – mainly in the notorious psychiatric hospital in the capital city, Asuncion – must be replaced by decentralized mental health services. In 2019, a delegation of health authorities and professionals from Paraguay travelled to Lima to meet with representatives of the Peruvian Mental Health Department of the Ministry of Health, and to become familiar with the mental health model, and exchange on best practices and lessons learned in the development and implementation of the mental health strategy.

In addition, Paraguay has been selected to participate in the global World Health Organization (WHO) Special Initiative on Mental Health, which seeks to ensure universal health coverage involving access to quality and affordable care for mental health conditions in 12 countries to 100 million more people. The initiative, which will advance policies, advocacy and human rights, and scale up quality interventions and services for people with mental conditions, is already being implemented in Paraguay and the situation analysis is being carried out.

However, one of the outcomes of the project determined that a common challenge that the three countries have encoun-

tered is tackling mental health within indigenous communities. Among indigenous communities, mental disorders are highly prevalent and suicide rates higher than in the general population. More joint efforts are needed to address the special need of these populations, and thus the project 'Good practices in community-based mental health: Chile, Paraguay and Peru' was submitted to the PAHO/WHO funding mechanism for Cooperation among Countries for Health Development (CCHD).

Since mental health remains a challenge for many countries, the best practices and lessons learned from this project are a primary resource in the development and implementation of mental health policies and service delivery. Through this initiative, countries have worked together to identify common barriers and consolidated the political commitment to address mental health problems, with a specific focus on populations living in conditions of vulnerability.

Contact:

Name: Country and Subregional Coordination Office
Organization: Pan American Health Organization/World Health Organization (PAHO/WHO)
Email: csc@paho.org



PROJECT NAME: Mental Health Services Reform: Successful experiences from South American communities
COUNTRIES/REGIONS: Chile, Paraguay, Peru
NOMINATED BY: Pan American Health Organization/World Health Organization (PAHO/WHO)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4, 3.5
SUPPORTED BY: PAHO/WHO
IMPLEMENTING ENTITIES: Ministries of Health (Chile, Peru and Paraguay)
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2019–2021
URL OF THE PRACTICE: www.paho.org/cchd

Road Safety Improvement in the Dominican Republic and Costa Rica through the Strengthening of Road Safety Management and Regulatory Capacities

Exchanging best practices from Costa Rica and institutional strengthening to address one of the major causes of mortality in the Dominican Republic

Challenge

The deaths and injuries caused by road traffic accidents represent an important morbidity, mortality and disability burden in the Dominican Republic and Costa Rica, especially among individuals aged between 14 and 29 years. This is due to the insufficient actions taken to prevent road traffic accident and is also related to the weakness of the road safety leadership. This project seeks to address one of the main public health issues in the Dominican Republic, because it has the highest traffic mortality rate in the Region of the Americas (34.6 deaths per 100,000 population) and one of the five highest in the world, by drawing on the experience of Costa Rica where the rate is 16.7 per 100,000 population, i.e. 1.1 percentage points above the regional average.

Towards a Solution

To approach the challenge, Costa Rica and the Dominican Republic collaborated on the project 'Road safety improvement in the Dominican Republic and Costa Rica through the strengthening of management capacities of the correspondent institutions', with the objective of developing practices and tools that contribute to the reduction of deaths, injuries and property damage caused by road traffic accidents in both countries.

Through this cooperation, Costa Rica and the Dominican Republic aim to share knowledge, abilities and expertise to reach its goals through concerted efforts, which are in line with the Sustainable Development Goal (SDG) 3 (Good health and well-being), target 3.6 and SDG 11 (Sustainable cities and communities), target 11.2.

This project emerged from the National Institution of Transit and Ground Transportation (INTRANT) in the Dominican Republic's interest to learn from Costa Rica Road Safety Council (COSEVI) experience, which was initiated through a formal request. This cooperation was facilitated by the Pan American Health Organization (PAHO)/World Health Organization (WHO) offices in Costa Rica and the Dominican Republic, which monitor the progress of both countries in achieving the objectives of the Decade of Action for Road Safety 2011–2020, officially proclaimed by the United Nations General Assembly in 2010. Moreover, the proposed actions, such as policy development, guidance, and communication campaigns, are aligned with the National Strategic Road Safety Plan of the Dominican Republic and with the National Plan for Road Safety 2015–2020 of Costa Rica.

Cooperation was initiated through multisectoral work meetings with public health and road safety experts from the participating institutions. From the early start, these meetings facilitated the identification of the project formulation, the strengths, capacities, instruments and tools that both countries could share or develop together, with the aim of tackling the respective country's prioritized challenges. In this way, there was a clear identification of the good practices to be shared during the development of the project, and the good practices that would be created as part of their development.

With the aim of making the methodological process more participatory, the starting of the project included a week of joint work with the expertise teams from both countries. This allowed to make

3 GOOD HEALTH AND WELL-BEING



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important adjustments to the methodology, derived from a deep documental analysis and subsequent technical discussions about the situation during the beginning of the project.

While both institutions play a role in sharing experiences, within this project, COSEVI shared most of the knowledge, technologies and acquired experiences with INTRANT. COSEVI has led important advancements in Costa Rica's road safety, which has the potential to be shared with similar institutions in the region.

During this project's short execution period, **the Dominican Republic started the implementation of its technical vehicle inspection programme, which was technically advised by Costa Rica based on its years of experience in this area.**

Vehicles in a poor state are more prone to create traffic accidents. Hence, the inspection programme is a cornerstone of the strategy. In contrast, Costa Rica is sharing communication products through social media, drawing on the long experiences of the Dominican Republic in this aspect. Additionally, a Road Safety Observatory has been developed to track and monitor progress road safety.

As a result of the exchange, the following has emerged, which can serve as a reference for other countries wishing to adopt this good practice: manuals, guides and regulations; plans on data collection, processing and analysis on injuries and fatalities from road traffic accidents; technical vehicle inspection programmes; and safer mobility and communication campaigns.

To ensure the replication of the outcomes that have been observed to date during the project execution, all the development experience has been systematized. This is indeed one of the objectives of the project, i.e. to facilitate the design of other similar initiatives among countries based on this methodology.

Contact:

Name: Country and Subregional Coordination Office
Organization: Pan American Health Organization/World Health Organization (PAHO/WHO)
Email: csc@paho.org



PROJECT NAME: Road Safety Improvement in the Dominican Republic and Costa Rica through the Strengthening of Management and Regulatory Capacities

COUNTRIES/REGIONS: Costa Rica, Dominican Republic

NOMINATED BY: Pan American Health Organization/World Health Organization (PAHO/WHO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.6, 11.2

SUPPORTED BY: PAHO/WHO

IMPLEMENTING ENTITIES: The National Institution of Transit and Ground Transportation (INTRANT) from the Dominican Republic, and Road Safety Council (COSEVI) from Costa Rica

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2021

URL OF THE PRACTICE: www.paho.org/CCHD



The Use of Digital Technology to Improve Vaccine Delivery in India and Indonesia

Promoting access and delivery of health technologies through the South-South exchange of innovative technology, knowledge and solutions

Challenge

Immunization is a life-saving and cost-effective intervention against many communicable diseases, saving up to three million lives globally every year. However, millions of children still lack access to vaccines in low- and middle-income countries, despite recent overall improvements in their health systems. This is certainly an issue that concerns Indonesia, where only 58 percent of children have completed their basic course of immunization. With over 76 million infants, children and women of reproductive age spread across 6,000 islands in need of routine vaccination, Indonesia faces a steep challenge in ensuring effective implementation of its immunization programme. The immunization gap in Indonesia is exacerbated by the inefficient distribution of vaccines across the supply chain. The weak inventory and data management system, combined with the relatively short shelf-life, cold storage needs and long supply chain of vaccines have contributed to significant inefficiencies in the supply chain. Addressing these challenges will accelerate Indonesia's progress towards achieving Sustainable Development Goal (SDG) Targets 3.3 (Combating the spread of communicable diseases) and 3.8 (Promoting equitable and timely access to life-saving vaccines and universal health coverage).

Towards a Solution

Eager to improve the immunization coverage in Indonesia, the Ministry of Health (MOH) discovered an innovative digital solution developed by the Indian Ministry of Health and Family Welfare (MOHFW), with support from the United Nations Development Programme (UNDP) India and Gavi, the Vaccine Alliance.

The Electronic Vaccine Intelligence Network (eVIN) is a digital mobile and web-based system that enables real-time visibility of the vaccine supply chain and cold-chain logistics. It provides end-to-end tracking of vaccine inventory, automated data analytics and instant alerts to support quick and effective decision-making and action.

Since it was first introduced in October 2015, the impact of eVIN on India's Universal Immunization Programme (UIP) has been immense. Vaccine stock-outs and wastage are now significantly lower while availability and coverage have improved. An independent economic analysis estimated that eVIN provided a three-fold return on investment for the UIP. By the end of 2020, eVIN will be operational in all 28,000 health facilities across the country, reaching 156 million beneficiaries.

The unique features of eVIN and the significant outcomes achieved in India quickly gained widespread attention across the Asia-Pacific region and beyond. Given such strong interest, UNDP established a knowledge hub in India to promote South-South engagement and cooperation on eVIN and other aspects of digital health and supply chain management. Following an initial exchange in early 2017 where delegations from several countries visited India to vet the eVIN technology and better understand its enormous benefits, the Indonesia Ministry of Health registered its strong interest in adapting the system. As such, UNDP was tasked with leveraging its expertise and experience in managing the deployment of eVIN in India to facilitate the transfer of technology, knowledge and experience to Indonesia.



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To facilitate this technical transfer, the Ministry of Health and Family Welfare (MOHFW) and UNDP India hosted a high-level delegation from Indonesian Ministry of Health on a study tour to directly observe the operationalization of eVIN at vaccine storage points and health centres, and gain valuable insights into its usability and adoptability. The study tour allowed for extensive dialogue between the Indonesian delegates, senior members of India's UIP and policymakers from MOHFW. These discussions offered in-depth understanding of good practices and appropriate policies, as well as the feasibility of, and strategic approach to, adapting eVIN in Indonesia.

This study tour not only provided a rich opportunity for the Indonesian Ministry of Health to learn about the experience and lessons from India, but also for India's UIP to showcase its ground-breaking digital innovation and success story.

Following the study tour, the Indonesian Ministry of Health began piloting eVIN in 54 health centres across two districts (Bogor and Tangerang Selatan). UNDP in India and Indonesia worked together to guide the initial assessment of the vaccine supply chain and digital infrastructure, and the development of costed strategic and operational plans for the pilot districts. One important focus was the customization of the eVIN technology and adaptation of relevant Standard Operating Procedures and training materials to the local context. To reflect these technical modifications and to promote country ownership, the Indonesian version of the eVIN system was rebranded as 'SMILE' (*Sistem Monitoring Imunisasi Logistik secara Elektronik*).

UNDP also helped deliver district-level training of health workers and managers from the national immunization programme, followed by ongoing mentoring and technical support as the system is rolled out. Additional support for South-South technical exchanges and the adaptation of available resources and lessons were provided by the Access and Delivery Partnership, a global initiative led by UNDP, which contributed to the effective roll-out of SMILE in Indonesia.

The introduction of SMILE has made the vaccine supply chain more efficient and coordinated in handling 1.4 million doses of vaccines and reaching over 850,000 ben-

eficiaries. Within the first 12 months of implementation, vaccine stockouts were reduced by 55 percent and the 'vaccine availability index' reached 99 percent. The level of over-stocking and stock wastage dropped by over 50 percent and 90 percent, respectively, while the lag in stock replenishment time went from 25 days to less than three days. The SMILE application was reported to have a high level of user satisfaction and acceptance among health workers, which resulted in better productivity and performance. The higher degree of control over the management of the vaccine supply chain has instilled a significant level of commitment, confidence and pride among health workers in carrying out their duties.

With the success of the pilot, the Indonesian Ministry of Health made the decision to expand SMILE to a further 600 health centres in 23 districts, reaching nearly seven million beneficiaries. The scale up is taking place in 2020 with implementation support from UNDP Indonesia, and co-financing from the Government of Indonesia and Gavi, the Vaccine Alliance. In addition, due to the system's high level of cost-effectiveness, end-user satisfaction, adaptability and interoperability with the current health system infrastructure, it can be quickly brought to scale, further contributing to the sustainable utilization and expansion of the system.

The South-South engagement, exchange and cooperation between stakeholders in India and Indonesia have been critical in amplifying the health impact of an innovative digital solution. UNDP will continue to leverage its extensive network of global initiatives, such as the Digital Health and Supply Chain Knowledge Hub in India and the Access and Delivery Partnership, to facilitate South-South sharing of rich experiences and know-how, and provide ongoing capacity building, mentorship and guidance to improve health outcomes and achieve the SDGs.

Contact:

Name: Mr Leslie Ong

Title: Programme Specialist, HIV, Health and Development Team

Organization: United Nations Development Programme (UNDP) Bangkok Regional Hub

Email: Leslie.ong@undp.org

PROJECT NAME: Digital innovations for health supply chain management

COUNTRIES/REGIONS: India, Indonesia

NOMINATED BY: United Nations Development Programme (UNDP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3, 3.8

SUPPORTED BY: UNDP, Gavi the Vaccine Alliance

IMPLEMENTING ENTITIES: UNDP, Ministry of Health and Family Welfare (India), Ministry of Health (Indonesia)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2019

URL OF THE PRACTICE: <https://bit.ly/2YAIHf4> ; shorturl.at/kmpR3



Towards the Elimination of Mother-To-Child Transmission (EMTCT) of HIV and Syphilis

Enhancing capacities on the path to EMTCT and Universal Health Coverage in Thailand

Challenge

Since 2011, progress has been made globally in reducing mother-to-child transmission of HIV, but not fast enough to reach the 2020 targets, especially the 'Super-Fast-Track Framework to end AIDS'. In 2019, there were approximately 150,000 new HIV infections among children under five, highlighting the need to accelerate the prevention and treatment for all pregnant and breastfeeding women living with HIV in order to eliminate new infections among children and reduce HIV-related deaths among pregnant women and new mothers. In line with the targets of Sustainable Development Goal (SDG) 3 (Good health and well-being), the global community has committed to eliminating mother-to-child transmission (EMTCT) of HIV and syphilis as a public health priority, but this requires an increased focus on integrating HIV interventions and prevention of mother-to-child transmission (PMTCT) services within broader sexual, reproductive, maternal, newborn, child and adolescent health programmes, as well as ensuring equitable access for all women, including the most vulnerable.

Towards a Solution

The Government of Thailand stepped up to leverage South-South and triangular cooperation (SSTC) to support other countries to achieve what it has achieved in 2016 – the elimination of mother-to-child transmission (EMTCT) of HIV and syphilis. To address the challenge, Thailand acts as a global knowledge resource, showcasing good practices and sharing lessons learned from successfully eliminating the transmission of HIV and syphilis from mothers to children. This has been achieved by strengthening universal health coverage (UHC) and health systems to increase access to quality maternal and child health (MCH) services. One of the key features of Thailand's success is its decision to extend health coverage to migrants living in Thailand. Through the Government's South-South cooperation (SSC) agenda managed by the Thailand International Cooperation Agency (TICA) under the Ministry of Foreign Affairs, the Government is sharing its experience, knowledge and technical expertise with other countries.

In 2019, TICA, the Ministry of Public Health of Thailand and United Nations Children's Fund (UNICEF) co-signed a joint plan of action to systematically accelerate progress in EMTCT through different South-South and triangular cooperation (SSTC) modalities. Under this initiative, a capacity-building training session was delivered in 2019 for Ministry of Health representatives from Kazakhstan, Tajikistan, Ukraine and Uzbekistan. TICA covered the costs of the training and of hosting – a model for the future of cost-sharing in middle-income countries and emerging economies. While UNICEF was instrumental in overall coordination together with TICA and the Ministry of Public Health (MOPH), and in mobilizing and funding participating countries, World Health Organization (WHO) and the Joint United Nations Programme on HIV and AIDS (UNAIDS) were engaged during the capacity-building training. Together with UNICEF, WHO provided guidance on validation processes, and UNAIDS built capacity on strengthening data and human rights components towards achieving the EMTCT.

Successful SSC within the Asia Pacific Region has opened the door for many more countries in the region and around the world to have the opportunity to learn from Thailand and access solutions that could be adapted to support their own efforts in working towards achievement of SDG 3, on



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good health and well-being. In 2017 and 2018, UNICEF East Asia and Pacific Regional Office and Thailand Country Office, in collaboration with the International Training Centre on AIDS, TB and STIs, the Department of Health, MOPH, Thailand's MOPH-U.S. CDC Collaboration (TUC), and with support from WHO and UNAIDS organized the South-to-South Learning and Exchange Experiences Workshop on Thailand's Validation of the EMTCT for Ministry of Health representatives from China, India and Myanmar. In 2019, TICA, MOPH and the UNICEF Thailand Country Office further formalised this collaboration and co-signed a plan of action SSTC for EMTCT and expanded the training to other countries beyond the Asia-Pacific Region.

To date, in order to facilitate the systematic cross-regional/-country transfer of good practices and knowledge, **SSTC between Thailand and recipient countries has enhanced capacities through direct observational learning, knowledge sharing, mentorship and experience sharing through workshops.** Based on the evaluation of the 2019 workshop most of the 47 participants expressed their satisfaction with the content of the sessions, citing especially the usefulness of learning about Thailand's experience with EMTCT validation, strong laboratory and data systems, case management for women living with HIV, and the efficient national testing and treatment programmes. One of the main outputs from the workshops was the practical application of the learning, where participants prepared roadmaps to EMTCT validation, and revisions were incorporated into existing EMTCT plans of the respective countries.

To ensure sustainability and formalize planning for future SSTC on EMTCT and other public health issues, UNICEF Thailand, with support from UNICEF East Asia and Pacific Regional Office

(EAPRO), developed a rapid needs assessment survey to identify potentially interested countries for further capacity building and technical support through the SSTC mechanism. Several requests have been received from countries in Asia, Central Asia and Latin America A Joint Work Plan for 2020–2021 on EMTCT of HIV and Syphilis through SSTC between UNICEF, Thailand International Cooperation Agency and the Ministry of Public Health will guide collective efforts in contributing to the global commitment on HIV and AIDS and achievement of the SDGs.

Contact:

Name: Ms Beena Kuttiparambil

Title: Chief, Adolescents Development and Participation

Organization: United Nations Children's Fund (UNICEF) Thailand

Email: kbeena@unicef.org

Name: Ms Shirley Mark Prabhu

Title: EMTCT, Adolescents Health and HIV Specialist

Organization: UNICEF East Asia and Pacific Regional Office

Email: smarkprabhu@unicef.org

Name: Ms Sirithon Wairatpanij

Title: Minister Counsellor, Partnership for Development Bureau

Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand

Email: si.wairatpanij@mfa.mail.go.th

Name: Ms. Chaweewan Tonputsa

Title: Senior Public Health Academic Officer, Bureau of Health Promotion

Organization: Department of Health, Ministry of Public Health

Email: chaweewan1975@yahoo.com

PROJECT NAME: Towards the Elimination of Mother-To-Child Transmission (EMTCT) of HIV and Syphilis

COUNTRIES/REGIONS: China, Kazakhstan, Tajikistan, Thailand, Ukraine, Uzbekistan

NOMINATED BY: United Nations Children's Fund (UNICEF)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.2, 3.3, 3.7

SUPPORTED BY: UNICEF Thailand, UNICEF Regional Office for East Asia and Pacific, UNICEF Division of Data, Analytics, Planning and Monitoring

IMPLEMENTING ENTITIES: Thailand International Cooperation Agency (TICA); Thailand Ministry of Foreign Affairs; Department of Health (DOH), Ministry of Public Health of Thailand (MOPH); with support from UNICEF, WHO and UNAIDS

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: Not available

China-Africa Conference on Population and Development Youth4Youth Forum: Creating a Youth-Led Avenue for Dialogue and Creating Solutions

Providing a platform for the aspirations of African and Chinese young leaders

Challenge

Africa is the youngest continent in the world in terms of population. African youth are among the most vulnerable groups and are often excluded from policy and decision-making. Young women are affected differently by the society than their male counterparts, and often in ways that bring stigma and rejection when they speak out about issues that affect their development. There is a need to address their limited participation in governance, the absence of youth-friendly spaces together with limited knowledge on sexual and reproductive health (SRH) and access to SRH services that result to poor reproductive health outcomes, such as child marriage, obstetric fistula, teenage pregnancy and HIV among others.

China is the largest developing country in the world. Comprehensive sexuality education and youth-friendly sexual and reproductive health services for its young people are limited in coverage and content. At the same time, they are largely excluded decision-making, especially those from marginalized communities. The rights of persons with disabilities (PWDs) and lesbian, gay, bisexual, transgender, questioning, and intersex (LGBTQI) to comprehensive SRH services remain largely neglected.

Young people from the African continent and China are faced with similar social and economic challenges that prevent them from realizing their full potential. They need avenues to discuss and create lasting solutions and form strategic partnerships and collaborations, locally and internationally.

Towards a Solution

Through multi-stakeholder consultations, the organizers of the China-Africa Conference on Population and Development decided that young people should lead their own dialogues, foster relationships and build networks that would result in opportunities for growth and development. This was the core intention of the 'Youth4Youth' Forum, which sought to bring forward youth perspectives on the global development agenda in the context of Africa and China. In this regard, the United Nations Population Fund (UNFPA) China and Ghana Country Offices organized the first Youth4Youth Forum, which was hosted by the Government of Ghana through the Ministry of Planning and the National Population Council. The Forum was held between 23 and 26 June 2019 in Accra, Ghana, as part of the 3rd Africa-China Conference. The UNFPA offices across Africa and in China mobilized youth organizations and provided financial and technical support.

The Youth4Youth Forum was aimed to:

- create a youth-led avenue for dialogue;
- improve young people's awareness of Programme of Action of the International Conference on Population and Development (ICPD) and of the Sustainable Development Goals (SDGs);
- provide a platform to showcase youth-led interventions and innovations;
- build networks to influence national decisions towards the realization of gender equality.

The Youth4Youth Forum attracted 345 young leaders from 17 countries in Africa, in addition to China. The Forum highlighted the aspirations of youth in order to inform national and global development policies.

The implementation process for the Forum consisted of three phases:

- Pre-Forum awareness activities;
- The Forum
- Post Forum follow-up.

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The Pre-Forum awareness activities ensured that the inputs of young people, even those who could not be in the actual Forum, would be fully reflected. The organizers utilized a participatory approach ensuring that a diverse group of Forum participants included rural youth, youth from marginalized sectors, including PWDs as well as in and out-of-school young people.

The Forum was a one-day event open to the media. Social media platforms served as key avenues to ensure continuous interactions between young people participating in the Conference and those who could not attend in person. As part of the follow-up to the Forum, a Declaration document was disseminated and used as a tool to engage relevant stakeholders.

As a lead convener, UNFPA Ghana worked with several youth groups and youth-led civil society organizations, such as the Youth Action Movement of the Planned Parenthood Association of Ghana (PPAG) and Curious Minds Ghana. At the helm of this mobilization were the Fellows of the Youth Leaders Fellowship Programme of UNFPA Ghana, whose participants were part of the planning process. The Fellows, with guidance from UNFPA and the Government, developed the content and structure of the Forum.

UNFPA Ghana also facilitated additional learning event for the young Chinese participants by arranging visits to the University of Ghana and the Disability Village. It also made the necessary arrangements with the Ministry of Foreign Affairs in Ghana for the participants' visas.

The Forum used innovative ways to elicit the views of young people. These included a call for video submissions where young people stated problems they faced in their countries and ideas on how they could be solved. The videos were compiled into the State of the Youth Address (SoYA) that was further deliberated on during the Forum. There was also an online event prior to the Forum to create awareness. The same online platform was utilized during the Forum as an efficient way to elicit inputs from participants.

Other technology-enabled approaches included a 'Tweet Meet' session that utilized Twitter to engage with youth participants. Participants offered their views and answered a variety of questions via Twitter. After becoming familiar with the modality, there was an exchange of ideas on how to engage rural youth and how to exploit South-South cooperation, among other topics.

There was an exhibition session where young entrepreneurs showcased their innovations in technology, arts and crafts, among others. In order to bridge the gap in access to youth-friendly sexual and reproductive health and services, there were mobile health booths.

As a result of the Forum, youth organizations became enthusiastically involved in achieving ICPD goals. In Ghana, for example, young people's inputs became part of Ghana's ICPD commitments, which were presented at the Summit in Nairobi on 12–14 November 2019. Many of the youth participants also joined a youth-led national march during the observance in Ghana of the 16 Days of Activism Against Gender-Based Violence.

This initiative is sustainable and can be replicated by being held on the sidelines of future China-Africa Conferences on Population and Development as the youth component. It is equally possible to replicate this activity in other countries or regions. The forum was documented in a video and written reports are available online for reference.

Contact:

Name: Mr Niyi Ojuolape

Title: Representative

Organization: United Nations Population Fund (UNFPA) Country Office Ghana

Email: ojuolape@unfpa.org

Name: Mr Babatunde Ahonsi

Title: Representative

Organization: UNFPA China and Country Director, UNFPA Mongolia

Email: bahonsi@unfpa.org

PROJECT NAME: China-Africa Conference on Population and Development Youth4Youth Forum: Creating a youth-led avenue for dialogue and creating solutions

COUNTRIES/REGIONS: Benin, Burkina Faso, Cameroon, Chad, China, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Eswatini, Ghana, Kenya, Malawi, Morocco, Nigeria, South Sudan, Uganda, Zambia

NOMINATED BY: United Nations Population Fund (UNFPA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.7, 3.8, 4.3, 4.4, 4.5, 5.1, 5.2, 5.5, 5.6, 5.b, 5.c, 17.9, 17.16

SUPPORTED BY: UNFPA Ghana, UNFPA China, AfriYAN Ghana, China Youth Network, Ministry of Planning of Ghana, China Family Planning Association, Beifang International Education Group (a Chinese private sector company and a partner with UNFPA China), National Development Planning Commission (NDPC) of Ghana, National Population Council, Ghana

IMPLEMENTING ENTITIES: Youth Leaders Fellows of UNFPA Ghana, UNFPA China, AfriYAN Ghana, China Youth Network, Ministry of Planning of Ghana

PROJECT STATUS: Ongoing (subsequent editions expected with periodic follow-ups on action points)

PROJECT PERIOD: March – June 2019 (This forum described has been completed, but the engagement of youth through forums like this will be ongoing. There will be yearly forums like this.)

URL OF THE PRACTICE: <https://bit.ly/31xTW92>

Development of a Network of Healthy Ageing Centres in Eastern Europe and the Caucasus

3 GOOD HEALTH AND WELL-BEING



Addressing the needs of this important and growing sector of society

Challenge

Extended life expectancy at birth and low fertility have contributed to steady population ageing. This is considered by far the greatest achievement of human development. It is expected that, on a global level, the number of persons over 60 will triple from 600 million to almost 2 billion by mid-century, and the proportion of persons over 60 will double from 10 percent to 21 percent in the population.

Many older persons live in dire conditions, with low pensions and insufficient healthcare services, as well as in inadequate housing, especially in rural areas. Furthermore, mental health issues are becoming increasingly widespread due to lack of socialization of older persons, lack of inter-generational support and long-term migration of younger family members.

There are concerns about the capacities of societies to address the challenges of an ageing population and the need to recognize the potential that an ageing society can bring. This programme addresses those concerns.

Towards a Solution

An effective method to address the needs of the ageing population is a programme called Healthy Ageing Centres, which was first developed in 2009 by the non-governmental organization (NGO) Partnership for Public Health in Bosnia and Herzegovina. It was built on strong societal and cultural values in support of older persons. It aimed at promoting physical and mental health, and preventing older persons' mental health illnesses associated with loneliness, as well as increasing voluntary engagement of older persons in community development initiatives and generating inter-generational collaboration and support.

The United Nations Population Fund (UNFPA) country office in Bosnia and Herzegovina closely collaborated with the Partnership for Public Health in policy and advocacy work in the country. As a result of this collaboration, **the network of Healthy Ageing Centres was expanded from its initial location to another 11 locations in Bosnia and Herzegovina over a period of 11 years; many more local communities have expressed interest in opening these centres.** UNFPA also provided technical support to relevant authorities in Bosnia and Herzegovina in developing strategies on ageing, where Healthy Ageing Centres have an important role by improving the position of older persons in society.

This innovative programme developed in Bosnia and Herzegovina has proven to be a highly successful model. It is successful for many reasons. First, older persons have strong capabilities that are not recognized in society and that only need to be stimulated for the greater good. Second, active participation in society brings a dual benefit – to society, through voluntarism, and to the individual old person through improved health and wellbeing. Third, the initiative contributes to gender equality. In the past, community associations and groups were mostly led by men, whereas the Healthy Ageing Centres offer the same opportunities for all older persons. Finally, older persons learn to use modern technologies that enable them to communicate with their children and family who often



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have migrated within the country or abroad. These skills come very handy at the time of crisis such as the COVID-19 pandemic, where older persons are being prevented from appearing in public to protect their own health and where communication is of utmost importance.

The network of Healthy Ageing Centres is cost-effective and fully sustainable. Operating costs are low (under the assumption that premises are available and can be easily equipped). At present, the monthly operating costs of each centre per older person is approximately EUR 4, or 1 percent of an average net monthly salary in the country. Considering the costs of pharmaceuticals for treatment of many non-communicable (including mental) illnesses, the operating costs are very low and affordable to local authorities. The methodology for establishing the network of Healthy Ageing Centres is very simple, and only initial management capacity building is required. The ensuing work is largely based on voluntarism and requires little investment. Indeed, the added value of the centres is very high.

This programme was presented at the Ministerial Conference on Ageing in Lisbon in 2017. As a result, delegations from other countries in the region showed keen interest in replicating

the initiative in their countries. Several countries in Eastern Europe and the Caucasus (including their government institutions and NGOs) expressed interest in learning more about the principles and operational modality of the Healthy Ageing Centres and in opening their own networks.

In response, UNFPA facilitated an inter-country cooperation to enable a direct exchange of knowledge, experience and lessons learned. The initial transfer of knowledge and experiences was organized between Bosnia and Herzegovina and the Government of North Macedonia in 2018. Furthermore, in 2019, a workshop on healthy ageing was organized in cooperation with UNFPA Eastern Europe and Central Asia Regional Office and UNFPA Georgia for government and non-government representatives from nine countries of Eastern Europe and the Caucasus.

Contact:

Name: Mr Zeljko Blagojevic

Title: Population Development/Monitoring and Evaluation Programme Analyst

Organization: United Nations Population Fund (UNFPA) Country Office Bosnia and Herzegovina

Email: blagojevic@unfpa.org



PROJECT NAME: Development of a Network of Healthy Ageing Centres

COUNTRIES/REGIONS: Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, North Macedonia, Serbia

NOMINATED BY: United Nations Population Fund (UNFPA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.7

SUPPORTED BY: UNFPA (Eastern Europe and Central Asia Regional Office, Bosnia and Herzegovina country Office, Georgia Country Office)

IMPLEMENTING ENTITIES: UNFPA, non-governmental organization Partnership for Public Health, Bosnia and Herzegovina

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017 – ongoing (the current programme cycle ends in 2020)

URL OF THE PRACTICE: www.ba.unfpa.org/en

International Conference on Population and Development (ICPD) Reference Center for Sexual and Reproductive Health and Rights

Collaborating to Increase health agencies' institutional capacities

Challenge

Globally, maternal deaths have declined by 44 percent since 1990. Still, some 830 women and adolescent girls die each day from preventable causes related to complications of pregnancy and childbirth. 99 percent of these maternal deaths occur in developing countries.

Addressing preventable maternal deaths requires coordinated and multisector responses, considering the dynamic interaction of four dimensions: economic and socio-cultural determinants of health such as gender, income, and ethnic-racial and territorial inequalities; analysis of the root causes; socio-epidemiological contexts for sexual and reproductive health (SRH); and the contexts of national health systems. It demands a complex and delicate integration between local interventions and a global effort to ensure universal, comprehensive and timely attention to pregnancy, childbirth and the puerperium.

Towards a Solution

The members of the Community of Portuguese Language Countries (CPLP) have sought to respond to the demands to enhance national health systems. Together with the Oswaldo Cruz Foundation of Brazil (FIOCRUZ), leaders of some of these health systems have conducted dialogues and formulated proposals resulting in a form of cooperation, described below. The solution sought by the partners is a coordinated response at the local and global levels, in the spirit of South-South and triangular cooperation.

The idea of an International Conference on Population and Development (ICPD) Reference Centre arises from other cooperative solutions developed by the United Nations Population Fund (UNFPA) in which the creation of an international platform and different levels of decision-making has been proven to be a good practice to organize, qualify and address demands jointly with national partners¹.

The ICPD Reference Center for Sexual and Reproductive Health and Rights hosted by FIOCRUZ aims at strengthening national health systems focused, at this first stage, on reducing preventable maternal deaths in CPLP countries. It embraces as a work methodology the creation of a common cooperation platform, i.e. the 'Reference Center', to organize demands and flows of inter-country cooperation initiatives, and to ensure transparent and participative decision-making. At the global level, the ICPD Reference Center is responsible for the advocacy, political dialogue and forecast governance through an Executive Secretariat, composed of representatives of FIOCRUZ and UNFPA, as well as a Steering Committee with representatives from government agencies and UNFPA offices

1 The prefix of the Reference Centre's name refers to the ICPD held in 1994 in Cairo, Egypt. ICPD was the largest inter-governmental conference on population and development ever held, with 179 governments participating and some 11,000 registered participants -- from governments, United Nations specialized agencies and organizations, intergovernmental organizations, non-governmental organizations and the media. It produced the landmark ICPD Programme of Action that has since guided the implementation of population policies of countries based on the concept of sexual and reproductive health, reproductive rights, and empowerment of women.

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in partner-countries. At the national level, the ICPD Reference Center ensures the continuity of cooperation by mobilizing national actors, producing evidence and intervention plans, and testing and sharing solutions.

The parties agreed to cooperate in activities of common interest, which will include: education, training and research opportunities; internship programmes; the co-designing of projects and events to take place locally, regionally and/or globally; and the development of flagship programmes that further advance partnerships for the 2030 Agenda for Sustainable Development.

Despite FIOCRUZ's vast experience in international development cooperation, there is new element to this initiative, i.e. the creation of integrated solutions that are highly adaptable to many national contexts. For example, among the first initiatives, the 'Distance Learning Program on Surveillance of Maternal Deaths and Performance of Mortality Monitoring

Committees' is an innovative proposal by FIOCRUZ to provide CPLP countries with education and training technologies tailored to the national health specificities of each country. This programme includes a virtual campus, tutor-led sessions and a digital library. One of its goals is to strengthen national alliances for health and to intensify the role of these Committees in establishing new ways to track and monitor the causes of preventable maternal deaths, and in improving the information chain available for health professionals, practitioners and decision-makers.

Contact:

Name: Mr Vinicius Monteiro

Title: Programme Officer

Organization: United Nations Population Fund (UNFPA) Country Office Brazil

Email: vmonteiro@unfpa.org

Skype: Unfpabrazil



PROJECT NAME: International Conference on Population and Development (ICPD) Reference Center for Sexual and Reproductive Health and Rights

COUNTRIES/REGIONS: Initially, Brazil, Angola and Mozambique; currently inviting all member of the Community of Portuguese Language Countries (CPLP). In the long term, all African and Latin American countries may join in this partnership.

NOMINATED BY: United Nations Population Fund (UNFPA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.2, 3.4, 3.7, 5.1, 5.6, 10.2, 17.6

SUPPORTED BY: National Institutes of Health from participating CPLP countries; Oswaldo Cruz Foundation (FIOCRUZ), Brazil; UNFPA

IMPLEMENTING ENTITIES: FIOCRUZ, National Institutes of Health from participating CPLP Countries, UNFPA

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2024

URL OF THE PRACTICE: ba.unfpa.org/en ; <https://bit.ly/34FqvE0> (in Portuguese)

Thailand and Lao People's Democratic Republic South-South Cooperation:

Measuring impact by calculating the social return on investment

Challenge

This innovative case not only documents the South-South Cooperation between two countries – Thailand and the Lao People's Democratic Republic (Lao PDR) – but also shows the framework of determining the tangible economic and social benefits of conducting South-South cooperation, its social returns of investment (SROI). Economists and government decision-makers are extremely interested in learning about these benefits of cooperation and communicating them to their public, hence this case documentation.

The United Nations Population Fund (UNFPA) and the Royal Government of Thailand through the Thailand International Cooperation Agency (TICA, have collaborated extensively to share Thailand's pioneering and widely lauded practices in sexual and reproductive health. In recent decades, Thailand's international development cooperation efforts have progressed considerably. UNFPA has supported the Government to take a leading role in sub-regional, regional and global initiatives to exchange successful experiences and technical knowledge, especially on maternal health care and services. It is in this context that the study on the measurable benefits of SSC is of interest and relevance to TICA, since it aims to expand its external cooperation. It is equally relevant to the Lao PDR since it has sought to determine if the investments it made in this partnership earned significant returns.

The Thailand Maternal Health Programme is globally recognized for producing significant declines in maternal mortality. With a rate of 24.6 maternal deaths per 100,000 live births, Thailand is already considerably below the Sustainable Development Goal target of 70 deaths per 100,000 live births. As such, UNFPA has been supporting the Government of Thailand to take a leading role in sub-regional, regional and global initiatives to exchange successful experiences and technical knowledge, especially on maternal health care and services.

Due to the challenges in Lao PDR in this area, the midwifery programme in the country was selected for analysis. The Government, UNFPA and TICA had co-invested in comprehensive programme management, comprising needs assessment, programme design and development, planning, programme implementation, monitoring and evaluation. Between 2015 and 2017, through Government cost-sharing, US\$450,000 went towards improving human resource skills and systems of the midwifery programme.

Towards a Solution

Concerted collaboration on the human resources component of the midwifery programme in Lao PDR began in 2015 with a needs-based prospectus to tailor the initiative to national priorities. Subsequently, high-level officials carried out a study visit to Thailand to learn about its nurse midwifery systems and maternal health programme. The Faculty of Nursing at Thailand's Khon Kaen University became a major source of technical advice. Participatory curricula were developed for human resource professionals, including a four-month course for 11 managers of midwifery schools and colleges, and a six-month training for two groups of 52 midwifery educators from all 11 midwifery educational institutions. Participatory monitoring and evaluation took place regularly to adjust activities based on needs and demands.



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To assess the value of the programme, UNFPA and TICA applied the principles and methodology of the social return on investment (SROI) framework, which is more comprehensive and participatory than traditional cost-benefit analysis. SROI applies financial proxies to measure socio-economic outcomes. By investigating and consolidating the views of multiple stakeholders in an easy-to-understand financial ratio, the framework can make a convincing case for the value of a project, shedding light on the social value created for each dollar invested.

The ratio is calculated by estimating the total present value of costs and benefits. The timing of these costs and benefits is taken into account with the discount rate, a percentage that represents the estimated value of depreciation per year.

To probe the cost-effectiveness of the initiative and the value provided to different stakeholders and beneficiaries, the SROI exercise drew on the quantitative analysis of surveys and key informant interviews. It focused specifically on activities to improve midwifery education according to standards set by the International Confederation of Midwives and the World Health Organization.

Close coordination with UNFPA's country office in Lao PDR, as well as a series of questionnaires, meetings and interviews helped ensure that relevant stakeholders would agree on and endorse the SROI results.

The SROI studies found a substantial return from the programme. The total investment of US\$ 450,000 created a social value of nearly US\$1.8 million. Each dollar invested generated nearly four additional dollars.

This value stemmed from **93 percent of trained participants having increased self-confidence in the midwifery profession, 63 percent having greater capacity to contribute to their institutions, 29 per cent having better job prospects, and 24 per cent having better abilities to contribute to their community.**

The SROI confirms that South-South cooperation equipped midwifery educators with knowledge and expertise in line

with international standards. Nursing and midwifery institutions have benefited greatly from improved skills and staff quality, and many innovations have emerged. These include: (i) work with medical doctors to train midwives at health centres and district hospitals; (ii) the exchange of teachers; (iii) an exclusive breastfeeding project; (iv) educational videos and micro teaching; and (v) a network of competent teachers.

The compelling findings of the SROI analysis led TICA, UNFPA and the Government of Lao PDR to recommend continued investment in midwifery educators and institutional capacity development. Since the South-South model is effective and makes efficient use of Thailand's expertise as well as financial resources, it has potential over time to deliver long-term and sustainable results in a number of areas, in maternal health, and sexual and reproductive health more broadly.

For UNFPA, changes in the funding structure of the country programme in Thailand underscore the imperative to pursue more multilateral partnerships or co-financing. The programme now has a clear case for continuing to advocate and mobilize resources for South-South projects, including with civil society networks and private sector firms in Thailand and other countries.

UNFPA plays vital roles in providing extensive technical support on the SROI initiative, offering evidence-based policy development assistance to TICA on South-South initiatives, and advocating further South-South resource mobilization among government organizations. It is UNFPA's hope that these findings contribute to the global knowledge of evidence on the value of SSC.

Contact:

Name: Ms Duangkamol Ponchamni

Title: National Programme Officer

Organization: United Nations Population Fund (UNFPA) Country Office Thailand

Email: ponchamni@unfpa.org

PROJECT NAME: Measuring South-South cooperation impact by calculating the social return on investment

COUNTRIES/REGIONS: Lao People's Democratic Republic, Thailand

NOMINATED BY: United Nations Population Fund (UNFPA) Asia and Pacific Regional Office

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 3.1, 5.6, 17.6

SUPPORTED BY: UNFPA, Thailand International Cooperation Agency (TICA)

IMPLEMENTING ENTITIES: TICA, Ministry of Foreign Affairs of Thailand

PROJECT STATUS: Completed

PROJECT PERIOD: 2018-2019

URL OF THE PRACTICE: www.tica.thaigov.net/main/en ; www.thailand.unfpa.org ; www.thailand.unfpa.org/en/SSC-SROI

Best Practices in the Enforcement of Tobacco Control Laws: Case Study from South-East Asia

3 GOOD HEALTH AND WELL-BEING



Cross-country collaboration in adapting best practices for effective implementation of Tobacco control initiatives

Challenge

Tobacco kills more than 8 million people every year globally. The South-East Asia Region has high prevalence of tobacco use, for both smoking and smokeless tobacco. All the countries except one are Parties to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) and are also implementing the WHO MPOWER Package and Best Buy Practices to reduce the demand of tobacco at the country level. Tobacco is a major risk factor for many non-communicable diseases (NCDs) and is the most common preventable cause of death. Effective implementation and enforcement of tobacco control laws are therefore crucial for the overall tobacco control.

Towards a Solution

The WHO Regional Office for South-East Asia (SEARO) initiated the practice of learning from regional best practices. In this regard, partnerships and networking with WHO, national governments and enforcement bodies were used as platforms to exchange knowledge and experiences. WHO SEARO and the Regional Office for the Western Pacific (WPRO) collaborated in organizing a study tour of enforcement officials from Sri Lanka to Singapore to learn about effective implementation of tobacco control policies and laws at the country level. Singapore was identified as the country that has been highly effective in enforcing strong tobacco control laws. A study tour of Public Health Inspectors, who are the enforcement officials for tobacco control law in Sri Lanka, was arranged to look at the best practices in law enforcement in Singapore.

In line with the Sustainable Development Goal (SDG) Target 3.a (Strengthen the implementation of the WHO Framework Convention on Tobacco Control in all countries, as appropriate), the objectives of the study tour were:

- To learn about Singapore's National Tobacco Control Programme, key agencies, their roles and functions in enforcing tobacco control laws and regulations (particularly smoke-free places, sale and distribution, tobacco advertising, promotion and sponsorship bans, content regulation, retailer licensing, excise tax collection, illicit trade).
- To learn first-hand how investigations, surveillance and enforcement are conducted.
- To develop a report consolidating findings and recommendations for a future enforcement strategy.

The study tour provided a platform to learn from best practices of one country and an inter-regional experience. **The enforcement officials from Sri Lanka discussed and learned how Singapore had achieved effective tobacco control and enforcement mechanisms.** The process was participatory, and deliberations were held with the Health Promotion Board, Singapore, the Health Sciences Authority, the National Environment Agency, the Singapore Customs, the FCTC 2030 team and public health inspectors from Sri Lanka. Field visits and hands-on experiences were also part of the study tour.

The study tour provided an innovative opportunity to learn from inter-regional experiences for tobacco control. The following learning objectives were met:

- An overview of Singapore's National Tobacco Control Programme, its structure, activities and campaigns (e.g. media campaigns, prevention programmes, cessation/treatment programmes).



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- An understanding of the Tobacco Regulation Branch and the Health Sciences Authority's roles and functions – enforcement of regulations on underage smoking, Tobacco Advertising, Promotion, and Sponsorship (TAPS) ban, electronic nicotine delivery systems (ENDS)/Vapes, content regulation and testing, licensing of retailers;
- First-hand observations on how enforcement of tobacco control regulations (TAPS, sale, distribution) is conducted on the ground;
- An understanding of the smoke-free regulations, how enforcement is conducted on the ground, as well as enforcement challenges and strategies to counter them; first-hand
- An understanding of excise collection and enforcement of illicit trade, as well as enforcement challenges and strategies to counter them.

The tour was a step forward towards the acceleration of WHO FCTC implementation in Sri Lanka in line with SDG 3a. The Singapore best practice is replicable and can be undertaken in other countries in both SEAR and WPR. The commitment

and involvement of the local authorities and coordination of participating agencies from various sectors are crucial to ensure replicability. There were extensive deliberations with the members of the study tour by different bodies of the Singapore Government including the Health Promotion Board, the Health Sciences Authority, the National Environment Agency and Singapore Customs.

The activity was result of close collaboration and coordination among National Authority on Tobacco and Alcohol (NATA) Sri Lanka, WHO at the regional (SEARO and WPRO) and country level (Sri Lanka), FCTC Secretariat and Government of Singapore.

Contact:

Name: Dr Jagdish Kaur

Title: Regional Adviser, Tobacco Free Initiative (TFI)

Organization: World Health Organization (WHO) Regional Office for South-East Asia (SEARO)

Email: kaurj@who.int



PROJECT NAME: Best Practices in the Enforcement of Tobacco Control Laws: Case Study from South-East Asia

COUNTRIES/REGIONS: Singapore, Sri Lanka

NOMINATED BY: National Authority on Tobacco and Alcohol (NATA) Sri Lanka

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.a

SUPPORTED BY: NATA, World Health Organization (WHO) Regional Office for South-East Asia (SEARO), World Customs Organization (WCO) Sri Lanka, Framework Convention on Tobacco Control (FCTC) Secretariat

IMPLEMENTING ENTITIES: Government of Singapore

PROJECT STATUS: Completed

PROJECT PERIOD: 25–29 November 2019

URL OF THE PRACTICE: Not available

Cross-Border Collaboration between India and Bhutan: Towards Malaria Elimination and Prevention of the Re-establishment of Malaria Transmission

Investing in cross-border collaboration for a malaria-free South-East Asia Region

Challenge

The South-East Asia Region (SEAR) continues to record the largest decline in malaria globally. Within SEAR, India has shown tremendous progress, despite being the highest burden country outside of Africa. While India has focused on elimination of malaria by 2030, one of its bordering countries, Bhutan, aims to have zero indigenous cases by 2020. In 2019, Bhutan reported only six indigenous cases but also 34 imported cases (most from India), and 14 introduced cases.

India and Bhutan share friendly international borders – 699 km with adjoining nine districts of four states on the India side and ten districts (Dzongkhags) on the Bhutan side – with almost unrestricted population movement. It is well recognized that malaria does not respect national boundaries, i.e. elimination cannot be achieved in isolation by any country, and Bhutan may possibly miss the set timelines without adequately addressing malaria along border areas. Border areas are mostly fraught with complex geographies and challenging settings; they are inhabited by ethnic, and mobile and migrant populations. Border malaria is therefore a socio-economic development issue and not only a technical one, which requires attention and investment.

Towards a Solution

To address the challenge above, Bhutan and India have requested that concerted efforts in cross-border activities, especially at local levels, be greatly accelerated facilitated and coordinated by the World Health Organization (WHO). This Cross-border collaboration initiative between Bhutan and India aims to contribute to the achievement of malaria elimination targets and Sustainable Development Goal (SDG) 3 (Good health and well-being) as well as other SDGs relating to ending poverty (SDG 1) and SDG targets on equity.

Preparing context-specific, cross-border action plans can mitigate the above-mentioned challenges. The initial steps towards these critical cross-border actions started with advocacy and planning meetings over several years in the SEAR. The countries showed strong commitment by signing the 2017 Ministerial Declaration on Accelerating and Sustaining Malaria Elimination and endorsing the Regional Action Plan 2017–2030. Cross-border collaboration was reinforced with the 2018 regional committee meeting with the launch of an operational framework for cross-border collaboration for malaria-free SEAR. The framework focuses on maximizing cross-border coordination mechanisms that provide an enabling environment for a context-appropriate harmonization and synchronization of policies, strategies, interventions and joint work plans, including joint capacity-building exercises.

The national strategic plans of India and Bhutan have a cross-border component, yet only a few episodic meetings were previously held with representation by high-level officials. In 2019, the WHO programme managers' meeting discussed cross-border collaboration and arrived at a consensus on the way forward. Subsequently, intermittent discussions continued at the country level. A peer-to-peer exchange on prevention of the re-establishment of malaria transmission was convened by the Government of Bhutan and supported by the Global Fund and Asia Pacific Leaders Malaria Alliance (APLMA) in 2019 where the WHO provided technical inputs. This meeting discussed the malaria sit-



uation along border areas and emphasized, *inter alia*, rapid information sharing through informal coordination mechanisms and alignment of interventions. Another meeting was held in Bhutan to discuss the cross-border strategy and mechanism. As part of strengthening malaria elimination efforts in Bhutan, technical assistance was provided through the WHO for establishing a District Health Information Software 2- (DHIS2) based malaria module within the Health Management Information System (HMIS) in Bhutan in 2018, and a comprehensive assessment of progress in malaria elimination was carried out by the WHO, including surveillance assessment along the border, in 2019. Importantly, a meeting was organized with a key focus on local-level collaboration with WHO Country Office support in 2019. Participation included districts along the India and Bhutan border in addition to respective national programme managers and the WHO. The objectives were to review and share updates on malaria elimination, with special focus on districts sharing international borders, and to develop a road-map for cross-border collaboration.

This India-Bhutan bilateral district-to-district meeting was a step forward in translating various recommendations from previous meetings/consultations and to operationalize 2017 Ministerial Declaration to mutually agreeable strategic 'road map' with special emphasis on border-relevant package of interventions for subnational (district) level.

The priority areas were:

- real-time data sharing, including case histories (on WhatsApp, Dropbox, e-mails, phone, etc.);
- coordination meetings for joint review and planning;
- synchronized implementation of interventions (long-lasting insecticidal nets, distribution, indoor residual spraying);
- diagnosis and treatment, irrespective of nationality, and ensured treatment compliance;

- strengthening of surveillance, and monitoring and evaluation adjusted to burden reduction and elimination settings;
- epidemiological analysis and malaria risk stratification;
- WHO facilitation and support for digital platforms for sharing malaria data, joint meetings and strengthening capacity at the subnational levels.

The initiation of bilateral district-to-district, real-time sharing of malaria information and periodic exposure visits for joint planning and action are innovative steps in the process of establishing a cross-border collaboration mechanism. This benefits both countries' path to malaria elimination and ensures that the gains made are safeguarded. With a progressive evolution, this cross-border initiative is expected to be replicated in other countries of the region. An initial plan for India-Bhutan cross-border actions has been prepared. There will be further country-level consultations, especially at the district level, with special emphasis on: actions (what); and who, when, where, why and how the actions will translate into operationalization of commitments made by the countries and may be leveraged to develop an investment case for resource mobilization. This will also add to other examples of cross-border collaboration, such as the Timor-Leste and Indonesia and the Greater Mekong Subregion (GMS) platform. The WHO will continue to provide support in facilitating these efforts.

Contact:

Name: Dr Tjandra Aditama

Title: Acting Director of Department of Communicable Disease Organization: World Health Organization (WHO) Regional Office for South-East Asia (SEARO)

Email: Aditamata@who.int

PROJECT NAME: Strengthening of Cross-Border Collaboration between India and Bhutan: Towards Malaria Elimination and Prevention of the Re-Establishment of Malaria Transmission

COUNTRIES/REGIONS: Bhutan, India

NOMINATED BY: World Health Organization (WHO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3

SUPPORTED BY: WHO (at Regional and country levels), the Global Fund, Asia Pacific Leaders Malaria Alliance (APLMA), RBM Partnership to End Malaria

IMPLEMENTING ENTITIES: National Malaria Programmes of India and Bhutan

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019 – ongoing

URL OF THE PRACTICE: <https://bit.ly/34EMM4J>

An Innovative e-Learning Approach for Health: Pre- and in-service training for medical students and health workers for quality health service coverage

Improving coverage and quality of health services in disadvantaged areas of Viet Nam

Challenge

Viet Nam is undergoing a reform of its primary health care network, as part of its commitment to attain health-related Sustainable Development Goals (SDGs). These goals relate to the rising burden of non-communicable diseases (NCDs), the continuing threat of communicable diseases, and the need to move towards universal health coverage (UHC) and ensure equitable access to quality health services. A strong health workforce is critical to the achievement of these goals and is a high priority for the Ministry of Health. However, there are several constraining factors, such as the lack of resources to cover the training of all health workers nationwide, lack of government institutions that can provide the training, and limited access to up-to-date, evidence-based learning modules and training approaches. Traditional classroom style training also takes frontline health care workers away from the workplace, thus disrupting service delivery.

Towards a Solution

The objective of the project was to develop and implement an e-learning system that will cover both pre-service and in-service training of health workforce, with the adequate and appropriate technological infrastructure and teaching methodologies, which can optimize the sharing of knowledge by healthcare training institutions in Viet Nam. It aimed to improve coverage, equal access, and quality of healthcare services for the poorest and most vulnerable population groups in the northern coastal region of Viet Nam, with a special focus on the management of NCDs at the primary healthcare level. The project addressed Sustainable Development Goal (SDG) 3 (Good health and well-being) targets 3.4 (on premature mortality/NCDs), 3.8 (on universal health coverage) and 3.c (on health workforce) as well as 3.1 (on maternal mortality), 3.2 (on neonatal and child mortality) and 3.3 (on communicable diseases).

In the spirit of South-South cooperation, the innovative India, Brazil and South Africa Facility for Poverty and Hunger Alleviation (IBSA Fund) had channelled funds to the World Health Organization (WHO) office in Viet Nam, through the United Nations Office for South-South Cooperation (UNOSSC). Using this fund, WHO supported the procurement of hard- and software and helped build capacity of, and provided technical assistance to, Hai Phong University of Medicine and Pharmacy (HPMU) through WHO experts. HPMU is one of the key training institutions for the health workforce in Viet Nam, which covers the northern coastal region. In this project, HPMU played a key role in designing, developing, delivering and testing initial pilot e-learning modules. The Ministry of Health (MOH) of Viet Nam was one of the signatories from the inception of the project, and played a significant role in providing policy guidance and support for future national roll out of the model. The project has benefited from regular oversight and guidance by a Steering Committee, which included ambassadors from the three IBSA embassies, representatives of the MOH, HPMU and WHO Viet Nam.

The project started with the inception workshop followed by a needs assessment and the drafting of the blueprint of the e-learning IT platform. WHO provided training of HPMU lecturers and IT staff to develop and upload training material on NCDs, using innovative e-learning modules that can be accessed by medical students at the HPMU and frontline health workforce at four selected districts in the Northern Coastal Region. The project supported the development of additional e-learning con-



tent and delivery beyond the pilot module. **The e-learning project trained 134 district-level and 160 commune-level staff in remote areas during the pilot, with an additional 600 students enrolled in the e-learning system.**

The project has succeeded in establishing significant levels of skills and infrastructure within HPMU to develop and deliver effective e-learning as an approach to Continuing Medical Training (CME), and in overcoming barriers to training experienced by many remote-site medical settings. It demonstrated that the e-learning system enabled frontline health care workers to upgrade their knowledge and skills with minor disruption in service delivery as these courses can be accessed on their smartphones or computers at a time suitable to them.

The project is an innovative initiative because at the time the project was developed, no other medical university in Viet Nam used e-learning methodology to train students who live in remote areas. The project also established a new way of providing health professional training in the country by “bringing teaching to learners, and not bringing learners to teaching”, to overcome geographic, financial and other learning barriers for health workers working in remote communities. Preparations to scale up the model have already begun as part of the project. This includes: the creation of additional modules and online resources; the development of an e-library and a

mobile app; the initiation of approval of the course contents to be certified by MOH as CME materials; and additional training of HPMU IT and library staff to develop a communication and engagement strategy to reach out to and disseminate the experiences of the project to other medical universities and involve more healthcare settings in the country.

HPMU has continued to utilize and expand the e-learning platform even after the completion of the project. In 2020, in light of the increasing demand to enhance the knowledge of health workforce to respond to the outbreak of COVID-19, WHO and HPMU jointly enhanced the e-learning platform by adding online training modules developed by WHO on COVID-19 in areas such as clinical care for severe acute respiratory infections, and other guidelines for treatment of COVID-19 at primary care settings. The special COVID-19 related courses were made accessible to all health workers and medical students free of charge.

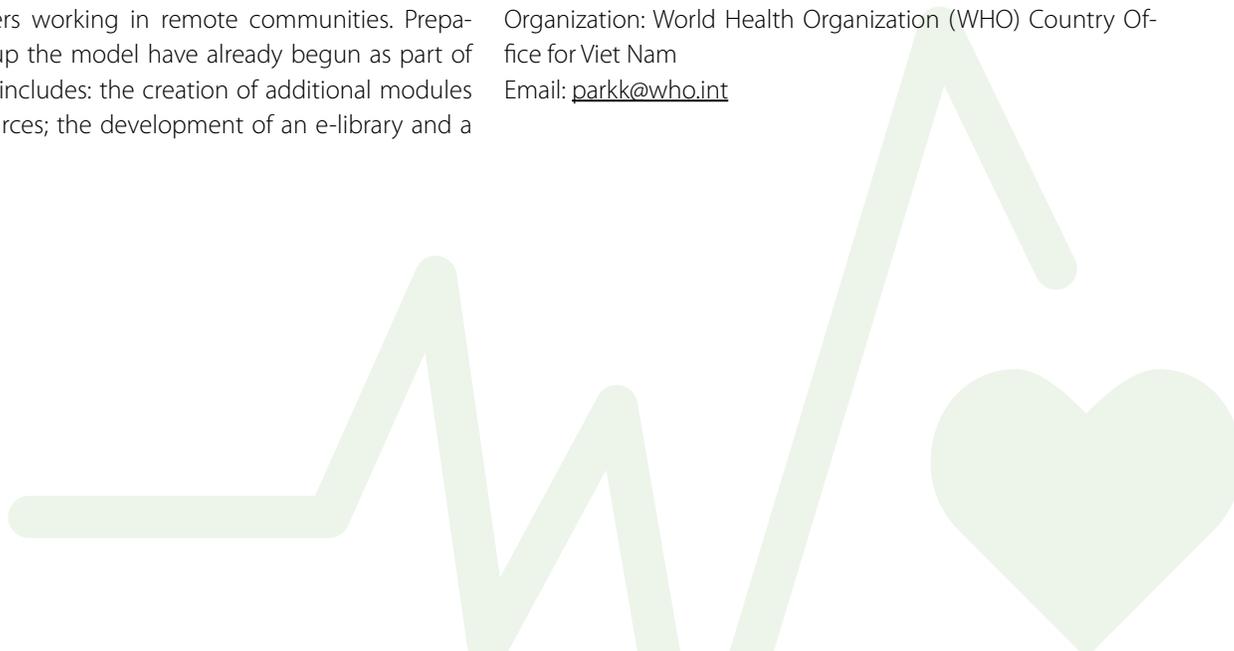
Contact:

Name: Dr Kidong Park

Title: Representative

Organization: World Health Organization (WHO) Country Office for Viet Nam

Email: parkk@who.int



PROJECT NAME: An Innovative e-Learning Approach for Health: A pre- and in-service training for the health workforce to improve coverage and quality of health services in the Northern Coastal Region of Viet Nam

COUNTRIES/REGIONS: Brazil, India, South Africa, Viet Nam

NOMINATED BY: United Nations Office for South-South cooperation (UNOSSC)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4, 3.8, 3.c

SUPPORTED BY: India, Brazil and South Africa Facility for Poverty and Hunger Alleviation (IBSA Fund) managed by UNOSSC and the World Health Organization (WHO) Country Office for Viet Nam

IMPLEMENTING ENTITIES: Hai Phong University of Medicine and Pharmacy through the Ministry of Health of Viet Nam

PROJECT STATUS: Completed

PROJECT PERIOD: 2015–2019

URL OF THE PRACTICE: <https://bit.ly/3lrX91B> (in Vietnamese); <https://bit.ly/2EHxEJ3> (in Vietnamese)

Scholarships for ASEAN Students from Cambodia, the Lao People's Democratic Republic and Myanmar

Addressing the gap in science, technology, engineering and mathematics (STEM) education

Challenge

Some countries in the Association of Southeast Asian Nations (ASEAN) have a low technological capacity and limited opportunities for advanced education and graduate studies in science, technology and innovation (STI). The ASEAN Secretariat notes that education, as a long-term investment, contributes towards skills formation, thus increasing the ability to work and to produce, which ultimately contributes to economic growth. In Cambodia, the Lao People's Democratic Republic and Myanmar (CLM), chronic underinvestment in education is an issue that has yet to be fully addressed. Since the global workforce is undergoing a shift from being labour-intensive to being more skills- and knowledge-based, the bar is higher for the skill sets to adapt to current innovative developments. The promotion of science, mathematics and engineering in the CLM region is vital in the region's socio-economic and human resource development to scale up the capacity of ASEAN as demanded by the contemporary needs of the ever-changing region.

Towards a Solution

This scholarship programme aims to share STI knowledge and skills through a degree program with CLM and other ASEAN Member States to contribute to the efforts in addressing the gap in science, technology, engineering, and mathematics (STEM) education. In addressing the above challenge, the Government of the Philippines, through the Department of Science and Technology (DOST), initiated a scholarship programme for MSc and PhD, to generate an advanced pool of CLM scientists and engineers who will be able to contribute to their respective country's development after they finish the programme. The objective is to promote human resource development in engineering and sciences for sustainable socio-economic development of the ASEAN region, particularly in CLM. This initiative contributes to Sustainable Development Goal (SDG) 4 (Quality education), targets 4.3 and 4.b, which place an emphasis on globally expanding the number of scholarships available to developing countries, in particular in engineering and scientific programmes, in developed and other developing countries.

More specifically, the project aims to:

- implement high-impact STI activities aligned with the ASEAN Plan of Action on Science, Technology and Innovation (APASTI) 2016–2025, the National Science and Technology Plan (NSTP) and the Philippine Development Plan (PDP);
- attain a critical mass of graduates with MSc and PhD degrees;
- upgrade the qualifications of practising engineers and scientists;
- upgrade the quality of science and technology research and make graduate education in the field accessible;
- develop a culture of research and development.

The initiative is also clearly aligned with SDG 17 (Partnerships for the goals), target 17.6, which aims to “enhance North-South, South-South and triangular regional and international cooperation on and access to STI and enhance knowledge-sharing on mutually agreed terms”.

The DOST of the Philippines initiated the scholarship programme by sending correspondence to the Philippine embassies in CLM for the dissemination of information and scholarship collaterals such

4 QUALITY EDUCATION



as invitations, brochures, and pamphlets, including its guidelines, to possible applicants. The embassies disseminated the call for scholarship applications through their local networks and through the local science and technology ministries. Applicants were requested to initially submit documents for review, after which successful applicants were interviewed by the DOST and staff at the local embassy. The active monitoring of the scholars' academic performance measures the effectiveness and quality of education received from Philippine universities, showing a successful transfer of knowledge and good practices to CLM. **The programme to date has supported a total of 25 students (14 MScs and four PhDs for Batch 1; and six MScs and one PhDs for Batch 2) who are pursuing degrees at Philippine universities in different fields of engineering, health, science and mathematics.**

As of 2020, in the programme consists of a total of 17 male and 11 female students. Eighteen Batch 1 students are in good standing status, i.e. they are able to maintain the academic requirements of the universities where they are enrolled. Batch 2 consists of ten students.

The students regularly report to the DOST-Science Education Institute (SEI). They are all provided with financial assistance in the form of a stipend, as well as a relocation, books and transportation allowances for their first academic year without any restrictions. The Batch 1 students are still attending their second year of studies and some are expected to graduate before the end of 2020.

DOST-Science Education Institute (SEI) support the students as follows:

- through regular visits or meetings at the universities, emails and phone calls;
- by immediately responding to their academic needs, such as endorsing the Project Leader of the university for temporary accommodation, enrolment, student visa processing and financial assistance;
- by providing regular academic guidance and advice.

The project is sustainable due to the continuous commitment for socio-economic development of the ASEAN region, particularly CLM. The ASEAN Committee on Science, Technology and Innovation (ASEAN COSTI) sectoral body has been prioritizing human capital development through the establishment of scholarship programmes, among others. The ASEAN COSTI developed a mechanism that supports similar current and future programmes that could be replicated by any interested ASEAN Member State and that may also be proposed to ASEAN Dialogue Partners. Progress is reported at the biannual regional meetings held by ASEAN COSTI.

The project may be replicated either through bilateral or triangular cooperation. In a bilateral cooperation, a country may offer scholarships to least developed countries, Small Island Developing States and African countries (such as in SDG 4.b). In a triangular cooperation, an international or regional organization may be the mediator, which would be similar to the role of ASEAN in this initiative.

This initiative can also be replicated in the form of short-term certificate or training courses. The focus of the project should be in the best interest of the countries involved, specifically in identifying the field of expertise that it aims to consider and the specific type of student, researcher and/or expert it targets. Finally, the scope of project shall also be aligned with SDG target 4.b, and must encourage the enrolment of women in the courses offered.

Contact:

Name: Dr Josette T. Biyo

Title: Director

Organization: Department of Science and Technology (DOST)– Science Education Institute

Email: bjvojsette@yahoo.com; copy to Ms Susana Esquivel esquivelsf@gmail.com

PROJECT NAME: Scholarships for ASEAN Students from Cambodia, the Lao People's Democratic Republic and Myanmar

COUNTRIES/REGIONS: Cambodia, Lao People's Democratic Republic, Myanmar, the Philippines

NOMINATED BY: Department of Science and Technology (DOST), Government of the Philippines

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.b, 17.6

SUPPORTED BY: DOST Philippines

IMPLEMENTING ENTITIES: DOST – Science Education Institute (DOST-SEI)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2021

URL OF THE PRACTICE: bit.ly/DOST-PH-CLMScholarship

Triangular Cooperation in Vocational Training among Morocco, Republic of Korea and Four African Countries

Providing training courses for government officials and technical instructors

Challenge

Cameroon, Côte d'Ivoire, Senegal and Tunisia are Southern countries equipped with a relatively basic infrastructure and industrial environments. They all have great national needs for strengthening the capacities of technical manpower in the automotive field, due to the industry's expected growth in the future. For example, in 2017, Côte d'Ivoire showed a high growth rate in its automotive market, with a 7 percent growth in new car sales. Its government has declared the advent of automobile assembly lines as a national project, which reveals great significant demands for building capacities of its technical manpower in the particular field.

Towards a Solution

This triangular cooperation project builds on the success of a previous project of the Korea International Cooperation Agency (KOICA), the 'Project for the establishment of the *Institut de Formation aux Métiers de l'Industrie Automobile de Casablanca* [Advanced Automobile Training Institute in Casablanca] (IFMIAC), implemented in cooperation with the Ministry of Employment and Vocational Training of Morocco. Since the foundation of IFMIAC in 2013, the institute has continued to show outstanding results, which has led to the establishment of this triangular project to respond to the great demand by other African countries to use IFMIAC as a benchmark. This triangular cooperation project targets youth from recipient countries to receive quality vocational training in the automotive industry (Sustainable Development Goal Target 4.4) and consequently produce quality manpower in the automotive industry of the recipient countries to help their industries and economy grow (Sustainable Development Goal Target 8.2).

The project comprises multi-year training, and is executed through triangular cooperation among the Republic of Korea, Morocco and four Africa countries (Cameroon, Côte d'Ivoire, Senegal, Tunisia). The project primarily aims to train government officials and technical instructors of the four recipient countries to help them establish action plans to develop vocational training in their automotive industry. The project includes two types of training courses. The first type aims to build the capacity of Moroccan officials and managers of IFMIAC to enable them to train the second type of training courses. The second type aims to reinforce the capacities of decision-makers and technical instructors from the four African countries.

From the planning phase, this project is designed by applying the 'Analysis-based Course Development (ABCD) methodology, which was developed by the Korean training agency, Korea Tech, in order to provide the exact type of training courses that best suits the demands of the recipient countries. The ABCD methodology deduces demand prior to designing the project based on policy analysis (i.e. analysing the recipient country's national growth strategy, strategies by area, systems and policies), situation analysis (i.e. analysing interior and exterior environments surrounding relevant areas) and field analysis (i.e. analysing current status and demands in relevant fields). It selects lecture topics, subjects and training targets, and designs courses that suit the topics and targets based on the findings.

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8 DECENT WORK AND ECONOMIC GROWTH



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Through this triangular cooperation initiative, in 2018, ten Moroccan IFMIAC officials were trained (ROK invitational course) and in 2019, 12 officials and policymakers from the four African countries were trained (Morocco invitational programme). In 2020, KOICA plans to carry out the remaining courses (the 3rd and 4th) via an online format taking into consideration the COVID-19 pandemic; 21 Moroccan IFMIAC officials will be trained in the 3rd course, but the number of trainees for the 4th course has not yet been decided. The levels of academic achievement and satisfaction of the trainees were very high; for the 2018–2019 training courses, survey results by participants showed a satisfaction rate of 90 out of 100, on average). Since this project is still in progress, and an evaluation has not yet been conducted, it is difficult to assess its actual impact at the current stage. However, as an immediate deliverable of the executed training courses, the trainees from Morocco and the four countries have concluded developing action plans and analyses in their respective countries. In order to encourage the subsequent implementation of these action plans in partner countries, KOICA will conduct a follow-up survey and monitor the status of implementation of these action plans until the end of the project year. KOICA will also conduct follow-up assessments with the Moroccan counterpart upon completion.

Through this project, opportunities among the participating countries have been enhanced to engage in self-motivated cooperation. As a result of this training, **Morocco's IFMIAC and Senegal's Institut Supérieur d'Enseignement Professionnel [Higher Institute of Vocational Education] (ISEP), estab-**

lished through KOICA's aid, signed a partnership agreement to promote training exchange activities to strengthen the capabilities of instructors, thus ensuring the sustainability of the project.

Since the foundation of IFMIAC, the Moroccan Ministry of Employment and Vocational Training expressed its willingness to continuously promote this triangular cooperation initiative, especially with French-speaking African countries. Through this project, KOICA intends to significantly contribute to improving Morocco's ability to serve as a leading nation in triangular cooperation, with its own perspective. Moreover, in order to continuously support Morocco's capacity in triangular cooperation for vocational training, KOICA plans to carry out the follow-up project, 'The Technical Enhancement Training Hub Center for Moroccan TVET Trainers Project' (2020–2024) (US\$6 million). This new project enables technical and vocational education and training (TVET) instructors and faculty to learn new technologies such as information and communications technology (ICT) and reinforce their practical capabilities. The triangular cooperation project will continue to be pursued at this training hub centre in order to cultivate the abilities and skills of the TVET trainers in neighbouring countries.

Contact:

Name: Ms Nami Kim

Title: Assistant Manager

Organization: Korea International Cooperation Agency (KOICA)

Email: nami.kim@koica.go.kr

PROJECT NAME: Triangular Cooperation among Morocco, Republic of Korea and four African countries in Vocational Training

COUNTRIES/REGIONS: Cameroon, Côte d'Ivoire, Morocco, Republic of Korea, Senegal, Tunisia

NOMINATED BY: Ministry of Foreign Affairs (MOFA) of the Republic of Korea

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.4, 8.2, 8.5, 8.6

SUPPORTED BY: Korea International Cooperation Agency (KOICA)

IMPLEMENTING ENTITIES: KOICA, Korea University of Technology and Education, Institut de Formation aux Métiers de l'Industrie Automobile de Casablanca (IFMIAC)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <https://bit.ly/3hCeJOi> ; <https://bit.ly/3loQLt>

Thai-Lao Development Cooperation Project on the Development of Vientiane Technical College

Building a strong and skilled labour market by establishing a quality skill development institution for the long-term economic and industrial development of the Lao People's Democratic Republic

Challenge

Similar to Thailand's experiences during the economic shift from agricultural-based development to an industrial-based economy in the 1960s, the Lao People's Democratic Republic chose to carry out structural changes in its labour market due to rapid economic growth deriving from the expansion of industrial and resource-based economic sector. In addition, in line with the Lao Government's policy on foreign investment promotion, it was pivotal that the Lao People's Democratic Republic had to develop its workforce to become a semi- to high-skilled workforce. Combined with the lack of quality education and school dropouts, the Lao People's Democratic Republic had to set up an effective Technical and Vocational Education Training (TVET) that would serve as an additional track that would provide a competent workforce for the growing economic and industrial development.

Towards a Solution

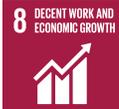
To address the above challenge, it is essential that the foundation for the TVET system is strengthened at the micro-level as a model for future replication in other institutions nationwide. In this regard, the Thailand International Cooperation Agency (TICA), in collaboration with the Office of the Vocational Education Commission, the Thai Ministry of Education and the Lao Ministry of Education and Sports, implemented a five year-development cooperation project, 'The Development of the Technical College of Vientiane Province', to serve as a model for a practice-oriented and comprehensive TVET institution that can produce skilled labour and a competent workforce. This will contribute to the Lao People's Democratic Republic's socio-economic development and productivity in required economic sectors and beyond.

Accordingly, in 1997, TICA, in collaboration with the Office of the Vocational Education Commission, the Thai Ministry of Education and the Lao Ministry of Education and Sports, initiated the first project on the development of TVET institutions at the Phonehong Technical School during the first phase of the project. This first phase focused on the improvement of facilities, curriculum development, equipment provision and capacity building for the respective executives from the Thai Ministry of Education and the Lao Ministry of Education and Sports on TVET policy planning, and for teachers and trainers on specific courses from the school.

Resulting from the success of the first phase, at least four syllabuses at the Phonehong Technical School were developed in collaboration between Thai educational experts and the Lao Ministry of Education and Sports; their curricula met the requirements of the Lao Ministry of Education and Sports, and the number of students attending the school was significantly increased from 1,500 to 3,001 in 2019. Therefore, the status of the school was upgraded to the Technical College of Vientiane Province in October 2010, becoming the first Technical College in the Lao People's Democratic Republic that provides extensive vocational and technical training programmes for students, not only locally but also nationwide.

The second phase of the project was designed to further develop in three main areas: (i) the improvement and construction of facilities within the College, including classrooms and workshops;

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(ii) the provision for necessary and adequate training equipment for practice-oriented vocational education; and (iii) capacity-building programmes for teachers and trainers at the college. Following satisfactory results from the first phase, Thailand and the Lao People's Democratic Republic closely designed activities focusing on specific courses that responded to the ongoing labour market demands, namely machinery, electrical engineering, construction, carpentry, tailoring, food and beverages, business administration, computer for business, general subjects and basic vocational training. In addition, the courses were improved to be better aligned with the national labour standards as well as ASEAN professional skill standards, and to serve the ongoing demands for labour in specific sectors in special economic zones in the Lao People's Democratic Republic. During this second phase, special attention was focused on curriculum design, the testing and assessment system, as well as methodology and pedagogy. In the second year of implementing the second phase, the focus was on upgrading and strengthening equipment and facilities in order to prepare for the growing number of students attending the College. **Since 1997 to date, there have been over 3,000 students attending, and over 10,000 graduates. Currently, the courses provided at the college cover extensive subjects including automotive technology, metal machinery, electro-electronics, welding, plumbing, heavy equipment and agro-machinery, leading to a diploma and higher degrees. It also offers short-term training courses.**

The project paves the way for the expansion of quality TVET institutions in the Lao People's Democratic Republic. In addition to the Technical College of Vientiane Province, polytechnic colleges in Savannakhet, Luang Prabang and Dongkhamxang were subsequently selected as three additional TVET institutions to be developed under this project. As a result of the

expansion of the project sites in other parts of the Lao People's Democratic Republic, there has been a significant impact in creating decent work and yielding sustainable and inclusive economic growth. This will help the Lao People's Democratic Republic achieve SDG 4 on quality education, and subsequently, SDG 8 on decent work and economic growth.

TICA realizes that the recognition of the importance of the implementation of the development project lies at the heart of its sustainability; therefore, from the start, inclusive and participatory cooperation has been incorporated as an integral part of the project. From the project design phase to the implementation, central government agencies of the Lao People's Democratic Republic and local authorities were actively involved and contributed as key players in designing, shaping and altering, when necessary, the project throughout the process. Additionally, the Project Steering Committee was set up with equal representation from both the Thai and Lao sides to provide a regular forum for close and open discussions on project design and its implementation. The Committee has ensured that the project would be of great benefit to the Lao People's Democratic Republic and will be most suitable and beneficial to the people and communities. Similar to all development cooperation projects implemented by the TICA, the project has been part of efforts to ensure that the SDGs are achieved through a strong, practical and sustainable partnership as stipulated in SDG 17 (Partnerships for the goals).

Contact:

Name: Ms Sayan Kongkoey

Title: Director, Thai Cooperation Branch I

Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs

Email: sa.kongkoey@mfa.mail.go.th

PROJECT NAME: Thai-Lao Development Cooperation Project on the Development of Vientiane Technical College

COUNTRIES/REGIONS: Lao People's Democratic Republic, Thailand

NOMINATED BY: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.4, 8.5, 8.6, 17.6, 17.9

SUPPORTED BY: TICA

IMPLEMENTING ENTITIES: TICA, Lao Ministry of Education and Sports

PROJECT STATUS: Completed

PROJECT PERIOD: 1997–2016

URL OF THE PRACTICE: Not available

COMSATS-ISESCO' National Training Workshops on Repair and Maintenance of Scientific Engineering Equipment in Universities, Research Institutions, and Small-Scale Industries

Promoting self-reliance for management and upkeep of technological resources in developing countries

Challenge

Scientific research and development activities are the most effective and sustainable tools in achieving long-term national economic growth. A large proportion of this research is customarily conducted in educational and industrial organizations. The pace of research, *inter alia*, depends on the availability of well-maintained scientific instruments. In developing countries, lack of planning in the purchase and management of inventories and severe shortage of technical expertise related to repair and maintenance of instruments and equipment greatly hamper the smooth progress of research programmes. The lack of maintenance facilities results in the discarding of a large number of very expensive instruments and equipment. These losses can be averted by spending a fraction of money on the effective and preventive repair and maintenance processes. There is a great need, therefore, to develop local capacities to repair and maintain the scientific equipment in developing countries in order to ensure uninterrupted research work.

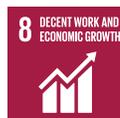
Towards a Solution

In recognition of the importance of the issue and to enable their common member countries to achieve technological self-reliance in the repair and maintenance of scientific equipment and to reduce the technological dependence on foreign experts, the Commission on Science and Technology for Sustainable Development in the South (COMSATS) and the Islamic Educational, Scientific and Cultural Organization (ISESCO) initiated a series of national workshops in 2004. These workshops are intended to highlight the issues/problems related to the maintenance of scientific engineering equipment used in universities, research institutions, hospitals, and small-scale industries. COMSATS, keeping in mind the needs of the host country, engaged two experts from Pakistan and provided hands-on training to the workshop participants for upgrading their skills and enhancing their capacities in repairing, maintaining and troubleshooting important scientific engineering equipment in their organizations.

The main goal of the workshop series is to train master trainers for developing sustainable infrastructure by relying on skilled human resources specialized in scientific engineering equipment, especially their repair and maintenance. The objectives are to:

- demonstrate the process of repairing defective instruments by the experts;
- provide hands-on training to participants for improving their skills for independently maintaining and repairing;
- update participants' knowledge on the latest techniques involved in the operation of scientific instruments;
- acquaint participants with the functioning of scientific instruments through needs-based training, as well as documentation of the repair and maintenance activities;
- update the trainees' knowledge on changing and new technologies in scientific equipment;
- consolidate the technical skills and understanding of local users or engineers in order to communicate with the manufacturer or principal for troubleshooting critical problems;
- develop a platform for information exchange among scientists, engineers, teachers, service techni-

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cians, operators and industrialists for updating their existing technical skills and knowledge base.

The series of workshops aimed to provide a forum to the young scientists/professionals from the developing countries to learn about the latest maintenance techniques.

Each workshop is designed for five days and includes presentations, distribution of training manuals and hands-on training sessions in the laboratories under the supervision of experts and application of learned techniques on the available faulty equipment.

- The list of equipment is identified by the host country. Faulty scientific instruments can also be repaired by the participants under the guidance of the resource persons during the workshop.
- On the basis of equipment identified by the host country, COMSATS engages resource persons/field experts who impart hands-on training to the workshop participants for upgrading their skills and enhancing their capacities in repairing, maintaining and troubleshooting.
- The beneficiaries of these workshops include researchers, engineers, technicians and teachers working at universities, research and development institutes/hospitals and small-scale industries.
- The desirable number of participants is around 30-40 from universities, research and development institutes and hospitals as well as industry.
- The host institute selects a laboratory for this workshop and the list of instruments for training.
- An agreement is signed between COMSATS, ISESCO and the host institute to identify the role of partner organizations in organizing the training workshop.
- The training includes theoretical, hands-on training and implementation on available, faulty machines.

These workshops, which are free of cost to participants, were organized in the common Member States of COMSATS and ISESCO. Over 450 scientists, researchers, engineers, technicians,

teachers, students, and representatives of government ministries, agencies, academia and research institutes have benefited from them. To date, 13 workshops have been organized in ten developing countries: Kazakhstan (2017), Nigeria (2016), Oman (2015), Iran (2014), Sudan (2004 and 2013), Tunisia (2012), Egypt (2011), Senegal (2010) and Syrian Arab Republic (2005). COMSATS also independently held two workshops on the theme in Ghana during 2013 and 2015. **They built their expertise and capacity to locally repair and maintain scientific instruments used in the laboratories of research and development institutions as well as small-scale industries in their respective countries.** Additionally, scientific equipment worth millions of US dollars were repaired and made functional for optimum and effective use due to these training workshops.

Thus, the workshops have provided a platform for the systematic and cross-country transfer of information, knowledge and good practices.

Sustainability is ensured by training participants to become master trainers. Since the establishment of this initiative in 2004, which was held in Sudan, the workshop has been held in ten developing countries with course content and training manuals updated and adapted to the host countries' needs.

Contact:

Name: Mr Tajammul Hussain
Title: Advisor (Programmes)
Organization: Commission on Science and Technology for Sustainable Development in the South (COMSATS)
Email: tajammul@comsats.org
Tel: +92-51-9204892

Name: Mr Nisar Ahmad
Title: Deputy Director (Systems)
Organization: COMSATS
Email: nisar@comsats.org
Tel: +92 51 9214505

PROJECT NAME: COMSATS- ISESCO' National Training Workshops on Repair and Maintenance of Scientific Engineering Equipment in Universities, Research Institutions, and Small-Scale Industries
COUNTRIES/REGIONS: Egypt, Ghana, Iran, Kazakhstan, Nigeria, Oman, Senegal, Sudan, Syrian Arab Republic, Tunisia
NOMINATED BY: Commission on Science and Technology for Sustainable Development in the South (COMSATS)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.4, 8.2, 9.1, 9.a, 12.a, 17.6, 17.9
SUPPORTED BY: COMSATS, Islamic World Educational, Scientific and Cultural Organization (ISESCO)
IMPLEMENTING ENTITIES: COMSATS, ISESCO
PROJECT STATUS: Completed
PROJECT PERIOD: 2004–2017
URL OF THE PRACTICE: <http://comsats.org>

The ICGEB Fellowship Programme for Short- and Long-term PhD and Postdoctoral Studies

Supporting South-South cooperation for human capital development

Challenge

Research and innovation capabilities and infrastructures in the Global South are far from being fully optimized. This is due to several factors, from scarce domestic and international funding, low capacity, poor governance, and a shortage of women in science, to weak links between industry and academia. Laboratories are often poorly equipped or totally inexistent, and science students receive minimal practical research training because the few research centres that do exist are usually separate from universities. Southern countries request support for scientific research and human capital development in the field of biotechnology – applied to health, agriculture and clean energy – in order to respond to major, current societal challenges such as food security, infectious and non-communicable diseases, and climate change. Inclusive higher education and post-university trainings are considered key factors in addressing these fields, with a positive spill-over effect for all levels of the society, for the economy, and in contributing effectively to sustainable development.

Towards a Solution

The ICGEB Fellowships Programme tackle Sustainable Development Goal (SDG) 4 (Quality education) directly by expanding the availability of scholarships for higher education, with a focus on students and young scientists from ICGEB Member States, the vast majority of which are in the Global South, including from many least developed countries (LDCs); the Programme has been developed with a strong focus on inclusivity and gender equality (to date, 59 percent are female fellows).

Through this Programme, the ICGEB has been developing human capacity in scientific research in the Life Sciences for over 30 years. The Fellowship Programme has three main components:

- a three-year PhD course, in one of the ICGEB's laboratories in Italy, India or South Africa, which includes intensive training in laboratory research to gain a PhD degree certified through specific agreements with internationally renowned universities.
- A two-year Postdoctoral Fellowships for novel and innovative research to be performed in one of the ICGEB laboratories, or in a recognized laboratory in an ICGEB Member State.
- the ICGEB Scientific Mobility for Advanced Research Training (SMART) Short-term Fellowships, of three to nine months, intended for young scientists from countries of the South to carry out research in top-class laboratories in other countries in the South, which would otherwise be impossible in their home institutes.

The Programme has proved instrumental in enhancing capacities and helping young researchers acquire specific, theoretical and hands-on research skills in new technologies that are available in the host laboratory, as well as improving their scientific network and collaborations, and it has increased the internationalization of the laboratories in the ICGEB constituency.

Successful scientific research is a collaborative endeavour, and as a result of these ICGEB Fellowships, a strong community of ICGEB alumni across many countries in the Global South has been established, capable of building strong transnational scientific collaborations.

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17 PARTNERSHIPS FOR THE GOALS



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The ICGEB Fellows are direct beneficiaries of the Fellowship Programme, receiving advanced training in the fields of biomedicine, biotechnology and plant biotechnology, consequently enhancing their career prospects. The wider scientific communities within the Fellows' home countries and geographical regions benefit indirectly from enhanced human capital and brain-drain reversal when the Fellows return to their country of origin, with an enhanced national innovation potential adapted to the local needs. In the long term, the Programme contributes to inspiring future domestic and regional research leadership, creating employment, establishing a network of highly qualified researchers and, ultimately, contributing to the wellbeing, peace and security of the citizens in the Global South.

In 2019 alone the programme facilitated South-South exchanges and cooperation by supporting a number of 182 Fellows in the ICGEB laboratories: 25 from Africa, 138 from Asia, 16 from South and Central America, and three from the Middle East. With regard to Scientific Mobility for Advanced Research Training (SMART) Fellowship, since its inception in 2014, a total of 28 fellowships were awarded to young researchers from all continents. In 2019, six new SMART fellowships (four female fellows) were awarded: three at the PhD level and three at the Postdoc level, specifically, students moved from Brazil to Uruguay, from Algeria to Croatia, from Syrian Arab Republic to Pakistan, from India to China, from Syrian Arab Republic to India, and from Morocco to Tunisia.

The direct beneficiaries of the ICGEB Fellowship Programme - the scientists and their institutes – develop their scientific skills and become scientific leaders, teachers and mentors in their respective countries; sustainability is ensured since during and after their Fellowship they form, and continue to build, international links and networks. Their membership of the ICGEB Alumni group, their collaborations with ICGEB Principal Investigators, and their increased level of international exposure and scientific networking increases their opportunities for wider collaboration.

The initiative is scalable and replicable in other countries in the Global South, since the ICGEB has a strong scientific network worldwide and its Programme management structure has been working effectively for decades. The model of ICGEB's standard procedures and infrastructure, which have a reputation for neutrality, integrity and transparency, are easily reproduced.

Contact:

Name: Ms Marianna Maculan

Title: Chief, External Relations

Organization: International Centre for Genetic Engineering and Biotechnology

Email: maculan@icgeb.org

Tel: +39 040 3757216

PROJECT NAME: ICGEB in support of South-South cooperation for human capital development

COUNTRIES/REGIONS: Afghanistan, Algeria, Argentina, Bangladesh, Bhutan, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Costa Rica, Côte D'Ivoire, Croatia, Cuba, Ecuador, Egypt, Eritrea, Ethiopia, Hungary, India, Iraq, Islamic Republic of Iran, Italy, Jordan, Kenya, Kuwait, Kyrgyzstan, Liberia, Libya, Malaysia, Mauritius, Mexico, Moldova, Montenegro, Morocco, Namibia, Nigeria, North Macedonia, Pakistan, Panama, Peru, Qatar, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Syrian Arab Republic, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Venezuela, Viet Nam, Zimbabwe

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.5, 4.b, 17.9

SUPPORTED BY: ICGEB, China, India, Italy, South Africa,

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Seven Programmes – all ongoing

PROJECT PERIOD: Bi-annual calls ongoing since 1987 (the Programme will run as long as the institution is operational)

URL OF THE PRACTICE: www.icgeb.org/activities/fellowship

The Vocational Education and Training Programme for the Member States of the Organization of Islamic Cooperation (OIC)

Strengthening cooperation among the OIC Member States to enhance the quality of technical and vocational education and training systems

Challenge

Technical and vocational education and training (TVET) is considered an integral part of skills development globally. It is also viewed as an essential element of socio-economic development of countries because of its positive impacts on employment, entrepreneurship, poverty alleviation and reduction. However, some common challenges hamper the development of the TVET sector in the Member States of the Organization of Islamic Cooperation (OIC), which negatively affect the performance of the vocational education systems and practices across the OIC region. These challenges include: the lack of accurate national legislative and regulatory frameworks; the lack of access to vocational education by vulnerable groups; the shortage of qualified TVET instructors; the lack of funding; and the mismatch between TVET education and the skills needed for the labour market.

Towards a Solution

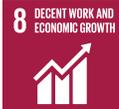
In 2009, the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) launched the Vocational Education and Training Programme for the Member States of the Organization of Islamic Cooperation (OIC-VET) Programme to support and supplement the efforts of the OIC Member States in addressing the challenges faced in the area of TVET. The programme was designed to scale up South-South and Triangular Cooperation (SSC and TrC), and knowledge exchange through innovative and holistic approaches among the relevant national TVET authorities of the Member States. The programme embraces the fundamentals of SSC such as mutual understanding, exchange of expertise and experiences, peer-to-peer learning and capacity development.

SESRIC, as the executing body of the OIC-VET, plays the role of catalyst by bringing together the OIC Member States, which offer wide-ranging development solutions, with a view to strengthening the cooperation among them in TVET. Collaboration between the National Focal Points (NFPs), represented by national TVET authorities in each OIC Member State is considered the anchor point of this country-driven innovative programme. Moreover, regularly held meetings of NFP representatives with relevant stakeholders help the Member States to identify their evolving challenges and offer them innovative solutions.

Concerning the implementation of its activities, the OIC-VET Programme employs several different modalities and tools that are based on the knowledge exchange approach, which include but are not limited to workshops, training of trainers (ToT), working group discussions, study visits and training courses. All of these help facilitate the sharing and acquisition of experiences, know-how, skills and new practices among the Member States.

Fifty-seven OIC Member States are considered a heterogeneous group of countries because of their diversity in terms of resources and development levels, some of whom rank among the least developed countries (LDCs). This situation offers considerable potential and opportunities for OIC Member States to benefit from each other's knowledge and experiences through intra-OIC cooperation in ways that have proven cost-effective and efficient. In this regard, the OIC-VET Programme, through its various modalities of implementation, strives to develop fruitful bilateral and multilateral cooperation between the OIC Member States.

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Since the key purpose of TVET systems is to prepare youth and vulnerable groups for employment by developing practical and technical skills for a wide variety of jobs, the programme is considered a cross-cutting platform that contributes directly to the achievement of SDGs 4 (Quality education), 8 (Decent work and economic growth) and 17 (Partnerships for the goals).

Within the framework of the OIC-VET Programme, 29 activities have been implemented in different OIC regions covering various fields, through *inter alia*, two workshops, 11 training of trainers (ToT) courses, four study visits, six monitoring and advisory committee meetings, four working groups, two seminars and international symposiums for more than 60 TVET instructors, and 250 representatives of the OIC national TVET Institutions. **The implemented activities have played an important role in youth and women's empowerment. In addition, the development of the knowledge and competency of TVET instructors plays a crucial role in improving the quality of the TVET systems in their respective countries.**

As of 2015, in light of the 2030 Agenda for Sustainable Development Goals and the OIC 2025 Programme of Action, the OIC-VET has evolved into a new phase with a view to exploring innovative ways and means for reinforcing and developing further the overall quality and impact of the programme.

To assess the current needs of technical and vocational education systems in the OIC Member States, SESRIC, in cooperation with six international institutions and 24 OIC Member States, took the initiative to develop the OIC-TVET Strategic Roadmap 2020–2025. In this process, relevant OIC institutions and United Nations agencies had significant roles in supporting the OIC-VET with their valuable inputs, which illustrated effective SSC and TrC among all stakeholders working hand in hand for the success and sustainability of this good practice. These institutions and agencies include the Islamic Centre for Development of Trade (ICDT), the Islamic Educational, Scientific and Cultural Organization (ISESCO), the Islamic Development Bank (IsDB), the Islamic University of Technology (IUT), the UNDP Istanbul International Center for Private Sector in Development (UNDP IICPSD) and the International Labour Organization (ILO)-Turkey.

The OIC-TVET Strategic Roadmap 2020–2025 aims to improve the quality and performance of TVET programmes by proposing a series of alternative ways and means to improve TVET practices in the Member States based on best practices and knowledge that have been proven globally. Four cooperation areas have been identified, and an implementation plan was established under the following fields: Legislative Framework, Governance and Promotion; TVET Teacher Education; Occupational Standards and Qualification and Quality Assurance System; and Certification and Modular Training Programmes.

Within the framework of the Roadmap, which was endorsed by the 35th Ministerial Session of the Economic and Commercial Cooperation of the Organization of the Islamic Cooperation (COMCEC) held in December 2019, 55 demand-driven activities were planned to be implemented in partnership with the national authorities in charge of TVET in the OIC Member States, relevant OIC institutions and key stakeholders over the next five years.

Contact:

Name: Mr Onur Caglar
Title: Acting Director of Training and Technical Cooperation Department
Organization: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)
Email: ocaglar@sesric.org

Name: Ms Esmâ Demirtas
Title: Project Officer at Training and Technical Cooperation Department
Organization: SESRIC
Email: edemirtas@sesric.org

Name: Ms Semiha Abdullah Inan
Title: Assistant Project Officer at Training and Technical Cooperation Department
Organization: SESRIC
Email: sainan@sesric.org

PROJECT NAME: The Vocational Education and Training Programme for the Member States of the Organization of Islamic Cooperation (OIC)

COUNTRIES/REGIONS: 57 OIC Member States

NOMINATED BY: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.4, 4.5, 8.6, 17.9, 17.15, 17.16

SUPPORTED BY: OIC Member States, OIC General Secretariat, the Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation (COMCEC)

IMPLEMENTING ENTITIES: SESRIC

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2009 – ongoing

URL OF THE PRACTICE: www.oicvet.org

Development and Delivery of Civil Aviation Authority Senior and Middle Managers Training Course

Enhancing the competency of civil aviation managers in support of the International Civil Aviation Organization's 'No Country Left Behind' Initiative and 2030 Agenda for Sustainable Development

Challenge

While sustainable transport and aviation do not have a stand-alone Sustainable Development Goal (SDG), they are both essential enablers of sustainable development. Aviation offers the most rapid global transportation network ever, connecting people, communities and businesses across the globe. As such, it has transformed into an economic engine allowing global socio-economic prosperity. The International Civil Aviation Organization (ICAO) is a United Nations' Specialized Agency that sets the Standards and Recommended Practices (SARPs) so that international civil aviation is safe, secure, efficient and environmentally responsible on a global basis. ICAO is the primary forum for cooperation in all fields of civil aviation among its 193 Member States. According to various analysis performed before initiation of the project, many States were experiencing challenges with the implementation of SARPs, thus leading to a situation that is far from optimal for durable air transport and the achievement of the 2030 Agenda for Sustainable Development.

Towards a Solution

Achieving worldwide implementation of SARPs is contingent upon the competency of the Civil Aviation Authority (CAA) managers to implement them in their respective states. To support states in increasing effective implementation rates of ICAO SARPs, it is crucial to provide adequate management and technical training to middle and senior managers of the CAAs who manage and oversee the implementation of SARPs, related to the areas of safety, air navigation, aerodromes, air transport, environment and other core disciplines of the air transport system. To address these challenges, a dedicated project was initiated to develop and deliver training aimed at senior and middle managers of CAAs, funded by the China South-South Cooperation Assistance Fund (SCCAF), to enable them to effectively plan, manage and assess the implementation of ICAO SARPs in their States. This was the first-ever training of this sort.

To this aim, a brand-new ICAO Training Package (ITP), the 'Senior and Middle Managers Training Course: Managing Compliance with ICAO SARPs' was developed. This new ITP directly supported the goals of ICAO's 'No Country Left Behind' capacity-building initiative and contributed to the achievement of the SDGs. This training package was further translated into Arabic, Chinese, French, Russian and Spanish, benefitting its global delivery.

In the project's implementation phase, 865 nominees from 124 States were awarded scholarships to attend 38 global sessions organized from July 2018 to October 2019. With the exception of New Zealand, all the participants in the training were from developing countries, i.e. 123 out of 124 States Scholarships covered tuition and meals for local participants, as well as accommodations, airfare and ground transportation for participants attending from neighbouring States. The development of the course, its delivery, and provision of scholarships were enabled by the fund provided through China SCCAF.

Upon completion of the course, participants were able to accomplish the following: (i) work with other CAA managers as a team to plan, manage and assess the implementation of ICAO SARPs; (ii) use relevant ICAO documentation, processes, tools and techniques to implement ICAO SARPs in their

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States; and (iii) apply their knowledge to assist their national administration in improving implementation of ICAO SARPs.

The project completed its planned strategies and missions and achieved its objectives. **This led to greater aviation capacity building, enhanced civil aviation safety and security oversight capabilities, and met the increasing needs for aviation managers and professionals.** The course is now widely accepted by civil aviation regulators, airports, airlines and air navigation service providers, and ICAO has been requested to hold additional deliveries.

Upon the completion of the project, the developed ITP was incorporated into ICAO's training course portfolio. It is now available to be hosted by ICAO Member States as well as ICAO's network of over 100 ICAO-recognized training centres around the world, also known as 'TPP Members', which ensures the sustainability of the project and safeguards results achieved.

In terms of donor relations, the project exceeded all of its three predefined key performance indicators: the number of participants, the number of training sessions, and the number of recipient States. As a result of the strengthened donor relations, China has approved another project for the development and delivery of a new course on Civil Aviation Master Planning.

The project supported the achievement of a number of Sustainable Development Goals (SDGs), including SDG 1 (No poverty) and SDG 8 (Decent work and economic growth), by providing more employment opportunities and improving the livelihoods of workers due to safer and more efficient air

transport systems. This also greatly contributed to increasing the connectivity and integration of regional markets into international ones by facilitating trade and tourism. The project led to improving the sector's performance and support of food security by improving accessibility and movement of food and perishable agricultural products, medical supplies and commodities, which are especially important in times of crises, hence supporting SDGs 2 (Zero hunger) and 3 (Good health and well-being). Providing such training to CAAs management also directly supported SDG 4 (Quality education) aiming at the training and empowering of skilled professionals and experts. The project directly contributed to SDG 9 (Industry, innovation and infrastructure) since development projects and improvement of airport and air navigation infrastructure are essential to reach a better implementation of ICAO SARPs. Finally, the project is a good example of SDG 17 (Partnerships for the goals) since it brings together different sectors of the economy in cooperating to achieve the 2030 Agenda.

Contact:

Name: Ms Thilly De Bodt
Title: Acting Head, Strategic Planning, Coordination and Partnerships
Organization: International Civil Aviation Organization (ICAO)
Email: Tdebodt@icao.int

Name: Mr Mekki Lahlou
Title: TRAINAIR PLUS Programme Coordinator, Global Aviation Training Office
Organization: ICAO
Email: MLahlou@icao.int

PROJECT NAME: Development and Delivery of Civil Aviation Authority Senior and Middle Managers Training Course
COUNTRIES/REGIONS: Global
NOMINATED BY: International Civil Aviation Organization (ICAO)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 1.5, 1.a, 2.4, 2.c, 3.d, 4.4, 4.b, 8.1, 8.2, 8.3, 8.9, 9.1, 9.4, 9.5, 9.a, 17.3, 17.6, 17.9
SUPPORTED BY: Ministry of Commerce of the People's Republic of China (MOFCOM), China Aid
IMPLEMENTING ENTITIES: ICAO Global Aviation Training (GAT) Office
PROJECT STATUS: Completed
PROJECT PERIOD: 2017–2019
URL OF THE PRACTICE: <https://bit.ly/32uPMY4>

Sustainable Development Goal 4 and Social Inclusion through South-South and Triangular Cooperation in Zimbabwe

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Making free basic education a reality in Zimbabwe – Key lessons from the South

Challenge

The Parliament of Zimbabwe approved the Education Amendment Bill in August 2019, which was subsequently signed into law by the President of the Republic of Zimbabwe on 6 March 2020. The Act now contains a wide range of reforms to the education sector, mostly with provisions aligning to the new Constitution, and to the provisions of the Convention on the Rights of the Child (UNCRC). Some of the key changes introduced are the provision of free basic education for all children, from early childhood development (ECD) to primary and secondary level, and free sanitary wear for all schoolgirls from grade five to six. Despite having implemented similar programmes in the 1980s, considering the current environment and how events have evolved since then, nationally and globally, the Government of Zimbabwe faced yet another hurdle in how to implement and finance the free basic education and sanitary wear programmes. Rolling out the programmes requires careful planning and setting up a sustainable financing framework to ensure maximum and long-lasting benefits to children. It was thus necessary for Zimbabwe to learn from other countries in similar contexts about how they are implementing and financing the key provisions on free basic education.

Towards a Solution

Following the approval by Parliament of the Education Amendment Bill, the United Nations Children's Education Fund (UNICEF) Zimbabwe Country Office facilitated and financed two exchange visits to Zambia and Kenya for members of the Parliamentary Portfolio Committee on Primary and Secondary Education, over the periods 13–18 October 2019 and 20–25 October 2019, respectively. These visits were carried out within the framework of the regional South-South cooperation initiatives as espoused in the New Partnership for Africa's Development (NEPAD) and African Union strategic frameworks that promote development through peer-to-peer learning. Eight parliamentarians were accompanied by a representative from the Ministry of Primary and Secondary Education for each visit, together with UNICEF Education and Social Policy staff. Kenya and Zambia adopted free basic education years ago, and the Parliament of Zimbabwe found it beneficial to visit the two countries and learn from their experiences in rolling-out and implementing the free basic education programme. The ultimate objective of the exchange was to create a platform where parliamentarians from each country, given their oversight of government programmes, could interact and share knowledge and experiences aimed at improving social development programmes within the region, such as the free basic education programme.

Since Zimbabwe was one of the few countries left to implement free basic education within the Southern African Development Community (SADC) region, the exchange visits provided significant insights on how other countries have rolled-out their programmes, the challenges they faced, the associated risks and mitigation measures they introduced, as well as the opportunities that could arise to further enhance the achievement of children's results.

Through lessons learned and insights from the exchange visits, the Parliament of Zimbabwe successfully advocated for its roll-out, even before the President had assented to the Bill. **As a result, the 2020 national budget set aside ZWL\$400 million (US\$23 million) for the free basic education,**



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and ZWL\$200 million (US\$12 million) for the provision of free sanitary wear. Furthermore, the exchange visits also sparked debates on the sustainability of the programme, including capacity strengthening of the responsible ministry(ies) and the establishment of the Education Fund that will finance the programme, as informed by regional best practices.

One key lesson from the two exchange visits was that regional flagship programmes are important for sharing learning and creating incentives towards greater efforts towards achieving the Sustainable Development Goals (SDGs) and Agenda 2063. The smooth implementation, standardization and sustainability of programmes can be realized through interventions such as the free basic education programme and peer review mechanisms between and among countries, as well as the enhancement of monitoring and oversight by parliamentarians. One of the key lessons learned from these visits as Zimbabwe begins to implement the Education Act is to ensure that proper steps are taken to avoid sudden disruptions to the education system, possibly by making free basic education access a gradual rather than an instant target. One of the agreed initiatives is to put in place well-structured peer review

mechanisms. These could take the form of technical review teams drawn from the various parliaments in the region. For instance, there could be technical review teams for education, healthcare, water, sanitation and hygiene (WASH) and social protection programmes. Findings from these reviews could then be used as a basis to improve programmes and other regional South-South and triangular cooperation initiatives. This will go far in ensuring that initiatives within countries are well focused and are addressing common regional challenges. As a result, this will allow the region to move at a more or less similar pace towards the achievement of the SDGs.

Contact:

Name: Mr Tawanda Chinembiri

Title: Chief of Social Policy and Research

Organization: United Nations Children's Fund (UNICEF) Zimbabwe

Email: tchinembiri@unicef.org

Name: Mr K.M. Chokuda

Title: Clerk

Organization: Parliament of Zimbabwe

Email: clerk@parlzim.gov.zw

PROJECT NAME: Parliament and Public Finance Programme

COUNTRIES/REGIONS: Kenya, Zambia, Zimbabwe

NOMINATED BY: United Nations Children's Fund (UNICEF)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.1, 4.2

SUPPORTED BY: UNICEF Zimbabwe

IMPLEMENTING ENTITIES: Parliament of Zimbabwe, Ministry of Primary and Secondary Education, Ministry of Finance and Economic Development

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: Not available

Strengthening STEM Curricula for Girls in Africa, Asia and the Pacific

Encouraging female participation in science, technology, engineering and mathematics

Challenge

Across the world, women are undeniably more likely than men to be uneducated or undereducated, and statistics show particularly low levels of participation for girls in science, technology, engineering and mathematics (STEM) throughout all levels of schooling. Despite decades of development interventions that focus on science and technology, the gender gap continues to widen in STEM fields. Country interventions focusing on curricular reforms that emphasize the practical, social, environmental and global objectives of STEM, in addition to the technical aspects, have demonstrated positive effects on female participation. These approaches alter pedagogy to allow for hands-on engagement, self-learning and collaboration and offer varied examples across gender, race, culture and class lines.

Acquiring knowledge about STEM is not only a basic human right; it is also a critical condition for sustainable development and participatory citizenship, and for providing skills for the future of work. Women's engagement in science and technology stimulates innovation and benefits their domestic and community work in agriculture, cooking, clean water, sanitation and healthcare. Nevertheless, statistics show relatively low levels of female participation in STEM in schooling and employment across the world. Women make up 33 percent of researchers in Africa and 18 percent in Asia and the Pacific. Given these statistics, the success of Malaysia is salient. Women constitute over half of the student population studying technology in higher education and a greater percentage in the professional information and communications technology (ICT) sector.

Towards a Solution

The project entitled 'Strengthening STEM Curricula for Girls in Africa, Asia and Pacific' aimed to increase female knowledge and engagement in STEM education by strengthening its gender responsiveness. The project united four participating countries from Africa (Kenya and Nigeria) and Asia and the Pacific (Cambodia and Viet Nam). Malaysian expertise and experience were essential to developing and strengthening existing STEM policies, curricula and pedagogy within these countries. The project intended to foster and build the institutional capacities of various ministers, decision makers, curriculum developers, planners and educators, with a view to designing and implementing gender-responsive, quality STEM curricula across the education system within a holistic vision.

Within this project, 11 activities were organized in collaboration with a number of local and international partners. Key components included a needs assessment workshop, in-country activities (policy dialogue, capacity-building trainings, working sessions, consultation meetings), a capacity development workshop and the development of training tools.

This initiative made crucial contributions to the Sustainable Development Goals and the Education 2030 Agenda in ensuring inclusive and equitable quality education and promoting lifelong learning for all.

The implementation of the first phase was planned in collaboration with the Ministry of Education (MoE) of Malaysia; the Southeast Asian Ministers of Education Organisation Regional Centre for Edu-

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cation in Science and Mathematics, under the Regional Centre for Education in Science and Mathematics (SEAMEO-RECSAM); and the United Nations Educational, Scientific and Cultural Organisation (UNESCO) offices in Bangkok, Nairobi, Ha Noi and Phnom Penh. This collaboration was indispensable in connecting various experts to ensure the project's impact and sustainability. Two activities were held for the entire group: a needs assessment workshop and a capacity development workshop. Drawing from Malaysian expertise and experience, country teams could contextualize their situation and suggest practical training tools to promote gender-responsive STEM education in their country.

As a result of these two activities, the International Bureau of Education (IBE) delivered two knowledge products: *Sharing Malaysian experience in participation of girls in STEM education* and *Training Tools for Curriculum Development: A Resource Pack for Gender-Responsive STEM Education*. These two documents were later used as key training tools for the capacity development workshop and in engaging with other countries' activities. By uniting their strengths, these countries were able to conduct a more specific analysis to overcome challenges.

Both workshops were organized by MoE Malaysia, SEAMEO-RECSAM and IBE. Workshops involved various experts from the beneficiary countries, as well as Cameroon, Malaysia and UNESCO Bangkok. Experts in international curriculum and gender also attended. With their help, each country team produced a national STEM situational analysis and a road map for in-country interventions.

As a result of these activities, each participating country identified its gaps in mainstream, gender-responsive STEM

education. Once needs and priorities were defined, a combination of policy dialogue and capacity development workshops were held. A resource pack for gender-responsive STEM education was also produced to help develop adequate tools to implement modifications. It is structured around six modules: policy, curricula, pedagogy, teachers teaching and learning resources, and community issues. Participating countries made noticeable progress in that regard.

Given the progress made, IBE requested an 8-month, no-cost extension in order to ensure the project's implementation and expected outcomes, which the donor approved. In addition, Viet Nam replaced Indonesia as a beneficiary country. The partnerships between countries and experts further ensured the project's impact, sustainability and monitoring.

The degree of commitment that each country made to gender-responsive STEM education depended on its national aspirations and educational plan, as well as its socio-political status. In order to help countries identify the gender gap in STEM fields, they may request and participate in policy and technical dialogues and capacity development trainings to re-assess their educational policies, curricula, pedagogy, teacher education and professional development.

Contact:

Organization: United Nations Educational, Scientific and Cultural Organization (UNESCO) Jakarta
Email: jakarta@unesco.org

PROJECT NAME: Strengthening STEM Curricula for Girls in Africa, Asia and the Pacific
COUNTRIES/REGIONS: Cambodia, Cameroon, Kenya, Malaysia, Nigeria, Viet Nam
NOMINATED BY: United Nations Educational, Scientific and Cultural Organization (UNESCO)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.4, 4.5, 4.7, 5.5, 5.b
SUPPORTED BY: Malaysia Funds-in-Trust
IMPLEMENTING ENTITIES: UNESCO
PROJECT STATUS: Completed
PROJECT PERIOD: 2014–2017
URL OF THE PRACTICE: <https://bit.ly/3jrZ7qZ>

The 'Our Rights, Our Lives, Our Future (O3) Programme':

The largest comprehensive sexual education programme in Africa

Challenge

Sub-Saharan Africa is home to 158 million youth between the ages of 15 and 24, a figure expected to rise to 281 million by 2050. This demographic dividend represents tremendous potential, but risks being derailed if the barriers to young people's health and education, including HIV, sexual and gender-based violence, adolescent pregnancy and child marriage are not addressed. Africa's female youth face a disproportionately high risk of HIV infection. Three out of four new HIV infections among those aged 15–19 are among young women, and seven out of ten young women do not have comprehensive HIV knowledge. Early and unintended pregnancy and gender-based violence pose serious barriers to young people's health and right to education. Investing in the education and health of adolescents and young people is critical for them to realize their rights to health, well-being, education, and full and equal participation in society.

Towards a Solution

The United Nations Educational, Scientific and Cultural Organization's (UNESCO) 'Our Rights, Our Lives, Our Future (O3) Programme' seeks to improve sexual and reproductive health, gender and education outcomes for adolescents and youth in sub-Saharan Africa through sustained reductions in new HIV and other sexually transmitted infections, early and unintended pregnancy, and gender-based violence. It is the largest comprehensive sexuality education programme in sub-Saharan Africa, covering 33 countries, with a budget exceeding US\$45 million, with financial contributions from France, Ireland, Norway, Sweden and the Packard Foundation.

The five-year programme (2018–2022) expects to reach 24.9 million learners in 72,000 primary and secondary schools, and 51,000 pre-service and 402,000 in-service teachers. Additionally, it expects to reach 30.5 million people (parents, guardians, religious leaders and young people out of school) through community engagement activities, and 10 million young people through social and new media platforms.

The Programme has adopted an innovative approach of a three-tier country system of programme 'acceleration countries', 'focus countries' and 'networking countries'. This three-tier approach enables the transfer of knowledge and experience across the countries, allowing them to learn from each other. The exchange is facilitated through the Regional Learning Platform, exchange visits and face-to-face meetings. The web-based Comprehensive Sexuality Education (CSE) learning platform facilitates knowledge exchange across all countries implementing the O3 Programme. The platform has a digital library where various resources and documents on CSE, including CSE frameworks, curricula, and teaching and learning materials can be accessed by government and key stakeholders.

The Programme places young people at the centre – with a specific focus on young women. For this reason, although it is focused on comprehensive sexuality education and access to sexual and reproductive health services, it has also integrated a wider approach that addresses the prevention of violence in schools and child marriage, as well as greater school health strengthening.

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UNESCO ensures sustainability by building and sustaining ownership of the Programme by establishing mechanisms so that it is driven by ministries of education and health from national to decentralized levels. A key feature of this

Programme is its support in incorporating CSE in policies and strategies to ensure that it is institutionalized as a priority planned and budgeted for, instead of creating dependency on external assistance. Sustainability of CSE is further ensured through the knowledge and capacity-building of teachers, curriculum developers, school heads and inspectors. The incorporation of specific indicators on the delivery of comprehensive sexuality education into Education Management Information Systems will ensure that data is collected annually and used for planning. Building the capacities of young people and communities to act as advocates ensures long-term support for comprehensive sexuality education.

The O3 Programme builds on the landmark 2013 Ministerial Commitment on comprehensive sexuality education and sexual and reproductive health services for adolescents and young people in Eastern and Southern Africa (ESA). Through this programme, UNESCO is supporting West and Central Africa in replicating the success of ESA.

In 2019, UNESCO, in collaboration with partners, began a process of developing a Continental Strategy on Sexuality Education for the African Union. To ensure a more comprehensive response to the growing opposition to 'CSE', it was decided to rename it the 'Continental Strategy on Education for Health and Well-being for Adolescents and Young People in Africa'. The purpose of the Strategy is to ensure that all young people acquire the knowledge, skills, values and attitudes that enable them to lead healthy and fulfilled lives, make informed decisions, and respond to local and global challenges.

Programme outcomes:

- The Let's Talk! Campaign was launched, inviting the positive role model champions from ESA to engage in conversations about the causes and consequences of early and unintended pregnancy, and its solutions.

- For French-speaking countries in sub-Saharan Africa, the programme developed a mobile application called Hello Ado, providing information, peer-to-peer interaction and services on CSE.
- The Programme developed an in-service teacher-training package, which borrows from existing teacher training modules for the ESA region and incorporates new elements that provide an opportunity for teachers to practise teaching CSE in a simulated environment before they arrive at the classroom, and to receive immediate feedback. In 2019, more than 24,000 in-service teachers were trained.
- A curriculum-based tool for addressing school-related gender-based violence (SRGBV), Connect with Respect, developed for the Asia-Pacific region was customized and piloted in Eswatini, United Republic of Tanzania, Zambia and Zimbabwe to generate evidence to inform the adaptation of the tool to the ESA context, and develop contextually and culturally appropriate resources for schools on SRGBV and management. This is an example of how this Programme has utilized available tools rather than duplicating existing ones.
- UNESCO developed a parent-child communication (PCC) manual which provides information to parents about adolescent sexuality and reproductive health and facilitate honest conversations between themselves and adolescents and young people.

Contact:

Name: Mr Chris Castle

Title: Chief of Section of Health and Education

Organization: United Nations Educational, Scientific and Cultural Organization (UNESCO)

Email: c.castle@unesco.org

Name: Ms Patricia Machawira

Title: Senior National Project Officer

Organization: UNESCO Harare

Email: p.machawira@unesco.org

PROJECT NAME: Our Rights, Our Lives, Our Future (O3) programme

COUNTRIES/REGIONS: 33 countries in sub-Saharan Africa

NOMINATED BY: United Nations Educational, Scientific and Cultural Organization (UNESCO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3, 3.7, 4.7, 5.6, 16.1

SUPPORTED BY: Governments of Ireland, France, Norway, Sweden and the Packard Foundation

IMPLEMENTING ENTITIES: Governments of the 33 countries in sub-Saharan Africa, Regional Economic Communities (SADC and EAC), networks of young people, civil society organizations

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018-2022

URL OF THE PRACTICE: cse-learning-platform-unesco.org

Poverty Reduction among Youth in Cambodia: Developing Youth Volunteer Skill Sets for Increased Employability

Creating additional opportunities for Cambodian youth to build skills, exchange expertise and improve employment opportunities through volunteer work

Challenge

In Cambodia, young people (under 25 years of age) make up the majority of the population, with 20.6 percent between the ages of 15 and 24 years. While this demographic trend creates opportunities, there are also challenges. One of the country's major socio-economic challenges is to create decent and productive employment opportunities for an estimated 300,000 new entrants to the labour market every year while ensuring that young people have access to skills, quality education and business training.

Acquiring transferable skills will improve access to employment opportunities for young people. To take advantage of the ASEAN Economic Community and the free flow of skilled labour in specific trades, Cambodia must quickly capitalize on its youth population and demographic dividend. Improving skills has also been identified as the country's greatest challenge to trade expansion.¹

Towards a Solution

Funded by Brazil, India and South Africa (the IBSA Fund), the project entitled 'Poverty reduction among youth in Cambodia: Development of youth volunteer skill sets for increased employability' was led by United Nations Volunteers (UNV) programme and implemented in partnership with the Cambodian Ministry of Education, Youth and Sport (MoEYS). The aim of the project is to increase the ability of Cambodian youth to build skills and find decent work through volunteerism, as well as to reduce poverty by contributing to their own development and the economic development of their country.

The methodology followed a participatory approach from design to implementation. The Government led national consultations with key stakeholders from the public and private sectors, academia, civil society organizations and the United Nations in order to design a project with a holistic approach. The project was divided into three goals to:

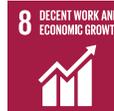
- strengthen national capacity to create an enabling policy environment for volunteerism and its recognition; to
- promote the engagement and inclusion of vulnerable youth in volunteerism as a means of developing employable skills; and to focus on
- advocacy, information and monitoring to implement volunteer management mechanisms.

Fostering cross-country transfer of knowledge, the project team received 16 on-site volunteers from countries in the global North and South, including Cambodia, China, India, the Republic of Korea and Thailand, and mobilized 2,400 local youth volunteers.² Of the 16 on-site volunteers, 11 are national volunteers from Cambodia and 6 are women. One volunteer from China contributed his information

1 *Cambodia Trade Integration Strategy 2014-2018* (Phnom Penh, 2014).

2 Nimul Chun, *Final Project Evaluation report: Poverty reduction among youth in Cambodia – Development of youth volunteers' skill sets for increased employability* (2020)

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and communications technology expertise to build the 'Youth Volunteer for Cambodia' online platform, through which hundreds of young people have access to volunteer information and opportunities.

The 'Youth Volunteer for Cambodia' online platform is managed by MoEYS. Although still in its infancy, it will continue to benefit thousands of young people across the country, which is evidence of the sustainable impacts of the project.

Innovative project activities included an assessment of youth centres, the 'Volunteering for Community Service' pilot initiative, the 'Volunteering for Social Entrepreneurship' pilot programme, youth volunteering and employability activities, study tours and visit from Indian youth to Cambodia, the 'Volunteering during National School Holiday' pilot programme, an International Volunteer Day, a national forum on volunteerism, and youth volunteerism outreach sessions. In addition, there were activities related to thematic workshops, the national Entrepreneurship Day and *Dream Magazine*.

Through the project, 14,172 participants were reached. They have participated in various volunteering programmes that have equipped them with transferable skills in communication, problem-solving, teamwork, presentation, leadership, time management and resource mobilization.

To ensure sustainability, the project was integrated into the United Nations Joint Programme on Youth Employment in Cambodia. UNV supported activities to exchange knowledge on youth empowerment, in collaboration with MoEYS and with support from the Resident Coordinator Office and the United Nations Development Programme.

In implementing the programme, MoEYS has strengthened its capacities, particularly in provincial youth centres. In 2019, the 'Volunteer for My Community' initiative was upscaled to a Government initiative and is being implemented in 12 provinces across Cambodia. It has benefited over 200 youth volunteers who have provided assistance to communities, including 2,396 young people, both in and out of school.

The Government has contributed US\$85,400 to the 'Volunteer for My Community' initiative for training and monitoring, and local communities in each province have also provided support, with an estimated total of \$38,912.

The Government has already committed to upscaling the initiative to reach 17 provinces in 2020.

South-South knowledge exchange allowed participants to share experiences in implementing the project with counterparts in other developing countries. The project was highly praised by the four participating countries (China, India, the Republic of Korea and Thailand) that conducted exchange programmes during the project period. It leverages the unique value of volunteering to provide solutions for countries facing the challenges of a growing youth population. Volunteerism is an important education and training tool to increase youth employability, and youth volunteer efforts benefit both the people in the community and the stakeholder institutions involved in the process. The project's interventions have helped young people reach their full potential. According to an online survey of 137 youth volunteers, 52 of them (38 percent) were employed at the end of the project period. Among those 52 volunteers, 79 percent felt that they had received their job as a result of having participated in the project's volunteer activities. In addition to improved employability, a small but significant minority of volunteers indicated that they had become leaders in the making while working with communities. Finally, the project's organization and setting were robust and flexible, allowing for an immediate response to challenges as they arose.

Contact:

Name: Ms Shalina Miah

Title: Regional Manager for Asia and the Pacific

Organization: United Nations Volunteers (UNV)

Email: shalina.miah@unv.org

Name: Mr Rafael Martinez

Title: Partnership Development Specialist

Organization: United Nations Volunteers (UNV)

Email: rafael.martinez@unv.org

PROJECT NAME: Poverty reduction among youth in Cambodia: Developing youth volunteers' skill sets for increased employability

COUNTRIES/REGIONS: Brazil, Cambodia, India, South Africa

NOMINATED BY: Ministry of Education, Youth and Sports of Cambodia

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.4, 8.6, 17.6, 17.17, 17.18

SUPPORTED BY: India, Brazil and South-Africa Facility for Poverty and Hunger Alleviation (IBSA Fund), managed by the United Nations Office for South-South Cooperation

IMPLEMENTING ENTITIES: United Nations Volunteers (UNV) programme

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2020

URL OF THE PRACTICE: <https://bit.ly/3ljrQWY>

School Leadership in Latin America and the Caribbean

Gaining clarity and consensus on the role and responsibilities of school principals and their management teams in improving learning outcomes

Challenge

The Dominican Republic and Guatemala are two of the lowest performers in regional learning assessments in both primary and secondary education. Given this learning crisis, governments of these countries are taking measures to improve the efficacy of their education systems. To raise the level of student learning, there is evidence that school leadership and management is key to creating an enabling learning environment. The 2018 World Development Report highlights the important roles played by school management and leadership to catalyse change and support student learning. The development challenge facing both the Dominican Republic and Guatemala is insufficient technical knowledge to professionally develop school principals and school leaders in the face of a learning crisis.

Towards a Solution

To address the above challenge, the World Bank facilitated a knowledge exchange with Brazil, Chile, Colombia and Mexico, which allowed Guatemala and the Dominican Republic to learn from the experiences and knowledge of these countries that were notoriously successful in overcoming similar challenges in their educational systems.

The objective of the exchange was to help the Dominican Republic and Guatemala learn and strengthen their capacities in the following areas:

- defining roles and responsibilities of school principal and their management teams and the tools available to help them improve student learning;
- developing practical training programmes that help improve performance and results on the ground;
- integrating school principals and leaders training programmes with the activities of teachers;
- exploring ways to help increase the pedagogical supportive role of principals in teacher development and classroom practice.

A knowledge exchange workshop took place in November 2018 in Santo Domingo, Dominican Republic. It provided an important forum to debate and advance stakeholder understanding on the role and responsibilities of school principals and leaders. The workshop generated great interest from other countries in the region, whose participation and experiences enriched the knowledge exchange. In total, the workshop was attended by representatives from ten countries, namely Argentina, Brazil, Chile, Colombia, the Dominican Republic (the host), Guatemala, Mexico, Paraguay, Uruguay and United States of America.

The workshop served as a benchmark for future similar activities in the region, particularly on how to implement reforms aimed at professionally developing school leadership and improving learning outcomes.

Key themes discussed during other workshop sessions included:

- main career framework reforms – with a focus on experiences from Argentina, Dominican Republic and Mexico;
- different and practical ways in which some countries navigated their political economy during their reforms – with a focus on experiences of Argentina and Mexico;
- ways to strengthen public management and implementation of ongoing education programmes – with a focus on experiences from Brazil and Colombia;
- approaches to enhancing the management abilities of school principals by using inclusion, equity and quality – with a focus on experiences from Argentina;
- training programmes to develop effective educational leaders – with a focus on experiences from Chile, Guatemala, Paraguay and Uruguay.

Panel sessions examined the current school management policies in the region, and their benefits and shortcomings. These sessions were followed by peer discussions to share ideas on ways to strengthen existing policies and develop new programmes. In addition, during the introduction segment of the workshop, Ms. Melissa Adelman, Senior Economist at the World Bank Education Global Practice, presented the results of a WB regional study on management in education, and shared overall trends in school principals' work across the LAC region. Ms. Adelman also presented statistics about the time usage of school principals, principals' autonomy and quotas of administrative labors across the region.



These findings were an important resource for reflection and discussion during the workshop.

Results

New knowledge

The Dominican Republic and Guatemala greatly benefited from the wealth of knowledge and experience shared by professionals of the participating countries. Critical knowledge was gained of how to effectively develop the definition of roles and responsibilities for school principals through consensus building. Some examples of new knowledge gained included effective ways to train school principals to become change agents and ways to collaborate with teachers' unions to improve learning outcomes.

Enhanced skills

Participants were exposed to different approaches in professional and managerial training for school principals. The approaches included: executive management courses; effective teaching practices; the establishment of enabling learning cultures; tools to monitor students' learning progress; development through observation and monitoring; and ways to measure and strengthen leadership skills using both qualitative and quantitative approaches.

Enhanced connectivity

The regional workshop gave participants opportunities to network and interact with their peers and counterparts from the Latin America and the Caribbean Region. Beyond the formal sessions, discussions and sharing of technical concerns and interests continued among participants, guest speakers and World Bank team members. Participants, especially from Guatemala, Paraguay and Uruguay, expressed interest on behalf of their countries to host similar workshops in the future.

New and improved actions

The closing session of the workshop provided an ideal forum for the Minister of Education of the Dominican Republic to launch a new and innovative principal training programme. This modular programme combines online and face-to-face formats, and covers the following crucial skills and qualities — *leadership, integrity, critical thinking, effective communication, results-based management and knowing how to improve learning outcomes*. Although the training programme was designed prior to the knowledge exchange, its implementation is likely to benefit from the knowledge and good practices shared during this workshop.

The World Bank Education Global Practice task team for education projects in the Dominican Republic and Guatemala shared

their ideas for a regional knowledge exchange with other World Bank Education Global Practice teams in the region, well in advance of the proposed dates. This made it possible for LAC Education task teams to reach out to their respective country counterparts and gauge their interest in participating. As a result of this client outreach, more widespread interest in the regional knowledge exchange was generated with more countries than expected enthusiastically confirming their participation. Having more countries join enriched the quality of the sessions and the peer learning, and provided a wider variety of good practice and experiences to share.

The knowledge exchange served as an effective platform for sharing experiences and inspiring participants to consider new strategies and approaches that can be implemented by the ministries in both the Dominican Republic and Guatemala. Application of the rich knowledge gained could help improve learning outcomes and strengthen capacities of school leadership. It is expected that this knowledge exchange will positively contribute to the implementation of education reform projects in both the Dominican Republic and Guatemala.

The knowledge exchange inspired renewed interest in the professional development of principals in Colombia, Guatemala and Paraguay. **In these three countries, the Ministries of Education have since reached out to the World Bank to further discuss possible support for reforming or revamping their school principal training strategies and the overall policy framework on the role and responsibilities of school principals.** A meeting between the World Bank Education Global Practice team and Colombian counterparts already took place. Colombia is considering possible ways of incorporating key themes from the knowledge exchange into a new project. In addition, management of the *Instituto Superior de Formación Docente Salomé Ureña* (ISFODOSU, Higher Institute for Teachers' Training) of the Dominican Republic has expressed interest in continuing the inter-country dialogue. ISFODOSU is exploring the possibility of establishing a technical working group to improve policy and reform implementation.

Contact:

Name: Mr Laurent Porte

Title: Program Manager, South-South Facility

Organization: World Bank

Email: lporte@worldbank.org

PROJECT NAME: School Leadership in Latin America and the Caribbean Region

COUNTRIES/REGIONS: Argentina, Brazil, Chile, Colombia, Dominican Republic, Guatemala, Mexico, Paraguay, United States of America, Uruguay

NOMINATED BY: World Bank

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.1, 4.c, 17.9

SUPPORTED BY: World Bank South-South Facility

IMPLEMENTING ENTITIES: Ministry of Education and Higher Institute for Teachers' Training (Instituto Superior de Formación Docente Salomé Ureña – ISFODOSU) of the Dominican Republic, the Ministry of Education of Guatemala, the Ministry of Education of Salta Province, Argentina, **Instituto Unibanco**, Brazil, APTUS, Chile; the Education Directorate of Bogota City, Colombia, the Ministry of Education of Mexico, and the Uncommon Schools Network of the United States of America

PROJECT STATUS: Completed

PROJECT PERIOD: 2018–2019

URL OF THE PRACTICE: <https://bit.ly/3gCX3Rp>



Project Rangeet: Empowering the Next Generation of ‘Superheroes’

Training primary school teachers through a multi-language interactive digital platform

Challenge

One of the major problems in many developing countries is that non-academic education is neither valued nor thoughtfully developed. Since Social, Emotional and Sustainable Learning is not thoughtfully developed, it is not valued by the educators. Moreover, the methods and tools that deliver consistently high levels of child engagement and teacher enthusiasm are lacking. Due to children’s inaccessibility to well-organized and measurable tools, they are unable to prepare for adapting to this rapidly changing world. Furthermore, due to their inability to identify the priorities and develop the necessary policies, educators and administrators are unable to identify and measure impact at scale in a timely and unbiased manner.

Towards a Solution

Project Rangeet believes that schools have a moral imperative to teach, monitor and assess Social, Emotional and Sustainability Learning.

To address this challenge, in 2014, a collaboration between Mach One and Music in Measures inspired the development of Project Rangeet. This project is a ‘teach the teacher’ platform aimed at primary school children and focusing on self, society and sustainability. The programme uses storytelling, music and art to promote engagement and convey important messages to children on social justice and to raise awareness on pressing issues facing humanity.

Content is delivered via a mobile app with tools that measure impact at scale, enabling every child involved in the project to learn 21st century skills. The multi-language lesson plans for teachers are used to deliver the Project Rangeet curriculum to primary school children. Training is carried out in person, via VTC and sample content within the app. The curriculum is organized around the Sustainable Development Goals (SDGs) and categorized into three learning umbrellas (topics): Self, Society and Sustainability, which are further grouped into modules; each module has 8–10 lessons of 50 minutes each.

Although other social emotional learning programme do exist, they have not identified what works with the psychology of primary school children. Rangeet uses proven methodologies that work in these classrooms, with each module including Howard Gardner’s Multiple Intelligences. Content, which includes minute-by-minute instructions on how to run a Rangeet class and tools that measure impact in real time and at scale enables the inclusion of 21st century skills in every child’s report card. The app recognizes and rewards teachers, children, parents and communities with redeemable tokens (called SuperPowers) for teaching Rangeet classes, co-creating content and promoting the platform. For example, participants in Bangladesh are rewarded with SuperPowers that are redeemable for discounts on books, groceries and mobile recharge.

The project has been piloted in Bangladesh in over 50 schools reaching 2,000 students, first with BRAC schools, and then in government primary schools (GPS).



The results of the project roll-out indicated a positive change in BRAC and GPS students' knowledge, attitude and behaviour in a number of social aspects embedded in the modules. Data revealed that students of the experimental group had positive behaviour and perspectives and awareness of targeted social issues. This project brought explicit hope that both attitudinal and behavioural changes on social issues can be achieved among young children within a joyful learning environment and interactive teaching-learning experiences. The diversified and varied social issues emerging across the country indicate the urgency of more of these programmes.

Additionally, results indicated that students performed better in all aspects of Project Rangeet activities after taking part in the sessions. This pilot project proved that solutions to complex issues such as discrimination, diversity, empathy and bullying can be taught to younger kids using interactive and easy teaching-learning methodology.

App-based delivery and distributed measurement combined with positive reinforcement loops expand the surface area of

the platform's impact. This ensures the sustainability, scalability and replicability of Project Rangeet. Flexibility of the educators and policymakers to introduce Social Emotional and Sustainability Learning in the mainstream education system is required to replicate this initiative in other countries.

Project Rangeet has been working with Global Indian International Schools (GIIS), Laya Resources (India), Aangan Trust (India), and Child Rights and You (India). These organizations are implementing the project in different educational institutions and supporting content development. Project Rangeet is now hoping to scale up in India, Afghanistan, Bhutan and Nepal. Due to COVID-19, some projects are on hold, but there are plans to launch this scaling up initiative in a virtual manner in the partner countries.

Contact:

Name: Mr Simran Mulchandani
Title: Founding Partner, Strategy & Business Development
Organization: Project Rangeet
Email: simran@projectrangeet.com
WhatsApp: +91 98336 32199

PROJECT NAME: Project Rangeet: Empowering the Next Generation of 'Superheroes'
COUNTRIES/REGIONS: Bangladesh, India (the next 12 months: Bhutan, Malaysia, Nepal, Singapore, Thailand, Viet Nam)
NOMINATED BY: South-South Network for Public Service Innovation (SSN4PSI), United Nations Office for South-South Cooperation
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 5.1, 5.3, 5.b, 5.c
SUPPORTED BY: BRAC Bangladesh, a2i Bangladesh; in conversations with various government entities and non-governmental organizations (NGOs) in India
IMPLEMENTING ENTITIES: BRAC (Bangladesh), Department of Primary Education (Bangladesh), Global Indian International Schools (GIIS) (India, followed by other locations across Asia), Laya Resources (India), Aangan Trust (India), Child Rights and You (India)
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2014–ongoing
URL OF THE PRACTICE: www.projectrangeet.com



Curbing Child Marriage Using Technology

Preventing child marriage, fighting violence against women and children, and availing information, just a single phone call away

Challenge

According to the State of World Population 2019 report by the United Nations Population Fund (UNFPA), 59 percent of all marriages in Bangladesh in 2016–2017 were with adolescent girls. Despite efforts by both public and private sectors to lower the child marriage rate, it is still the highest in South Asia and ranks fourth globally. In addition, around 65 percent of citizens in the country who are not using/accessing Internet do not have the means to obtain information on government services, report social problems, and provide feedback on the public services they receive. These underprivileged populations are the major victims of child marriage because they have no access to different media who provide awareness campaigns on child marriages and do not know how to obtain government help to combat this scourge.

Towards a Solution

To address this challenge, the Aspire to Innovate (a2i) Programme introduced the '333--National Helpline for Information, Services and Grievance Redress' ('the 333 National Helpline'). It was inaugurated on 12 April 2018. Today, in Bangladesh, curbing child marriage, preventing violence against and other crimes against women and children, and receiving government information and services can all be achieved with a single phone call to the 333 national helpline.

This helpline is fully capable of efficiently ensuring information, services, grievance redress and consultancy services for every citizen, which reduces the time, cost and visits (TCV) of citizens. In particular, 333 National Helpline plays an important role in lowering the early marriage rate in Bangladesh, saving underaged girls from this social problem, and providing them with administrative support so that they can continue their education.

This platform aims to:

- reduce the child marriage rate, verbal and sexual harassment, and violence against women to pave the way for women's empowerment;
- provide administrative support to enhance the understanding of parents of adolescents of the value of continuing education and the dangers of early teenage marriage;
- ensure access of vulnerable citizens to government information and emergency contact numbers of government institutions, public representatives and government staff;
- implement a Citizens' Grievance Redress System to address any complaint, feedback or suggestions about government services and to provide consultancy services.

The initiative offers a combination of approaches and methodologies that involve a baseline study on the socio-economic status of gender, a public-private partnership strategy, the adoption of technical tools, the development of the content management system (CMS) platform, content development, training, sharing of knowledge, cooperation and coordination, among others.

The Government teamed up with Robi, an experienced private mobile phone operator, for the technical support, and Genex Infosys Ltd., a leading call centre service provider, to ensure the 333



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National Helpline operation. a2i ensures that the operations of the helpline are integrated with all ministries, divisions and directorates, and in particular, with public and private agencies working to prevent all forms of violence against women and children. a2i also ensures regular capacity development of the service providers. After receiving a call about an imminent child marriage, the call is directed to the concerned authority, which takes prompt action to stop the marriage. The Cabinet Division of Bangladesh regularly monitors whether the complaints received are properly investigated and resolved.

The a2i initiative addresses Sustainable Development Goal (SDG) 5 (Gender equality) and is aligned with targets 5.1, 5.2, 5.3, 5.b and 5.c. It provides an inclusive service for all minor girls around the country with legal action to stop their forced marriages or any harassment or violence against them, and encourages them to continue their education despite social discrimination. To date, 37 percent of the total calls made to the 333 National Helpline are made by female citizens of the country. **From April 2018 to January 2020, with its help, a total of 4,803 child marriages were stopped and 2,892 complaints of violence against women and children resolved. Most of the girls who escaped child marriage are continuing their education after successfully convincing their families about the need to become skilled workers for the future.**

It also addresses SDG 16 (Peace, justice and strong institutions), targets 16.2, 16.5, 16.7 and 16.10 by providing transparent government information and services to over 4.2 million citizens and acting on complaints on over 17,000 social crimes. In addition, this helpline has led to a savings of 1.6 million person-days, US\$25.6 and 4.2 million visits of citizens to obtain government information and services, and to report social crimes.

Within this short period of operation, the 333 National Helpline has become a sustainable initiative. A public-private

partnership has been established to build the ecosystem of all operational levels. This platform does not depend on any other infrastructure to run its system. The integration of the helpline by the Cabinet Division with the central monitoring of the Grievance Redress System (GRS) of Bangladesh improved the latter's effectiveness and strength. This enables citizens to receive assistance from the Government to resolve various social problems and also receive the public services with the minimum TCv. Moreover, this platform does not need to use any additional resources to advance its operation. The success of the 333 National Helpline also ensures the availability of a government fund for financial sustainability.

This platform is highly replicable across the globe. Recently, Bangsamoro Autonomous Region of Muslim Mindanao (BARMM), Philippines has shown interest in replicating this initiative in their region. Countries such as Chad, India, Mali, Nepal and Niger, with a high percentage of child marriage, can also significantly benefit from establishing a similar platform in their own country. The following conditions need to be met to ensure its replicability: adequate government funding; public-private partnerships; ownership by the government; regular monitoring by the government; CMS/GRS Platform development; integration with relevant public-private agencies; the adoption of technical tools; and capacity development of service providers.

Contact:

Name: Mr Mohammad Ashraful Amin

Title: Deputy Secretary and e-Service Specialist, Aspire to Innovate (a2i) Programme

Email: ashraful.amin@a2i.gov.bd

Mobile: +8801720221111

PROJECT NAME: Curbing Child Marriage Using Technology

COUNTRIES/REGIONS: Bangladesh, the Philippines

NOMINATED BY: Aspire to Innovate (a2i) Programme, Government of Bangladesh; United Nations Development Programme (UNDP) Bangladesh

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.1, 5.2, 5.3, 5.b, 5.c, 16.2, 16.5, 16.7, 16.10

SUPPORTED BY: Government of Bangladesh, UNDP Bangladesh

IMPLEMENTING ENTITIES: a2i Programme, Government of Bangladesh; UNDP Bangladesh

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2021

URL OF THE PRACTICE: 333.gov.bd



Women's Empowerment and Capacity-Building Programmes

Engaging African women in rural areas through continuous distance education and computer-assisted technologies

Challenge

Women in Africa face various issues related to gender inequality, such as disproportionate levels of poverty and education, poor health and nutrition, lack of political power, limited workforce participation, gender-based violence, female genital mutilation and child marriage.

Social and economic changes in recent decades have significantly altered the conditions and structuring of women's employment. This is particularly the case in Africa, specifically in rural areas, where, due to the economic downturn, there is an increased need for women to seek additional and/or off-farm income. However, the opportunities for rural women to respond to these changes are constrained by the problem of isolation. One result has been the consistently low participation and completion rates of rural women in vocational education and small business training programmes.

Towards a Solution

Achieving Sustainable Development Goal (SDG) 5 (Gender equality and empowering women) is a top priority and work agenda, since development cannot be achieved or sustained without the full and genuine involvement of women.

The Egyptian Agency of Partnership for Development (EAPD) attaches special importance to women's empowerment in Africa since it believes in women's crucial role in developing African societies. In this regard, the Agency organized training courses for women, in collaboration with various distinguished centres and institutions. As a general rule, women must represent 20 percent of the participants in the Agency's programme, and the Agency is seeking to increase this percentage during the current fiscal year. Accordingly, EAPD is collaborating with the Egyptian National Council for Women to design and deliver a training courses tailored to women from the continent on various issues, such as 'The Empowerment of African Rural Women in Vocational Education or Small Business'.

These one-month training courses are implemented annually, with 30–40 participants. Participants are selected by their governments or national institutions working on women's issues and through a full coordination with Egyptian embassies in these countries. Through an effective learning process to raise their capacities and enrich their entrepreneurship knowledge, the training aims to inspire and empower African women in rural areas who wish to create their own businesses.

The training courses covered the following key topics:

- identifying the small business training needs of women with established businesses or interested in establishing their businesses in isolated rural locations;
- investigating relevant training developments in technical and further education (TAFE) and private provider contexts;
- establishing networks and support systems that could promote women's enrolment, completion and credentials in vocational education and training programmes;
- making policy recommendations.



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Around 30-40 candidates participate each year in this training course, implemented by the National Council for Women in Egypt, and with the collaboration with different partners from the private sector and technical experts.

The objectives were met by working closely with various key providers of small business training programmes in Egypt, who agreed to share their experiences, lessons and views, which allowed the participants to fully review their courses on marketing, management, content, delivery, etc.

The participants were trained to implement various techniques to identify their current strengths and weaknesses. This enabled them to efficiently review their small business plans with a clear understanding of the major issues emerging from the current research, and through practical experience.

In addition to the peer-learning exchanges, the training course was highly successful with the increase of trainees' capacities. The training strived to enable them to settle effectively and efficiently into their work responsibilities. The trainees completed the training programme with high levels of motivation and full engagement.

To ensure the sustainability of this initiative, selected participants in the country should hold a position that allows them to

disseminate knowledge, such as extension officer or instructor at a relevant institution. In some cases, graduates participate in the selection of new candidates because this can help strengthen the relationship between former and new participants, allowing the latter to become leaders in their countries.

The training has set off a chain reaction by generating qualified trainers who will pass on the knowledge and skills they acquired during the course to their peers, subordinates and co-workers in various developing countries. The trainees will use the new knowledge gained to effectively contribute to their respective organizations and countries.

The programme is regularly updated to effectively adapt to the changing working environment, and can be easily implemented through other development agencies in other developing countries.

Contact:

Name: Ambassador Mahmoud Elmaghraby

Title: Secretary General

Organization: Egyptian Agency of Partnership for Development (EAPD)

Email: marwa.mahmoud@mfa.gov.eg

PROJECT NAME: Women's Empowerment and Capacity-Building Programmes

COUNTRIES/REGIONS: Egypt, 44 African Countries

NOMINATED BY: Egyptian embassies in Africa in collaboration with the Ministry of Foreign Affairs in their respective countries and with other relevant national institutions such as the National Council for Women in Egypt

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 10.1, 10.2

IMPLEMENTING ENTITIES: Egyptian National Council of Women

PROJECT STATUS: Ongoing.

PROJECT PERIOD: 2014 – ongoing

URL OF THE PRACTICE: <https://bit.ly/3hMXUA6> (in Arabic)

Afghanistan-Indonesia-Germany Triangular Cooperation for Women's Economic Empowerment

5 GENDER EQUALITY



Sharing good practices of women engaged in the home industry sector



Challenge

Many Afghan women who are involved in micro and small-scale enterprises face numerous challenges, such as a lack of access to finance, poor infrastructure and a lack of business networks. In general, Afghan women are not expected to have an income or carry out business, which in many cases means that they are expected to be inactive. Major difficulties arise from social norms and cultural prejudice, particularly in the rural areas, due to customs and tradition.

While Afghan government policies tend to be gender-neutral, some issues are more pronounced for women. For example, Afghan women have less access to the market because their mobility is limited and they face language barriers. Afghan women are discriminated against in acquiring property or owning assets. Also, there are few inspiring role models of successful women entrepreneurs with similar backgrounds.

Towards a Solution

Initiated in a kick-off exchange in October 2018, the Ministry of Women's Empowerment and Child Protection of Indonesia implemented a South-South and triangular cooperation initiative with the Deutsche Gesellschaft für Internationale Zusammenarbeit [Germany Development Cooperation Agency] (GIZ), in which Indonesia would share its best practices in empowering women through home industry with the Ministry of Women's Affairs of Afghanistan. This cooperation aims to empower women in Afghanistan by learning from Indonesia's experience in promoting the economy of less prosperous women in rural areas and in conditions of conservative patriarchal societies.

To this end, the initiative aims to strengthen partnerships between Indonesia and Afghanistan through direct exchanges to identify best practices for the economic empowerment of women through home industry. This was followed by facilitating joint efforts to develop "A Concept for the Economic Empowerment of Women in conditions of Conservative Patriarchal Societies", mutually agreed by Indonesia and Afghanistan for possible replication in Afghanistan. In its role as facilitating partner, GIZ ensured quality, partnership and sustainability throughout the process.

The project approach focused on three key principles:

- Partnership: Through three steering meetings, Indonesia, Afghanistan and Germany agreed on roles and responsibilities, including sharing of resources. All three partners fully participated in the entire process, including planning, implementation, monitoring and review.
- Joint learning for sustainable development through horizontal exchanges and co-creation for women's economic empowerment, project management and partnership effectiveness for development solutions. Accordingly, GIZ facilitated activities and partnership at the country level to ensure that demands and needs were met.
- Key activity: The key activity included two direct workshops and one virtual exchange (due to the COVID-19 pandemic) in which the key indicators of the projects were discussed and agreed, such as: (i) best practices for women's economic empowerment through home industry; (ii) the 'one concept' on women's economic empowerment to apply the agreed best practices in Afghanistan;



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and (iii) the lessons learned drawn from the triangular cooperation project for future South-South and triangular cooperation in Indonesia. The project took six months to prepare and 15 months to deliver, adjust the knowledge and monitor the implementation.

Through evidence based on a multistakeholder partnership, Indonesia and Afghanistan have achieved outcomes at many different levels (personnel, community, institutional). Examples include direct knowledge exchanges between sub-national officials of Indonesia and Afghanistan where the best practices for women in home industry were identified, and up to 200 diverse stakeholders were involved. These included individuals from national and sub-national government, national and local civil society organizations (CSOs), women's community groups, religious leaders and business practitioners during the key processes.

The project has a strong participatory approach throughout each stage of its implementation. Afghanistan's national and sub-national officials are not simply passive beneficiaries, but rather active partners. They make key contributions towards achieving results, especially in: consolidating the sharing of knowledge with Indonesia; validating the concept of women's economic empowerment in home industry within Afghan culture and norms; and presenting the one concept learned from Indonesia to potential donors in Afghanistan for possible piloting.

In Indonesia, this triangular cooperation initiative has shaped the capacity of the Ministry of Women's Empowerment and Child Protection to innovate the approaches to home industry development. In the tenth month of this triangular partnership, Indonesia was successful in drawing on lessons learned and in jointly creating the module, 'Steps to Develop Home-Based Industry' as a reflection of its experiences in women's economic empowerment within the project framework. The Module has been shared and accepted by the Ministry of Women's Affairs, Afghanistan for reference in implementing the lessons learned from Indonesia in Afghanistan.

In less than a year, the project has translated the exchange into concrete partnership action. To date, reflecting the lessons learned from Indonesia, led by the Deputy Ministry of Women's Affairs of Afghanistan, **there has been a series of concrete actions on women's economic empowerment in Afghanistan: first, exercising/piloting the 'one concept' of home industry, learned in Indonesia, in Samangon Province; second, establishing a packaging centre for women in Hazrat Sultan District; and third, presenting the lessons learned from Indonesia for funding possibilities and scaling up in Afghanistan.**

In Afghanistan, partners include community and religious leaders from Indonesia and Afghanistan, non-governmental organizations (NGOs), civil society organizations and government at all levels, including the Ministry of Rural Rehabilitation and Development, the Ministry of Agriculture, Irrigation and Livestock, the Ministry of Labour and Social Affairs, the Ministry of Public Health, the Ministry of Finance, and the Women's Chamber of Commerce and Industry.

In Indonesia, the partners are women and individuals practising home industry and e-commerce, community and religious leaders, the Association of Women in Small Micro Business Assistance (ASPPUK), the 'Female-Headed Household Empowerment Programme', the Ministry of State Secretariat and the National Coordination Team on South-South Cooperation (NCT-SSC) which consists of four line Ministries for Foreign Affairs, State Secretary, National Development Planning/Bappenas and Finance.

Contact:

Name: Ms Neni Marlina

Title: Principle Advisor

Organization: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Email: neni.marlina@giz.de

Tel: +62 8111 713 824

PROJECT NAME: Afghanistan-Indonesia-Germany Triangular Cooperation for the Economic Empowerment of Women

COUNTRIES/REGIONS: Afghanistan, Germany, Indonesia

NOMINATED BY: German Federal Ministry for Economic Cooperation and Development (BMZ) Department 310

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 5.a, 5.c, 17.9, 17.14, 17.16

SUPPORTED BY: BMZ

IMPLEMENTING ENTITIES: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

PROJECT STATUS: Ongoing

PROJECT PERIOD: April 2019 – July 2020

URL OF THE PRACTICE: <https://bit.ly/3lsAJ0w>

Gender Inequality Tackled through Theatre-based Education among the Most Vulnerable Groups in Serbia

Changing harmful gender roles and stereotypes among youth in Serbia towards a more equal society

Challenge

Youth in Serbia were confronted with decades of instability during the post-communist period and the post-conflict transition in the 1990s and early 2000s. Issues regarding youth and gender were not the highest priority during this time, which had a significant influence on the development of Serbian youth. Among the main issues hindering them from fully realizing their human rights are gender inequality influenced by gender stereotypes and traditional gender roles that have a negative impact on the quality of life of the most vulnerable individuals. This resulted in many youths, especially from vulnerable groups, being left behind. The country still has far to go to reach gender equality as confirmed by the Gender Equality Index (GEI 2019), which allows to measure the gender gap in different fields. Considering that the best score is 100 percent, the GEI for Serbia (40.6 percent) is below the EU average (52.9 percent), and ranks second lowest when compared to all European Union Member States. Responding to this complex challenge and contributing to the development of a world where no one is left behind urgently call for changing the negative connotations of gender roles within society. This in turn requires a change in the way of thinking among youth through innovative approaches that engage them at the affective and, thus, behavioural level.

Towards a Solution

To respond to the described challenge, the Serbian Association for Sexual and Reproductive Health (SRH Serbia) implemented a project, with the support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), which reached out to young Roma people and youth from other vulnerable groups across Serbia. Through Theatre-based Education (TBE) methodology, an innovative approach to work with vulnerable individuals, these young people were engaged in guided discussions about gender roles. The objective was to reduce gender inequality and discrimination by encouraging youth to question traditional gender roles, stereotypes and behaviours.

Scripts were developed as a part of the TBE methodology as well as guided (online) discussions following the theatre plays, which addressed topics such as: violence and discrimination against women and girls; harmful practices (such as early child marriages); and all forms of inequality in all aspects of life (including but not limited to economic, social and political levels). This directly contributed to the achievement of Sustainable Development Goals (SDG) targets 5.2, 5.3, 5.6, 10.2, 10.3, 16.1 and 16.2.

In addition to Roma people, the project involved individuals from other communities, including youth from the general population and other vulnerable populations such as ethnic minorities from Albania, Hungarian and Croatia. This mixture of different backgrounds – ethnic, cultural, economic, etc. – challenged and directly addressed social inequalities. The project combined the TBE methodology with a gender-transformative approach to encourage critical thinking about traditional gender roles and stereotypes. It also raised awareness about gender as a socially constructed category that can be de- and reconstructed to prevent and reduce gender-related discrimination. Even though the project primarily focused on gender, it simultaneously questioned other social elements that influence notions of gender. Working and discussing with these heterogeneous groups revealed

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the extent to which social norms reproduce and determine social inequalities, including gender inequality's socio-cultural dependence and manifestations. These discussions led to new and equality-based values and social perspectives.

The project's participatory approach encouraged participants to be the carriers of change rather than mere subjects of lessons on right and wrong. Thus, the project was able to achieve a sustainable and long-lasting impact on Serbian communities. Not only are participants now able to replicate the newly gained knowledge, but they are also provided with an additional impetus to spread the knowledge and positive examples among their peers and across their communities.

SRH Serbia directly equipped 600 young people who now intrinsically understand notions of gender equality, and will be ready to wholeheartedly assume the role of female and male leaders and of change within their communities. In addition, and with the aim to involve a wider community in discussions about traditional gender roles, SRH Serbia started to organize online discussions, which reached more than 6,500 youth and encouraged them to critically question potentially harmful gender norms and values.

The transferability and replicability of SRH's projects to other contexts and regions are among its main features. Indeed, TBE methodology is easily adaptable to respective target groups and topics.

It can be implemented in different regions with different vulnerable groups and address different social problems through the needs-based development of additional scenarios.

To ensure accelerated transferability and the sustainability of SRH Serbia's project, six non-governmental organizations (NGO) partners were chosen and trained to become champions in the provision of TBE training to other NGOs and vulnerable young people. Through training and knowledge dissemination, SRH Serbia supported the capacity building of these partners to implement TBE for different topics within their respective projects and initiatives.

This acceleration sparked a cross-country transfer to Albania and Bosnia and Herzegovina, where TBE is now also implemented to fight inequality. In addition, the European Commission recognized TBE as an innovative approach to work on gender and sexual and reproductive health and rights (SRHR) issues with school children, leading to the Economic Commission's authorization of SRH Serbia to implement the initiative in Serbia's education sector.

Contact:

Name: Ms Dragana Stojanovic

Title: Executive Director

Organization: Serbian Association for Sexual and Reproductive Health (SRH Serbia)

Email: draganastojanovic01@gmail.com

PROJECT NAME: Tackling Gender Inequality through Theatre-based Education among the Most Vulnerable Groups in Serbia

COUNTRIES/REGIONS: Albania, Bosnia and Herzegovina, Germany, Serbia

NOMINATED BY: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.2, 5.3, 5.6, 10.2, 10.3, 16.1, 16.2

SUPPORTED BY: GIZ

IMPLEMENTING ENTITIES: Serbian Association for Sexual and Reproductive Health (SRH Serbia)

PROJECT STATUS: Pilot phase completed; scale-up phase ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: Not available

Coding Camps and ICT Training for Young Girls in Africa – Phase 1

Improving access to computer science for girls in Africa

Challenge

In the future, information and communication technology (ICT) will impact and influence our lives in a big way. To take full advantage of the ongoing information and communication technology evolution skills in coding and algorithms are essential. The sectors that will be impacted most include healthcare, transportation, education, agriculture and trade. Appropriate legal and regulatory frameworks are required to facilitate the deployment of these technologies as enablers. It has been estimated that 90 per cent of future jobs will require ICT skills, and around two million new jobs will be created in the computer, mathematical, architecture and engineering fields.

According to the United Nations Educational, Scientific and Cultural Organization's (UNESCO) report on The Gender Gap in Science, globally, only 28.4 percent of people engaged in science, technology, engineering and mathematics (STEM) careers are women. In sub-Saharan Africa, that figure is around 30.0 percent on average. Additionally, the proportion of women using the Internet globally is 48 percent, compared to 58 percent of men. Between 2013 and 2019, the gender gap hovered around zero in the Americas and has been shrinking in the CIS countries and Europe. However, in the Arab States, Asia and the Pacific, and Africa, the gender gap has been growing. Coding and other ICT skills are essential in the future labour market. Hence, if African girls and women are to be part of the fast-growing sectors in the future job market, they must be able to develop the ICT skills needed. Thus, it is important that they also learn to code. That is fundamentally needed to close the gender gap in the tech world and is also essential for closing the overall gender digital divide.

Towards a Solution

'Coding Camps and ICT training for Young Girls in Africa – Phase 1' (2018–2021) is a continental Initiative based on a partnership among the International Telecommunication Union (ITU), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and the African Union Commission (AUC). The initiative aims at reducing the gender digital gap by exposing African girls to, and equipping them with the computer and information technology skills through coding provided by STEM related education that will open doors in entrepreneurship and career opportunities in the job market later in life. The initiative targeted young African girls between the ages of 17 and 20 who are enrolled in the 11th grade of high school. Training is conducted through coding camps and is organized annually in different African countries in the form of continental, regional and national coding camps.

The objective of the coding camps is to inspire the young girls to build their computing and ICT skills and hands-on experience in the STEM disciplines through interactive basic coding and programming. Scratch is used as the programming software to introduce them to computer programming in a short time. It is an easy coding language that teaches the girls coding and programming, and how to create and share their own interactive stories and animations.

The training programme and course work for the coding camps are designed in collaboration and consultations with ITU, partners in the Ministries of Education, ICT, and higher education institutions

5 GENDER EQUALITY



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and tech companies to ensure that the training and learning experiences are designed to equip the girls with the appropriate skills to pursue higher education and employment in ICT. The initiative exposes the girls to a wholesome learning experience with a primary focus on building their coding, and leadership skills. The coding camp's learning environment provides a peer-to-peer learning, sharing and collaboration experience for the participants. **Through these camps, the participants from across the African region share experiences in terms of strategies and approaches used by their respective countries and educational systems with the aim of supporting girls to embrace science, technology, and innovation.**

The first phase of the project has reached more than 500 girls, and in the next phase, the coding camps will reach more than 1,000 girls across Africa.

To ensure the sustainability of the initiative, an online platform was developed. The coding skills of the participants is maintained via the online platform where the girls can inspire each other, stay connected and share experiences after the camps. The platform includes mentoring from experts with a good understanding of gender and ICT, who support and encourage the girls.

The online platform also includes learning materials and short courses (beginner, intermediate and advanced levels),

innovation competitions, linking opportunities (scholarships, conferences), research publications, and an open platform for innovative and policy discussion. All of these will be accessible and available to the overall female public, including those who were not at the camp. Camp participants become members and have access to: materials to further develop their projects; a portal to connect with their team members; and a portal for support from trainers from the camp (mentorship). The platform provides available learning materials, which will be designed as an interactive learning experience and space to share ideas and opportunities with likeminded individuals. The platform will continuously be updated with up-to-date information in ICT and provide space for companies to advertise job opportunities.

This project is already being replicated in the Arab and Americas regions. However, the projects are at the formulation stage.

Contact:

Name: Mr Cosmas Zavazava

Title: Chief *ad interim*, Partnerships for Digital Development Department

Organization: Telecommunication Development Bureau, International Telecommunication Union (ITU)

Email: cosmas.zavazava@itu.int

PROJECT NAME: Coding Camps and ICT training for Young Girls in Africa – Phase 1

COUNTRIES/REGIONS: All countries in sub-Saharan Africa

NOMINATED BY: International Telecommunication Union (ITU)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.5, 5.2, 8.2

SUPPORTED BY: UN Women, Africa Union Commission

IMPLEMENTING ENTITIES: International Telecommunication Union (ITU)

PROJECT STATUS: Completed

PROJECT PERIOD: 2018-2019

URL OF THE PRACTICE: <https://bit.ly/34twzji>



Rocket Stoves Initiative for the Empowerment of Rural Woman

Campaign addressing health, improved cooking facilities and natural resources management for improving livelihoods in rural Fijian communities

Challenge

A significant percentage of the population of Fiji still relies on wood and fossil fuels to meet their basic domestic energy needs. This places a strain on economies, human well-being and the environment. In Fiji, the practice of open fire cooking is widespread in rural villages and settlements. It is estimated that, on average, a family needs roughly two tons of fuel wood a year to cook three meals a day. These can be sourced from mangrove areas or logged from community forests. The burning increases greenhouse gas emissions in addition to creating challenges associated with land erosion and deforestation. The use of fuel wood exposing people to smoke from cooking, the extensive productive time lost collecting and processing traditional fuel wood, and forest and land degradation due to continued demand for wood for fuel have led to the improved cook stoves intervention in the country.

Towards a Solution

The 'Empowering Rural Women in Fiji – Upscaling the Rocket Stove Project', also known as the 'India, Brazil, South Africa (IBSA) Rocket Stove project for the Small Grant Programme (SGP) Fiji', aims to enhance the livelihoods of women and their families in rural households. The IBSA Rocket Stove project, implemented through a partnership with Fiji's Ministry of Women, provides a design of a rocket stove that requires less fuel wood, builds capacities on the manufacturing of these stoves, as well as on the reforestation of woodlots targeted for fuel wood.

The IBSA Rocket Stove project promotes the wellbeing of rural households through the saving of expenses for fossil fuel such as kerosene and gas, as well as the reduced time to collect fuel/firewood for cooking with the improved rocket stove design. The latter contributes significantly to women's lives, saving time and reducing the risk of being exposed to respiratory diseases as would be the case in using the average open fire cook stove. Women are responsible for most of the cooking for the rural households. These project activities contribute towards achieving the Sustainable Development Goals (SDGs) 5 (Gender equality) and 13 (Climate action). Targeted communities are also required to build nurseries to raise wood fuel seedlings and have them replanted in cleared areas in the communities' and in the villages' outskirts. This activity addresses SDG 15 (Life on land).

The project is an upscaled initiative originally spearheaded by Fiji's Ministry of Women. While successfully completing the initial intervention, the Ministry approached the IBSA Fund to financially support the project. IBSA recurred to the United Nations Office for South-South Cooperation (UNOSSC) for its support. UNOSSC then approached UNDP's office in Suva (Fiji), which delegated the implementation of the project to the GEF Small Grants Program (SGP). The GEF SGP Fiji Office mobilized the funds for implementation through its grant facility modality. This involved soliciting proposals from interested non-governmental organizations (NGOs); four NGOs were selected to implement the activities.

GEF SGP Fiji, in partnership with the Ministry of Women, completed three out of the four phases of the project. The phases included:

- The selection of rural communities: Fiji's Ministry of Women was the advisory institution that



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assisted in the selection of the communities through their divisional (decentralized) offices.

- Training: Women and girls in the identified communities were also assisted by the four grantees on the production and use of the rocket stoves and the training on climate change awareness.
- The construction of a storage warehouse for the rocket stoves to be distributed to other communities: Fiji's Ministry of Women recently identified an alternative site for the storage warehouse, which is the last phase to be implemented to complete the project.
- Monitoring and evaluation: Implemented activities by the grantees continue to be monitored by both the SGP Fiji office and the Ministry of Women. Final internal evaluation will be conducted after the storage facility is constructed.

While SGP Fiji is a grant management facility, its role is limited to ensuring project management by the successful grantees were adhered to and that policies of the grant were observed. The grantees and the Ministry of Women, having to implement the technical components of the initiative have become key partners for SGP Fiji and play important roles to broadening the reach of this initiative. At the start of the grantee engagement phase, an interest from a private cooperate was made by a hardware company. This company has now started distribution of imported stoves that are also using less fuel wood for open fire cooking.

Some outcomes achieved for this project to date are:

- **56 communities assisted (traditional villages and informal settlements);**
- **1,650 trained individuals (79 percent women);**

- **1,580 rocket stoves produced;**
- **1,331 woodlots seedlings raised and distributed for re-planting;**
- **At least two knowledge management products produced.**

The project's sustainability is an important attribute, which has been regularly discussed by the implementing partners and stakeholders. It is ensured through:

- capacity building for community members on the manufacturing of the rocket stoves, which makes the rocket stove accessible, so that beneficiaries can manufacture them in the future;
- the replanting of woodlots that were cleared for fuelwood in the outskirts of the villages and settlements ;
- the use of a storage warehouse, currently in the planning stage, to continue future training of interested communities, as well as for storing produced stoves for targeted communities and households. Its oversight will be provided by the Ministry of Women.

SGP Fiji is working with the Ministry of Women over the second half of 2020 to complete the project and document key lessons that will improve the campaign on the use of more environmentally friendly rocket stove to make life easier for rural women.

Contact:

Name: Ms Akisi Bolabola

Title: National Coordinator GEF Small Grants Programme (SGP) Fiji

Organization: United Nations Development Programme (UNDP)

Email: akisi.bolabola@undp.org

Skype: kisi01avb

PROJECT NAME: Empowering Rural Women in Fiji – Upscaling the Rocket Stove Project

COUNTRIES/REGIONS: Fiji

NOMINATED BY: UNDP Global Environment Facility (GEF) Small Grants Programme (SGP) Fiji (GEF SGP Fiji)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.9, 5.4, 7.b, 10.2, 13.3

SUPPORTED BY: India, Brazil, South Africa Dialogue Fund (IBSA), United Nations Office for South-South Cooperation

IMPLEMENTING ENTITIES: SGP Fiji and the Ministry of Women Fiji

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2020

URL OF THE PRACTICE: Not available

Transboundary Water Cooperation for Sustainable Development in African Basins and Globally Facilitated through the Water Convention

6 CLEAN WATER AND SANITATION



Supporting cooperation and integrated basin management in Central and Western Africa to drive regional integration, sustainable development, peace and security

Challenge

With 60 percent of the world's freshwater shared by two or more countries, transboundary cooperation to manage these basins is crucial for preventing conflicts and ensuring peace, security and human well-being. However, transboundary water cooperation within many regions is frequently weak, partial or fragmented. In 2020, for its eighth consecutive year, the World Economic Forum Global Risk Report listed water crises among the top five risks in terms of impact. With growing populations and economic development, demand for water increases, further complicating the political, institutional, economic, environmental and financial challenges that many countries face as they manage and develop their transboundary rivers, lakes and aquifers. Cooperation in the management of shared water resources is also key to reducing water-related risks such as floods and droughts, and to increase climate change resilience. A critical challenge for African basins is thus how to strengthen legal and institutional platforms facilitating water cooperation to further promote regional stability and sustainable development. In this regard, the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), whose secretariat is serviced by the United Nations Economic Commission for Europe (UNECE), provides a global intergovernmental platform for supporting cooperative development, preventing conflict over shared waters and achieving the Sustainable Development Goals (SDGs).

Towards a Solution

Transboundary cooperation, as required by SDG target 6.5 on integrated water resources management, is crucial for ensuring water and sanitation for all (SDG 6) and for achieving other SDGs on climate action, sustainable energy, ecosystem protection, poverty, food security and peace. To respond to the challenges of weak transboundary water cooperation, the Water Convention adopts a multi-pronged approach.

Global and regional workshops under the Convention, for example, on transboundary water cooperation in Africa, support a South-South capacity-building approach to accelerate progress towards the SDGs, particularly target 6.5, among basin states and from basin to basin, both in terms of riparian states and basin organizations. For example, the 2019 'Practitioner to Practitioner: Regional Training on Promoting Implementation to Two Global Water Conventions' workshop, organized by UNECE together with partners targeting experts active in Francophone countries in West, North and Central Africa, fostered a common understanding on the practical benefits of both the Water Convention and the Convention on the Law of Non-Navigational Uses of International Watercourses (commonly referred to as the Watercourses Convention), collectively known as the United Nations global water conventions. As another example, in 2017, in partnership with the World Bank, the African Development Bank, the European Investment Bank and the Senegal River Basin Development Organization, the Convention secretariat organized a training in Dakar on preparing bankable project proposals for climate change adaptation in transboundary basins, where experts from Africa, Asia and Eastern Europe exchanged experiences.

Outcomes achieved in relations to the SDG targets:

The first report on the global baseline for SDG indicator 6.5.2 published in 2018 demonstrated that the highest level of cooperation can be found in the Pan-European region, largely facilitated by the Water Convention, followed by West and Southern Africa, including, for example, the Senegal, the Gambia,



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Volta and Niger Rivers. The water charters of the Niger, Volta and Lake Chad Basins refer to the Water Convention. Moreover, since its global opening in 2016, **there has been a very promising trend within Africa, particularly Central and Western Africa, towards accession to the Water Convention. In 2018, Chad and Senegal were the first countries outside the UNECE region to accede to the Water Convention and Ghana joined both United Nations global water conventions in June 2020.**

This initiative has been sustainable through the following:

- Facilitating regional consultation for improved transboundary basin cooperation: Addressing the lack of cooperation on the Senegalo-Mauritanian aquifer basin (SMAB) was one of the motivations for Senegal to accede to the Water Convention. Based on a request by Senegal at the Water Convention's Meeting of the Parties in 2018, UNECE, together with the Geneva Water Hub, initiated a dialogue in 2019 on the SMAB between the Republic of the Gambia, Guinea-Bissau, Mauritania and Senegal, which aims to strengthen cooperation and sustainable use of the aquifer and is still ongoing.
- Supporting development of agreements for regional stability and sustainable development: The Convention secretariat provided support to the development of a regional agreement for water cooperation in Central Africa. The project led by the Economic Community of Central African States (ECCAS) aims at providing the region with a legal framework to ensure the sustainable management of water resources on transboundary water resources. In December 2017, the ECCAS Convention was approved by the 11 members' water ministers.

Replicability by promoting accession to the United Nations global water conventions as a driver of effective implementation:

The United Nations global water conventions are the only two legal instruments focused specifically on transboundary water cooperation at the global level. They are powerful tools to promote and advance transboundary water cooperation. They provide guiding principles for transboundary water management in the absence of basin level agreements

and can support countries in the negotiation of new or the revising of existing cooperative arrangements. Through institutional frameworks such as that offered by the Water Convention, they also assist countries in the implementation of basin agreements to address growing water challenges, and thereby promote sustainable development and peace. Experience from the Parties demonstrates that these two instruments help to innovate good practices in transboundary water cooperation, for example, by supporting the design, development and implementation of basin agreements. Accession can thus offer Parties support in strengthening their legal, technical and institutional basis for cooperation, as well as national water governance.

The centrality of transboundary water cooperation for peace and sustainable development and for accelerating progress towards the SDGs has been reiterated at global and regional levels. The United Nations Secretary-General Antonio Guterres encourages countries to accede to and implement the United Nations global water conventions. The Water Convention Secretariat is actively engaged with global and regional partners such as the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Economic Commission for Africa (UNECA), the African Ministers' Council on Water (AMCOW), ECCAS and the Economic Community of West African States (ECOWAS), and African river basin organizations to support accession to, and implementation of, the United Nations global water conventions, fostering transboundary cooperation in these regions and globally.

Contact:

Name: Ms Sonja Koepfel

Title: Secretary, Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention); Co-Secretary, Protocol on Water and Health

Organization: United Nations Economic Commission for Europe (UNECE)

Email: sonja.koepfel@un.org

PROJECT NAME: Global Promotion of Effective Implementation of, and Accession to, the Water Convention

COUNTRIES/REGIONS: Global

NOMINATED BY: United Nations Economic Commission for Europe (UNECE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.5, 6.3, 6.5, 7.1, 7.2, 7.3, 8.4, 8.9, 9.1, 9.4, 11.4, 11.5, 11.7, 12.2, 13.1, 13.2, 13.3, 14.1, 14.5, 15.1, 15.5, 15.9, 16.3, 16.6, 16.7, 16.8, 17.3, 17.5, 17.6, 17.7, 17.9, 17.14, 17.16, 17.17, 17.18

SUPPORTED BY: United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Economic Commission for Africa (ECA), United Nations Economic and Social Commission for West Asia (ESCWA), African Ministers' Council on Water (AMCOW), Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), Geneva Water Hub, and many others.

IMPLEMENTING ENTITIES: UNECE

PROJECT STATUS: Ongoing

PROJECT PERIOD: 1996 (entry into force of the Convention); 2016 (Global opening) – ongoing

URL OF THE PRACTICE: www.unece.org/env/water.html



Upscaling Water Security to Meet Local, Regional, and Global Challenges

Designing local ecohydrology and Integrated Water Resources Management (IWRM) educational resources for Africa

Challenge

Water education is essential for water security and for the achievement of Sustainable Development Goal (SDG) 6 (Clean water and sanitation) and water-related goals and targets across the 2030 Agenda for Sustainable Development. However, to be effective, water education must be interpreted in a broader sense than the teaching of hydrological sciences and related scientific disciplines; it must be locally appropriate, applicable and relevant to the context of the learner, regardless of educational context.

Curriculum materials that convey innovative, trans- and interdisciplinary content that is time-relevant to the local context in the global South are rare. Often, educators must rely on resources developed elsewhere in the world, lacking the local grounding that would have made them more effective educational resources in regions such as Africa, and Asia and the Pacific.

Towards a Solution

To support the effective implementation and achievement of water-related goals and targets, the development, dissemination and implementation of new and locally applicable water education materials are required. The ‘Upscaling Water Security to Meet Local, Regional, and Global Challenges’, implemented by the United Nations Educational, Scientific and Cultural Organization (UNESCO), reflects the effort aimed at developing, adapting and sharing such resources between the regions of Africa, and Asia and the Pacific.

The project’s core objective is to ensure the availability of innovative water education curriculum resources initially developed for the Asia and the Pacific context in a format that is as relevant, applicable and appropriate to the African context as possible.

In pursuit of this objective, the project takes its point of departure in the three-volume Water Management Curriculum using Ecohydrology and Integrated Water Resources Management (IWRM), developed immediately prior to the start of the project by the Humid Tropics Centre – Kuala Lumpur (HTC-KL), a UNESCO Category 2 Centre hosted by the Government of Malaysia.

Drawing on extensive academic experience and practice, the original curriculum was developed by a consortium of Malaysian universities and designed in consultation with the Regional Centre for Integrated River Basin Management (RC– IRBM) in Nigeria, as well as the UNESCO Chair in Water Resources Management and Culture based in Khartoum, Sudan.

Although representing a significant and lasting achievement in water resources management theory and practice – and in principle applicable in both Asia and the Pacific and Africa, the three-volume publication draws most of its practical examples, case studies and general frame of reference from the Malaysian context. In order to guarantee the greatest possible contribution towards sustainable development in the African context, and maximize its relevance and applicability in Africa, the project developed an entirely new water curriculum designed for and enriched with African local content. It took into consideration that the approaches and technologies related to ecohydrology and IWRM are, to a considerable extent, context-specific.



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Three main activities were covered by the project: a drafting phase, an expert consultation to refine and design the curriculum, and a formal review and launching of the curriculum. These activities were carried out through UNESCO's active engagement in several African institutions: RC-IRBM (Kaduna, Nigeria); the Ecohydrology Coordination Office at the Ministry of Water, Irrigation and Energy of Ethiopia; and Sokoine University of Agriculture, Morogoro, United Republic of Tanzania. Implementation was carried out in close coordination with the Malaysian partners, notably HTC-KL and the Malaysian International Hydrological Programme (IHP) National Committee, with contributions by water sector experts from Australia, Ethiopia, Indonesia, Kazakhstan, Malaysia, South Africa, Thailand and the United Republic of Tanzania.

A series of detailed dialogues and discussions relating to the organization and structure of the document were held over the course of these three iterative phases involving the interregional group of experts, resulting in a new structure for the curriculum, designed to further improve the document and its applicability in the African context. The resulting document covers topics organized into 13 distinct sections, as follows:

- Topic 1: Introduction to Ecohydrology and Freshwater Management
- Topic 2: Introduction to Integrated Water Resources Management and its Principles
- Topic 3: River Basin Management
- Topic 4: Wetland Ecology and Management
- Topic 5: Ecology of Lakes
- Topic 6: Groundwater Hydrology and Groundwater-dependent Ecosystems
- Topic 7: Integrated Water Resources Management and Aquatic Ecosystem Management
- Topic 8: Marine Resources, Estuarine systems, and Coastal Wetlands Management
- Topic 9: Integrating Ecohydrology and Environmental Economics
- Topic 10: Riparian Vegetation and River Health Assessment
- Topic 11: Remote Sensing and Geographical Information System
- Topic 12: Ecohydrology, Biotechnology and Water Resources
- Topic 13: Water Resource Management and Gender Involvement/Participation.

The Water Management Curriculum Using Ecohydrology and Integrated Water Resources Management for Africa will provide

university students in sub-Saharan Africa with an understanding of the application of ecohydrology principles and practices. This will enable them to be at the forefront in solving problems relating to freshwater and marine resources. The document will also serve to supplement learning materials across a wide range of subjects – conservation education, environmental economics, and coastal/marine sciences, among others.

The project contributes to the identification of sustainable water solutions for Africa and Asia through improved water resources management knowledge among professionals, managers, academics, decision-makers and planners, as well as through strengthened scientific cooperation among members of the UNESCO water family, experts and managers in the two regions. In addition, members of the International Hydrological Programme (IHP) community across both regions have benefited from the inputs and contributions made by international experts towards the project through exchanges and the delivery of technical inputs, data and materials during project implementation.

Wider use of the water curriculum by universities in Africa – promoted and facilitated by the participating African Category 2 Centres and university chairs – will sustain and upscale the project's output. Moreover, contributing experts strongly recommended that key contents of the curriculum be presented and made available to policymakers in Africa. As a result, the approaches and technologies related to ecohydrology and IWRM in the region would have an impact at the decision-making level. The UNESCO water family in the two regions are committed to ensure that the different stakeholders become more effective and efficient by improving and sharing knowledge related to management and leadership skills and fostering organizational development.

While the curriculum is formulated for use in Africa region, it can be adapted and customized to suit the needs of regions outside of Africa, with further analysis and adjustment of the content are recommended as part of the adaptation to other regions.

Contact:

Organization: United Nations Educational, Scientific and Cultural Organization (UNESCO) Jakarta

Email: jakarta@unesco.org

PROJECT NAME: Upscaling Water Security to Meet Local, Regional, and Global Challenges

COUNTRIES/REGIONS: Australia, Ethiopia, Indonesia, Kazakhstan, Malaysia, Nigeria, South Africa, Thailand, United Republic of Tanzania

NOMINATED BY: United Nations Educational, Scientific and Cultural Organization (UNESCO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 6.5, 6.6, 6.a

SUPPORTED BY: Malaysia Funds in Trust

IMPLEMENTING ENTITIES: UNESCO Jakarta

PROJECT STATUS: Completed

PROJECT PERIOD: 2018–2019

URL OF THE PRACTICE: <https://mucp-mfit.org>

Hands-on Training on the Use of Fibre-reinforced Plastic Biogas Digester in Samoa

Promoting biogas development through South-South Cooperation and communication

Challenge

In most developing countries, agricultural wastes are left untreated, which may cause environment pollution and animal-human disease transmission. Moreover, farmers have limited access to modern energy such as kerosene, liquefied gas and electricity, which leads to deforestation, water loss and soil erosion. Women and children are overburdened with low-value work, such as the collection of firewood and cow dung for cooking. Moreover, the overuse of chemical fertilizers is a threat to soil, ecosystem and human health. The above issues have impacted the sustainable development of the vulnerable small island countries such as Samoa.

Based on the common goal of tackling climate change and the energy shortage, some countries have independently or jointly developed biogas in the pursuit of their environmental, economic, health and social benefits. Since the natural environment and social conditions differ from region to region, and country to country, identifying the most suitable biogas model in a country is still a challenge.

Towards a Solution

To tackle the above challenges, the 'Hands-on training on fibre-reinforced plastic biogas digester in Samoa' initiative was implemented to demonstrate sustainable agriculture practices. This could render the livestock industry profitable, sustainable and environmentally friendly by promoting technologies of animal waste management for recycling resources and adding value.

The project was implemented by two organizations: (i) the Biogas Institute of the Ministry of Agriculture and Rural Affairs (BIOMA), People's Republic of China, established in 1979, by a Government-based research institute and the Food and Agriculture Organization of the United Nations (FAO) Reference Centre for Biogas Research and Training since 2014 and (ii) Samoa Farmers' Association (SFA), a non-government organization engaged in agro-tech extension, connecting local farmers under a membership mechanism and maintaining close contact with government and educational institutions.

BIOMA was invited by the SFA as the overseas technical supporter for this 14-day training, in which two professors and a technician delivered on-site lectures and demonstrations. The Global Environment Facility (GEF) supported the procurement of digesters and auxiliary parts. China South-South Development Centre Project supported the international travel of the two BIOMA professors from China to Samoa. The China-Samoa Agricultural Technical Aid Project (CSATAP) served as a local supporter, provided classrooms and invited local media for report.

The project has achieved the following: 21 digesters were shipped to Samoa, 17 digesters were installed during the training, four by the trainees after the training. A total of 22 trainees, 4 women and 18 men, were trained.

According to research conducted by SFA and BIOMA, supported by Global South-South Development Center Project in 2019, the digesters were all operating normally without leakage, and the shortest activation time for biogas production was one week after digester installation and feeding.

7 AFFORDABLE AND CLEAN ENERGY



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There was a savings of around US\$25 on the average monthly cost of liquefied petroleum gas (LPG). By applying digestate as fertilizer, the agricultural production efficiency was improved. Excessive digestate was shared in the neighborhoods. The demand for digesters rose in communities.

Women in the households were relieved from hard work of firewood collection and the smoke of burning coconut shells. Children had fewer chances of being infected with animal diseases after the animal pen was built to keep hogs and piglets from moving everywhere. Children also learned that animal waste and leaves can turn into clean cooking gas and some joined to feed manure into digesters.

Farmers fed animal manure into a digester through a manure collecting tunnel installed along the edge of animal pen. As a consequence, animals had a better welfare of not eating food in manures in the cleaner pens.

It is a win-win project for both implementing organizations. Together with SFA as the technology recipient, BIOMA learned that the importance of community solidarity, awareness establishment, pre-assessment and lobbying laid the demand-driven basis for the sustainability of the project, and that the process of each project is subject to modification according to the local situation.

The success of the project had an impact on biogas development policy of Samoa Government. After the project in 2018, SFA signed a contract with BIOMA for project session II to install 21 digesters made of hard and soft building materials so as to find out the optimal technical mode for Samoa; it was nearly completed by online and video training in 2020. A regional project entitled 'Establishment of the Biogas Research and Training Center for the Asia-Pacific region (BRTC)' could be replicated based on the experience of this project and inte-

gration of the partnership in the region, so that the long-term sustainability of the project can be achieved.

The project can be replicated in other developing countries if some conditions are met.

First, an assessment could be carried out on demand in advance in order to identify the right geographical site: the animal pen must be within 30 m away from the kitchen; the environment temperature must be above 13 °C throughout a year; the groundwater level must be below 1 m; and the location of the digester must be 5 m away from the road. The ideal recipients should have at least two pigs or one cow for digester feeding, be able to afford to hire laborers or rent excavators, be greatly interested in biogas and digestate, and have an impact on lobbying.

Second, funding can be obtained for the provision of equipment, the mobilization of resource persons and local provisions for training and digester construction.

Third, the quality of the digester construction and operation could be institutionalized in a standard routine through the training of trainers and membership services.

Auxiliary parts were prepared as a part of the purchase order of the equipment at the beginning of the project for the replacement of fittings damaged accidentally. A technical capacity building could provide continuous technical consultancy.

Contact:

Name: Ms Yan Long

Title: Associate Professor

Organisation: Biogas Institute of Ministry of Agriculture

Email: 5584494@qq.com

WeChat: Longerlady

PROJECT NAME: Hands-on Training on Fibre-reinforced Plastic Biogas Digester in Samoa

COUNTRIES/REGIONS: China, Samoa

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 1.3, 1.4, 1.5, 1.a, 2.3, 2.4, 2.a, 3.3, 4.3, 4.4, 4.5, 4.6, 4.7, 4.b, 4.c, 7.1, 7.2, 7.3, 7.a, 7.b, 8.2, 8.4, 8.5, 8.6, 11.1, 11.6, 11.a, 12.4, 12.5, 12.8, 12.a, 13.1, 13.2, 13.3, 13.a, 13.b, 15.2, 15.3, 17.1, 17.6, 17.7, 17.8, 17.9

SUPPORTED BY: China and Global South-South Development Center Project, Global Environmental Fund (GEF), Government of Samoa, China-Samoa Agricultural Technical Aid Project

IMPLEMENTING ENTITIES: Biogas Institute of Ministry of Agriculture and Rural Affairs, People's Republic of China, Samoa Farmers' Association (SFA)

PROJECT STATUS: Completed

PROJECT PERIOD: 2018-2019

URL OF THE PRACTICE: www.biogas.cn



Promotion of Small Hydropower Development in Zambia, Nigeria and Ghana

Promoting SHP technology transfer and awareness enhancement of SHP management and technical skills in selected African countries

Challenge

Eastern Africa has the highest overall small hydropower (SHP) potential on the continent, and Western Africa is the region with the second largest SHP potential. In Eastern Africa, Zambia's electricity production is heavily dependent on hydroelectric generation, both in terms of large and small hydropower projects. Due to the limitations imposed by electricity access, there is a need to develop new SHP projects that take advantage of its high potential and are able to support rural electrification. In Western Africa, Nigeria has a high level of installed SHP capacity, indeed, the highest in the region, yet this amounts to only 6 percent of its total small hydropower potential. Similarly, Ghana has no SHP plant, but rather, just a large hydropower project. The challenge to ensure access to electricity in rural areas determines the importance of small hydropower resources.

Towards a Solution

This project aims to remove obstacles to SHP technology transfer and enhance awareness to improve SHP management and technology in the selected African countries. The project involved the following counterparts: Zambia, representing the Common Market for Eastern and Southern Africa (COMESA), Eastern Africa and Ghana, Nigeria from Western Africa to develop the appropriate mechanisms that will allow the recipients to understand the relevance of SHP for their national and regional development and promotion of inclusive and sustainable growth of electricity access rate. Project implementation partners include the Common Market for East and Southern Africa, the Renewable and Conventional Energy Technology Department, Federal Ministry of Science and Technology of Nigeria (FMST), and the Energy Commission of Ghana (GEC).

To implement this project, activities were organized and developed in three stages:

- The first stage: This involves the planning and carrying out of a deep research-focused analysis of the current developments in the field of SHP in the target countries, supplemented by site surveys and opportunities to engage in direct training.
- The second stage. This entails the evaluation of financing mechanisms for SHP development and engagement strategies directed at local governments and communities in the target regions.
- The third stage: This involves the coordination activities to support the dissemination of lessons learned from the project. The parties aim to develop study tours to enable and support the sharing of the lessons and experience with other countries.

The project has achieved the following outcomes:

- The obstacles and solutions to SHP development in selected countries were identified through the collection of the updated general situation, strategies and policies. Training workshops and stakeholder meetings were held to remove knowledge barriers for the promotion of SHP development.
- **A sustainable financing mechanism was developed to support private sector and government rural electrification initiatives in selected countries.**
- The site investigation was undertaken for potential SHP sites with the preparation of pre-feasibility reports. The demonstration project was also selected.
- The 8th Hydropower for Today Forum. 'Hydropower Promotes Industrial Development in Africa',



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was held in Lusaka, Zambia, in cooperation with the International Network on Small Hydro Power (INSHP), COMESA and United Nations Industrial Development Organization (UNIDO). The forum further called for multilateral cooperation in order to optimize the use of water resources for those in need, and provided a platform for discussions on creating favourable policies for SHP development.

The development of a financing mechanism is one of the innovative elements of the project. The financing mechanism for SHP development includes preferential policies that may support the development of SHP technology in an inclusive and sustainable manner, as well as the development of financing channels that would allow stakeholders from different levels to assess their interest in supporting bankable renewable energy projects in the field of SHP in selected countries.

Furthermore, INSHP signed Memoranda of Understanding (MoUs) with COMESA, FMST and GEC respectively. All MoUs aim at enhancing future cooperation between the two parties in SHP development in areas related to policies, legal systems,

innovation on technologies, management, and regional, continental and global cooperation.

INSHP will also join efforts with COMESA, the Federal Ministry of Science and Technology of Nigeria (FMST) and ECG in order to expand the knowledge of this initiative beyond the original target countries to other countries facing similar difficulties in diversifying their energy mix to facilitate South-South knowledge sharing and exchanges. An essential purpose of future cooperation between all parties will be to ensure a space for discussion and sharing between peer countries in Africa with common interests on relevant issues in the field of SHP and renewable energy.

Contact:

Name: Mr Dale Qiu

Title: Programme Officer

Organization: International Center on Small Hydro Power (ICSHP)

Email: dlqiu@icshp.org



PROJECT NAME: Development of Untapped Small Hydropower Potential in Selected African Countries

COUNTRIES/REGIONS: China, Ghana, Nigeria, Zambia

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.1, 7.2, 7.3, 7.a, 9.3, 9.5, 13.2, 13.3

SUPPORTED BY: China South-South Development Center, Common Market for Eastern and Southern Africa (COMESA), Federal Ministry of Science and Technology of Nigeria (FMST) and Energy Commission of Ghana (GEC)

IMPLEMENTING ENTITIES: International Network on Small Hydro Power (INSHP)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2018

URL OF THE PRACTICE: Not available

Technical Transfer, Research and Training Center on Clean Energy and Rural Electrification for African Countries

Promoting renewable energy development and rural electrification in African countries

Challenge

African countries have abundant energy resources, but electricity is urgently needed for people's living and economic development. The strong dependence on fossil fuels leads to drastic effects of climate change, including drought, flooding, soil erosion etc. In addition, individuals are losing their lives and incurring economic losses from climate-related disasters every year in most African countries. Hence, there is an immediate need for a technical transfer, research and training centre in Africa to promote the development of clean energy and rural electrification for achieving Sustainable Development Goal (SDG) 7 (Affordable and clean energy), SDG 13 (Climate action) and SDG 17 (Partnerships for the goals).

Towards a Solution

Throughout the world, there is an increasing focus on affordable and clean energy, since it mitigates climate change. In the 27th African Union Summit, held in Kigali, Rwanda in July 2016, it was concluded that the electrification programme would be put on an urgent schedule, and all member countries should become more aware of the importance to develop the great potential of clean energy, including hydropower, solar, wind and biogas, etc., so as to achieve rural electrification and sustainable development. For this purpose, the Technical Transfer, Research and Training Center on Clean Energy and Rural Electrification for Africa was set up in Addis Ababa, Ethiopia in May 2017 jointly with the National Research Institute for Rural Electrification, the Ministry of Water Resources of China through the Hangzhou Regional Center for Small Hydro Power (HRC), and the Addis Ababa Science and Technology University (AASTU), and was supported by the Mission of the People's Republic of China to the African Union.

The Center provides an effective platform to share expertise and experience and explore possibilities to develop affordable and clean energy. In the context of global warming, it cooperates with governmental authorities, research institutions and universities, power companies and independent power producers of African countries. In the near future, sub-centres in East, West, Southern and North Africa will be set up through the joint efforts of the African countries involved in order to cover more specific themes for cooperation to produce replicable solutions.

The methodologies include technology exchange, research and development, project demonstration, talent and local development. With the joint efforts of the partners, the following activities have been initiated under the project umbrella:

- On 12–14 May 2017, the 'Seminar on Renewable Energy and Off-grid Power System for East African Countries' was held to share and exchange knowledge. More than 20 representatives from Burundi, Ethiopia, Kenya, Rwanda, Uganda and the United Republic of Tanzania attended the seminar, which presented the energy situation and emerging issues, shared technical know-how and proven experience, and demonstrated practical solutions on off-grid power system etc., thus pursuing the cross-country transfer of good practice and knowledge among all East African countries for their mutual benefit, and address the common issues of power shortage, climate change and joint partnership. At the end of the seminar, participants signed a cooperative resolution to enhance



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research and development collaboration for the long term and are encouraged to disseminate expertise and know-how to hundreds of professionals and help policymakers of their own countries to stimulate the development of renewable energy.

- On 31 October 2017, the President of AASTU of Ethiopia visited China, and both sides discussed follow-up work and other cooperative issues of the Center.
- From 2 to 13 May 2018, the Chinese delegation visited Rwanda, Ethiopia, Uganda and Kenya respectively for bilateral and multi-lateral cooperation on capacity building, joint research and development, project demonstration and technical transfer etc. The visit has brought fruitful results.
- From 20 June to 20 August 2018, a graduate student was dispatched from AASTU to China for a research study on renewable energy and hybrid power generation system. Under the guidance of Chinese supervisors, the student learned a great deal about renewable energy development in China, including the management policies, technical standards and practical experience, and completed his research paper.
- The Director General of HRC visited Rwanda and Ethiopia from 4 to 11 August 2018 to discuss the setting up of the “Technical Transfer, Research and Training Center on Clean Energy and Rural Electrification for East Africa” and the

forthcoming cooperative activities in Rwanda, as well as the management and operation of the Center in Ethiopia.

Therefore, the Center will be sustainable and replicable, with important support from the governments of African countries and China, and potential sponsorship from the United Nations organizations especially the United Nations Office for South-South Cooperation. AASTU is currently providing logistic support, such as the venue and transportation, while Uganda Electricity Generation Co. Ltd., Energy Development Corporation Ltd. of Rwanda, Kenya Power & Lighting Co. Ltd. and the Tanzania Renewable Energy Association, among others, actively participated in technical exchange and talent development, among other activities, at the Center. The establishment and operation of the Center is enhancing international cooperation on infrastructure, green development, poverty reduction, as well as in the humanities among African countries.

Contact:

Name: Division of Foreign Affairs and Training
Organization: National Research Institute for Rural Electrification, Ministry of Water Resources, China / Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power (HRC)
Email: jshi@hrcshp.org / nlin@hrcshp.org

PROJECT NAME: Technical Transfer, Research and Training Center on Clean Energy and Rural Electrification for African Countries

COUNTRIES/REGIONS: Burundi, China, Ethiopia, Kenya, Rwanda, Uganda and United Republic of Tanzania

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.1, 7.a, 13.1, 13.3, 13.b, 17.6, 17.9, 17.16

SUPPORTED BY: Perez-Guerrero Trust Fund

IMPLEMENTING ENTITIES: National Research Institute for Rural Electrification, Ministry of Water Resources, China / Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power (HRC)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017– 2018

URL OF THE PRACTICE: <https://bit.ly/34H3O28>



Trilateral Cooperation on Natural Gas Metrology in Latin America

Quantifying the volume and energy content of natural gas as a basic contribution to the sustainable development of national and regional energy strategies



Challenge

Natural gas is one of the main energy sources in Bolivia and Peru. The two countries lacked measurement capacity for characterizing natural gas, which is important for the national supply and trade. As a result, it was not possible to guarantee the national traceability of measurements and the results of measurements of volumes and energetic values were not reliable. This created an obstacle for the regional integration with peer institutes and organizations of gas mining and distribution infrastructures. Based on the respective national strategies, national reference laboratories should be capable of determining the correct parameters of this energy source.

Towards a Solution

Management and control of natural gas resources are essential for the composition of the energy mix of a country. The project concept was based on a request from the National Metrology Institutes (NMIs) of Peru and Bolivia to improve their capacities to measure quantity and quality of natural gas. The NMIs of Mexico and Brazil offered to support the project through knowledge sharing and technical assistance in a South-South cooperation initiative.

The NMIs are responsible for providing precise and comparable measurements. In practice, this is achieved through an agreement on a globally accepted reference system, the International System of Units (SI), which defines the seven physical quantities as fundamental benchmarks. For natural gas this applies to the physical measurement of the volume of gas flow and the chemical measurement of energetic value. Peru and Bolivia wished to establish these capacities in their laboratories. The NMIs of Brazil and Mexico contributed with technical assistance, because they already had laboratories at an internationally recognized level and used the techniques and equipment that Peru and Bolivia would use.

To obtain comparable and recognized measurement values, there is a need for cooperation among different partners. This includes synchronizing measurement methods, supported by inter-laboratory comparisons. Laboratories in different countries measure a sample and compare results to determine the degree of equivalence. The desired result are reliable and comparable measurements – a prerequisite for transborder and domestic trade.

In a first phase, the measurement capacities for Peru and Bolivia were adopted, and staff were coached by the NMIs of Mexico and Brazil to respond to international criteria, so that the NMI of the beneficiary countries could subsequently provide a reliable national measurement service of flow and composition of natural gas to users.

The regional relevance of the harmonization and collaboration in the field of natural gas motivated Colombia, Chile and Argentina to share their needs and capacities with the project partners. Therefore, in the second phase, Argentina became involved as a coach for technical assistance, together with Mexico and Brazil in building the capacities of the laboratory staff throughout the region. Additionally, the Argentine NMI started as reference laboratory for the preparation of an inter-laboratory



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comparison among the participating labs. The comparison was concluded after the formal end of the project with funds from the participating NMIs. Colombia and Chile assisted the training and consultancy by their own means, and began to develop national plans to creating the know-how and technology to manage this energy resource on their own. The NMIs of Peru and Bolivia now operate as national authorities with their own laboratories that they continue to upgrade.

The project was highly successful as a result of the strong motivation of the partner institutes. **It opened a platform for coordination and helped to strengthen the relationships and knowledge sharing between these institutes, which led to the establishment of continuous links between the countries.** The participants appreciated learning from each other as equals through the cooperation with other institutes that face or faced similar challenges. Since all these countries and their institutes are also part of a regional organization, Sistema Interamericano de Metrología [Inter-American System of Metrology] (SIM), the project benefits are spread in the region.

The international acceptance of measurement results is a very important component of the quality systems that underpin

commercial activities worldwide. Laboratory capacity provides the domestic market with exact measurements and enables customers to optimize their activities in the gas sector. It also allows to relate with the metrological community in the field of gas measurement and thereby to earn and maintain international recognition of their measurement capabilities. This recognition is based on, *inter alia*, continuous collaboration between peer institutes. Inter-laboratory comparisons and mutual reviews of quality systems and technical skills, as well as exchanges among technical staff are elements of sustainability. Through SIM, the countries of the region are reaching a homogeneous level of gas measurement that allows to consolidate the NMIs in the global context of metrology.

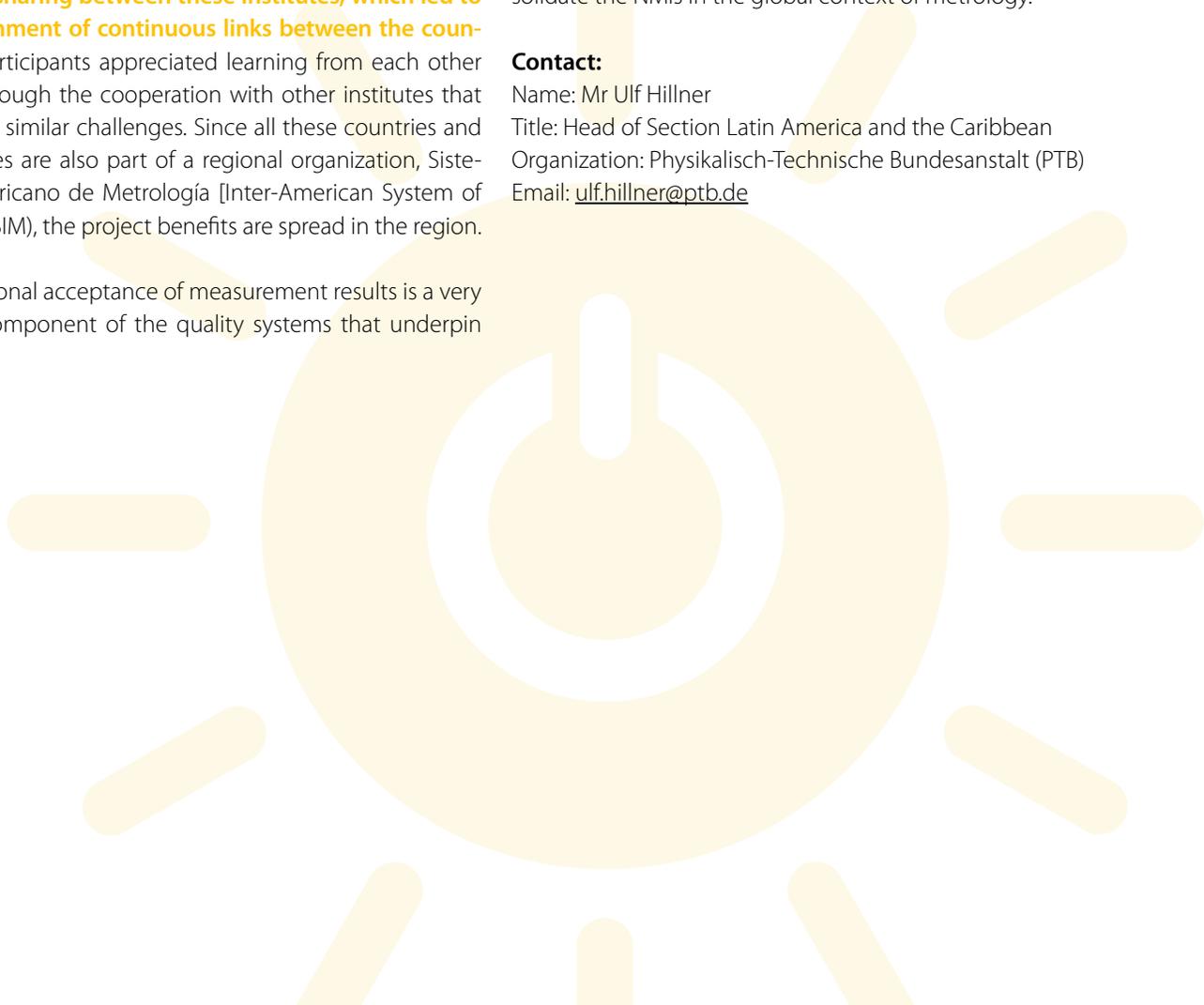
Contact:

Name: Mr Ulf Hillner

Title: Head of Section Latin America and the Caribbean

Organization: Physikalisch-Technische Bundesanstalt (PTB)

Email: ulf.hillner@ptb.de



PROJECT NAME: Trilateral Cooperation on Natural Gas Metrology in Latin America

COUNTRIES/REGIONS: Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Peru

NOMINATED BY: Federal Ministry for Economic Cooperation and Development, Germany

SUSTAINABLE DEVELOPMENT GOAL TARGETS: 7.1, 7.3, 7.a, 7.b, 9.1, 9.2, 9.b

SUPPORTED BY: Physikalisch-Technische Bundesanstalt (PTB), National Metrology Institute (NMI)

IMPLEMENTING ENTITIES: National Metrology Institutes (NMIs) of participating countries

PROJECT STATUS: Completed

PROJECT PERIOD: 2007–2015

URL OF THE PRACTICE: www.ptb.de/9.3



Home Solar Project

Using renewable energy to promote social inclusion

Challenge

Mauritius is still heavily reliant on fossil fuels, which must be imported, to meet its energy demands. According to the Renewable Energy Roadmap 2030¹, in 2019, the country generated 78.3 percent of its electricity from non-renewable sources, primarily petroleum products and coal. The resulting greenhouse gas emissions have impacts on health and the environment. Only 21.7 percent of its energy comes from renewable sources, mainly bagasse, hydro, wind, landfill gas and solar. The need to integrate more sources of renewable energy in the electrical energy mix has long been recognized by the Government and streamlined in relevant national policies.

Towards a Solution

With a view to addressing this challenge, the Government of Mauritius developed a road map for renewable energy in order to increase the share of renewable energy to 35 percent of the electricity mix by 2025 and 40 percent by 2030. One of the key strategies in the road map is the installation of 35,000 rooftop photovoltaic units by 2025 and 50,000 by 2030.

Within this strategy, the Home Solar Project has been designed to involve low-income families in the production of electricity, with a view to improving their standard of living and enabling them to develop small businesses.

In 2017, the project secured a loan of US\$10 million from the Abu Dhabi Fund for Development and the International Renewable Energy Agency (IRENA). It is being implemented by the Central Electricity Board (CEB), a parastatal body solely responsible for the transmission, distribution and supply of electricity to the population. Solar photovoltaic systems are being installed on the rooftops of 10,000 households as part of the Government's efforts to alleviate poverty while contributing to national renewable energy targets.

The households will benefit from significant savings on their electricity bills. In addition, the project will add 10 MW of new renewable energy capacity to the grid, resulting in savings of over \$35 million in fossil fuel imports over the project's lifetime. It will also improve energy security. Each household will benefit from 50 kWh of electricity free of charge on a monthly basis, for a period of 20 years. Any surplus electricity generated is being injected into the grid. The project is being implemented in five phases across Mauritius, including the territory of Rodrigues. The first three phases will be completed by 2025.

The project's key partners are the Ministry of Energy and Public Utilities, CEB and CEB (Green Energy) Co. Ltd. The latter is a private company fully owned by CEB that is responsible for the promotion and development of renewable energy. IRENA and the Abu Dhabi Fund for Development are also involved in the project.



© CEB (Green Energy) Co. Ltd

1 Ministry of Energy and Public Utilities of Mauritius, *Renewable Energy Roadmap 2030 for the Electricity Sector* (August 2019)

To date, approximately 1,000 solar photovoltaic kits of 1 kWp have been installed on the rooftops of low-income households. The surplus electricity injected in the grid will generate savings for CEB, which will enable it to reinvest in similar projects in the future.

The project model is very simple and can be replicated in Small Island Developing States with good solar insolation and in countries seeking to promote solar energy in their electricity mix.

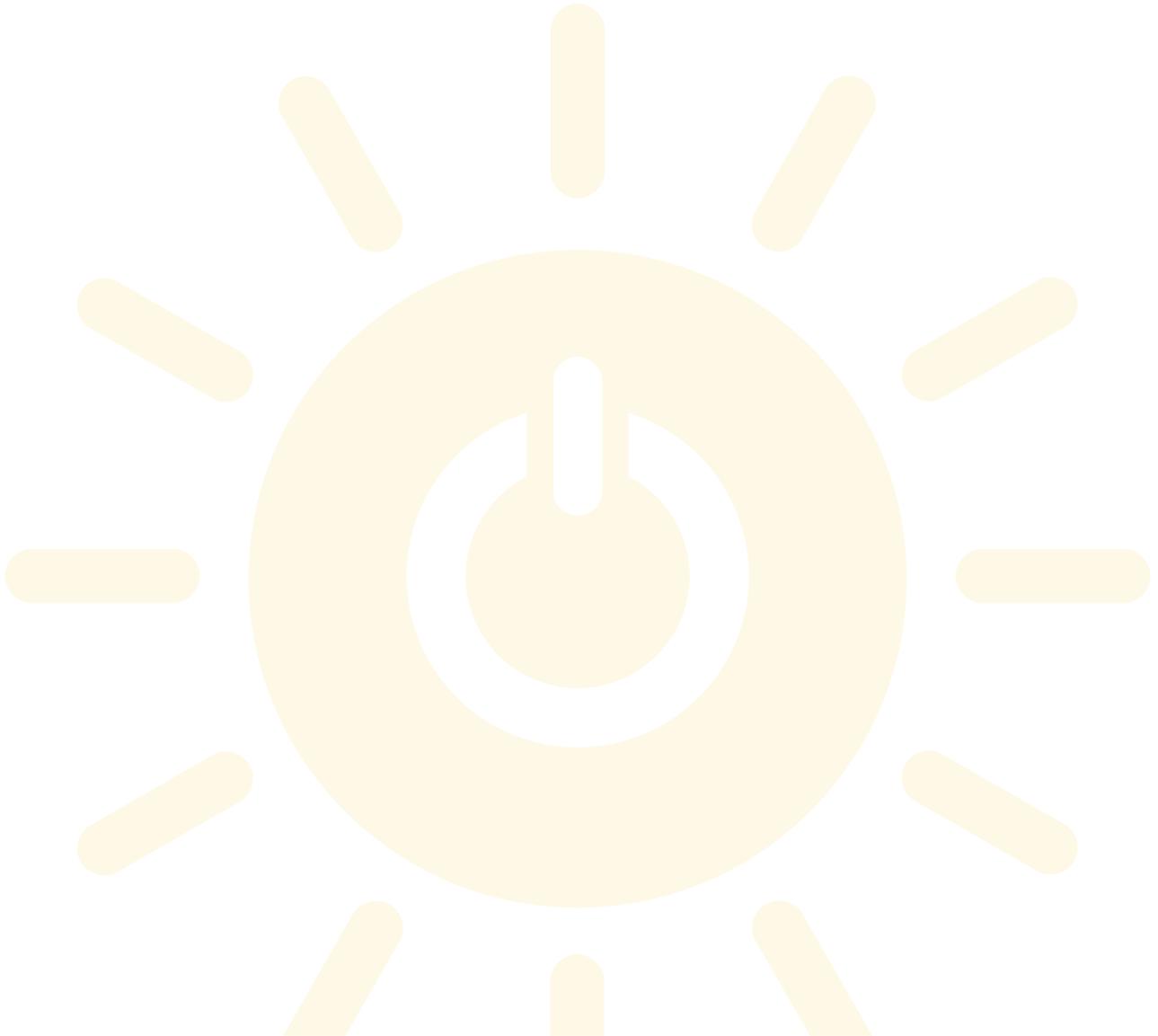
Contact:

Name: Mr Maheswur Raj Dayal

Title: General Manager

Organization: CEB (Green Energy) Co. Ltd

Email: mahesh.dayal@ceb.intnet.mu



PROJECT NAME: Home Solar Project

COUNTRIES/REGIONS: Mauritius, United Arab Emirates

NOMINATED BY: International Renewable Energy Agency (IRENA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.1, 7.2, 7.a, 7.b

SUPPORTED BY: Abu Dhabi Fund for Development

IMPLEMENTING ENTITIES: CEB (Green Energy) Co. Ltd

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2023

URL OF THE PRACTICE: Not available

United Arab Emirates-Caribbean Renewable Energy Fund

Providing a US\$50 million grant fund for reducing energy costs and pollution, with gender and resilience standards

Challenge

Caribbean Small Island Developing States (SIDS) face some of the highest energy costs in the world, owing to reliance on imported, expensive diesel, which has adverse effects on economic growth. Many of the countries also face significant vulnerability in their power systems to climate disasters like hurricanes. Although renewable energy is now the cheapest power source in every country, many SIDS do not have a developed renewables sector with a track record of implementing projects. Accordingly, quickly building high quality renewable energy projects can potentially prove to all stakeholders that renewables can immediately bring down costs, deliver reliable power, and create jobs – and thereby drive interest and policies to enable further renewable energy power generation assets.

Towards a Solution

The United Arab Emirates (UAE)-Caribbean Renewable Energy Fund provides US\$50 million in grants for renewable energy projects in the 16 Caribbean countries classified by the United Nations as sovereign Small Island Developing States.

The UAE-Caribbean Renewable Energy Fund was established with two key objectives:

- Increase the use and resilience of renewable energy applications in the region, including in related sectors such as water and waste, per national development and energy plans.
- Expand technical experience in designing, implementing, and managing renewable energy projects, to facilitate faster and lower-cost deployment in the future.

The Fund responds to the high cost of energy in Caribbean SIDS countries, identified as a primary growth barrier by the International Renewable Energy Agency (IRENA) and the Samoa Pathway.

The Fund typically enables one of the first or largest renewable energy installations in the project locations, with a mix of utility-scale and off-grid solar, and is designed to help to kickstart or enhance the local industry while also enhancing the power system's resilience to climate change. The Fund has partnered with other organizations: for instance, for co-financing the green reconstruction of the Barbuda power system with the Caribbean Community (CARICOM) Development Fund and New Zealand's Ministry of Foreign Affairs and Trade, as well as for undertaking the scoping work of Rocky Mountain Institute, Carbon War Room and Clinton Foundation project towards implementation. To date, three projects (Bahamas, Barbados, and St Vincent and the Grenadines) have been commissioned under the Fund, three are under construction (Antigua and Barbuda, Belize, and Dominica), seven are preparing for procurement (Dominican Republic, Grenada, Guyana, Haiti, St Lucia, Suriname, and Trinidad and Tobago) and three are in the feasibility stage (Cuba, Jamaica, and St Kitts and Nevis).

Renewable energy is now significantly cheaper than diesel in all 16 countries, but deployment has not kept pace with this economic shift, often due to lack of project development precedent. The UAE faced a similar situation in its own development of renewable energy and found injections of public finance for hardware to be highly effective in quickly commercializing solar power technol-

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gies. One of the Fund's innovations is its provision of grants for hardware (solar panels, converters, grid upgrades, etc.) with built-in training and capacity development, so that partners are applying their skills to concrete projects that are actually built and operated. The UAE and Caribbean Governments therefore agreed to focus the Fund on generation assets that could immediately demonstrate renewable energy's cost savings, technical feasibility, and job creation potential, as a spur and example for future development.

The Fund operates on a government-to-government basis, with Caribbean countries developing a shortlist of projects and assigning a technical working group (usually several ministries, the relevant utility, and local authorities). The group then partners with the UAE's independent technical focal point (the private clean energy project developer Masdar, headquartered in Abu Dhabi) to select the final project(s) and develop the feasibility report. A tender is then released to the market, with priority placed on local firms and content, as well as on gender metrics. Funding is untied. The government technical group and Masdar then manage the contractor until plant commissioning. The Government specifies which entity will own the asset and handles any offtake agreements. The project is also required to be financially self-sustaining, i.e. unsubsidized for future operation. A six-week plant operation training module serves as the project coda. This cooperative, iterative process is designed to build the experience of all of the stakeholders (including the UAE) in overseeing renewable energy projects from concept to operation.

Because the projects are often the first of their kind, they often have regulatory impacts. For instance, the offtake agreement between the Government and the utility for the Fund project in the Bahamas created the template for large-scale independent power producers, facilitating future projects.

The Fund also includes a resilience and gender standard. The resilience standard requires projects to assess and improve their location and durability regarding extreme weather events (namely hurricanes). The gender standard requires a gender analysis for the project concept, as well as consideration of and reporting on gender balance in staffing and procurement.

In terms of results, the first three implemented projects in the Bahamas, Barbados, and St Vincent and the Grenadines result in immediate annual savings of \$1.3 million by avoiding 995,000 litres of diesel. Annual carbon savings from the three projects are estimated at 2.7m kg, and ten people in each country received direct training on project development and plant operation. The solar and battery project on Union Island in St Vincent and the Grenadines is also one of the first islands in the region to achieve 100 percent solar power during sunny periods, creating a proof point for renewables + battery technology.

Practices and experiences from the Fund are shared through global and regional partners including the International Renewable Energy Agency (IRENA), CARICOM's energy unit, the Caribbean Electric Utility Services Corporation (the power industry association, CARILEC) and Rocky Mountain Institute/Carbon War Room. The Fund also transfers significant experience from the UAE-Pacific Partnership Fund, a similarly designed US\$50 million grant fund for renewable energy deployed across 11 Pacific countries between 2013 and 2016.

Contact:

Name: Mr Dane McQueen

Title: Senior Advisor, Development and Humanitarian Affairs

Organization: United Arab Emirates Ministry of Foreign Affairs and International Cooperation

Email: d_mcqueen@mofaic.gov.ae

PROJECT NAME: United Arab Emirates (UAE)-Caribbean Renewable Energy Fund

COUNTRIES/REGIONS: Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, United Arab Emirates

NOMINATED BY: Ministry of Foreign Affairs and International Cooperation of the United Arab Emirates

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.2, 5.b, 7.1, 7.2, 7.b, 8.2, 8.3, 8.4, 8.9, 9.1, 9.4, 9.a, 13.1, 13.a, 13.b, 17.3, 17.6, 17.7, 17.9

SUPPORTED BY: Ministry of Foreign Affairs and International Cooperation of the United Arab Emirates

IMPLEMENTING ENTITIES: Range of government agencies and utilities within each of the 16 Caribbean countries + Abu Dhabi Fund for Development, Masdar, and UAE Ministry of Foreign Affairs and International Cooperation. Co-financing and other complementary resources provided by the CARICOM Development Fund, New Zealand Ministry of Foreign Affairs and Trade, and Rocky Mountain Institute / Carbon War Room / Clinton Foundation.

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2022

URL OF THE PRACTICE: Not available

Solarization of Head of State Residences in Pacific Islands Development Forum Member Countries

Promoting the use of solar energy through the installation of solar photovoltaic systems in Pacific Island Countries

Challenge

The Pacific Island Countries (PICs) face energy challenges, including:

- an overdependence on fossil fuels;
- the high cost of developing energy resources and extending services to remote populations;
- the poor quality of energy data and trends;
- a small base of skilled people to address the issues;
- weak bargaining positions with petroleum suppliers;
- exposure to high logistic costs.

In response to these challenges, a clear, central solution across much of the Pacific is the installation of solar photovoltaic (PV) systems. Price reductions for photovoltaic PV over the past decade have brought the cost of solar generated electricity to the point where it is competitive with most forms of commercial generation, mostly by diesel engines. PICs are targeting the scaling-up of renewable energy to offset high prices and seek on- and off-grid solutions for improved power access, quality and efficiency.

Towards a Solution

Through the “Solarization of Head of State Residences in PIDF Member Countries” initiative, the Pacific Islands Development Forum (PIDF) and the non-profit organization Solar Head of State (SHOS) aimed to raise the profile of the installation and usage of solar energy in PICs with the Heads of State championing the technology.

This initiative brings together a regional organization (PIDF, SHOS), a Global-South Development partner (the Government of India through the India-UN Development Partnership Fund managed by the United Nations Office for South-South Cooperation [UNOSSC]), and an executing agency (United Nations Development Programme [UNDP]). It also brings in Solaria, a private sector partner based in the United States of America, which is donating the solar panels.

The initiative is being implemented in 11 PICs: Fiji, Federated States of Micronesia, Kiribati, Republic of the Marshall Islands (RMI), Nauru, Palau, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu.

By having a solar system installed on public buildings, including the executive administrative residence of a country, the country’s leadership is given first-hand experience with proven benefits of renewable technologies, which further encourages the development of energy policies that favours the adoption of renewable energy. Each system is a demonstration project to inspire the mass adoption of solar energy and other renewable energy technologies by the citizens of the country and around the world. The projects can be used to engage the general public with the benefits of renewable energy through an effective media campaign and community outreach. By bringing global expertise in the design and installation of solar systems to each project, SHOS and PIDF facilitate the transfer of critical skills and knowledge to the participating PICs.

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13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS



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SHOS has a proven track record and have already installed these installations in the Maldives (Official Presidential Residence), St. Lucia (public residence of the Governor-General) and Jamaica (National Executive Office, Jamaica House).

Building on previous work, the project will work diligently and proactively to arrange appropriate complementary and/or joint activities, and where relevant, develop practical follow-up activities. The PIDF and the Global Green Growth Institute (GGGI), with Korea International Cooperation Agency (KOICA) funding, are collaborating on the ongoing multi-country "Capacity Building to Strengthen Sustainable Implementation of Renewable Energy Technologies for Rural Energy Access" project. The project is being implemented in three of the countries, Fiji, Solomon Islands and Vanuatu, and PIDF will lead implementation in the Solomon Islands. Possible areas of collaboration include training on the installation, operation and maintenance of solar PV systems, public awareness raising on sustainable energy (e.g. unveiling of the solar PV projects while announcing new national energy policies and plans), etc. Furthermore, UNDP has ongoing sustainable energy projects in Tuvalu, Nauru and Vanuatu as well as projects being developed in other countries.

All PICs have submitted nationally determined contributions (NDCs), and the Republic of the Marshall Islands (RMI) submitted its second in November 2018. The national climate change mitigation pledges address some of the major sources of national greenhouse gas (GHG) emissions, but the focus is on the energy sector. Most of the NDCs include GHG emission reduction targets, and some have targets both for an unconditional and a conditional mitigation component with common needs includ-

ing finance, technology support and/or capacity development. Some ultimately aim for 100 percent renewable energy-based penetration by 2030, including Fiji, Tuvalu and Vanuatu.

The most important element of this initiative is the partnerships involved. Multiple organizations based in different countries and regions of the world are involved, including from the public sector, the private sector and civil society: (i) in PICs, partners include the offices of the head of state/building of national importance, power utilities and private companies; (ii) at regional level, partners include PIDF and UNDP; and (iii) at the international level, SHOS, Solaria, the Government of India and UNOSSC.

There is potential to upscale the individual installations to make them more than a simple PV installation, but full-on 100 percent renewable electricity for state houses, including battery storage and other sustainability efforts on the grounds of the residences. These efforts could include electrification of garden maintenance tools, use of electric vehicles by government officials or garden workers, installation of electric vehicle charging stations, etc. There is some scope for upscaling in the Pacific Islands region; for example, solar PV systems could be installed on executive residences in Cook Islands, Papua New Guinea and Samoa. However, there is significant scope for upscaling in other Small Island Developing States (SIDS).

Contact:

Name: Mr Viliame Kasanawaqa

Title: Team Leader Policy Research and Evaluation

Organization: Pacific Islands Development Forum

Email: viliame.kasanawaqa@pidf.int

PROJECT NAME: Solarization of Head of State Residences in Pacific Islands Development Forum (PIDF) Member Countries

COUNTRIES/REGIONS: PIDF Member Countries (Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu)

NOMINATED BY: Pacific Islands Development Forum (PIDF)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.2, 7.a, 13.2, 17.9

SUPPORTED BY: India-United Nations Development Partnership Fund

IMPLEMENTING ENTITIES: PIDF, United Nations Development Programme, and Solar Head of State

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2020–2022

URL OF THE PRACTICE: <http://greenbusiness.solutions/shos>

Following the Carbon for Clean Energy in Asia

Accelerating energy efficiency, renewable energy and natural gas solutions among middle-income countries in Asia

Challenge

Over 80 percent of new, worldwide coal-fired power plants that began operating between 2017 and 2020 are in middle-income countries in Asia: People's Republic of China, India, Indonesia, Pakistan, the Philippines and Viet Nam. In addition to the plants that were in operation in these countries, these new power plants will lock-in 260 gigatons of carbon dioxide emissions over their remaining lifetimes. This would exceed the power sector's carbon budget in line with mitigation pathways consistent with limiting global warming to 2°C. Support for policies and investments to maximize energy efficiency and clean energy in Asian countries will therefore not only benefit local populations through greater energy productivity and cleaner air, but it will also contribute critically to the Paris Agreement targets.

While energy efficiency (EE) is known as the 'first fuel' of economic development, due to its enormous potential and low cost, implementation progress has been slow, mainly due to difficulties in finding scalable business models and attracting commercial capital to support these investments. For various institutional and technical reasons, countries around the world, especially middle-income countries in South, East and South-East Asia, have been struggling to identify scalable mechanisms to promote EE.

All these countries have a renewable energy (RE) portfolio, but need to develop affordable scale-up policies. They were eager, therefore, to understand and overcome constraints to least-cost generation.

Towards a Solution

The objective of this knowledge exchange was to improve the capacity of China, India, Indonesia, Pakistan, the Philippines and Vietnam to achieve their respective national, low-carbon energy ambitions by optimizing their EE, RE and gas policies, developing successful business models and adopting suitable financing mechanisms. **The exchange aimed at allowing peers in participating countries to exchange experiences and lessons learned on designing and implementing policies to supply low carbon energy at least cost to end users, including through private sector participation in their home countries.**

To rapidly translate the business models across countries for similar cross-cutting deals, three knowledge exchange workshops were jointly organized and facilitated by a World Bank team as part of the Follow the Carbon/Energy Transition (FTC/ET) in Asia initiative: the first two in Singapore and the third one in Qinghai, China. The workshops consisted in expert panel sessions, site visits and networking.

Expert panel sessions

The workshops comprised three separate knowledge exchange events on RE Auction, EE, and Grid Integration of RE. Resource experts shared their experience and lessons learned; they were from: (i) countries that successfully implemented RE auctions (Brazil, India, Peru, South Africa and the United Arab Emirates); (ii) countries that successfully implemented EE policies and programmes (China, India, Japan, Mexico, Republic of Korea, Singapore and the United Kingdom); and (iii) countries that are successfully integrating RE into their power systems (Australia, Denmark, Spain and United States of America).

Site visits

Field visits were organized to the world's largest and most efficient district cooling facility, a green hotel and a green hospital to gain personal experience about Singapore's experience with green buildings. The Grid Integration of RE workshop included field visits to the world's largest solar photovoltaic (PV) park in Qinghai, the largest power station of hybrid PV and hydropower at Long Yang Gorge, and the dispatch centre of



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Qinghai Grid Company in Xining to showcase its experience of 100 percent RE grid integration during nine consecutive days.

Networking

The workshops were interspersed with networking activities between FTC/ET country representatives, resource experts, and World Bank staff.

Results and Lessons Learned

New knowledge

Renewable Energy Auction

- Among the three RE policy options (feed-in tariffs, RE portfolio standards and auctions), feed-in tariffs have delivered success to scale up RE in a short time period. However, tariff levels tend to be high, which can result in an extra burden on consumers or governments for RE subsidies. According to a recent global trend, there is an increasing number of countries shifting from feed-in tariffs to auction schemes, which has led to a rapid decline of the price of solar PV and wind energy, resulting in a massive scale-up of investments. Almost all countries represented at the workshop that successfully implemented RE auction schemes achieved solar PV tariffs that are competitive with conventional power generation, even compared to coal as baseline fuel in India and South Africa.
- In addition to adequate tariff levels with long-term power purchase agreements, successful RE policies should also require mandatory grid access, and incremental costs, if any, to be passed to consumers.
- Solar PV electricity prices are primarily driven by investment costs, cost of financing, cost of land and labour, and solar resources. Current prices are sustainable over time, but the rate of decrease could slow down.

Energy efficiency

- Conducive policies are the essential driver to create market demand for catalysing EE investments. Successful EE experiences demonstrated that mandatory output-based policies are more effective than voluntary input-based approaches, and strong regulations must go hand in hand with financial incentives. China and India adopted mandatory EE targets for industry. China adopted a top-down approach in allocating EE targets to each province and top 17,000 energy-intensive industrial enterprises, and held the obligated parties accountable for achieving the

targets. India's Perform, Achieve, Trade (PAT) scheme is a market-oriented scheme where energy saving targets are allocated to industry sectors and allow trading of energy saving certificates to achieve the national targets at least cost.

Grid integration of renewable energy

- FTC/ET countries are at various phases of variable renewable energy (VRE) grid integration (solar PV and wind). Most South-East Asian countries are at the starting phase with a very low share of VRE in the grid system. China and India have a notable VRE share in the system, and some regions of China such as the northwest have experienced a very high share of VRE in the grid system. All have huge potential to scale up over time with proven technical solutions and institutional reforms. From a technical perspective, integrating high levels of VRE into conventional electric power grids poses distinct challenges due to the intermittency nature of solar PV and wind power.

New and improved actions

Following the workshops, the six countries began tailoring knowledge learned to their specific context and leveraging the newly established network for joint efforts in maximizing EE and clean energy. During the process, new and improved actions were undertaken.

Moving forward

All FTC/ET countries have decided on follow-up plans to pilot or implement RE auctions.

Immediately after the RE auction workshop in Singapore, World Bank teams in Indonesia and Viet Nam conducted follow-up in-country workshops and discussions on RE auctions. Resource experts from the Singapore workshop were tapped for these consultations. The World Bank team in Pakistan engaged in follow-up discussions with its government counterparts on how to support them on RE auction. All three teams made plans to mobilize trust funds to support their respective countries in piloting solar auction schemes, and potential funding sources have been identified.

Contact:

Name: Mr Laurent Porte

Title: Program Manager, South-South Facility

Organization: World Bank

Email: lporte@worldbank.org

PROJECT NAME: Following the carbon for clean energy in Asia

COUNTRIES/REGIONS: Australia, Brazil, China, Denmark, India, Indonesia, Japan, Mexico, Pakistan, Peru, the Philippines, Republic of Korea Singapore, South Africa, Spain, United Arab Emirates, United Kingdom, United States of America, Viet Nam

NOMINATED BY: World Bank

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.2, 7.a, 17.9

SUPPORTED BY: World Bank South-South Facility

IMPLEMENTING ENTITIES: Governments of China, India, Indonesia, Pakistan, the Philippines and Vietnam, World Bank, experts from Australia, Brazil, China, Denmark, India, Japan, Mexico Peru, Republic of Korea Singapore, South Africa, Spain, United Arab Emirates, United Kingdom and United States of America

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2018

URL OF THE PRACTICE: <https://bit.ly/3aUWj8V>



ekShop: Empowering Rural Communities using Assisted E-Commerce

Employing a unique e-commerce platform to facilitate greater access to economic opportunities for hard-to-reach rural citizens, lessen the logistics divide and reduce inequality

Challenge

People living outside of urban areas or in less advantageous zones are deprived of the benefits of the emerging e-commerce industry, owing to their non-existent or limited Internet knowledge, as well as a lack of access to logistics and finance tools. Although many districts are known for producing domestic goods, producers do not receive a fair price because of unequal access to transport facilities and digital financial services. These inequalities lead to a decrease in production, which, in turn, increases inequalities between rural and urban areas. In addition, most e-commerce companies do not have access to the rural market, which remains largely untapped.

Towards a Solution

The vision of the 'ekShop' initiative is to create a platform where these marginal producers can sell their products directly to customers and take advantage of online shopping. It integrates all the top e-commerce and logistics companies into a single channel and extends access to over 4,000 physical-digital centres. This single initiative has sparked a 'Go Rural' revolution within the e-commerce and fast-moving consumer goods industries, thus acting as the catalyst to create a highly efficient access and logistics infrastructure.

One of the objectives in establishing ekShop was to reduce inequalities between market facilities in rural and urban areas. Through ekShop's digitized market platform and delivery channel, rural producers were able to access the urban market and sell their goods across the country through all the top e-commerce companies in Bangladesh. Women in particular are encouraged to market their handcrafted products, especially those living in rural areas.

ekShop is a modular platform that uses an application programming interface. It has introduced secure payment system, provided by ESCROW, and uses an integrated payment portal to foster trust between buyers and sellers. Furthermore, digital centres are often used as storage warehouses for products that are frequently ordered by locals. These are one-stop centres run by citizen entrepreneurs in tandem with elected local government representatives where citizens can access over 150 public and private services, some free and some fee-based.

By engaging digital centre entrepreneurs and applying an assisted e-commerce model, ekShop is gradually reducing the digital divide and increasing income in rural populations. Currently, most of the logistics companies are using the digital centres as their delivery points and the centres' entrepreneurs as delivery agents to ensure access to rural areas.

As of February 2020, over 4,000 digital centres have been on-boarded, and over 32,000 urban-to-rural orders worth 45 million taka (over US\$530,000) have been placed. In addition, 230,000 kg of rural-to-urban agricultural orders have been placed, and handcrafted goods worth 20 million taka (over US\$235,000) have been sold. ekShop has 3,765 doorstep delivery points with 500 micro-merchants and has completed over 100,000 orders. To date, 300,000 consumers have been served, an average of three per order. Although the majority of payments have been made



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as cash on delivery (82 percent), some entrepreneurs have used banking and mobile financial services as well. A total of 247 entrepreneurs have become local distributors of fast-moving consumer goods through ekShop, and 2,100 entrepreneurs have been trained in e-commerce by the ekShop team.

ekShop provides an assisted e-commerce model that uses ESCROW payment services and is focused on improving rural sales. It is the only platform to connect 80 percent of the nation's logistics providers with its exclusive geomapping.

All the stakeholders and partners involved with ekShop benefit from each transaction. As a result, they have taken ownership of the initiative, along with the Aspire to Innovate (a2i) Programme, and will maintain it on an ongoing basis. A revenue ecosystem is established, in which all the connected commission flows need not depend on any external sources. Furthermore, the initiative has led to the establishment of the National E-Commerce Policy of 2018 and the E-Commerce Policy for Small- and Medium-Sized Enterprises in 2019.

ekShop has crossed international borders to replicate this model. There are four operational hubs: ekShop centres in Ma-

laysia and Singapore and full ekShop architecture operations in Turkey and Nepal. This cross-country transfer has increased the number of people who can access the digital services that ekShop has to offer. ekShop also exports rural products to several countries.

For an ekShop model to thrive in an area, the digital market must have multiple e-commerce players and logistic facilities. There must also be stable Internet connectivity. This initiative is based on the idea of making e-commerce platforms as easy to access as possible. As a result, it does not require a complex project design or significant investment.

Contact:

Name: Mr Rezwanul Haque Jami

Title: Team Leader, Rural E-Commerce and Head of Commercialization (iLab)

Organization: Aspire to Innovate (a2i) Programme

Email: rezwanul.haque@a2i.gov.bd

PROJECT NAME: ekShop: Empowering Rural Communities using Assisted E-Commerce

COUNTRIES/REGIONS: Bangladesh, Malaysia, Nepal, Turkey, Uganda

NOMINATED BY: Aspire to Innovate (a2i) Programme, Government of Bangladesh, United Nations Development Programme (UNDP) Bangladesh

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 1.5, 1.a, 5.1, 5.a, 5.b, 5.c, 8.1, 8.2, 8.3, 8.5, 8.9, 9.1, 9.2, 9.3, 9.4, 9.a, 9.b, 9.c, 10.1, 10.4, 10.b, 11.a, 11.c

SUPPORTED BY: ICT Division, Cabinet Division, UNDP

IMPLEMENTING ENTITIES: a2i Programme, Government of Bangladesh, UNDP Bangladesh

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2021

URL OF THE PRACTICE: www.ekshop.gov.bd



Innovations in Apprenticeship: A Skilled Workforce for the Future

Leveraging the demographic dividend by empowering youth with meaningful skills most demanded by the market

Challenge

According to the World Bank, Bangladesh has a total population of 158 million and a labour force of 59.5 million, with a projected labour force growth rate of 2.2 percent¹ by 2030. Approximately 2 million young people join the workforce every year.² Among them, 0.6 million are from mainstream education, and 1.1 million are trained by government or private skills development agencies. The remainder are classified as not in education, employment or training. A total of 11.6 million young people falls into this category. There is a significant gap between the demand for skilled workers in local industries and the supply from education and training centres. One plausible reason for this is the communication and coordination gap between employers and skill development agencies in Bangladesh.

Towards a Solution

Apprenticeship is any system by which the employer undertakes, by contract, to employ and train a young person (between the ages of 17 and 30 years) for a period specified in advance and during which the apprentice is bound to work in the employer's service. Employers provide apprentices with real, on-the-job skills. This is the main learning environment in which manual skills, behaviours, attitudes and work processes and procedures are formed under real working conditions. On the other hand, training institutions equip apprentices with more theoretical training. In this learning environment, apprentices acquire competencies that are most effectively taught outside the workplace.

The apprenticeship programme can be a practical solution to address the gap between the demand for skilled workers in local industries and international job markets and the supply ensured by education and training centres. This initiative involves employers, skill development agencies and young people to ensure that demand-driven skills are being developed.

The apprenticeship programme benefits apprentices, hiring organizations and the economy. For apprentices, apprenticeships can provide access to full-time employment for semi-skilled and unskilled youth. Certificates of completion help apprentices to promote their skills and capabilities to potential employers. Apprenticeships also count as credible experience for jobseekers, which can be used to improve their earning potential. Furthermore, business entities operating apprenticeship programmes have sufficient time to mould apprentices to the company's culture and work structure. Under the Labour Law of 2013, apprenticeship-related expenses are tax-free, and training equipment can be imported duty-free. Benefits for the economy include a significant reduction in the unemployment rate, an increase in overall industrial productivity, continued economic growth and a more skilled labour force.

As the innovation intermediary of the Government, the Aspire to Innovate (a2i) Programme is working with a whole-of-society approach, applying behaviour change methodologies and leveraging the rapid

1 www.documents1.worldbank.org/curated/en/834041507299981599/pdf/Main-report.pdf

2 www.blogs.worldbank.org/endpovertyinsouthasia/skilling-bangladeshs-youth-changing-job-market



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expansion of technologies to create an enabling environment for the development of demand-driven skills in Bangladesh.

In industrialized countries, at least five percent of the new labour force has an apprenticeship opportunity, which is crucial to creating skilled workers. Bangladesh plans to reach this percentage by 2023. **In 2017, 1.39 percent of the labour force participated in the apprenticeship programme. That number increased to 2 percent in 2018, and 2.35 percent in 2019.**

In terms of the informal job sector, 60 percent of the enrolled apprentices are female, and the apprenticeship programme has a successful job placement rate of over 85 percent, which demonstrates that this is an innovative approach to developing skills. This initiative is demand-driven, as industries are transforming rapidly to keep pace with technology. a2i has also developed the Apprenticeship Management System to manage, monitor and mentor apprenticeship programmes across the country. The hub serves all the needs of the programme's stakeholders, both young people and businesses.

This approach consists of registration, monitoring, assessment and certification, which ensures that the apprenticeship programme is conducted smoothly, and workers are actually re-

ceiving benefits. The programme coordinates employers and skill development agencies, which ensures its sustainability. It could easily be replicated in other countries that have a gap in supply and demand in the labour market.

To expand the apprenticeship programme in the global South, a2i has undertaken significant South-South cooperation activities. It signed a memorandum of understanding with the Global Apprenticeship Network in Switzerland in 2017 to connect with apprenticeship networks in other countries and share knowledge and experience. In addition, a2i serves as the Secretariat for the Asian Alliance for Apprenticeship network and promotes the exchange of knowledge, experience and best practices among its 11 member countries. The Government of Somalia and the Bangsamoro Autonomous Region of the Philippines have expressed interest in the apprenticeship solutions of a2i and a willingness to replicate the programme.

Contact:

Name: Mr Asad – Uz – Zaman

Title: Policy Specialist

Organization: Aspire to Innovate (a2i) Programme

Email: asad.zaman@a2i.gov.bd

Phone: +8801712092922

PROJECT NAME: Innovations in Apprenticeship: A Skilled Workforce for the Future

COUNTRIES/REGIONS: Bangsamoro Autonomous Region of the Philippines, Bangladesh, Cambodia, Somalia

NOMINATED BY: Aspire to Innovate (a2i) Programme, Government of Bangladesh; United Nations Development Programme (UNDP) Bangladesh

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.9, 8.b

SUPPORTED BY: International Labour Organization (ILO), United Nations Children's Fund (UNICEF), Oxfam, ActionAid

IMPLEMENTING ENTITIES: a2i Programme, Government of Bangladesh; UNDP Bangladesh

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2024

URL OF THE PRACTICE: www.apprenticeship.gov.bd



Towards a Leakage-Free Social Safety Net Distribution

Digitizing social safety net programmes in Bangladesh to deliver affordable, effective and leakage-free digital payments to those unreached

Challenge

Social safety net programmes help the Government to alleviate poverty and reduce inequality in Bangladesh. Budgetary allocations have grown in absolute terms, from 1.3 percent of gross domestic product in 1998 to 2.58 percent in the fiscal year 2019–2020. Total government spending has increased to 14.21 percent. There are currently over 140 social safety net programmes being administered in the country by 23 ministries and divisions.

Social safety net payments are heavily reliant on cash. The inherent costs associated with direct cash payments, such as the administrative cost of payment and the risk of leakage, are significantly higher. Studies indicate that leakage in social safety net programmes often constitutes a significant hurdle. Reducing leakage from the system could save a significant amount of money, which could eventually allow for a higher number of beneficiaries to be enrolled.

Moreover, considering that beneficiary groups are extremely poor and marginalized, recipients spend excessive time and money to travel to the payment location to collect their allowance. They also frequently experience aggravation at the point of payment collection.

Towards a Solution

In light of the challenges of direct cash transfers, the Aspire to Innovate (a2i) Programme, with support from the Bill and Melinda Gates Foundation, partnered with various government departments, ministries and financial service providers in Bangladesh to digitize social safety net payments as part of the Government's overarching plan to digitize all Government-to-person (G2P) payments in order to provide affordable, efficient financial services to marginalized people in Bangladesh.

Digital payments have the potential to promote financial inclusion in underserved communities, and the Government has made digitizing G2P payments a priority. G2P digitization was piloted in 2018, and a countrywide scale-up is currently underway.

In the past, beneficiaries would receive their quarterly allowance in cash at a bank branch, once their identity was validated by the bank staff. Under the new system, beneficiaries can choose their financial service provider, and the money is credited directly from the Treasury account to individual beneficiary accounts. Beneficiaries can withdraw the money at any time from any banking agent point around the country or with any mobile financial service. Beneficiary validation using national identity cards is an integral part of the architecture. Over 25 million beneficiaries of various cash transfer programmes will benefit from the new system, which will ensure that beneficiaries have ownership of their money and eliminate ghost beneficiaries from the programmes. The system also eliminated several middle tiers, which reduced inefficiencies, delays and leakages. Beneficiaries now have the ultimate freedom to choose their financial service provider, thereby laying the foundation for financial inclusion.

When compared to traditional programmes, a properly digitized social safety net programme could potentially reduce the number of visits to collect allowances by 80 percent, the time spent by



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58 percent and the costs incurred by 32 percent. Moreover, the Government could save 10 percent of its social safety net budget, resulting in possible savings of over US\$14 million annually.

Overall, the new system creates several benefits. The cash transfer programme allows for easier and faster delivery. Digital payments reduce the cost of collecting benefits; they save hours and, in some cases, days. In addition, a digital ecosystem ensures efficient service delivery for beneficiaries at the union level, the lowest tier of the Bangladeshi Government.

The programme allows for leakage-free distribution. The digitization of government payments ensures transparency, accountability and traceability. It also lessens the risk of corruption and leakage. As part of the digitization process, an awareness-raising programme was designed for beneficiaries to increase their ownership and reduce dependency on others in collecting their allowance.

The cash transfer programme increases efficiency in government operations. Given the nature of transactional anonymity, cash-based transactions are inconvenient, inefficient and lack transparency and accountability for government organizations. Digital payment methods are quicker and more efficient, which decreases overall cost and increases the efficiency of government officials.

The programme promotes the adoption of other digital financial services. Digitizing social safety net payments provides mobility, enabling citizens to receive their allowance by visiting the nearest cash point. It also creates an enabling environment for accessing more advanced digital financial services. **To date, this initiative has reached 2.5 million beneficiaries.**

The G2P payment architecture allows the Government to initiate digital payments in other sectors by leveraging fintech at a much lower cost and promoting digital financial services. This significant payment stream was digitized using an innovative model that ensured affordable and effective service delivery. Digital payments also have the capacity to promote the inclusion of women and serve the bottom of the pyramid. The infrastructure required to roll out G2P digital payments already exists in Bangladesh. Bangladesh Bank, the Finance Division of the Ministry of Finance, the Office of the Controller General of Accounts and a2i collaborated to integrate the various systems and adopt the necessary policy reform. Effective partnerships have been made among financial service providers and government institutions, including the Department of Social Service, the Ministry of Liberation War Affairs, the Department of Disaster Management and the Department of Women Affairs. The Government also approved new guidelines for the ministries and agencies implementing the payment system.

This model can easily be replicated in countries similar to Bangladesh, as well as in the private sector. Bangladesh has taken inspiration from the direct benefit transfer programme of India to develop this inclusive payment architecture. The Bill and Melinda Gates Foundation aided a2i in implementing this innovative approach to bolster South-South cooperation.

Contact:

Name: Md. Tohurul Hasan

Title: Programme Manager

Organization: Aspire to Innovate (a2i) Programme

Email: tohurul.hasan@a2i.gov.bd

Phone: +8801707554768

PROJECT NAME: Towards a Leakage-Free Social Safety Net Distribution

COUNTRIES/REGIONS: Bangladesh

NOMINATED BY: Aspire to Innovate (a2i) Programme, Government of Bangladesh; United Nations Development Programme (UNDP) Bangladesh

SUSTAINABLE DEVELOPMENT GOAL TARGET(s): 1.3, 8.10

SUPPORTED BY: Bill and Melinda Gates Foundation

IMPLEMENTING ENTITIES: a2i Programme, Government of Bangladesh; UNDP Bangladesh

PROJECT STATUS: Ongoing

PROJECT PERIOD: July 2017–December 2020

URL OF THE PRACTICE: Not available



Accessibility of Financial Services and the Private Sector in Africa

Maximizing the impact of financial cooperation on economic development and industrialization in Africa

Challenge

Although financial systems in Africa have progressed over the past 20 years, liberalization, privatization, and stabilization have yet to translate into more accessible financial services for the majority of Africans. There is a strong relationship between financial market development and economic growth. Financial markets help to direct the flow of savings and investments in the economy to facilitate the accumulation of capital and the production of goods and services. At a time of slowing global growth, the world is beginning to take notice of the fast-growing population and markets in Africa and the opportunities they hold. Nevertheless, the lack of access to financial services for small- and medium-sized enterprises (SMEs) at all levels continues to hamper cooperation in Africa.

Towards a Solution

To address these challenges, an in-depth study of African financial markets was needed. The accessibility and quality of financial services in African countries are crucial to healthy development in the private sector. The China-Africa Business Council (CABC) was established under the United Nations Development Programme in 2006 to promote economic and technological cooperation between China and African countries, particularly in the private sector. After a decade of development, CABC has accumulated rich experience in economic and technological cooperation. It has a broad communication network, deep understanding of African markets and strong support from member companies in Africa. CABC was therefore ideally placed to implement this project. With assistance from the China-Africa Development Fund and the Pérez-Guerrero Trust Fund, CABC designed a project to research financial markets in Madagascar, Mauritius and Zambia that would include in-depth interviews with local private businesses. The project, entitled 'Accessibility of Financial Services and the Private Sector in Africa', aimed to **highlight the existing issues in financial cooperation between Africa and its development partners, to the benefit of investment promotion agencies, financial institutions and chambers of commerce in Madagascar, Mauritius and Zambia**. The outcomes were expected to contribute to the achievement of Sustainable Development Goal 8 to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

This project was carried out in conjunction with government departments and non-governmental organizations in China and across Africa. The Economic Development Board of Madagascar, the Zambia Chamber of Commerce and Industry and the SBM Group of Mauritius collaborated with CABC on this project. The China-Africa Development Fund and the Pérez-Guerrero Trust Fund also contributed their expertise. Researchers conducted a series of well-designed investigations focusing on financial accessibility and companies' interaction with financial systems in Madagascar, Mauritius and Zambia. Field visits and on-site seminars were organized in those countries as well. After gathering the data, a comprehensive report was produced. It provides policy recommendations for Madagascar, Mauritius, Zambia and other countries in the region, as well as international investors, to develop financial markets in order to attract more foreign capital for development. In addition, a valuable database has been established for further research on South-South and China-Africa cooperation.



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With the population of Africa expected to overtake that of China by 2025, the continent's economic potential is undeniable. Given its growth and development requirements, Africa also has significant potential to develop its financial markets, thereby improving socio-economic prosperity and reducing poverty. A timely and in-depth study of African financial markets benefited both African countries and investors.

Madagascar, Mauritius and Zambia were selected for this study. Madagascar has strong performance in exports and investment. Mauritius is among the most financially active countries in Africa and has served as a hub for many multinational investors. Zambia has strong manufacturing and industrial sectors and is the headquarters of the Common Market for Eastern and Southern Africa. To a great extent, the selected countries represent the various development patterns across the African continent. The outcomes of this project could therefore serve as a reference for other African countries.

The project relied on a thorough study of financial markets in these three countries and a survey of local private businesses to identify common problems and challenges. The report

summarized the experiences and best practices of these three countries and the region as a whole. It includes several policy suggestions for Governments, financial institutions and the private sector. The report also provides recommendations to maximize the impact of financial cooperation on economic development and industrialization in Africa, thereby contributing to the healthy development of the private sector and job creation for local communities.

Improving financial markets attracts foreign direct investment and is crucial for every country. The challenges and solutions mentioned in the report also apply to other African countries. Hopefully, a similar research project can be applied to additional African countries with support from other banks and governmental agencies.

Contact:

Name: Mr Xiaofeng Bai

Title: Executive Deputy Secretary General

Organization: China-Africa Business Council

Email: baixiaofeng@cabc.org.cn

PROJECT NAME: Accessibility of Financial Services and the Private Sector in Africa

COUNTRIES/REGIONS: Madagascar, Mauritius, Zambia

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.3, 8.10

SUPPORTED BY: Pérez-Guerrero Trust Fund for South-South Cooperation

IMPLEMENTING ENTITIES: China-Africa Business Council

PROJECT STATUS: Completed

PROJECT PERIOD: June 2018–May 2019

URL OF THE PRACTICE: en.cabc.org.cn



E-Commerce Development Programme for SMEs from Developing Countries

Facilitating cooperation and exchanges among SMEs in developing countries

Challenge

Small- and medium-sized enterprises (SMEs) have always been important in developing countries, and central and local governments have been working on laws and regulations to promote their development. In today's society, e-commerce is rapidly transforming the way in which enterprises are interacting with each other, consumers and policymakers.

However, less developed countries and regions rely on low information technology and have less experience in informatization, which has hindered the development of e-commerce and related business activities among SMEs.

The target countries of Cambodia, Cuba and Viet Nam have a significant number of SMEs and provide strong support for domestic markets; however, government officials struggle to promote economic growth and integrate these SMEs in the global market.

Towards a Solution

The E-Commerce Development Programme for SMEs from Developing Countries, carried out by CIFAL Shanghai International Training Centre for local actors, aimed to facilitate cooperation and exchanges among SMEs in developing countries, particularly in e-business development. The Programme also seeks to apply the experience and best practices of China to other countries.

CIFAL Shanghai has long had a high reputation for bringing together individuals from developing countries to update their knowledge and professional skills in information technology in order to keep pace with informatization and industrialization. The Centre has offered seminars on information technology and related economic growth and development methods, which have been attended by 1,229 beneficiaries from 127 countries. Topics include domestic and cross-border e-commerce, e-business management, information security and infrastructure development, as well as the latest information technology in China and its application in daily life.

Based on demand in Cambodia, Cuba and Vietnam, CIFAL Shanghai provided workshops that would benefit SMEs from developing countries and regions. Participants learned about e-commerce and related issues through first-hand interactions with Chinese e-commerce market players, policymakers and other relevant parties.

A seminar on cross-border e-commerce cooperation was organized in each country, providing 70 government officials from Cambodia, Cuba and Vietnam with a better understanding of e-commerce and related infrastructure development in China. These seminars shared solutions and good practices from China through lectures and site visits. In order to equip participants with knowledge of the latest trends in application management of e-commerce information systems, all lectures were presented by experts from the front line and officials at all levels involved in urban construction, who shared examples from their daily work. To complement the knowledge gained in the classroom, CIFAL Shanghai arranged for participants to visit enterprises, which provided a better understanding of e-commerce development in China.



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CIFAL Shanghai would like to expand this training to provide further study opportunities to officials and technicians in less developed countries. Participants in the seminars gained a comprehensive and objective understanding of China's achievements and accumulated experience in cross-border e-commerce cooperation. They also gained a scientific and pragmatic perspective of cross-border e-commerce cooperation and learned how to apply information technology.

Based on the feedback received from participants, **the project not only provided knowledge of e-commerce and related information technology, but also allowed participants to understand the advantages of information technology products and solution companies in China.** Target countries could further explore opportunities for cooperation with China and Chinese companies to improve their information infrastructures and achieve Sustainable Development Goal targets in the future. The target countries showed a strong willingness to have delegates participate in future seminars.

CIFAL Shanghai provides demand-based solutions to design e-commerce training courses that fit the specific needs of a country. It conducts an analysis to determine the optimal approach to e-commerce development and assists in building partnerships among SMEs in different sectors or countries.

At the end of the seminars and training courses, all participants received a pen drive that contained all the course materials. They could share it with their colleagues or use it as reference to design related trainings in their countries. Representatives of CIFAL Shanghai maintained contact with the participants once they had returned to their home countries to identify their training demands and design future seminars for them. These training seminars could therefore be sustainable in both the participants' countries and in China. However, many countries currently lack the technical and academic expertise required to offer similar trainings.

In the coming years, CIFAL Shanghai will continue to raise awareness of informatization construction and share related knowledge and skills to further benefit individuals from Governments, corporations, financial institutions, hospitals and private businesses from States members of the Group of 77.

Contact:

Name: Mr Hanye Xue

Title: Project Manager

Organization: CIFAL Shanghai International Training Centre

Email: hanye.xue@cifalshanghai.org

WeChat: Xur233

PROJECT NAME: E-Commerce Development Programme for SMEs from Developing Countries

COUNTRIES/REGIONS: Cambodia, China, Cuba, Viet Nam

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.a, 9.3

SUPPORTED BY: Pérez-Guerrero Trust Fund for South-South Cooperation

IMPLEMENTING ENTITIES: CIFAL Shanghai International Training Centre

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2018

URL OF THE PRACTICE: <https://bit.ly/31sIfjN>

Entrepreneurship and Economic Growth to Achieve the Sustainable Development Goals in Nigeria

Supporting entrepreneurial growth for sustainable, community-based economic development

Challenge

Nigeria is the largest economy in Africa, with expanding economic sectors in manufacturing, finance, service and technology. The country has gradually shifted to a more sustainable economic approach, reducing dependency on oil and petroleum. According to the National Bureau of Statistics, small- and medium-sized enterprises (SMEs) have contributed 48 percent of national gross domestic product in the past five years. They account for 50 percent of industrial jobs and nearly 90 percent of the manufacturing sector, with approximately 17.4 million entrepreneurs across the country. The shift towards sustainable economic growth has now become one of the Government's policy priorities. With significantly more economic potential to be explored and optimized, strengthening entrepreneurship in the country could serve as the new driving force for economic growth, helping to create more job opportunities, alleviate economic disparity and promote a more inclusive economic environment.

Towards a Solution

In cooperation with the Indonesian Embassy in Abuja, the Directorate of Technical Cooperation and the Directorate General of Multilateral Cooperation of the Ministry of Foreign Affairs of Indonesia conducted a capacity-building programme entitled 'International Workshop on Entrepreneurship Capacity-building for Nigeria: Promoting Economic Growth to Achieve the Sustainable Development Goals (SDGs)' in Abuja, Nigeria from 30 October to 1 November 2019. The programme was undertaken to fulfil a commitment made by Indonesia in its role as a non-permanent member of the United Nations Security Council from 2019 to 2020. It was also a means of strengthening the country's South-South cooperation framework.

Twenty entrepreneurs and business practitioners from various sectors in Nigeria participated in the training, which was conducted by external consultants from Global Entrepreneurship Network (GEN) Indonesia who had prior experience in the numerous training programmes offered by the Directorate of Technical Cooperation. Through this programme, participants were expected to gain knowledge and insights on entrepreneurship that could support economic growth in Nigeria and create new economic opportunities with Indonesia. Furthermore, this programme was designed to align efforts to maintain peace with the sustainable development agenda through community building at the grassroots level.

The training sought to provide a better understanding of the importance of creativity and innovation in maintaining sustainable economic cooperation within global and domestic markets. It also aimed to build capacity in designing product prototypes with high economic value, identifying economic opportunities and potential markets, developing entrepreneurship capacity to optimize natural and technological resources for innovative solutions to market demands, and formulating new methodologies to validate the products or services offered by target markets and audiences.

The programme was delivered in an intensive three-day session that relied on classroom activities, interactive discussions, simulations, field practice and the use of audiovisual media to enhance the learning experience.

8 DECENT WORK AND ECONOMIC GROWTH



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The first session focused on building the entrepreneurial mindset. This important modality allowed participants to assess the business process used by entrepreneurs in order to determine the correct business model for growth potential. In this session, in-depth research was emphasized as the key to a successful business strategy. Participants were also introduced to the entrepreneurship ecosystem in Indonesia to gain insights on how businesses are conducted and to learn from the country's experience in integrating this ecosystem to foster national economic growth.

The second session focused on using the business model canvas as a tool to develop and navigate business strategy. It can be implemented to understand new business concepts, analyse business risk and create strategies to overcome challenges facing the business ecosystem. Participants were also encouraged to embrace technological advances in their business model canvas to improve their process and foster stronger growth. As an example, they learned about how the business climate in Indonesia is dominated by digital start-ups as a result of technological advances, which provides new business actors with several innovative strategies to disrupt the conventional business process and amplify their business growth.

To complement their training, participants also attended workshops on marketing and branding and received tips and insights on creating innovative products. These skill sets were deemed important to produce notable and valuable products that could compete in the fast-growing market while maintaining product sustainability.

At the end of the training, representatives from the Ministry of Foreign Affairs of Nigeria conveyed their satisfaction with the training programme and found that SMEs are important to growth and sustainable development. Moreover, they expressed interest in providing and further strengthening an environment conducive to empowering women and youth in the creative industry to promote economic growth. They would also focus on integrating technology to address stagnant development within the business community in Nigeria.

To maintain the continuity and spirit of the training, a network of entrepreneurs and SME owners from Indonesia and Nigeria was established. This initiative was undertaken to ensure further cooperation among entrepreneurs of both countries. It also serves as a platform to consult and explore mutually beneficial partnerships between these countries in the future.

This initiative contributed to achieving SDG 8 on decent work and economic growth, SDG 10 on reducing inequalities and SDG 5 on gender equality.

Contact:

Name: Mr Mohammad Syarif Alatas

Title: Director for Technical Cooperation

Organization: Ministry of Foreign Affairs of Indonesia

Email: syarif.alatas@kemlu.go.id

PROJECT NAME: Entrepreneurship and Economic Growth to Achieve the Sustainable Development Goals in Nigeria

COUNTRIES/REGIONS: Indonesia, Nigeria

NOMINATED BY: Ministry of Foreign Affairs of Indonesia

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 5.a, 8.2, 10.3

SUPPORTED BY: Ministry of Foreign Affairs of Nigeria

IMPLEMENTING ENTITIES: Ministry of Foreign Affairs of Indonesia

PROJECT STATUS: Completed

PROJECT PERIOD: 30 October–1 November 2019

URL OF THE PRACTICE: <https://bit.ly/32p0ohV>

Empowering Small- and Medium-Sized Enterprises in Suriname

Building stronger enterprise cooperation for sustainable economic growth

Challenge

Owners of small- and medium-sized enterprises (SMEs) in Suriname have great potential to expand their businesses and a desire to build stronger relations with Indonesia. The countries share strong economic and cultural bonds, as well as a good relationship. At the same time, the economic potential has not been optimized, and there is still significant room for improvement. Many owners of SMEs in Suriname still rely on a simple business planning method. Failure to address the possible loss of economic opportunity could affect efforts to achieve Sustainable Development Goal (SDG) 8 on decent work and economic growth and SDG 10 on reducing inequalities.

Towards a Solution

To address this challenge, the Government of Indonesia, with support from the Government of Suriname, hosted a capacity-building programme entitled 'International Workshop on Small and Medium-Sized Enterprises Empowerment: Working Together to Achieve the Sustainable Development Goals'. This programme was convened in Paramaribo, Suriname from 16 to 18 September 2019, and was attended by 35 participants, including government officials from relevant ministries and owners of SMEs. The resource persons for the programme were assigned from an external firm, a partner of the Ministry of Cooperatives and SMEs of Indonesia. The programme was undertaken to fulfil a commitment made by Indonesia in its role as a non-permanent member of the United Nations Security Council from 2019 to 2020. It was also a means of strengthening the country's South-South cooperation framework.

Owners of SMEs are at the core of economic activity in Suriname and play an important role in economic growth and development in terms of production, employment opportunities, export contributions and equitable distribution of income in society.

The training focused on three main themes: developing the skills necessary to improve capacity and knowledge to upscale businesses, implementing more structured and comprehensive business planning with the business model canvas method, and fostering product development skills.

The first theme focused on teaching participants how to analyse their own business. This included formulating a proper business model, determining their bargaining value and developing a strategy to put their businesses forward. The second theme focused on familiarizing participants with the business model concept, which included training on using the business model canvas to analyse risks and potential, understanding its components and improving existing business models.

To provide participants with all the skills required, the training also included materials on product development, such as marketing, packaging and branding. Participants were encouraged to use mind-mapping techniques during brainstorming sessions to organize or simplify ideas and thought processes. They were introduced to customer journey maps to analyse business processes, and they participated in a practical workshop to make or improve product branding and packaging.



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Based on the responses to the questionnaire returned at the end of the programme, the training received mostly positive feedback. Participants were satisfied with the interactive training methods and the concrete ideas delivered by each facilitator. Moreover, participants requested that similar capacity-building programmes be conducted in the future.

In addition to the capacity-building programme, the training also served to strengthen the network between SMEs in Suriname and Indonesia. The exchange of knowledge between the two countries is important to build trust and it paved the way for potential future collaborations in various sectors, given the similar economic challenges they face as developing countries.

As a result of the capacity-building and training programme, participants increased their knowledge and skills to empower owners of SMEs and integrate local businesses and SMEs into long-term economic development plans. This ensures more prosperous and sustainable economic growth, in line with SDG 8, “Decent Work and Economic Growth”, SDG 5 “Gender Equality” as well as SDG 10, “Reducing Inequalities”.

Contact:

Name: Mr Mohammad Syarif Alatas
Title: Director for Technical Cooperation
Organization: Ministry of Foreign Affairs of Indonesia
Email: syarif.alatas@kemlu.go.id



PROJECT NAME: Empowering Small- and Medium-sized Enterprises in Suriname
COUNTRIES/REGIONS: Indonesia, Suriname
NOMINATED BY: Ministry of Foreign Affairs of Indonesia
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 8.2, 10.3
SUPPORTED BY: Ministry of Foreign Affairs of Suriname
IMPLEMENTING ENTITIES: Ministry of Foreign Affairs of Indonesia
PROJECT STATUS: Completed
PROJECT PERIOD: 16–18 September 2019
URL OF THE PRACTICE: <https://bit.ly/3lhAt45> (in Bahasa Indonesia)

Good Governance and Institutional Capacity for the State of Palestine

Developing stronger institutions for better governance

Challenge

Good governance and strong institutional capacity are among the most important aspects of a healthy, functional government. In order to support economic growth with accountable government leadership, robust macroeconomic management and fiscal planning is necessary to ensure all policies within the sector benefit the country as a whole. The State of Palestine is currently improving its institutional capacity to strengthen its independence and credibility as a sovereign country. International assistance is needed to ensure continuity in the Government's institutional development, as limited resources and ongoing conflict may hinder progress.

Towards a Solution

In cooperation with the Indonesian Embassy in Amman, Jordan, the Directorate of Technical Cooperation and the Directorate General of Multilateral Cooperation of the Ministry of Foreign Affairs of Indonesia conducted a capacity-building programme on macroeconomic management and fiscal policy to support economic growth for Palestine. It was held in Amman from 26 to 28 March 2019. The programme was undertaken to fulfil a commitment made by Indonesia in its role as a non-permanent member of United Nations Security Council from 2019 to 2020. It was aligned with the three-year activity plan agreed upon during the Third Conference on Cooperation among East Asian Countries for Palestinian Development, as well the country's commitment to strengthen South-South cooperation within the framework of the New Asian-African Strategic Partnership.

Participants of the programme included 21 officials from the Palestinian Ministry of Finance and Planning and 3 officials from the Jordanian Ministry of Finance. **The ultimate goal of the training was to improve development in their respective countries, as the ability to manage and plan macroeconomic policy impacts economic growth.** The training sought to provide participants with the knowledge necessary for effective planning in macroeconomic management and fiscal policy, which are essential for developing countries.

The three-day training was conducted by experts from the Ministry of Finance of Indonesia and relied on an interactive and participative approach, with focus group discussions and audio-visual learning methods.

The training was divided into three sessions. In the first session, the participants attended a lecture on macroeconomic management and sectoral analysis, using Indonesia's latest economic development approach as an example. In this portion of the training, participants learned about the importance of identifying and promoting key sectors that are vital to economic growth. They were also introduced to the Government's spending policy, particularly social spending that aligns with development.

In the second session, participants learned about Indonesia's strategy of managing procurement financing, particularly foreign procurement. The session also focused on fiscal risk management, particularly how to anticipate the impact of governing activities on State expenditure dynamics.



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In the final session, participants were equipped with the various analytical tools and models required to measure the impacts of fiscal policies. The Government Spending Review was also introduced in this session as a framework to evaluate various types of spending, including social, capital and employee expenditures.

A questionnaire was filled out by the participants at the end of the training, and most responded positively. The topic of financing through public-private partnerships gained the most traction, as it aligned with current economic and fiscal policy in the State of Palestine.

At the closing ceremony, the participants conveyed their appreciation and requested additional follow-up trainings to further improve their capabilities, particularly regarding capacity-building in official development assistance management. The broad range of possibilities for follow-up programmes is indicative of the programme's sustainability and replicability, as additional programmes could be implemented upon request from the Government of Palestine.

This training is part of a series of capacity-building programmes organized by the Government of Indonesia to provide continuous support for the independence of the sovereign State of Palestine. As a follow-up, in February 2020, the Government of Indonesia organized a capacity-building programme for Palestinian police authorities to continue to develop the Government's institutional capacity.

This initiative contributed to Sustainable Development Goal 8 on decent work and economic growth and Goal 10 on reducing inequalities, as it emphasizes good governance through strong policy management and training to foster economic growth.

Contact:

Name: Mr Mohammad Syarif Alatas

Title: Director for Technical Cooperation

Organization: Ministry of Foreign Affairs of Indonesia

Email: syarif.alatas@kemlu.go.id

PROJECT NAME: Strengthening Good Governance and Institutional Capacity for Palestine

COUNTRIES/REGIONS: Indonesia, Jordan, State of Palestine

NOMINATED BY: Ministry of Foreign Affairs of Indonesia

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.1, 8.3, 8.10, 10.1, 10.4

SUPPORTED BY: Indonesian Embassy in Amman

IMPLEMENTING ENTITIES: Ministry of Foreign Affairs of Indonesia

PROJECT STATUS: Completed

PROJECT PERIOD: 26–28 March 2019

URL OF THE PRACTICE: <https://bit.ly/34F0Ef8> (in Bahasa Indonesia)

Vocational Training and Employment Programme (MESIP): 3D Design and 3D Printing Trainings

Providing product design training using computers and G-codes in 3D printer trainings with 3D design software

Challenge

Computer-assisted 3D design and 3D printer technologies have been actively used in many developed countries in education, health, machinery, architecture, jewellery and scientific research and development projects. These new technologies, born out of the fourth industrial revolution, shorten production time for many products and research and development processes. Nevertheless, some developing countries lack this technology, which impacts growth, productivity gains and human development. This creates new forms of inequality and widens the digital divide between industrialized and developing countries. The international community must therefore do more to help developing countries close the connectivity gap.

Towards a Solution

The Vocational Training and Employment Programme, which has been developed by the Turkish Cooperation and Coordination Agency (TIKA), supports employment growth and develops human capital. The primary goal of the programme is to build educational capacity in partner countries. Within its scope, grants are provided for equipment and materials, along with training of trainers, which allows knowledge to be implemented concretely. Training on 3D design and 3D printers has been included in the submodules of the programme, which cover training and equipment support more broadly.

The training framework is adapted to meet local needs. Training sessions are carried out on site by expert trainers in partner countries, using donated 3D printers and consumables. Partners are chosen based on demand from official institutions in partner countries. Participants are then chosen by the partner institutions. In order to ensure the programme's sustainability and increase the supply of qualified teachers, in line with Sustainable Development Goal (SDG) target 4.c, the training of trainers model was adapted. Qualified trainers continue to deliver trainings in their own country, increasing the skilled workforce to achieve decent job creation, in line with SDG target 8.5. Grants for equipment are included in the programme to ensure the quality of education, in line with SDG target 4.3. Trainings are conducted in three levels. Basic trainings (100 hours) are held in the partner country. Advanced level (50 hours) and industrial solutions (50 hours) modules are carried out in Turkey.

Since 2018, the programme has been implemented in 11 countries, where instructors from Turkey have conducted 1,100 hours of training for 328 trainees. Those participants have gone on to train an additional 292 individuals in the partner countries. The programme has therefore benefited 620 people, of whom 30 percent are women. In 2020, trainings are planned in Afghanistan, Azerbaijan, Georgia, Jordan, Lebanon, Montenegro and Pakistan; however, these trainings have been postponed due to the coronavirus disease (COVID-19) pandemic.

Within the scope of the programme, 102 computers, 25 three-dimensional printers and 102 kg of consumables (filament) have been donated to the cooperating institutions in the countries where trainings have been conducted. While this innovative programme provides countries with new technologies in a short time, it also helps to reveal participants' potential and increase their self-confidence.



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This low-budget programme to develop human capital has been designed by considering the financial and administrative capacities of the recipient countries. Thus, after the capacity-building is completed, the development of human resources and use of the technology continue without further support, thereby creating a sustainable environment for the programme. **Job opportunities for trainees have increased, and the participants who have become trainers continue to apply these techniques in their own countries.**

This programme can be replicated and applied in any region, as it has a wide range of applications. The conditions and needs of the country and region should be analysed, and equipment

and instructor support should be provided. Training content may also be updated. However, there must be demand for the programme. Once a request is received, the internal project cycle begins and a general framework for the programme is determined. The implementation phase may then begin quickly within institutional strategic planning processes.

Contact:

Name: Strategy Development Department

Organization: Turkish Cooperation and Coordination Agency (TIKA)

Email: sgdb@tika.gov.tr

Phone: +90 312 939 70 00



PROJECT NAME: Vocational Training and Employment Programme: 3D Design and 3D Printing Trainings

COUNTRIES/REGIONS: Afghanistan, Algeria, Azerbaijan, Bosnia and Herzegovina, Croatia, Georgia, Jordan, Kyrgyzstan, Lebanon, Libya, Mongolia, Montenegro, Pakistan, Sri Lanka, Sudan, Turkey, Uganda, Uzbekistan

NOMINATED BY: Turkish Cooperation and Coordination Agency (TIKA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.c, 8.2, 8.5, 8.6

SUPPORTED BY: TIKA

IMPLEMENTING ENTITIES: TIKA

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2021

URL OF THE PRACTICE: <https://bit.ly/3grB4Ne> and <https://bit.ly/3lIV4Er>

SESRIC OIC Tourism Capacity Building Programme

Developing human and institutional capacities of OIC Member States in tourism through South-South cooperation

Challenge

Tourism is a significant economic activity and an important source of foreign exchange earnings and employment in many Member States of the Organization of Islamic Cooperation (OIC). According to the Tourism Outlook 2019 report of the Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation (COMCEC), the share of international tourism arrivals in OIC countries as a whole was 14.8 percent in 2018, whereas their share of international tourism receipts was 11.4 percent during the same period. There are many challenges affecting tourism performance in OIC countries, including insufficient investments and infrastructure, poor tourism planning and product development, a lack of travel facilitation, safety and security issues, low quality service, insufficient marketing and promotion, and inadequate image-building and branding. Nevertheless, OIC Member States have significant potential to develop a sustainable international tourism sector. Taking into consideration the distinct natural, cultural, social and historical assets of OIC countries, careful attention is required to fully reach their tourism potential and increase South-South cooperation in the sector.

Towards a Solution

To address these challenges, the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) launched the OIC Tourism Capacity Building Programme (Tr-CaB) in 2015 to develop and strengthen the capacities of national tourism institutions of OIC Member States by matching their needs and capacities within the framework of South-South cooperation. The programme aims to enhance the capacities of national tourism institutions while also promoting this neglected sector in many OIC countries, particularly the in Sub-Saharan Africa and least developed countries. Furthermore, within its mandate to conduct economic and social research, SESRIC regularly prepares reports and policy documents on tourism that aim to facilitate discussion and debate among the OIC Member States during the Islamic Conference of Tourism Ministers.

The tourism industries of OIC Member States are not at the same level of development. While some countries are ranked among the top destinations, such as Indonesia, Malaysia and Turkey, the majority of Member States are concentrated at the bottom of the list. The difference stems from a lack of tourism-related infrastructure, government prioritization and policy orientations, as well as conflicts and political instability.

Within its mandate to organize capacity building training activities on a wide range of socio-economic issues of interest to the OIC Member States and to facilitate sharing of experience and knowledge, SESRIC provides a number of capacity-building activities that are delivered via different modalities, such as training courses, training workshops, seminars and study visits. This is usually done through matching the needs and capacities of the national institutions of the OIC Member States. To match the needs and capacities, the Centre regularly circulates the questionnaires on the relevant subjects and analyses these needs and capacities based on the responses of the relevant institutions in the Member States. Stakeholders in this process are purely motivated by a spirit of solidarity and South-South cooperation. They are also looking to scale up the impact of promising partnerships with proven and cost-effective approaches.



Since 2015, SESRIC has implemented a total of seven training courses, one training workshop, three seminars and two projects within the framework of the OIC Tourism Capacity Building Programme. These activities were attended by the OIC Member States, as well as relevant regional, international and OIC institutions. Azerbaijan, Bahrain, Bangladesh, the Gambia, Indonesia, Iran, Jordan, Kyrgyzstan, Malaysia, Maldives, Mozambique, Niger, Nigeria, the State of Palestine, Saudi Arabia, Senegal, Togo, Tunisia, Turkey and Uzbekistan, among others, benefited from these capacity-building activities, which covered topics such as tourism marketing, sustainable tourism development and Muslim friendly tourism.

In addition, a one-day commemoration programme was organized in Dhaka, Bangladesh in 2019 within the framework of the OIC City of Tourism. The programme consisted of an international seminar on developing Muslim friendly tourism in Dhaka and an award ceremony for the best tour operators. Three tour operators were awarded for their remarkable contributions to the development of tourism in the city.

In an effort to explore new ways to support the Member States of the OIC in the field of tourism, many activities focusing on Muslim friendly tourism were implemented in partnership with COMCEC, through its Project Funding Schemes. In this regard, a training course on the development and promotion of Muslim friendly tourism in OIC Member States was held in Ankara, Turkey in 2017. The aim of the training was to facilitate the transfer of knowledge by sharing the experiences of Malaysia, Turkey and other advanced OIC countries in developing successful policies, regulations, standards and marketing strategies in that regard.

The OIC Tourism Capacity Building Programme is an ongoing programme of SESRIC. In the past six years, over 20 OIC Member States have benefited from this initiative, which reflects a growing interest. Considering the potential and growing market size of Muslim friendly tourism as a niche segment

across OIC Member States, leading Islamic destinations like Malaysia, Turkey and the United Arab Emirates could share their knowledge and best practices with other OIC Member States, which could play a vital role in their economic growth and prosperity. Capacity-building and training programmes on various aspects of the tourism sector, including Muslim friendly tourism, are being planned in collaboration with the relevant stakeholders so that the lessons learned from these activities can be scaled up and disseminated more broadly.

Finally, **this programme contributes significantly to training human resources through South-South cooperation and generating new revenue sources, thereby boosting economic growth.** As such, it contributes to the achievement of Sustainable Development Goal targets 8.2, 8.9, 12.b, 14.7 and 17.9. The methods and modalities of the programme are constantly updated to address the evolving challenges and meet the growing demand of national tourism institutions.

Contact:

Name: Mr Onur Caglar
Title: Acting Director of Training and Technical Cooperation Department
Organization: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)
Email: ocaglar@sesric.org

Name: Ms Alia Sharify Ortaq
Title: Project Officer at Training and Technical Cooperation Department
Organization: SESRIC
Email: alia@sesric.org

Name: Mr Thierno Aliou Balde
Title: Assistant Project Officer at Training and Technical Cooperation Department
Organization: SESRIC
Email: tabalde@sesric.org

PROJECT NAME: SESRIC OIC Tourism Capacity Building Programme (Tr-CaB)
COUNTRIES/REGIONS: 57 Member States of the Organization of Islamic Cooperation (OIC)
NOMINATED BY: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.2, 8.9, 12.b, 14.7, 17.9
SUPPORTED BY: OIC Member States, the General Secretariat of the OIC, the Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Cooperation (COMCEC)
IMPLEMENTING ENTITIES: SESRIC
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2015–present
URL OF THE PRACTICE: bit.ly/33cq4OB



Learning Territories: Improving Practical Skills in Rural Business

Implementing learning territories and strengthening rural businesses in Brazil and Colombia

Challenge

Family farming has generated higher incomes and alleviated poverty in most remote rural areas in Latin America. Nevertheless, significant barriers remain in terms of sustainable market access, guarantees for long-term product supply and income growth for poor households.

The biggest challenges to market access facing family farming include developing a wider range of marketing channels, long-term land tenure, technical assistance, credit, capacity-building, climate impacts on production quality, product standards, inadequate pricing and imbalances in supply and demand.

Towards a Solution

The Semear International Programme has identified and showcased a range of successful experiences in promoting access to markets. Funding for this knowledge management is provided by the International Fund for Agricultural Development (IFAD), in partnership with Procasur, a global organization specialized in scaling up rural family farming practices. The 'Learning Territories' programme is led by Procasur and financed in South America in partnership with Semear International. It seeks to develop local capacities through associative learning for producers, families, communities and rural associations, which could help to scale up innovations.

A community or territory can be characterized as a learning territory if it has a high concentration of innovations that are relevant to development. The programme invests in promoting lessons learned by the local talents themselves in order to generate training proposals in the field and provide useful solutions for public and private partners that want to invest in rural development. The 'Learning Territories' programme encourages the recognition of community members in the rural technical service market as paid providers of rural technical assistance.

The Semear International Programme chose the learning territories of Belén de Umbría and Nariño, in the department of Risaralda, Colombia, to be the starting point of this exchange programme. A six-day visit to these territories took place in August 2019. The group included 6 project technical staff members, 6 governmental officials and 6 farmers from Brazil, as well as 50 local farmers from Colombia. The latter shared their knowledge management strategies and successful experiences in farming production chains and marketing. The participants analysed the possibilities for adapting and scaling up the experiences of these learning territories in their own rural development settings.

The 'Learning Territories' programme in Colombia has received financing from IFAD and the Ford Foundation to promote group capacity-building in associations and cooperatives of family farmers for the development of successful rural microenterprises. For example, the marketing challenges caused by a recent fall in the price of coffee required prompt production diversification and restructuring that could cope with the fluctuating demand and new quality standards required by the market. As a result, producers in Colombia successfully reorganized to undergo intensive capacity-building, create new commercial units and implement managerial and organizational techniques.



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The latter ultimately improved product quality, ensured stricter quality control, increased sales volumes and introduced new commercial partnerships guaranteeing business sustainability, thereby contributing to the achievement of Sustainable Development Goal (SDG) 1 on poverty and SDG 8 on decent work and economic growth.

In addition, new training strategies and a high degree of direct management required from the farmers' organizations themselves led to innovative solutions for technical assistance programmes. The communities began to manage and sell their own knowledge, offering a wide range of peer-to-peer consultancy services for farmers, and to organize learning routes for rural businesses, thereby generating new income opportunities (SDG 1 on poverty, SDG 8 on decent work and economic growth and SDG 12 on responsible consumption and production). **In Belén de Umbría, the 'Learning Territories' programme benefited 10 farmer associations, involving approximately 1,900 people. The Nariño learning territories benefited at least 3 farming associations and approximately 500 people.** The programme has also allowed beneficiaries to reduce the generational knowledge gap by encouraging youth involvement, training young people as business managers and providers of technical assistance to other family farms, thereby ensuring the long-term sustainability of rural businesses and a more continuous presence of young people in the field (SDG 1 on poverty, SDG 4 on quality education and SDG 8 on decent work and economic growth). In the Belén de Umbría learning territory, at least 62 young people had become involved by 2015.

As a result of this visit to Colombia, development leaders in Brazil have decided to replicate this good practice in three territories in the states of Paraíba, Piauí and Bahia, in coordination with IFAD and Procasur. Farmers of honey, goats, sheep and native fruits from the caatinga, a semi-arid region, have enrolled as participants and set clear targets for enhancing their own productivity and knowledge management. This programme will enable communities to organize their knowledge management activities and strengthen their long-term capacities to increase productivity, diversify production, increase access to markets and manage and sell their own local knowledge. This is expected to contribute to increasing family farming incomes, reducing poverty, building sustainable production and consumption models, combating climate change, reducing inequalities and building strategic alliances (SDG 1 on poverty, SDG 2 on hunger, SDG 8 on decent work and economic growth, SDG 12 on responsible consumption and production and SDG 13 on climate action). The programme has been closely monitored by Semear International Programme.

Contact:

Name: Mr Leonardo Bichara Rocha

Title: Country Programme Officer

Organization: International Fund for Agricultural Development (IFAD)

Email: l.bichararocha@ifad.org

PROJECT NAME: Learning Territories in Colombia: Improving Practical Skills in Rural Business

COUNTRIES/REGIONS: Brazil, Colombia

NOMINATED BY: International Fund for Agricultural Development (IFAD) Brazil

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 2.1, 2.3, 2.a, 8.3, 12.2, 12.6

SUPPORTED BY: Government of Brazil, Government of Colombia, IFAD

IMPLEMENTING ENTITIES: Semear International Programme (implemented by Inter-American Institute for Cooperation on Agriculture), Procasur Corporation

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2021

URL OF THE PRACTICE: <https://bit.ly/3be86PW> ; <https://bit.ly/3lrDvmw> (in Portuguese)

Enhancing Empowerment and Resilience for Sierra Leonean Women Entrepreneurs in Cross-Border Trade within the Mano River Union

Sharing experiences and lessons learned from the East African Community

Challenge

Women in Sierra Leone, particularly women entrepreneurs, continue to face a number of challenges, including low literacy rates and a lack of business and technical skills, as well as limited access to business development, financial services and profitable markets. They experience difficulties in accessing outside markets through cross-border trade with neighbouring countries, particularly Côte d'Ivoire, Guinea and Liberia, which are also fragile States and members of the Mano River Union (MRU). Women entrepreneurs in these countries risk crossing the river for their livelihood. On each of the market days within travelling distance of the river border, women leave their homes early in the morning. They may have to cross the river multiple times to bring all their market goods across, before loading up a truck for a long, rough road journey that is sometimes too long to return home by nightfall.

Women cross-border traders in the East African Community (EAC) face similar challenges but have developed a simplified guide on customs tariffs and immigration procedures to facilitate trade across borders with minimal challenges. This is a good practice from which to learn.

Towards a Solution

The development objective of the project was to contribute to women's economic empowerment and resilience in Sierra Leone by promoting interregional trade and economic cooperation within the MRU. The project built on evidence-based learning from the EAC, with the aim of accelerating economic growth, social progress and cultural advancement.

A study tour to the EAC Secretariat in Arusha, United Republic of Tanzania and the Namanga One-Stop Border Post on the border between Tanzania and Kenya was organized for MRU officials and women cross-border traders. The tour was designed to promote peer learning and knowledge-sharing on fragile-to-fragile, cross-border trade among women entrepreneurs within the EAC economic community and to establish a network of women cross-border traders from both regional economic communities. The MRU team met with women entrepreneurs in Tanzania, who shared their experience on managing cross-border trade and establishing their network. Additional exchanges between the MRU team and the EAC explored possibilities to develop an instrument to share information on cross-border trade, especially for women entrepreneurs, and to identify good practices on its effective implementation from both a regional and country perspective.

During the study tour, participants recognized the positive results of the communication and training tools developed by the EAC, particularly the Simplified Guide for women entrepreneurs. The International Labour Organization (ILO) supported the MRU in replicating this guide. In collaboration with experts from the East African Women in Business Platform, the MRU conducted a situational analysis during a technical cooperation visit, which examined the legal, regulatory, institutional and social conditions affecting Sierra Leonean women engaged in cross-border trade within the MRU subregion. The 'Simplified Guide for Micro and Small-Scale Women Cross-Border Traders and Service Providers within the East African Community' was adapted to the MRU context and piloted in Sierra Leone. The guide built on the conclusions of the situational analysis and was based on the lessons learned during the study tour.

8 DECENT WORK AND ECONOMIC GROWTH



5 GENDER EQUALITY



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ILO provided information on improving and formalizing cross-border trade, capacity-building activities and access to diversified and adapted financial services for women cross-border traders, which was of great value in complementing the activities of other development actors. Technical and financial partnerships among stakeholders promoted cross-border trade. At the end of the project, a mobile application was developed to allow women to access all the necessary information from anywhere and in a simplified format that is easy to use.

The MRU women cross-border traders now have a better understanding of ways to strengthen their businesses. They know the right prices, laws and tariffs, so they are less likely to be cheated. The guide also assists them in accessing a wider range of financial services, which will facilitate additional technical and financial partnerships with other stakeholders. Even more impactful, the collaboration between the MRU women traders and their colleagues in Tanzania and Kenya has inspired additional countries to take part in South-South and triangular cooperation.

The project developed a mobile application as an innovative solution adapted to the needs of the women cross-border traders. This format was easier to use than traditional printed booklets or informational sessions.

Sustainability is guaranteed through the East African Women in Business Platform, which will support a continued database

of the good practices of women traders. The connection made between the EAC and the MRU is another aspect of inter-regional sustainability.

The project encouraged the inclusion of additional countries under the South-South and triangular cooperation modality through its engagement with stakeholders in Sierra Leone, the MRU and the EAC. It included reflections on innovative and easily accessible dissemination channels for women, such as mobile applications that might be more convenient and useful than printed booklets. Information sessions with service providers were held to discuss how to channel information on trade rules and regulations to women cross-border traders. Although these traders face similar challenges in other countries, replicating the guide requires a contextual analysis to tailor solutions to their particular situation. Ensuring social dialogue by encouraging women traders to organize and participate actively in developing the guide is also a key step in adapting it to different contexts.

Contact:

Name: Mr Dennis Zulu

Title: Director, Country Office for Nigeria, Ghana, Liberia and Sierra Leone

Organization: International Labour Organization (ILO)

Email: zulu@ilo.org

PROJECT NAME: Enhancing Empowerment and Resilience for Sierra Leonean Women Entrepreneurs in Cross-Border Trade within the Mano River Union

COUNTRIES/REGIONS: Kenya, Sierra Leone, United Republic of Tanzania

NOMINATED BY: International Labour Organization (ILO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 8.8

SUPPORTED BY: ILO, Economic Community of West African States

IMPLEMENTING ENTITIES: ILO Sierra Leone

PROJECT STATUS: Completed

PROJECT PERIOD: August 2018–December 2019

URL OF THE PRACTICE: <https://bit.ly/2QBvSfg>

Fragile-to-Fragile Cooperation: Establishing an Effective Information System on Labour Markets in Fragile States

8 DECENT WORK AND ECONOMIC GROWTH



Sharing experiences among the Central African Republic, the Congo, the Democratic Republic of the Congo and Mali



Challenge

The Central African Republic, the Congo and the Democratic Republic of the Congo have faced significant challenges that include high unemployment rates and weaknesses in their labour market analysis systems. They lack data that would allow them to develop accurate policy solutions. These countries, along with Mali, are also characterized by high fragility. In addition, ongoing civil wars and instability are an issue in the region.

Towards a Solution

This initiative aimed to strengthen the capacities of the Central African Republic, the Congo and the Democratic Republic of the Congo and provide them with the tools to establish their own employment observatories, especially in the context of crises. The collaboration also brought together the Economic Community of West African States (ECOWAS) and the Economic Community of Central African States (ECCAS) to exchange knowledge on labour information systems through peer learning.

In the context of South-South cooperation, the International Labour Organization (ILO) Country Office in Kinshasa, with financial support from the ILO Partnerships and Development Cooperation Department (PARDEV), provided an opportunity for a delegation of nine constituents to visit the Observatoire National de l'Emploi et de la Formation (ONEF), the employment observatory in Mali. ONEF emerged as a result of the West African Economic and Monetary Union (WAEMU) Summit, which called on States to establish a national observatory to carry out studies and research in employment and training. The Subregional Observatory on Employment and Training in the WAEMU region will be created to promote employment and combat poverty.

A study visit was organized in Bamako, Mali from 5 to 9 November 2018. There were three participants from each country, including representatives of trade unions, employer organizations and Governments. The delegates learned about establishing an observatory, which included understanding the various stages of the process, obtaining information about the difficulties encountered and the measures to reduce them, and speaking with development partners who helped set up the process. The visit focused on promoting regional integration by involving ECOWAS and ECCAS.

Under this participatory approach, each country had a country-level tripartite consultation group and an official designated by the Ministry of Employment and Vocational Training. Participants also included development partners with a particular interest in establishing a solid information system and integrated database in the Central African Republic, the Congo and the Democratic Republic of the Congo. These partners could mobilize resources and provide support for implementing action plans following the South-South intervention by PARDEV.

At the end of the tour, an action plan was prepared by each country with specific dates to return to Mali, begin studies for the establishment of an observatory, validate studies with the participation of ONEF and seek financing from development partners. The studies were validated on 12 December 2018 in Bangui, Central African Republic. The study tour also strengthened cooperation between



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ECOWAS, which was more advanced in the process of setting up observatories, and ECCAS, which received advice on how to replicate the experience of Mali successfully. The Central African Republic, the Congo and the Democratic Republic of the Congo were able to improve their policies, identify and resolve obstacles, devise financing strategies for the observatories and establish their role in supporting labour information systems.

This good practice sought to improve the capacity of policymakers to create and manage information on the labour market and update data on a regular basis for continuous tracking of the employment situation. This will help countries better analyse the impact of investments on employment and training, create a database on the labour market, identify sectors with potential for job creation and improve decision-making in times of crisis. The initiative strengthened continuous cooperation among ECCAS countries to create

their national observatories as a first step in creating a regional observatory on the labour market.

An ongoing discussion with ECCAS will expand experience in the subregion. The models developed in the Central African Republic, the Congo and the Democratic Republic of the Congo can be replicated in Cameroon, Chad, Equatorial Guinea, Gabon, and Sao Tome and Principe. It will require a good system of transparency, social dialogue and a healthy labour institution.

Contact:

Name: Ms Nteba Soumano

Title: Skills and Employability Officer

Organization: International Labour Organization (ILO) Country Office-Kinshasa

Email: soumano@ilo.org



PROJECT NAME: Fragile-to-Fragile Cooperation: Establishing an Effective Information System on Labour Markets in Fragile States: Sharing Experiences among the Central African Republic, the Congo, the Democratic Republic of the Congo and Mali

COUNTRIES/REGIONS: Central African Republic, Congo, Democratic Republic of the Congo, Mali

NOMINATED BY: Partnerships and Development Cooperation Department (PARDEV), International Labour Organization (ILO) Regional Office for Africa, ILO Country Office-Kinshasa

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.3, 16.6

SUPPORTED BY: PARDEV, ILO Development and Investment Branch, ILO Skills and Employability Department, ILO Country Office-Abidjan

IMPLEMENTING ENTITIES: ILO

PROJECT STATUS: Completed

PROJECT PERIOD: May 2018–April 2019

URL OF THE PRACTICE: <https://bit.ly/2FYp5dh>



South-South and Triangular Cooperation to Strengthen the Pakistani Compensation System for Workplace Injury, Based on Lessons Learned from Malaysia and Thailand

Promoting peer learning on improving compensation for workplace injuries

Challenge

The workplace injury compensation system in Pakistan is governed by each provincial government under their respective Employees Social Security Act, which exists in only three of the four provinces. The system is challenged by a number of limitations in terms of coverage, quality, adequacy and alignment with international standards, such as the Employment Injury Benefits Convention, 1964 (No. 121). Furthermore, it covers only a fraction of formal economy workers. The employee's social security institutions (ESSI) of Pakistan provide work injury insurance under some of the most advanced legislation in Asia and conform to the minimum requirements of the Convention. Nevertheless, ESSIs still face numerous challenges in promoting full compliance to cover all workers in all economic sectors, deliver quality and timely health benefits and provide adequate cash benefits to replace lost income. The main barriers are rooted in the limited resources available to invest in human and information technology capacity and good governance management systems for ESSIs.

Towards a Solution

The project focused on strengthening the Pakistani compensation system for workplace injury through exchanges with Malaysia and Thailand. It contributed to building capacities among these countries on social security systems, as well as non-work-related injury and death. In this regard, South-South cooperation with Malaysia was useful in sharing experiences and enhancing peer learning on social security matters.

Against this backdrop, the International Labour Organization (ILO) Country Office in Islamabad hosted a consultation on knowledge-sharing and insights into developing a road map to support provincial reforms in ESSIs in Pakistan, which are responsible for work injury insurance. On 16 July 2018, the heads of the four ESSIs met to review their existing contribution collection and registration systems, examine the overall social security and welfare schemes and address the needs of formal and informal sector workers. They shared some of their practical experiences and challenges facing governance and implementation. They also identified areas to be included in a road map for upgrading ESSIs. The consultation also involved the Departments of Labour, the Ministry of Overseas Pakistanis and Human Resource Development, the Employers' Federation of Pakistan, the Pakistan Workers' Federation and technical experts. Following this consultation, a peer-learning South-South study trip to visit social security institutions in Malaysia and Thailand took place in September 2018, with further exchanges of knowledge and good practices to address the capacity gaps in ESSIs in Pakistan.

The results of this project provided a strong and sustainable foundation for effective employment injury compensation for all workers, including small- and medium-size enterprises (SMEs) and self-employed workers, who are not currently covered. Limits in sustainability depend largely on the capacity of national institutions to take over the oversight and implementation of social security benefits for all workers, based on the good practices of the two countries. ILO facilitated continued exchanges among the countries, brought in resource persons from Malaysia and Thailand and established networks such as WhatsApp groups.



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Through South-South and triangular cooperation, the project developed the capacity of existing institutions responsible for employment injury insurance. It improved governance, computerized management systems, expanded coverage and improved the delivery of benefits, which ultimately leads to a sustainable social security system. Knowledge and organizational skills among social security institutions in Pakistan were strengthened through the study visits to Malaysia and Thailand and the training workshops provided by the International Training Centre of ILO in Turin. Knowledge products such as case studies and information, education and communication materials were developed for use by ESSIs in Pakistan to promote the adoption of good practices.

The scheme was supplemented by a holistic network of services, including occupational safety and health promotion programmes and healthy lifestyle campaigns, as well as rehabilitation centres that prevent accidents and facilitate the reintegration of injured workers to the workforce. In 2017, the Malaysian social security system provided coverage to self-employed taxi drivers. It also provides protection to self-employed insured persons, including for illnesses and accidents during work-related activities.

Continued peer learning between Thailand, Malaysia and Pakistan facilitates sustainable changes in the social security systems of the three countries. It also benefits other South Asian countries, through South-South exchanges.

The Thailand Social Security Office covers the smallest businesses, even those with only one employee. Despite minor practical implementation issues, there was much to learn about gradually extending coverage to these businesses. Thailand also has a sophisticated system of contribution rates for different industries and a merit rating system to adjust contribution rates based on accident rates. The Government of Pakistan shared the lessons it had learned on improving social security with Myanmar.

Contact:

Name: Ms Ingrid Christensen

Title: Director

Organization: International Labour Organization (ILO) Islamabad Office

Email: christensen@ilo.org

PROJECT NAME: South-South and Triangular Cooperation to Strengthen the Pakistani Compensation System for Workplace Injury, based on Lessons Learned from Malaysia and Thailand

COUNTRIES/REGIONS: Malaysia, Pakistan, Thailand

NOMINATED BY: International Labour Organization (ILO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.8

SUPPORTED BY: ILO Enterprises Department; ILO Decent Work Team in Delhi; Social Security Systems in Thailand, Malaysia and Pakistan; Social Partners

IMPLEMENTING ENTITIES: ILO

PROJECT STATUS: Completed

PROJECT PERIOD: March 2018–December 2019

URL OF THE PRACTICE: bit.ly/2QewVRZ



China-Cambodia-UNDP Trilateral Cooperation on Cassava

Strengthening sustainable production through the first triangular cooperation project on cassava

Challenge

Cambodia has identified agriculture as its top priority for socio-economic development; however, very little technical assistance is provided to the cassava sector, despite the fact that it has become the second largest agricultural crop in terms of income, employment, hectares cultivated and exports. The lack of technical support for leveraging cassava production could also have serious environmental consequences, as cassava cultivation could deplete nutrients and have other ecological effects on the soil.

Towards a Solution

In 2011, the United Nations Development Programme (UNDP) began working with the Ministry of Commerce (MOFCOM) of China and the Ministry of Agriculture of Cambodia to help small producers, processors and exporters of cassava move up the value chain, increase their revenue and exports and create jobs. The project also sought to help them better understand Chinese market requirements for Cambodian commodities, taking into consideration the preferential market access Cambodia enjoys with China.

The purpose of Phase I (2011–2012) of the project was to leverage the added value of the joint involvement of China and UNDP. A 21-day training programme was organized in Hainan, China, through which each party was able to add substantive value and produce successful knowledge products and training activities on cassava production and export. Phase I concluded in January 2012 and was declared a success by both China and Cambodia, with a request to expand the cooperation to conduct further research, training and testing to establish direct linkages with processors and buyers. The overall feedback indicated that the training style, content and practical activities were conducive to improving cassava cultivation in Cambodia.

Based on the success and lessons learned from this initial phase, MOFCOM agreed to support a second phase and created a new funding window as a cost-sharing contribution. This was the first time that the Government of China provided grant-based financial support for a trilateral project. Phase II was launched in May 2013 and completed in March 2015. During this phase, six trainings were held, and a study tour was organized to Nanning, Guangxi province in China. In addition, a number of knowledge products were prepared to facilitate the expansion of cassava production using environmentally sustainable methods.

Phase II of the project revolved around three main outputs: knowledge and research, improved yields and increased trade. In terms of knowledge and research, two influential and important knowledge products were produced. First, a comprehensive Needs Assessment Study was conducted to identify the specific production and processing needs of the Cambodian cassava sector, as well as gaps in supply and demand in the Chinese market. Second, the first Environmental Impact Assessment was undertaken in Cambodia to mitigate environmental damage resulting from poor cassava cultivation techniques, which elicited some surprising but critical findings.



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In terms of improved yields, tailored training materials and targeted trainings for processors, exporters, farmers and government officials were developed. Trainees were then empowered to become trainers themselves. In terms of increased trade, targeted support to enhance exports from Cambodia to China was provided through a business matchmaking mission, where a Cambodian delegation of key stakeholders visited the city of Nanning in September 2014. Members met with potential Chinese buyers, local trade and commerce officials and other major actors in the Chinese cassava industry. The mission and follow-up proved significant for understanding market requirements and entry points.

To ensure scalability and sustainability, 2,500 copies of the training manuals were produced for government trainers across Cambodia to build the capacity of farmers, processors and exporters. **An estimated 200,000 farmers have benefited from the training manual.**

Overall, the project has contributed innovative solutions to generating pro-poor growth in Cambodia by providing technology and know-how from China and creating direct linkages with the Chinese market.

This project was the first trilateral cooperation project initiated by MOFCOM and UNDP following the signing of the

China-UNDP Memorandum of Understanding in 2010 to expand joint endeavours in South-South cooperation. The project demonstrated that triangular cooperation can leverage comparative strengths, create synergies and facilitate mutual learning more strongly than any of the three parties acting alone. It also demonstrated the potential of such development assistance approach in improving development effectiveness and supporting poverty eradication across the world.

The cooperation modality and activities will be replicated in other developing countries in future projects, provided that the countries have similar needs – in terms of limited production know-how and connection with potential export markets - that are consistent with the goals of creating jobs and strengthening sustainable production; the technology and achievements of this project apply to local conditions; and there are sufficient funds and human resources to provide support.

Contact:

Name: Ms Sujuan Zhang

Title: Team Leader, China South-South Facility of the Global Partnership Cluster

Organization: United Nations Development Programme (UNDP) China

Email: sujuan.zhang@undp.org

PROJECT NAME: Strengthening Sustainable Cassava Production through China-Cambodia-UNDP Trilateral Cooperation

COUNTRIES/REGIONS: Cambodia, China

NOMINATED BY: United Nations Development Programme (UNDP) China

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.2, 8.3, 12.2, 12.a, 17.9, 17.15, 17.16

SUPPORTED BY: Ministry of Commerce of China, Chinese Academy of Tropical and Agricultural Sciences, UNDP

IMPLEMENTING ENTITIES: Ministry of Agriculture, Forestry and Fisheries of Cambodia

PROJECT STATUS: Completed

PROJECT PERIOD: 2011–2015

URL OF THE PRACTICE: bit.ly/2CMgJ7k

Governance Structures for Business Environment Reforms in Afghanistan: A Knowledge Exchange with Morocco

Helping Afghanistan to strengthen its capacity to design an investment climate reform program supported by reform strategies and road maps

Challenge

Afghanistan faces significant development challenges, as poverty levels remain high. While fostering growth led by the private sector is essential to addressing these challenges, the formal private sector is extremely limited. Continuing conflict has caused a sharp contraction in private sector credit, firm registration and private investment.

The Government of Afghanistan and the World Bank Group (WBG) have recognized that regulatory reforms are needed to establish a conducive business environment, restore private sector confidence and create jobs. To address its development and poverty challenges, the country must find new sources of private sector growth that could help to reduce its dependency on international aid, as well as the economy's reliance on a volatile agriculture sector. Addressing private sector constraints will be key to achieving sustained growth in the long term.

To support job creation and promote a more enabling regulatory environment for businesses, the Government must strengthen the institutional structures dedicated to the design, coordination, implementation and monitoring of its investment climate reform programme.

Towards a Solution

To help address the country's development challenges, the Government of Afghanistan has undertaken several interventions to improve the business environment and support private sector-led growth. In April 2017, the Inter-Ministerial Committee on Private Sector Development (PRISEC) was established to lead business environment reforms. PRISEC is co-chaired by the Ministry of Commerce and Industry, the Office of the Chief Executive and the WBG. The Committee includes key public and private stakeholders.

To strengthen the institutional capacity of PRISEC, a knowledge exchange was organized with Morocco, a country that has implemented a series of reforms and continued to improve its ranking in the World Bank's Doing Business publication¹. The exchange aimed to strengthen institutional capacity to design, coordinate, implement and monitor a successful business environment reform program that would foster private sector development in Afghanistan.

During the exchange, which took place from July 2018 to May 2019, the Afghan delegation met with key representatives from Moroccan institutions that are leading the effort to improve the country's business and investment climate. The Commission Nationale de l'Environnement des Affaires [National Committee for Business Environment] (CNEA) has been successful in implementing numerous business reforms since its creation in 2013. These reforms have improved the position of Morocco in the World Bank's Doing Business publication. CNEA facilitated a learning session on designing, implementing and monitoring an investment climate reform program by developing action plans and effective reform strategies. They also discussed the role of academia, inclusive approaches to stakeholder and regional engagements, and techniques and approaches for establishing sector-specific frameworks for dialogue.

The Afghan delegation also met with the Secretary General of the Government of Morocco to discuss reforms to improve the regulatory environment for entrepreneurs and the process for devising laws. The Department of Commerce and Customs gave presentations and led discussions on the Moroccan export process, the PortNet digital portal and the new process for export licences. The Municipality of Casablanca shared information on the recent reforms to streamline the construction permit system. The Centre Régional d'Investissement de Casablanca [Regional Centre for Investment of Casablanca] (CRI) also gave presentations on its one-stop-shop approach to company registration and discussed its initiatives to improve regional competitiveness. CRI has also developed resources to support investors, such as an investor guidebook, sec-

1 www.doingbusiness.org



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tor-specific booklets and a multilingual website. Representatives from the Moroccan Economic Development Zones (MEDZ) Agribusiness Park in Meknes discussed its institutional set-up, financing and its role in establishing industrial, agricultural, offshore and tourist parks across 12 territories in Morocco.

The Confédération Générale des Entreprises du Maroc [General Confederation of Enterprises in Morocco] (CGEM), which is the country's leading business association, facilitated a learning session on innovative approaches to effective public-private dialogue. Representatives discussed how CGEM secured eight seats in Parliament, which enabled it to strategically lobby for reforms and influence policymaking. They also emphasized the role and participation of women in corporate and state-owned enterprise (SOE) boards. In addition, they shared information about how CGEM collects feedback and contributes to private sector capacity-building; how it prioritizes reforms in light of the development road map promoted in political campaign pledges; and how it engages with the international business community, multinational corporations, small- and medium-sized enterprises and trade unions.

The Afghan delegation gained new knowledge on how to design and implement a process for business reforms. Delegates benefited from candid conversations with CNEA about the institutional and political challenges Morocco encountered during its reform process. They were also introduced to the efficiencies and transparency of the PortNet e-platform and paperless processes for registering businesses and issuing licences and permits. Hopefully, the e-governance law to be passed in Afghanistan will help to expedite the digitization process. Morocco also provided examples of good practices in supporting high-level participation for women in business through leadership roles and their inclusion in both corporate and SOE boards.

At the end of the study visit, a half-day session allowed the Afghan delegation and the WBG teams to reflect on the experiences and lessons learned from the knowledge exchange, which were as follows:

- A clear understanding of a well-defined reform process.
- Improved approaches to defining the roles and responsibilities of institutions leading a reform process.
- The value of communicating government decisions, proposals

and reforms using local languages to increase awareness among citizens living in various regions of the country.

- Ways to increase ownership and accountability in the line ministries responsible for various aspects of the reform.
- More inclusive approaches to strengthen public-private dialogue in Afghanistan. The delegation agreed to explore ways to enhance private sector representation in the executive structure and formalize private sector participation in policy discourse.
- Key decisions, actions and next steps. Roles were assigned, and follow-up timelines were set.

Learning from the efficient and multilayer management approach employed by CNEA, PRISEC representatives discussed the possibility of simplifying the existing structure of the coordination and policy units to enhance efficiency and high-level political support.

Following the approval of the Afghanistan Women Chamber of Commerce and Industry by the High Economic Council, the delegation has identified practical proposals to help increase women's representation and participation on executive boards in Afghanistan.

Due to limited data and baselines, it remains difficult to make decisions and measure investment-related targets in Afghanistan. The delegation therefore nominated two officials to lead the process of creating the business surveys needed to improve data quality and establish more reliable baselines.

A presentation of the knowledge exchange, experiences, good practices and next steps for the PRISEC executive committee was scheduled to take place by the end of the fiscal year 2019. The team representative from the Ministry of Industry and Commerce committed to preparing updates on the proposed e-governance law and circulating them to the rest of the delegation and the WB team following the exchange visit.

Contact::

Name: Mr Laurent Porte
Title: Program Manager, South-South Facility
Organization: World Bank
Email: lporte@worldbank.org

PROJECT NAME: Governance Structures for Business Environment Reforms in Afghanistan

COUNTRIES/REGIONS: Afghanistan, Morocco

NOMINATED BY: World Bank

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 8.1, 8.2, 8.3, 8.5, 8.6, 17.9

SUPPORTED BY: World Bank South-South Facility

IMPLEMENTING ENTITIES: Afghanistan: Government of Afghanistan, Executive Committee for Private Sector Development, Ministry of Commerce and Industry

Morocco: National Committee for Business Environment (CNEA); Department of Commerce and Customs, Municipality of Casablanca; Regional Centre for Investment (CRI) of Casablanca; General Confederation of Enterprises in Morocco (CGEM); Moroccan Economic Development Zones

PROJECT STATUS: Completed

PROJECT PERIOD: 2018–2019

URL OF THE PRACTICE: <https://bit.ly/2YMaBnk>

Border Haats as a Tool to Improve the Lives and Livelihood of People Residing in Remote Villages along the India-Bangladesh Border

Using evidence-based policy advocacy to guide informed policy decisions and improve quality of life in grass-roots communities

Challenge

The border haat initiative is a successful Government-to-Government initiative that transformed the lives of those residing in border villages. In 2010, the Governments of Bangladesh and India signed a comprehensive framework agreement covering a range of issues, one of which sought to promote cross-border trade and cooperation through the establishment of border haats. Between 2011 and 2015, four border haats were opened along India-Bangladesh border. These haats were successful in reducing informal trade between the two countries and creating livelihood opportunities that increased income and per capita spending on health care and education. While border haats helped to increase people-to-people connectivity and improved various socio-economic indicators, including the economic empowerment of women, there was insufficient awareness among policymakers, media and other stakeholders. As a result, efforts were needed to upscale the model.

Towards a Solution

The overall objective of the initiative was to document how border haats are benefiting and transforming the lives of people living in remote border areas. It sought to engage with relevant policymakers and non-State actors to advocate for opening additional border haats along the India-Bangladesh border, especially in north-east India. The initiative is contributing to Sustainable Development Goal (SDG) 1 on poverty, SDG 3 on good health and well-being, SDG 5 on gender equality, SDG 8 on decent work and economic growth and SDG 9 on industry, innovation and infrastructure.

The border haats allow people residing in remote border areas to market their local produce, mainly vegetables and fruits. Consumers then have access to essential commodities at cheaper prices than those found in markets in their home country, thereby allowing marginalized consumers to save a portion of their monthly income.

For example, the Balat border haat is located in the East Khasi Hills district in Meghalaya, India. Larger markets are all located at a distance: Shillong (100 km), Silchar (300 km) and Guwahati (200 km). These markets supply essential food grains, processed food items, medicines and consumer goods to nearby villages. However, owing to transportation costs, villagers living in remote border locations generally prefer to buy vegetables and other commodities at the border haat in Balat. According to one person surveyed, vegetables from Bangladesh cost less than half the price of Indian vegetables. In addition, fast moving consumer goods from Bangladesh, like fruit-based drinks, potato chips and biscuits, are also in high demand among Indian consumers. These goods are sold in large quantities but at a cheaper price. The border haat is therefore a boon for poor and marginalized communities, enabling them to access essential commodities at affordable prices.

For Bangladeshi residents, the Balat border haat facilitates access to items like Jeera (cumin seed) and luxury items like bedsheets, which are far cheaper on the Indian side of the border. For example, Jeera costs around 450 taka (around US\$5.30) in Bangladesh, but consumers can buy it for 280 taka (around US\$3.30) at the haat.



In terms of the methodology used, the Consumer Unity & Trust Society (CUTS International), with the support of the World Bank, undertook a bottom-up approach and evidence-based advocacy to propose opening more border haats. An extensive survey and a series of focus group discussions with grass-roots stakeholders were conducted to understand and document the impacts of the four operational border haats on local communities. The study found that border haats had a positive impact on the welfare of communities on both sides of the border in three definitive ways: **creating livelihood opportunities, improving cross-border relations and reducing informal trade and illegal and subversive activities.** Anecdotal evidence also points to the overall positive impact of border haats. For example, a vendor at the Srinagar haat in Tripura, India boosted his income by 9,500 rupees per month.

Across all locations, many participants at the haats use the additional income to increase spending on essential services, including health care for family members and education for children. In addition, by purchasing various consumer durables such as televisions and mobile Internet, villagers are able to afford a better quality of life for themselves and their families. The study also revealed the need to increase the participation of women in border haats.

The study was effective in demonstrating the need to establish more border haats to policymakers in both India and Bangladesh. As a result of the intervention, six new border haats were sanctioned in 2016¹. In addition, the memorandum of under-

standing (MoU) governing the establishment of the border haats was revised on 8 April 2017, taking into consideration the recommendations from the study. The validity period for the MoUs was also increased from three to five years. The number of vendors from each country was increased from 25 to 50, and buyers were allowed to buy produce worth US\$200, which was increased from \$100. The list of items sanctioned for trade at the border haats has also been expanded over time to meet local needs and conditions.

The Governments of both India and Bangladesh are currently considering additional border haats along the India-Bangladesh border. A list of 73 locations has been proposed by both the Border Security Force and state governments.

This innovative initiative has used both a quantitative and a qualitative approach to documenting evidence from the grass roots. Furthermore, the initiative captured verifiable anecdotal evidence. This approach has proven to be effective in creating trust and, most importantly, promoting political will. It has also cemented relations and good will among residents at the grass-roots level. The approach is sustainable and could be replicated to address a broad spectrum of cross-cutting issues.

Contact:

Name: Mr Bipul Chatterjee

Title: Executive Director

Organization: Consumer Unity & Trust Society (CUTS International)

Email: bc@cuts.org

Skype ID: bc_cuts

1 www.pib.gov.in/PressReleaseDetail.aspx?PRID=1498189

PROJECT NAME: Bangladesh-India Border Haats and their Impact on Poverty Reduction

COUNTRIES/REGIONS: Bangladesh, India

NOMINATED BY: Consumer Unity & Trust Society (CUTS International)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 1.b, 3.8, 5.1, 5.5, 5.c, 8.3, 9.1

SUPPORTED BY: World Bank

IMPLEMENTING ENTITIES: CUTS International

PROJECT STATUS: Completed

PROJECT PERIOD: 15 August 2015–30 June 2016

URL OF THE PRACTICE: bit.ly/2v8sQYz



Application and Promotion of Functional Plastic Materials in Developing Countries

Developing sustainable, green and innovative functional plastic materials in developing countries

Challenge

Plastics can be divided into conventional plastics and special plastics according to their uses. Conventional plastics include general-purpose and engineering plastics; special plastics are functional plastic materials. These are high-tech materials that use general-purpose and engineering plastics as a base, which are then filled, blended or reinforced for specific performance purposes or to improve flame retardancy, strength, impact resistance and toughness. Examples include magnetic permeability materials, medical polymers, photosensitive materials and pearlescent materials.

Functional plastic materials have been widely used in various fields and have recently become more common in many South-East Asian countries and some developing countries in Latin America. Due to a lack of research and development in functional plastics in these countries and regions, most rely on imports from abroad. As a result, functional plastic products are expensive, and large-scale promotion and application are unsuccessful.

Functional plastic materials are convenient because of their unique performance and advantages, but incorrect use will harm the environment. This project relies on technology to make up for the deficiencies of general-purpose plastics. It seeks to improve product performance, explore simple recycling options and analyse environmentally degradable performance for sustainable development.

Towards a Solution

This project focuses on a series of research, development and processing technologies for functional plastic materials. It aims to improve their range of application and promote these technologies in developing countries. The ultimate goal is to improve the functional plastic industry to increase industrial output and workers' incomes in developing countries. This project also contributes to achieving the Sustainable Development Goals (SDGs) that promote inclusive and sustainable industrialization and innovation.

The project's main partners are official institutions, private enterprises, universities and scientific research institutes in China, Indonesia and Malaysia. These include the Fujian Provincial Science and Technology Exchange Center with Foreign Countries; Fuzhou Fusu Science and Technology Research Institute; Malaysian Plastics Manufacturers Association; International Islamic University Malaysia; Dragonpak Industries (M) Sdn Bhd; PT. ABPS Technology Batam; Krida Wacana Christian University; PT. Stellarway Indonesia; and PT. Arya Wiraraja Plastikindo.

Participating partners from China, Indonesia and Malaysia jointly analysed the problems that Malaysian and Indonesian companies encountered in production. Chinese technical personnel primarily addressed the problems and guided companies in the practical application of solutions. Issues included a pilot scale-up production test to produce functional plastic masterbatch for plastic film and the development of high-efficiency, energy-saving materials for cleaning screws.

At the same time, the three parties established a joint research and development centre under the South-South cooperation framework. The main body was set up at the Fuzhou Fusu Science and



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Technology Research Institute in China, the research and development branch was at the College of Engineering at the International Islamic University Malaysia and the practice branches were in Dragonpak Industries (M) Sdn Bhd and PT. ABPS Technology Batam in Indonesia. South-South cooperation has been actively developed: 6 exhibitions were organized, 34 projects were displayed and promoted, and 12 seminars and on-site trainings were organized in Germany, Indonesia, Malaysia and across China. In addition, Chinese experts provided training for technicians and workers from companies in Malaysia and Indonesia. At least 205 trainees participated, more than half of whom were women.

This model actively promotes continuous innovation in the functional plastic industry to achieve low power consumption and sustainable development. It also strongly encourages the practical application of achievements from scientific research in universities and research institutions, which is a mutually beneficial development model.

The project is driven by the industrial demands of developing countries and is committed to solving the issues facing industrial development to assist them in meeting their development demands. **Under the project, private sector participation in South-South cooperation has been promoted, which contributes to achieving the SDGs, particularly in areas such as technological development, research and innovation.** The developing countries participating in the project worked together and learned from one another. They promoted the cross-country transfer of knowledge and technology to their

mutual benefit. At the same time, women in developing countries have been actively encouraged to participate in project activities, thereby promoting women's participation in social development, women's empowerment and gender equality.

The project was developed sustainably, as the Fuzhou Fusu Science and Technology Research Institute maintains contact and cooperative relations with partners in Malaysia and Indonesia. The partners continue to share cutting-edge information in the plastics industry, exchange technical personnel and new product development and strengthen cooperation in the research and development of new environmentally friendly plastics.

The project could be replicated in developing countries that have market demand for functional plastic materials and companies that can test research results. It will be more beneficial if there are universities or research institutes with the research capabilities to cultivate talent for project development.

Contact:

Name: Mr Yingfeng Huang
Title: Vice Chief of the Project Division
Organization: Fujian Provincial Science and Technology Exchange Center with Foreign Countries (FSTEC)
Email: fjstec@126.com
WeChat: tiago18

PROJECT NAME: Application and Promotion of Functional Plastic Materials in Developing Countries
COUNTRIES/REGIONS: China, Indonesia, Malaysia
NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.1, 8.2, 9.b
SUPPORTED BY: Pérez-Guerrero Trust Fund for South-South Cooperation, Group of 77
IMPLEMENTING ENTITIES: Fujian Provincial Science and Technology Exchange Center with Foreign Countries (FSTEC)
PROJECT STATUS: Completed
PROJECT PERIOD: September 2017–September 2019
URL OF THE PRACTICE: <https://bit.ly/3htd1yN> (in Chinese)



Informatization and Urban Development for Developing Countries

Facilitating the exchange of approaches to build information technology infrastructure in the context of urbanization

Challenge

The adoption of information technology provides opportunities and conditions to promote economic development, enhance traditional industries and develop new information industries and high- and new-technology industries. It also has a significant impact on urban development, bringing new ideas and innovative methods to city management. Based on the development experience of China, informatization correlated positively with gross domestic product growth and benefited urban management. Higher levels of information technology lead to greater efficiency and faster economic growth for cities.

In some developing countries and regions, the slow development of information technology infrastructures has resulted in a lack of awareness and opportunities for citizens to access the latest information technology and use it on a daily basis for life and work.

With assistance, developing countries will be able to implement good practices on the development of information technology and discover concrete ways to leverage it to promote urban development.

Towards a Solution

CIFAL Shanghai International Training Centre for Local Actors has long had a high reputation for bringing together individuals from developing countries to update their knowledge and professional skills in information technology in order to keep pace with informatization and industrialization. The Centre has offered seminars on information technology and related economic growth and development methods to 1,229 beneficiaries from 127 countries. Topics include e-government, geographic information systems, urban informatization and management, as well as the latest information technology in China and its application in daily life.

CIFAL Shanghai organized a seminar on informatization and urban development for Samoa and one for developing countries. It also organized a seminar on e-government and urban informatization for North Macedonia. Participants learned the definition of a smart city and how it is formed. By understanding the Smart and Connected Communities model, they should be able to integrate Internet technology into urban management. In addition, they were asked to design a smart city proposal for their own cities or regions that included hardware installation and software development. Lecturers evaluated their proposals for feasibility and participants discussed the various ideas. Following the seminar, participants could use these proposals to develop the relevant areas.

Participants were introduced to practices and achievements in information technology development across China and in Shanghai through theoretical and practical training in the form of thematic lectures, special sessions, open discussions, case studies and on-site investigation. These activities also promoted knowledge transfer on informatization and urban development, while fostering cooperation between China and developing countries. Training seminars were held monthly from August to November 2019, and each lasted 21 days. Participants included 20 government officials from Samoa; 34 government officials and scholars from Bangladesh, Cuba, Egypt, Ethiopia, Ghana,



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Malaysia, Nigeria, Pakistan, Panama, Suriname, Timor-Leste, Uruguay and Zimbabwe; and 17 officials from government departments and the central bank of North Macedonia.

Based on the feedback received, **participants gained a comprehensive and objective understanding of China's achievements and accumulated experience in information technology and urban development.** They also gained a scientific and pragmatic perspective of future applications of information technology. Target countries could further explore opportunities for cooperation with China and Chinese companies to improve their information infrastructures and achieve the Sustainable Development Goals. The target countries showed a strong willingness to send delegates to participate in future seminars.

With assistance from CIFAL Shanghai, Samoa has sent over 100 participants to attend seminars on information and technology in recent years. The participants include teachers, farmers, doctors, nurses, media reporters, private business owners, public welfare organizations and government officials. These seminars helped to promote the economic and social development of Samoa, enhancing the relationship between the countries' people and promoting cooperation in various fields. In 2018, delegates from Samoa participated in the first Import Expo, organized by CIFAL Shanghai and hosted in Shanghai, China. They brought traditional Samoan handcrafted goods and artisanal alcohol. In 2019, ten enterprises from Samoa participated in the second Import Expo. These seminars received praise from both the Chinese embassy in Samoa and the Samoan embassy in Beijing.

CIFAL Shanghai would like to expand this training to provide further study opportunities to officials and technicians in less developed countries. At the end of the seminars and training courses, all participants received a pen drive that contained all the course materials. They could share it with their colleagues or use it as reference to design similar trainings in their countries. Representatives of CIFAL Shanghai maintained contact with the participants once they had returned to their home countries to identify their training demands and design future seminars for them. These training seminars could therefore be sustainable in both the participants' countries and in China. However, many countries currently lack the technical and academic expertise required to offer these trainings.

In the coming years, CIFAL Shanghai will continue to raise awareness of informatization construction, share related knowledge and skills and enact solutions for urban development to further benefit individuals from Governments, corporations, financial institutions, hospitals and private businesses from States members of the Group of 77.

Contact:

Name: Mr Hanye Xue

Title: Project Manager

Organization: CIFAL Shanghai International Training Centre

Email: hanye.xue@cifalshanghai.org

WeChat: Xur233

PROJECT NAME: Informatization and Urban Development for Developing Countries

COUNTRIES/REGIONS: Bangladesh, China, Cuba, Egypt, Ethiopia, Ghana, Malaysia, Nigeria, North Macedonia, Pakistan, Panama, Samoa, Suriname, Timor-Leste, Uruguay, Zimbabwe

NOMINATED BY: China International Center for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.1, 11.c

SUPPORTED BY: Pérez-Guerrero Trust Fund for South-South Cooperation

IMPLEMENTING ENTITIES: CIFAL Shanghai International Training Centre

PROJECT STATUS: Completed

PROJECT PERIOD: 2018–2019

URL OF THE PRACTICE: <https://bit.ly/3bdBK7N>



Industrial Construction Technologies in Ethiopia

Promoting low-cost prefabricated building technology for better housing conditions and investment environment in Ethiopia



Challenge

With a population of over 100 million, Ethiopia is the second most populous country in Africa. The economy has been growing rapidly, driven largely by the construction industry and the service sector. The country has also been experiencing increased urbanization; the housing backlog is estimated to be 1.2 million houses. This projected demand far outstrips the annual housing supply. As a result, affordability is a significant issue in the housing market. Most household incomes are too low to afford formal housing solutions, whether public or private. Challenges stemming from the low income of urban residents are exacerbated by costly construction materials and unreasonably high land prices. Given the global industrial restructuring, Ethiopia has great potential to attract foreign capital and boost its economy for the benefit of its people. It has abundant resources, a cheaper labour force, an extensive market and an ever-improving infrastructure. Nevertheless, the local industrial base is weak; the country relies on imports for parts, components and raw materials; and construction technology and professionals cannot meet the needs of the market.

Towards a Solution

To help improve housing conditions and the investment environment, the China-Africa Business Council and its partner, Huajian Group, designed a project to train talent in the construction industry and promote low-cost wooden housing technology in Ethiopia. As the implementing unit, Huajian Group has years of experience in environmentally friendly wood construction and is dedicated to exploring the research technologies of prefabricated buildings. The company also provides a range of services, including architectural design, building material production, centralized procurement, logistics and transportation, as well as on-site technical training. Huajian Group has arranged for experts in relevant fields to provide training for local workers. Under the project, a three-month investigation was conducted to identify feasible technologies for prefabricated buildings in Ethiopia. Hands-on demonstrations and on-site construction practices were performed in the Huajian Industrial Park in Ethiopia to collect feedback and make adjustments and improvements for better wood structure. Finally, a seminar was held to facilitate experience-sharing and technical exchanges among Chinese experts, Ethiopian technical experts and the management team of the Ethiopia Huajian project.

A special committee was created for this project. Five professionals from relevant fields in Ethiopia and seven Chinese experts met in Addis Ababa. The Chinese experts introduced the principles of wood structure architecture and its application in China. Experts from Ethiopia discussed the type of architecture and construction technology used in their country and the existing problems. A number of small seminars were held to further the discussion of using wood structures in Ethiopia. Finally, the committee designated a location for the project, choosing the country's largest city and port, which serves as a political, economic, cultural and transportation centre.

The project also provided an opportunity for four Ethiopian skilled construction workers to study at the headquarters of Huajian Group, in the Chinese province of Guangdong. During a one-month training, the Ethiopian workers mastered the theoretical concepts of wooden structure architecture and could carry out some simple practical operations. Upon their return, a technical training pro-



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programme for Ethiopian technicians was conducted by the four workers and the core team from the Ethiopia Huajian Industry Park. They shared the wood structure technology that they had learned in China with the entire team. The core team from the Ethiopia Huajian Industry Park also invited three officials from the Construction and Housing Development Bureau and the Ministry of Industry to visit China and discuss rapid fabrication and low-cost wooden housing technology. The project highlighted the advantages of affordable assembly-type buildings in terms of construction speed, comfort, safety, affordability, practicality and environmental protection. This new wood construction technology system was suitable for Ethiopia and met the basic demand of low-income groups in the country and in neighbouring African countries. During the construction period, the project created hundreds of job opportunities for local workers in construction, retail, catering and the service industry and increased their wages by 30 to 50 percent. It not only promoted local economic development, but also helped people at the grass-roots level in Africa to understand China and improve public opinion for China-Africa cooperation.

Compared with traditional construction technology available in Africa, rapid fabrication and low-cost wooden housing technology has significant advantages in ensuring construction quality, increasing production efficiency, improving working conditions, reducing the requirements of operators and production costs, and implementing environmental protections. The technology was introduced to governmental agencies during several seminars. **It helped to improve living conditions in Huajian Industrial Park and received acknowledgments from government officials and Chinese companies in Ethiopia.** This project trained workers in the prefabricated construction industry and promoted rapid fabrication and low-cost wooden housing technology. This project could spread from Ethiopia to neighbouring African countries with similar conditions.

Contact:

Name: Mr Xiaofeng Bai

Title: Executive Deputy Secretary General

Organization: China-Africa Business Council

Email: baixiaofeng@cabc.org.cn

PROJECT NAME: Promoting Industrial Construction Technologies in Ethiopia

COUNTRIES/REGIONS: China, Ethiopia

NOMINATED BY: China International Center for Economic and Technical Exchanges

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.1, 9.a, 11.1, 17.6

SUPPORTED BY: China South-South Development Center Project

IMPLEMENTING ENTITIES: China-Africa Business Council, Ethiopia Huajian Industrial Park

PROJECT STATUS: Completed

PROJECT PERIOD: December 2017–November 2018

URL OF THE PRACTICE: Not available



Deployment of Fibre to the Home (FTTH)

Improving the deployment of broadband infrastructure and its quality, leaving no household unserved with fibre connectivity



Challenge

Across Africa, less than a third of the population has access to broadband connectivity. Achieving universal, affordable and good-quality Internet access by 2030 will require an estimated investment of US\$100 billion. In many African countries, Internet connectivity is provided mainly through mobile technologies, due to a lack of fixed infrastructure. This was a challenge for Mauritius as well.

Over the past few years, fibre broadband connectivity has been widely discussed in many markets in Africa. It has been acknowledged as required infrastructure for the next generation of services, both in business and residential markets. It will be used by small- and medium-sized enterprises, e-government services and household entertainment across the continent. Yet, with the exception of a few countries, the growth of fibre access networks has been very limited in Africa, due to the high cost of fibre infrastructure deployment and maintenance. This has also resulted in a small target market. Additionally, the landscape of fibre infrastructure providers is often fragmented, with a number of smaller fibre network operators.

Towards a Solution

To address these challenges, the Prime Minister of Mauritius and the former Minister of Finance and Economic Development announced the acceleration of the Fibre to the Home (FTTH) programme in a speech about the 2016/2017 budget. Under the programme, Mauritius Telecom would cover every town and village on the island by 2017, ensuring that everyone had access to the Internet. The main objective was to improve the quality and deployment of broadband infrastructure, leaving no household without fibre connectivity.

The main challenge in implementing the FTTH programme was to identify funds and a partner for the project's deployment. The Government solicited the cooperation of local telco operators to deploy FTTH connectivity across urban and rural areas. Mauritius Telecom, a major telco operator, invested its own capital in exchange for sole use of its network in the local loop until 2021, to which the Government agreed, in order to secure its return on investment.

Mauritius Telecom invested over 5 billion rupees (approximately US\$75 million) to roll out fibre cable across the island. The project was expected to be completed in 2020 but finished ahead of schedule, in 2019. Mauritius is the sixth country in the world with 100 percent FTTH, and citizens benefit from broadband speeds of up to 100 Mb/s at affordable prices. **There is also 100 percent mobile coverage, which means that all regions in Mauritius are served with fibre and mobile connectivity.**

Due to the success of the project, Mauritius has achieved the most outstanding Telecom Maturity Index (TMI) rating in Africa, with a score of 49. This comes as a result of a massive investment from the Government to improve connectivity on the island. In order to build on this success and to keep pace with the vast telecommunications changes, the Government has formulated a new set of policies to provide the necessary infrastructure and regulatory framework to take full advantage of the changing global environment.

Based on the lesson learned from the successful FTTH deployment, there is a need to provide a regulatory framework that enables private ventures to design innovations and invest in information and communications technology. The Government of Mauritius recognizes that a modernized telecommunications system is central to the economic development of the country and that privatization and economic liberalization of telecommunications is critical to attracting the capital needed to achieve the necessary targets.

Contact:

Name: Mr Rajnish Hawabhay

Title: Chief Technical Officer

Organization: Ministry of Information Technology, Communication and Innovation; Government of Mauritius

Email: rhawabhay@govmu.org

WhatsApp: + 230 5 254 6192



PROJECT NAME: Deployment of Fibre to the Home (FTTH)

COUNTRIES/REGIONS: Mauritius

NOMINATED BY: Government of Mauritius

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.a, 9.b, 9.c, 17.6, 17.8, 17.16

SUPPORTED BY: Government of Mauritius

IMPLEMENTING ENTITIES: Government of Mauritius, Mauritius Telecom, CEB FibreNet

PROJECT STATUS: Completed

PROJECT PERIOD: 2016–2017

URL OF THE PRACTICE: Not available

International Workshops on Internet Security: Enhancing Information Exchange Safeguards

Ensuring secure information exchange in cyberspace for facilitating sustainable socio-economic development in the South

Challenge

The 21st Century has seen rapid advancements in information technology and telecommunications, particularly in computing hardware and software. As a result, smaller, less expensive and more efficient equipment is available to organizations, businesses and individuals. However, the widespread use of electronic devices and equipment for commercial, social and personal activities on the Internet has raised many privacy and security concerns. The frequency of cyberattacks has increased significantly, and the nature of security risks is constantly evolving. Malicious cyberactivity has caused serious financial damages, amounting to billions of dollars. There is an increasing demand to ensure the security of data transfer services in traditional and emerging Internet-based applications by preventing unauthorized access, misuse, modification or denial of information and information systems. Internet and information security can be ensured by adopting consistent policies and practices and employing the relevant technical measures.

Towards a Solution

To address this challenge, the Commission on Science and Technology for Sustainable Development in the South (COMSATS), the Islamic World Educational, Scientific and Cultural Organization (ISESCO), and the Inter Islamic Network on Information Technology (INIT) organized a series of eight training workshops to raise awareness in the field of Internet and information security in developing countries, particularly in their member States.

The aim of these workshops was to provide a forum for young scientists and professionals from developing countries to learn about the latest advancements in Internet security; promote the use of state-of-the-art technologies to protect network and network-accessible resources from malicious attacks; and identify effective Internet and information security solutions for the general public, governmental organizations and commercial ventures. They addressed the following Sustainable Development Goals (SDGs): SDG 4 on quality education; SDG 8 on decent work and economic growth; SDG 9 on industry, innovation and infrastructure; and SDG 17 on partnerships for the Goals.

The workshops were held in Jordan, Kazakhstan, Morocco, Qatar, the Syrian Arab Republic, Tunisia, Turkey and the United Republic of Tanzania. For each workshop, COMSATS selected a panel of five or six experts in the field of Internet and information security, originally from Pakistan but working at various universities and commercial organizations in Pakistan, Qatar, Saudi Arabia, Singapore, the United Arab Emirates and other countries. Participants from the host country included researchers, practitioners, academics, executives, system administrators, system programmers and students working in the field of Internet and information security and cryptography. Approximately 10 to 15 foreign participants belonging to ISESCO and INIT member States also participated in each workshop. The events therefore facilitated the systemic and cross-country transfer of information, knowledge and good practices.

Each workshop included technical presentations, tutorials and hands-on training sessions conducted by designated subject experts and covering the major aspects of Internet and information security, including theoretical understanding of cryptographic algorithms, practical subtleties of network systems and related managerial and technical issues. In addition, network security tools were demonstrated to provide participants with opportunities to update their knowledge base and interact with experts for further collaborative undertakings.



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COMSATS selected and financially sponsored the subject experts designated to conduct the training sessions of each workshop. The local participants were selected and supported by host institutes. ISESCO and INIT selected and sponsored the additional foreign participants from their respective member countries. The technical programme and training manuals for each event were prepared by the designated experts and approved by the partners.

The workshops covered the following key topics: information security risk assessment and management; network security with regard to modern attacks, evasion techniques and defences; malicious code analysis and detection; measuring security; ethical issues of information and communications technology security; organizational security standards, policies and guidelines; cryptographic techniques for network security; web security; social network security; cloud computing security; and digital forensics procedures and tools.

To date, the initiative has benefited approximately 350 young researchers, academics, system administrators and cybersecurity professionals belonging to various developing and least developed countries. The beneficiaries also included a significant number of female scientists and professionals, ensuring a gender balance. Participants came from the following countries: Algeria, Bangladesh, Brunei Darussalam, Côte d'Ivoire, Egypt, The Gambia, Indonesia, the Islamic Republic of Iran, Jordan, Kazakhstan, Malaysia, Maldives, Mauritania, Morocco, Nigeria, Oman, Pakistan, Qatar, the State of Palestine, the Sudan, the Syrian Arab Republic, Tunisia, Turkey, the United Arab Emirates, the United Republic of Tanzania and Uzbekistan.

Courses and certifications on Internet and information security are generally expensive and unaffordable for developing countries. In some cases, individuals must travel to another city or country to attend trainings. COMSATS, ISESCO and INIT took an innovative approach to addressing these challenges by focusing on building capacity in their common member countries. As a result, the workshops conducted under this series were free of cost, convenient and easily accessible for the researchers and practitioners from developing countries.

The workshops generated a chain reaction by training Master Trainers who passed on the knowledge and skills acquired

during the events to their peers, subordinates and students at professional organizations and universities in their home countries, thereby ensuring the sustainability of the initiative. The beneficiaries are using the knowledge gained to make effective contributions to their respective organizations and countries. The first workshop held in the Syrian Arab Republic in 2011 has since been replicated in seven other developing countries. The list is given below:

- First International Workshop held from 23 to 27 July 2011 in Damascus, Syrian Arab Republic;
- Second International Workshop held from 16 to 20 September 2012 in Amman, Jordan;
- Third International Workshop held from 9 to 13 December 2013 in Nabeul, Tunisia;
- Fourth International Workshop held from 19 to 23 October 2014 in Dar es Salaam, Tanzania;
- Fifth International Workshop held from 14 to 18 September 2015 in Ankara, Turkey;
- Sixth International Workshop held from 19 to 23 December 2016 in Rabat, Morocco;
- Seventh International Workshop held from 19 to 23 December 2017 in Almaty, Kazakhstan;
- Eighth International Workshop held from 23 to 27 December 2018 in Doha, Qatar.

The course contents have been updated regularly to keep pace with changing global scenarios. This programme could easily be replicated in other developing countries.

Contact:

Name: Mr Tajammul Hussain
Title: Advisor of Programmes
Organization: Commission on Science and Technology for Sustainable Development in the South (COMSATS) Headquarters
Email: tajammul@comsats.org
Phone: +92-51-9204892

Name: Mr Farhan Ansari
Title: Senior Assistant Director of Programmes
Organization: COMSATS Headquarters
Email: farhan@comsats.org
Phone: +92 51 9214515-7

PROJECT NAME: Series of International Workshops on Internet Security: Enhancing Information Exchange Safeguards
COUNTRIES/REGIONS: Jordan, Kazakhstan, Morocco, Qatar, Syrian Arab Republic, Tunisia, Turkey, United Republic of Tanzania
NOMINATED BY: Commission on Science and Technology for Sustainable Development in the South (COMSATS)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.4, 8.2, 9.1, 9.c, 17.6, 17.8
SUPPORTED BY: COMSATS; Islamic World Educational, Scientific and Cultural Organization (ISESCO); Inter Islamic Network on Information Technology (INIT)
IMPLEMENTING ENTITIES: COMSATS, ISESCO and INIT
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2011–2021 (may be extended if there is need in Member States)
URL OF THE PRACTICE: comsats.org/?p=5265; comsats.org/?p=203; comsats.org/?p=1935; comsats.org/?p=3044; comsats.org/?p=3489; comsats.org/?p=2063; comsats.org/?p=4222; comsats.org/?p=4363



Pacific Small Island Developing States: Aviation Needs Analysis

Supporting aviation safety and security, as well as air navigation capacity and efficiency

Challenge

The Pacific Small Island Developing States (PSIDS) are among the smallest and most remote countries in the world. They have a combined population of only 10 million people scattered across an area that covers 15 percent of the Earth's surface. Their distinct challenges include remoteness, vulnerability to external shocks and natural disasters, an excessive dependence on international trade, fragile environments and limited resources. Civil aviation is vital for PSIDS, especially for connectivity, socio-economic development and disaster relief efforts. Many of the PSIDS depend on tourism, and the majority of tourists arrive by air. Although most of the travel between the islands is only feasible by plane, air connectivity is not optimal.

Towards a Solution

Recognizing the air connectivity challenges facing PSIDS, the 39th Assembly of the International Civil Aviation Organization (ICAO) proposed a study to identify and address the current challenges and needs of PSIDS in terms of aviation safety, air navigation and aviation security. The Pacific Small Island Developing States Aviation Needs Analysis (PSIDS Study) also identified potential options and opportunities to help address these civil aviation challenges. The main objective was to enhance the capabilities of PSIDS in a strong and resilient manner to benefit their sustainable development and improve their resilience to climate-related hazards. In addition to the resources provided by ICAO, the PSIDS Study was made possible by generous financial and in-kind contributions from Australia, Chile, China, Fiji, Singapore, the United Kingdom and the United States of America.

The analysis was conducted in the context of the 2030 Agenda for Sustainable Development, the SIDS Accelerated Modalities of Action (SAMOA) Pathway and the SENDAI Framework for Disaster Risk Reduction 2015–2030. It inventories vulnerabilities in air transport within the region and assesses how civil aviation could alleviate challenges facing PSIDS and support their sustainable development. It includes a comparative cost-benefit analysis of various forms of State regulatory oversight and assistance mechanisms.

The PSIDS Study included several consultations with Australia, New Zealand, the Pacific Aviation Safety Office (PASO), the Pacific Islands Forum (PIF) Secretariat, United Nations offices in Suva and Fiji, the Association of South Pacific Airlines, the World Bank and the Asian Development Bank. The study team met with high-level officials from ministries and Civil Aviation Authorities (CAAs) during on-site visits to 11 States. Representatives from the CAAs of Samoa and Vanuatu participated as observers in some on-site visits. States that were not visited were invited to meet with the Senior Advisor of the PSIDS Study to provide their views and inputs. These activities were made possible by the monetary and in-kind contributions made to the project.

Based on the information gathered and the analyses performed within the study's time and resource constraints, **a total of 30 recommendations have been formulated to be taken forward by the PSIDS, PIF and ICAO, as applicable. Some of the recommendations for ICAO aim to encourage assistance donors, training institutions and multilateral development banks to take further action to support PSIDS.** The recommendations support a holistic approach to the development



and implementation of a Pacific aviation road map to establish effective, sustainable and resilient aviation regulatory systems in the region.

To ensure the project's sustainability, ICAO is considering the designation of an ICAO Liaison Officer for Pacific Small Island Developing States. The position would provide support to PSIDS in delivering safe, secure and sustainable international civil aviation. The mandate of the Liaison Officer will be to facilitate coordination and cooperation, as well as strengthen communication and knowledge-sharing between ICAO and the PSIDS, PASO, PIF and other United Nations entities. The Liaison Officer will also facilitate the implementation of the recommendations from the PSIDS Study, with a view to stimulating and sustaining the effective implementation of safety and security standards and recommended practices in these States.

Safe, reliable, cost-effective and environmentally responsible air transport is critical to achieving the 17 Sustainable

Development Goals (SDGs). To illustrate just how essential a catalyst aviation is in the pursuit of the SDGs, ICAO mapped its work against them and found that its strategic objectives support 15 of the 17 SDGs. ICAO is committed to working in close cooperation with States and other United Nations bodies to achieve these sustainable development targets.

Contact:

Name: Ms Thilly De Bodt

Title: Acting Head, Strategic Planning, Coordination and Partnerships.

Organization: International Civil Aviation Organization (ICAO)

Email: tdebodt@icao.int

Name: Mr Nicolas Rallo

Title: Chief, Safety and Air Navigation Audit Section

Organization: ICAO

Email: nrallo@icao.int

PROJECT NAME: Pacific Small Island Developing States: Aviation Needs Analysis

COUNTRIES/REGIONS: 14 Pacific Small Island Developing States which included: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Niue (non-contracting State), Palau, Papua New Guinea, Solomon Islands, Samoa, Tonga, Tuvalu and Vanuatu

NOMINATED BY: International Civil Aviation Organization (ICAO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 1.5, 1.a, 2.4, 2.c, 3.d, 8.1, 8.2, 8.3, 8.9, 9.1, 9.4, 9.5, 9.a, 10.2, 10.6, 10.b, 17.3, 17.6, 17.9

SUPPORTED BY: Australia, Chile, China, Fiji, Singapore, United Kingdom of Great Britain and Northern Ireland and United States of America

IMPLEMENTING ENTITIES: ICAO

PROJECT STATUS: Completed

PROJECT PERIOD: March–September 2019

URL OF THE PRACTICE: <https://bit.ly/3gGmt0p>



Promoting Sustainable Investment in Partner Countries: Ethiopia Pilot

Investing for sustainable development

Challenge

Ethiopia is pursuing an export-oriented industrialization focused on light manufacturing and has experienced over a decade of high economic growth. Nevertheless, the country is facing key challenges, including the limited capacity of government implementing bodies, a lack of coordination among government institutions providing support, a shortage of industrial inputs, limited engagement from private investors, inefficient logistics systems, limited productivity and a lack of technological and managerial capacity in the manufacturing sector.

To deepen and diversify its industry base and allow the economy to reach middle-income status by 2025, Ethiopia is in urgent need of a more competitive manufacturing sector with greater private sector participation, more sustainable industrial zones and better industrial integration at the regional and global levels.

Towards a Solution

China's engagement and financing provide an opportunity to close development gaps in partner countries and advance the Sustainable Development Goals (SDGs) on a global scale when implementation is systematically aligned with the principles and practices of economic, social and environmental sustainability.

The United Nations Development Programme (UNDP), in assisting partner countries to achieve their sustainable development goals in a way that is in line with their development strategies, aims at strengthening the capacities of partner countries and establishing a network of sustainable investment promotion (SIP) facilities that can help orient investments towards comprehensive economic, social and environmental sustainability outcomes.

The overall objectives of the project are to strengthen institutional frameworks and build development capacity in the pilot country to leverage sustainable investments. The goal is to improve the overall investment climate in order to attract and sustain all foreign investments that respond to the country's national development priorities and local needs.

In line with the national strategies of Ethiopia, the SIP programme aims to sustain the manufacturing sector's contributions to industrial and economic growth, increase industrial zone development, promote private sector development and integrate Ethiopian industries into regional and global markets.

Supported by the Governments of China and Ethiopia, the SIP programme aims to provide a scalable blueprint for improving the sustainability of investments. In the short term, it will develop a pilot facility in Ethiopia to generate relevant and effective modalities for sustainable investments. It will also provide concrete lessons and recommendations on achieving positive development impacts. The latter will discuss which approaches, policies and mechanisms are suitable to an investment climate at the national level. In the intermediate and long term, it is envisaged the approach can be scaled up as part of a network to promote sustainable investment.



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The programme adopts an innovative 3P Approach: platform-building, policy engagement and pilot projects. Since 2019, it has had several early successes. In terms of platform-building, the United Nations Department of Economic and Social Affairs and UNDP successfully facilitated practical exchanges with public and private sectors to provide a framework of cooperation to leverage sustainable investment opportunities (in line with SDG 17 on partnerships) and to identify and address barriers to sustainable investment (SDG 9 on industry, innovation and infrastructure; SDG 11 on sustainable cities and communities; and SDG 13 on climate action).

Two high-level forums, one study tour and two knowledge exchange programmes were held in 2019 in Ethiopia and China, attended by over 150 Ethiopian and 200 Chinese stakeholders from governments, the private sector, development agencies, think tanks and other institutions. These events provided an opportunity for in-depth discussion and knowledge exchanges on sustainable investment.

With regard to policy engagement, the results of sector-specific diagnostic studies on sustainable investment in Ethiopia will be submitted to the relevant government authorities to improve the policy framework (SDG 16 on peace, justice and strong institutions).

In terms of the piloting project, **the programme has built on findings from both dialogues and policy analyses to identify potential pilot project areas, including capacity devel-**

opment to enhance technology and skills transfer (SDG 1 on poverty and SDG 8 on decent work and economic growth). The programme will further provide project-level advice and analysis to support the testing and application of practical solutions. It will share best practices and lessons learned for sustainable investment with other partner countries. Both the Governments of China and Ethiopia expressed a strong commitment to support the pilot project.

With best practices and lessons learned from Ethiopia, the SIP programme can be further replicated and expanded to other partner countries. For a successful outcome, it is key that both the Chinese and host Government are willing to collaborate and able to provide implementation support. The programme will help promote and realize sustainable investment on a larger scale to advance the SDGs and will ultimately form a sustainable investment platform for mutual learning, knowledge- and experience-sharing, policy coordination and capacity development.

Contact:

Name: Ms Yixuan Shao

Title: Programme and Partnership Coordinator of the Global Partnership Cluster

Organization: United Nations Development Programme (UNDP) China

Email: yixuan.shao@undp.org

PROJECT NAME: Sustainable Investment Promotion Facilities, with Ethiopia as the Early Pilot

COUNTRIES/REGIONS: China, Ethiopia

NOMINATED BY: United Nations Development Programme (UNDP) China

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.3, 1.5, 1.a, 1.b, 8.2, 8.3, 8.a, 9.2, 9.a, 9.b, 11.a, 13.b, 16.6, 16.b, 17.3, 17.5, 17.9, 17.14, 17.16, 17.17

SUPPORTED BY: United Nations Peace and Development Trust Fund managed by the Department of Economic and Social Affairs

IMPLEMENTING ENTITIES: UNDP

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: <https://bit.ly/32xW7bS>



Industrial Upgrading and Modernization of the Carpet-Weaving Industry in Tajikistan

Promoting the carpet-weaving, embroidery and traditional textile sectors in Tajikistan

Challenge

The existing textile, carpet-weaving and embroidery facilities of Tajikistan still suffer from underexploited manufacturing potential and the declining competitiveness of local producers. In addition to other industry development challenges, these sectors face challenges in supply, marketing, management capacity, access to producers, quality and standards, technology and vocational trainings.

Expanding the scope of traditional textile, carpet-weaving and embroidery enterprises through technological modernization and managerial capacity-building would contribute to improving efficiency, productivity, trade capacities and the work environment. Enhancing existing marketing practices and introducing new tools would facilitate market access and sales of locally manufactured products in local, regional and international markets, thereby contributing to Sustainable Development Goal (SDG) 9. Additionally, upgrading of these sectors would generate employment opportunities, especially for women, thereby contributing to SDG 5 and SDG 8.

Towards a Solution

This project aims to contribute to the development of the traditional textile, carpet-weaving and embroidery sectors and to improve the international position of Tajikistan in manufacturing value added, manufactured exports and global competitiveness. The project also aims to increase job creation capacity and the development of sector-specific skills, while decreasing the gender wage gap and enhancing the position of women in the beneficiary enterprises. The practices established in the beneficiary enterprises as a result of the project's implementation should stimulate the adoption of similar activities in other enterprises in the manufacturing sector. Thus, the project will contribute to the implementation of the country's National Development Strategy and the 'Programme on the development of carpet-weaving in Tajikistan for the period 2014–2020'. The project supports private sector development, job creation, and upgrades to existing industry, as well as inclusive and sustainable industrial development with equal opportunities for all.

In 2015, within the framework of regional and South-South cooperation and taking into account the national development goals of Tajikistan, the Governments of China and the Russian Federation agreed to support the Tajik Government in implementing its National Development Strategy and development objectives for the carpet-weaving sector. The project's pilot phase aimed to increase the productivity and competitiveness of enterprises in Tajikistan, in both the carpet-weaving and embroidery sectors. It identified regional and international export markets, improved technology and industrial modernization, introduced innovative marketing tools and strengthened national expertise to provide the required technical support and services to local enterprises on a sustainable basis.

Phase II of this project, from 2019 to 2022, will take advantage of opportunities for regional integration by strengthening productivity, export and employment-generating capacities in the national carpet-weaving, embroidery and traditional textile sectors. In particular, the project will improve the productivity and competitiveness of Tajik enterprises operating in these sectors by identifying regional and international market opportunities, supporting enterprise upgrading, modernizing tech-



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nology, introducing innovative marketing tools and building the capacity of national experts and business support institutions for the long-term sustainability of the project.

During the first phase, the United Nations Industrial Development Organization (UNIDO) organized over 40 capacity-building activities in several regions of Tajikistan, reaching up to 535 participants, of whom 75 percent were women and some were refugees from Afghanistan. The indirect awareness-raising impact has been far-reaching, encompassing up to 1,000 textile specialists across the country. The training activities for experts covered various aspects of the production and market access cycle, including product design, personnel management, business financial management and marketing.

Since the beginning of the second phase, from May to December 2019, over 25 capacity-building activities have been organized for textile industry experts, involving over 250 specialists of various professional profiles, including designers, craftsmen, textile artists, textile industry specialists, students and university professors.

With the technical support of UNIDO, pilot project beneficiaries created three new collections under the umbrella brand LA'AL Textiles, including two home textile and accessories collections, both handmade and machine-made, as well as a carpet collection. LA'AL Textiles won several awards in the country's Brand of the Year Competition, including the 2017 Peak of Fame, the 2018 Best National Brand to Contribute

to Sustainable Development and the 2019 Golden Award. This highlights that the brand has established itself as a flagship for innovation in the country's textile industry by adhering to international quality standards and cutting-edge practices in the field of environmentally friendly production.

Since 2016, employment at the pilot beneficiary enterprises has increased by 140 percent as a direct result of the UNIDO project. Yearly turnover has grown by 68 percent, while exports and local market sales have increased by 106 percent and 66 percent respectively.

The project aims to support the retention of knowledge in Tajikistan to ensure the project's long-term sustainability. Expertise and skills gained through the UNIDO intervention will enable local counterparts and beneficiaries to replicate these experiences and practices in other industrial sectors. Lessons learned during the successful implementation of this project could potentially be replicated in other developing countries and economies in transition, particularly in countries that seek to modernize traditional textile industries.

Contact:

Name: Mr Farrukhbek Alimdjano

Title: Industrial Development Officer

Organization: United Nations Industrial Development Organization (UNIDO)

Email: f.alimdjano@unido.org

PROJECT NAME: Industrial Upgrading and Modernization of Carpet-Weaving, Embroidery and Traditional Textile Sectors in Tajikistan

COUNTRIES/REGIONS: China, Russian Federation, Tajikistan

NOMINATED BY: United Nations Industrial Development Organization (UNIDO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.4, 5.5, 8.1, 8.2, 8.3, 8.4, 8.5, 9.2, 9.3, 9.4, 9.a, 9.b

SUPPORTED BY: Phase I: China, Russian Federation; Phase II: Russian Federation

IMPLEMENTING ENTITIES: UNIDO

PROJECT STATUS: Ongoing

PROJECT PERIOD: Phase I (2015–2017), Phase II (2019–2022)

URL OF THE PRACTICE: <https://bit.ly/3hFhwGw>



Promotion of Neem-Derived Biopesticides in West Africa

Promoting the use and development of eco-friendly and cost-effective pesticides derived from neem kernels in three West African countries

Challenge

Developing countries perpetually struggle to produce sufficient food for their growing populations. Future increases in agricultural production must come from increased crop yields per hectare, relying on increased use of fertilizers and pesticides. Current methods of employing those chemicals often result in soil, water and food contamination and endanger human health.

Assistance is therefore required to support countries in promoting the use and development of production capacity for cost-effective, eco-friendly alternatives to persistent organic pollutant (POP) pesticides by emphasizing non-chemical alternatives.

Towards a Solution

In November 2007, the Regional Network on Pesticides for Asia and the Pacific (RENAP) Indian model of neem-derived pesticide technology, which uses the neem kernel aqueous extract, was presented and discussed at an Expert Group Meeting organized in Abuja, Nigeria. A recommendation was made to replicate and transfer the low-cost technology and the farmer training model developed in India to West African countries through South-South cooperation.

As a result, the Centre for South-South Industrial Cooperation (UCSSIC) of the United Nations Industrial Development Organization (UNIDO) and RENAP undertook preparatory missions to Ghana, Nigeria and Sierra Leone. All three countries were conscious of the effects of chemical pesticides on soil, water and air contamination. The neem tree had been planted abundantly in those countries to combat soil erosion and desertification, and farmers were aware of its additional agricultural benefits.

During the preparatory phase, the project targeted resource-poor farmers and small-scale, village-level agribusiness enterprises and microindustries. It also targeted women and unemployed rural youth. Participating technical institutions benefited from technology transfer and institutional linkages. At the same time, soil, water and food contamination were reduced.

The project aimed to promote the use and development of production capacity for eco-friendly, cost-effective pesticides derived from neem kernels, focusing on neem-shed development, technology transfer, South-South institutional linkages, skill enhancement, training activities in villages to promote rural development, agribusiness and microindustry promotion, poverty alleviation and employment generation. It also aimed to strengthen environmental protections and eliminate hazards by providing a low-cost, bio-efficient alternative to toxic POPs and chemical pesticides.

To achieve these objectives, the project built upon the successful results of the UNIDO/India projects entitled 'Technical Support for Development and Production of Neem Products as Environment Friendly Pesticides' and 'Production and Promotion of Neem-Based Pesticides as Environment Friendly Biodegradable Alternatives to Chemical Pesticides'. The project relied on strong collaboration and cooperation among project partners: UNIDO, UCSSIC, RENAP and the relevant ministries in participating countries.



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Neem (*Azadirachta indica*) is an evergreen tree native to the Indian subcontinent that can grow in almost all types of soils and agroclimatic conditions. It is now widespread in many African countries. In 1989, the United States National Research Council classified it as a “tree for solving global problems,” given that its bearing chemicals could serve as environmentally friendly pesticides. Other potential uses of the neem tree will also generate additional income and employment opportunities in rural areas.

Based on an initial study conducted by UCSSIC and RENPAP, UNIDO decided on a two-pronged approach to this project. It partnered with one technical institution in each country to carry out bioefficacy and phytotoxicity studies and field trials. It also partnered with a suitable civil society organization to raise awareness of the project and establish production and distribution centres in neem-shed areas.

The project’s approach consisted of establishing a national coordination arrangement, providing training for stakeholders and transferring technology to the three national technical partners. It also conducted field trials and phytotoxicity studies, generated crop-specific bioefficacy data and established three neem centres with production demonstration plants. In addition, it disseminated standardized technology for seed collection and neem-derived biopesticide production. The project also supports replication and scale up.

The project has achieved several results. A neem census was conducted to assess seed potential for neem-shed areas and pinpoint focus locations for future scale-up. Neem seeds were collected and nurseries were successfully planted. In Sierra Leone, neem was adopted nationwide as a new innovation in the agricultural and reforestation programme. **Low-cost production technology for neem-based pesticides was transferred to national technical partners in the three countries: the University of Ghana, Njala University in Sierra Leone and the Federal Ministry of Environment in Nigeria.**

In each participating country, a bioevaluation of neem kernel aqueous extract technology was conducted using scientific field trials under varied agroclimatic conditions. Trials were

conducted for cowpea, cucumber, okra, maize and pepper crops. In Nigeria, data showed a higher yield for the 1.5 percent neem treatment against all other treatments, including synthetic pesticides. These trials proved the effectiveness of the neem-derived pesticides.

To provide hands-on practical experiences, neem-derived pesticides were demonstrated on various crops in farmers’ fields. The equipment, materials and neem centres necessary to train farmers and promote neem-derived pesticides were provided. Awareness-raising and training programmes with field demonstrations for farming communities were conducted as well. Mechanized demonstration plants for the production of neem-derived pesticides were also established. The machinery, including depulpers, decorticators, crushers and storage facilities, was purchased, installed and tested. In addition, machine operators were trained.

This project had been used as a model for UNIDO and Global Environment Facility regional projects in the Common Market for Eastern and Southern Africa and the Southern African Development Community. These projects aim to strengthen capacity and provide technical assistance for national implementation plans under the Stockholm Convention on Persistent Organic Pollutants in least developed countries in Africa. As a result, a regional strategy was developed for the production and application of neem-based and other biopesticides.

Contact:

Name: Ms Erlinda Galvan
Title: Industrial Development Officer/Project Manager
Organization: United Nations Industrial Development Organization (UNIDO)
Email: e.galvan@unido.org
Skype: e.galvan_4

Name: Mr Rajeev Vijh
Title: Director
Organization: UNIDO Centre for South-South Industrial Cooperation
Email: r.vijh@unido.org

PROJECT NAME: Promotion of Neem-Derived Biopesticides in West Africa
COUNTRIES/REGIONS: Ghana, India, Nigeria, Sierra Leone
NOMINATED BY: United Nations Industrial Development Organization (UNIDO)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.3, 3.9, 5.4, 5.5, 9.2, 9.4, 9.b, 12.2, 12.4, 12.a, 17.6, 17.7, 17.17
SUPPORTED BY: Government of India
IMPLEMENTING ENTITIES: UNIDO Centre for South-South Industrial Cooperation (India); Regional Network on Pesticides for Asia and the Pacific (India); Ministry of Food and Agriculture (Ghana); Federal Ministry of Environment (Nigeria); Ministry of Agriculture, Forestry and Food Security (Sierra Leone)
PROJECT STATUS: Completed
PROJECT PERIOD: 2014–2017
URL OF THE PRACTICE: <https://bit.ly/32BRvla>



Promoting Small Hydropower Resources

Updating and disseminating the World Small Hydropower Development Report and creating pilot project initiatives

Challenge

A majority of the world's leading economies depend heavily on fossil energy sources, which are the major cause of global warming. To avoid increasing the amount of carbon in the atmosphere, the international community is seeking clean energy sources and affordable solutions. Expanding small hydropower (SHP) at a global level through South-South cooperation could contribute to reducing carbon emissions. It is an excellent, mature renewable energy technology that could provide cost-effective power generation in many parts of the world; however, its global potential remains largely untapped.

Small hydropower, which is generally defined as plants producing less than 10 MW of power, currently produce only 78 GW of the total estimated global potential of 229 GW. While there is enormous potential for small hydropower in developing countries, many have not yet given it consideration. A South-South approach to facilitate interactions and share experiences regarding small hydropower resources among developing countries could lead to the implementation of related policies and projects to harness its power for clean energy production.

Towards a Solution

A pioneer in small hydropower technology with nearly 50,000 installations throughout the country, China is sharing its extensive experience with rest of the world. With the support and guidance of the United Nations Industrial Development Organization (UNIDO), the International Center on Small Hydropower (IC-SHP) in Hangzhou, China is leading small hydropower expansion globally. To fast track this initiative, the Government of China collaborated with UNIDO to initiate this project, which began in 2013 and was successfully completed in 2019. The project aimed to provide development information about all aspects of small hydropower to benefit countries in need.

The 2016 World Small Hydropower Development Report built on the first publication in 2013 and was the result of a significant collaborative effort between UNIDO, IC-SHP and professionals from around the world. Over 230 experts and scholars in the field from government institutions, research institutes, universities, colleges and hydropower companies contributed to the country and regional reports. Analysis of the status of small hydropower development in each country included the following aspects: an overview of the electricity sector, small hydropower capacity and potential, renewable energy policy and barriers to small hydropower development. Other issues covered in country reports include information on the power grid structure, electricity tariffs and future short-term projects, as well as incentives, policies and plans for renewable energy development.

While working on the 2016 Report, interactions with professionals and government representatives from various countries generated interest in small hydropower projects, which has already resulted in several additional projects under South-South cooperation. During his visit to IC-SHP, former Secretary-General Ban Ki-moon expressed his appreciation for the project's impacts. Following the launching ceremony, a group of countries from Africa, led by the Secretariat of the Common Market for Eastern and Southern Africa, established collaborations to scale up small hydropower and grow business on the continent. Similarly, a new centre on small hydropower facilitation was proposed in Colombia.



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With the publication of the World Small Hydropower Development Report every three years, UNIDO and IC-SHP China share and disseminate the latest information on the status of small hydropower across the world. This flagship initiative of UNIDO is expected to boost productivity, industrialization and regional economic development. It is the compilation of valuable information on global small hydropower and serves as a crucial guide for policymakers and investors. With its first publication of in 2013, the second edition in 2016 and the third in 2019, UNIDO and IC-SHP are supporting sustainable development on a global scale. The progress, benefits and good practices seen at the international level will build confidence for and empower many countries with the potential resources to adopt suitable strategies and policies to explore this technology. Many African countries, including Liberia, Nigeria and Sierra Leone, have included small hydropower in their priority plans.

Using small hydropower for industrial development is in itself an innovative approach to solving development challenges. With little investment, the project disseminates information on small hydropower and is able to benefit countries by bringing together a number of stakeholders to provide manageable technological solutions for energy generation. Small hydropower therefore enhances local economies and supports poverty reduction in providing energy access to many households. Its use also benefits the environment, women and children and provides economic opportunities to local residents. **Within the framework of South-South cooperation, the project contributed to knowledge-sharing and technology transfers between China and the countries developing this technology.** A new South-South initiative to promote small hydropower was undertaken in 2020 by China and five recipi-

ent countries: Ethiopia, Kyrgyzstan, Myanmar, Nigeria and Peru. China also provided support for small hydropower projects in Ghana and Zambia.

Within the framework of inclusive and sustainable industrial development, UNIDO and its IC-SHP counterpart aim to scale up sustainable small hydropower development for productive uses in interested countries. The various types of equipment and accessories are sourced from several places; most are basic in nature and available in almost every country. In some cases, they are sourced from nearby countries. This is achieved by providing technical assistance in resource assessment, conducting feasibility studies and developing technical and business proposals.

Small hydropower technology is environmentally friendly, simple to operate and proven to be effective in different local contexts. For this reason, small hydropower projects could easily be replicated in a number of developing countries. China has recently provided support for these projects within the context of South-South cooperation. Many others, including Colombia, Haiti, Mongolia, the Philippines and the Sudan, are currently seeking to collaborate with UNIDO in this regard.

Contact:

Name: Dr Rana Pratap Singh

Title: Industrial Development Officer, Energy Systems and Infrastructure Division, Department of Energy

Organization: United Nations Industrial Development Organization (UNIDO)

Email: r.p.singh@unido.org

Skype: rana.pratap.singh6

PROJECT NAME: World Small Hydropower Development Report and Pilot Project Initiatives

COUNTRIES/REGIONS: Approximately 170 countries from Africa, Asia and Latin America

NOMINATED BY: United Nations Industrial Development Organization (UNIDO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 7.1, 7.2, 8.3, 9.2, 13.2, 17.5

SUPPORTED BY: UNIDO, Government of China

IMPLEMENTING ENTITIES: UNIDO, International Center on Small Hydropower (ICSHP) China

PROJECT STATUS: Completed

PROJECT PERIOD: 2013–2019

URL OF THE PRACTICE: www.smallhydroworld.org; www.icshp.org



Hisense Appliance Industrial Park Project

Promoting sustainable development in Africa through South-South investment co-operation

Challenge

Industrialization is essential to modernization and the only way to improve a country's economic development. There are abundant natural resources and population advantages in Africa, which has long been a global supplier of industrial raw materials. While South Africa expects to see a high level of industrial development, some industries are still in the early stage, particularly manufacturing. They are suffering from insufficient infrastructure, a shortage of technologies and capacities, and a high level of unemployment, which severely restricts local economic development. In the home appliance industry in particular, South Africa and other African countries have depended on exports and face barriers to purchasing and access, high prices, incomplete after-sales service and other obstacles.

Towards a Solution

After 40 years of reform and opening-up, China has accumulated rich experiences in industrial development, as well as technology, capital and talent advantages. Partnerships between China and Africa that focus on capacity help to meet African development needs and provide a strong foundation for cooperation. In March 2013, the China-Africa Development Fund and the Chinese company Hisense Group Co., Ltd. signed an investment cooperation agreement to support the construction of the Hisense South Africa Appliance Industrial Park (Hisense South Africa), with a view to improving local manufacturing and meeting the manufacturing demands of South Africa. The agreement included a total investment of US\$ 150 million and an annual output of 540,000 refrigerators and 390,000 televisions. President Xi of China and then-President Zuma of South Africa witnessed the signing.

Hisense South Africa promotes sustainable development in the local manufacturing industry without increasing government expenditure, as the capital was provided to build the factories. The project implemented localized management, increased job opportunities, brought foreign exchange and tax revenues to the local region, provided support based on its technical and management experience, and effectively improved the local manufacturing industry. Hisense South Africa has employed 700 local people, who account for 90 percent of its total employees. A number of local employees were trained in the country through a mentoring programme and currently hold 40 percent of the management positions. By driving demand for upstream and downstream products and services, the Park has indirectly created 2,000 jobs. In 2019, Hisense South Africa trained approximately 1,000 unemployed young people aged 18 to 25 years living in rural areas. It also collaborated with the Atlantis Secondary School to build the Hisense South Africa Technology Research and Development Training Base, which has carried out training on products, technology research and development and techniques to 1400 trainees, enabling them to master the skills needed for electronic technology, software and electrical equipment.

The project adapted activities to the local context and aligned them with local development plans. A phased development was planned to include dimensions such as branding, operations, manufacturing, research and development, logistics, after-sales and sales channels. The goal of the project is to establish a household-appliance industry platform able to provide overall solutions, driving investment



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by trade, expanding beyond trade to include factory building and production, and helping to optimize and upgrade African productivity. Hisense South Africa uses advanced technologies to enhance market recognition of the brand. It produces mainly high-end green products, such as energy-saving and environmentally friendly refrigerators and smart 3D high-definition televisions, which effectively meet the growing needs of local families. In addition, the Park promotes energy conservation, environmental protection and upgrading capacity. Hisense South Africa strictly abides by these principles at all stages, from the selection of raw materials to production and processing. It has responded to the South African Government's call to save electricity and resolve the imbalance between energy supply and demand. It has also become the first home appliance enterprise in South Africa to produce energy-saving products with low power consumption.

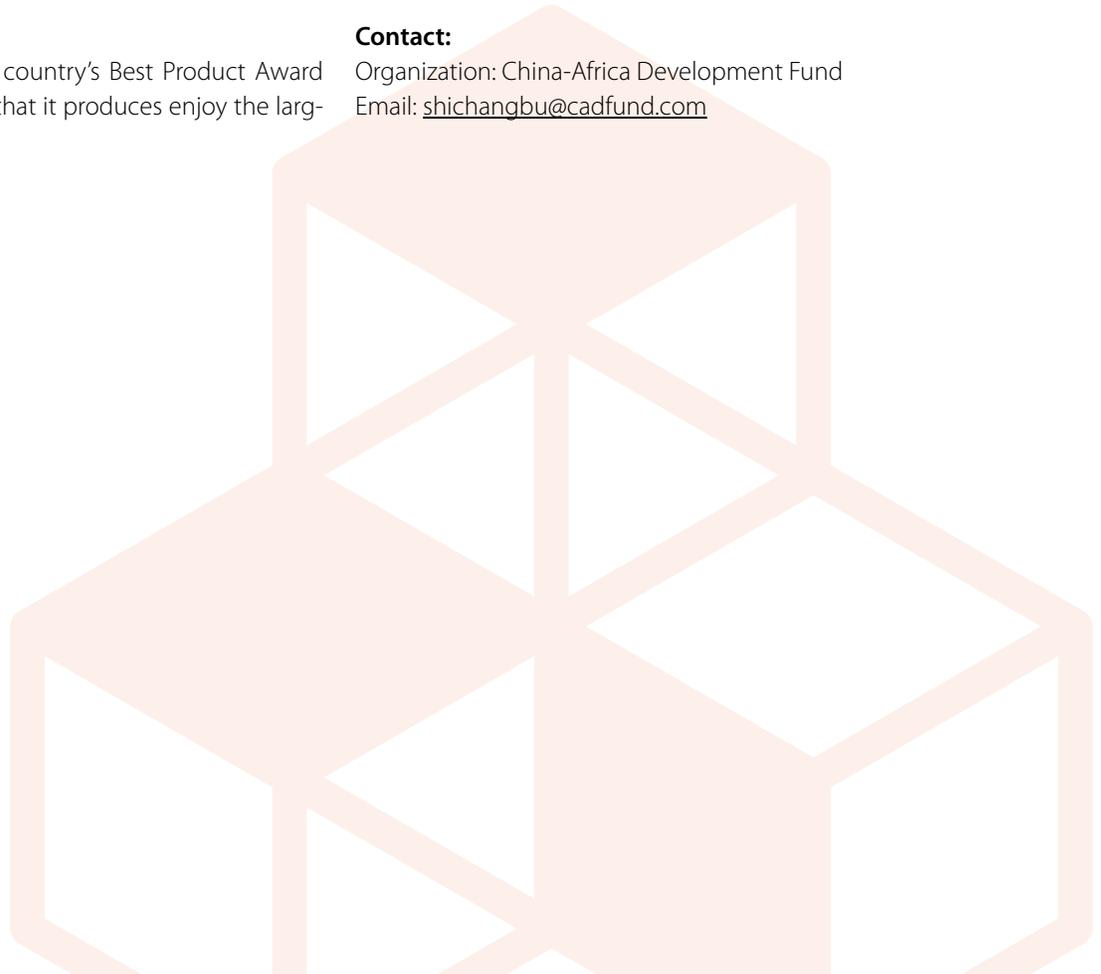
Hisense South Africa won the country's Best Product Award in 2017. The home appliances that it produces enjoy the larg-

est sales volume in the local market and are exported to over 10 African countries. **The project's implementation has not only promoted employment and exports in South Africa but has also improved the country's manufacturing and technical capacity.** Through the 'Made in Africa' project, it has also improved local management, logistics and post-sales service; promoted the development of related industries; won the praise of South African leaders and citizens; and become a well-known brand in South Africa. The innovative industrial park approach adopted by the project can be replicated in other African countries with adequate infrastructure and a relatively large market scale. The project entails driving investment by trade, expanding beyond to include factory building and production, and helping to optimize and upgrade regional productivity.

Contact:

Organization: China-Africa Development Fund

Email: shichangbu@cadfund.com



PROJECT NAME: Hisense Appliance Industrial Park Project
COUNTRIES/REGIONS: China, South Africa
NOMINATED BY: China-Africa Development Fund
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 8.6, 9.2, 11.c
SUPPORTED BY: China-Africa Development Fund, Hisense Group Co. Ltd
IMPLEMENTING ENTITIES: Hisense SA Manufacturing (Pty) Ltd
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2013–present
URL OF THE PRACTICE: Not available

Advanced, Cost-Effective and Climate-Resilient Technologies for Bridge Construction in Nepal: A Knowledge Exchange with Bangladesh

Helping Nepal gain technical knowledge on advanced technologies for bridge construction from the experience of Bangladesh

Challenge

Under its first Bridge Improvement and Maintenance Programme (BIMP I), the Nepal transport sector achieved targets to strengthen institutions and physical infrastructure, including the maintenance, rehabilitation and construction of new bridges. The project was implemented with support from the World Bank using the Program-for-Results (PforR) lending instrument.

Under BIMP II, network arch bridges will be introduced in Nepal; however, the project implementation team did not have experience designing these structures. It was therefore imperative to gain new knowledge and technical skills to design this type of bridge using advanced and innovative technologies that are better able to withstand disaster risks, including weather- and climate-related shocks such as earthquakes and floods. To address this challenge, the South-South Facility supported a knowledge exchange with Bangladesh.

Towards a Solution

BIMP I was implemented to support the efforts of the Government of Nepal in order to maintain and provide access to safe, resilient and cost-effective bridges on the country's Strategic Roads Network. BIMP II, a second phase, was later implemented to further support the Government in improving bridge resilience and including non-motorized transport modes using advanced technical designs. Its objective is to support approximately 475 bridges in Nepal. This includes carrying out maintenance on approximately 90 bridges and upgrading road safety measures on approximately 180 existing bridges to help reduce accidents, injuries and fatalities. The program also aims to support the construction, rehabilitation or replacement of about 80 two-lane bridges and 35 four-lane bridges.

To address the lack of experience, a knowledge exchange was organized with Bangladesh, a country with extensive knowledge and experience in the design and construction of long-span bridges, including network arch bridges. Bangladesh also has experience providing on-the-job training and certification programs to professionals in the transport and construction sectors. At the same time, officials from the Local Government Engineering Department (LGED) of Bangladesh were keen to learn about the experience of Nepal in using the PforR lending instrument of the World Bank, as LGED was preparing to launch a similar program using PforR. In addition, Bangladesh transport sector government officials were hoping to learn about developing a bridge management system.

For Nepal, the main objectives of the exchange were to gain technical knowledge on advanced technologies for bridge construction and learn from the experiences and practices of Bangladesh government officials and private sector stakeholders involved in advanced bridge construction. Representatives from Nepal also sought to share their experience regarding bridge assessment with Bangladeshi counterparts responsible for building a bridge funded by the PforR.

The exchange was designed in close collaboration with the Bangladesh University of Engineering and Technology (BUET) in Dhaka. It consisted of technical sessions, peer-to-peer learning and site visits. It was conducted using a participant-centred learning approach, allowing for active engagement



and participation throughout sessions and site visits. The exchange mobilized a wide range of resource persons, including high-profile professionals of BUET, LGED and the Bangladesh Road and Highways Department (RHD), as well as certified national trainers on procurement.

The exchange was structured around four main elements: technical sessions, knowledge-sharing and peer-learning sessions, site visits and a feasibility study.

Technical sessions covered the evolution and fundamentals of network arch bridge design and construction; their geometry; modelling in SAP 2000 software; the application of load and prestress; load combination; and analysis, results and design.

Knowledge-sharing and peer-learning sessions were held during discussions and meetings with representatives of the Bangladesh Association of Construction Industry and the Bangladesh LGED. Topics included the definition of quality bridge construction, especially for high-value contracts; good bidding practices; training and supervision of field engineers; the roles and institutional responsibilities of LGED and RHD; progress and feedback on the development of a bridge management system; and resources used by LGED for designing medium- and large-sized bridges.

The site visits were carefully selected to complement the technical sessions. In order to study network arch bridges, participants visited several sites, including the Dhanmondi, *Sanssad Bhaban*, *Rayerbazar Graveyard* and Jamuna bridges. Technical questionnaires were distributed to all participants at each site, with a view to applying knowledge acquired during technical sessions, learning about the technical characteristics of each particular bridge and helping participants better understand how bridges should be integrated into urban and rural environments.

A separate feasibility study was carried out by the World Bank transport team to explore and propose options to help

strengthen the technical capacity and certification in the construction industry in Nepal. Proposed options included the establishment of a twinning arrangement with reputable and financially stable entities in the bridge construction sector within the region or in areas where internationally recognized good practices have been identified. The study provided recommendations on the planning, design and implementation of skill enhancement programs for contractor staff. These programs will include advanced techniques for bridge construction, rehabilitation, maintenance and climate resilience and will be implemented at a later stage based on the recommendations.

The knowledge and technical skills shared by Bangladesh were of tremendous value for the Nepalese delegation, particularly given the countries' similarities in terms of governance, economy, climate, geography and topography. **Members of the Nepalese delegation gained knowledge and enhanced their skills in various technical aspects, including structural requirements for network arch bridges**, their benefits and resilience, risks and causes of failure, good practices on bridge loading and construction, the use of advanced technologies to implement bridge projects, the practical use of SAP 2000 software to design bridges in the context of the country's geotechnical conditions and the application of steel pipe sheet pile foundations. They also learned about good practices for quality bidding, bridge selection and construction, procurement and tender management.

The Bangladeshi team also learned from the Nepalese experience and gained new knowledge in bridge asset management, bridge management systems and how to implement a bridge project using PforR funding.

Contact:

Name: Mr Laurent Porte
Title: Program Manager, South-South Facility
Organization: World Bank
Email: lporte@worldbank.org

PROJECT NAME: Advanced, Cost-Effective and Climate-Resilient Technologies for Bridge Construction in Nepal

COUNTRIES/REGIONS: Bangladesh, Nepal

NOMINATED BY: World Bank

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.1, 17.9

SUPPORTED BY: World Bank South-South Facility

IMPLEMENTING ENTITIES: Government of Nepal, Department of Roads, Bridge Improvement and Maintenance Programme–Phase II implementation team; Federation of Contractors' Associations of Nepal; Bangladesh University of Engineering and Technology; Bangladesh Association of Construction Industry; Local Government Engineering Department (Bangladesh); Roads and Highways Department (Bangladesh)

PROJECT STATUS: Completed

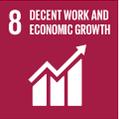
PROJECT PERIOD: 2017–2018

URL OF THE PRACTICE: <https://bit.ly/2D8odlk>

Transit Trade between Bangladesh and Bhutan via India through Transboundary Waterways



Accessing the transboundary inland waterways of India and Bangladesh for a sustainable mode of transport that cuts down on logistics costs



Challenge

Bangladesh, Bhutan and India are connected through the transboundary Ganges and Brahmaputra Rivers. The Protocol on Inland Water Transit and Trade (PIWTT) between India and Bangladesh designates specific river routes for the movement of intercountry and transit cargo. It takes approximately 7 to 10 days for a consignment from Bhutan to reach Narayanganj, Bangladesh via land transit routes in India. Delays are caused by inadequate road infrastructure, customs procedures, internal disturbances at border points and trans-shipment at the Bangladeshi border. These delays cost time and money. For a landlocked country like Bhutan, access to sea routes through the seaports of Bangladesh would extend its trade prospects; however, rising logistics costs have limited its scope. As a result, Bhutan would benefit greatly from transit trade with Bangladesh via the transboundary Brahmaputra River with modal shifts from road to waterway and then road to sea.

Towards a Solution

This initiative focused on the sustainable use of select inland waterways for transit cargo and cross-border trade. The overall objective was to improve inland waterways governance institutions through policies, laws and regulations, with a focus on cross-border trade, transit trade, transport connectivity and livelihoods in the subregion of Bangladesh, Bhutan, India and Nepal (BBIN). Inland waterways navigation, including cross-border trade, transit, transportation and tourism, directly addresses Sustainable Development Goal target 9.1 on sustainable and resilient infrastructure.

In order to achieve this objective, the initiative created an alternative policy discourse between policymakers, civil society organizations (CSOs) and local communities to establish reform measures and improve governance of inland waterways. It also shared knowledge between Governments and CSOs on the governance of inland waterways.

The initiative involved a literature review, secondary data analysis from available sources and extensive fieldwork in Assam and Meghalaya, in India, and Chilmari, in Bangladesh, and selected adjoining areas. The fieldwork included interviews with stakeholders, particularly traders, boatmen, customs officials and transporters, as well as representatives from the Border Security Force in India and the Border Guard in Bangladesh. There were also consultations with women, representatives from non-government organizations and government officials in trade and agriculture. In total, the Consumer Unity & Trust Society (CUTS) team interacted with approximately 100 stakeholders in order to better understand trade prospects, the supply and demand of goods, and barriers to the cross-border trade and transit of select products through inland waterways. One of the key recommendations of this explorative study was to operationalize shallow draft vessels to facilitate trade in shorter stretches of inland waterways near the international border.

To generate evidence in support of this recommendation, a case study was conducted for the stretch between Dhubri (Assam, India) and Chilmari (Kurigram, Bangladesh) along the Brahmaputra River. Close to the India-Bhutan border, the inland waterways in Dhubri can be easily accessed from Bhutan by road. As a land-locked country, Bhutan conducts trade with Bangladesh primarily via land routes



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through India. Minerals, boulders, stones and fruits (mainly apples and oranges) are in great demand in Bangladesh. Inadequate road infrastructure and procedural delays at border checkpoints add significantly to logistics costs and time. The freight cost per tonne-kilometre through inland waterways is much lower (1.06 rupees), compared to rail (1.41 rupees) and roadways (2.58 rupees). For example, a 200-tonne vessel could replace 20 trucks with a 10-tonne capacity and reduce fuel expenses, thereby cutting carbon emissions.

During the study, CUTS explored potential cargo for inter-country trade between India and Bangladesh and transit trade between Bhutan and Bangladesh via the transboundary inland waterways of India. The findings were shared in a series of subnational, national, subregional and track 1.5 dialogues between India and Bangladesh.

As a result of the advocacy efforts of CUTS, Dhubri and Chilmari were declared ports of call along the PIWTT Route between India and Bangladesh. On 18 July 2019, the first Indian cargo ship carrying 1,000 tonnes of stone aggregates from Bhutan arrived at Narayanganj, Bangladesh. The stones were brought by truck from Bhutan to Dhubri, where they were loaded into a vessel and carried to Narayanganj via waterways. The time needed to move the cargo has been reduced by eight days and travel costs decreased by 30 percent, thereby lowering the logistics costs.

This trilateral, transboundary cooperation between Bangladesh, Bhutan and India has opened new avenues for cross-border and transit trade. Several small traders in India and Bhutan have shown interest in switching to inland waterways for trade with Bangladesh.

CUTS has continued its effort to promote inclusive cross-border and transit trade as part of the regional programme of Transboundary Rivers of South Asia (TROSA), managed by Oxfam and supported by the Government of Sweden. With the introduction of shallow draft mechanized vessels in the PIWTT Routes, local traders and producer communities with

market linkages across the border could also participate in international trade.

The newly declared ports of call in Jogigopha, Dhubri and Chilmari will play a key role in multimodal trade and transit and will redefine the transport narrative of Bangladesh, Bhutan and India. Similar opportunities for cross-border trade along shorter stretches of transboundary waterways could be explored in other international rivers. With adequate infrastructure and regulatory support, cross-border trade via inland waterways could attract the private sector, business communities and local players as a sustainable, cheap and environmentally friendly mode of transportation.

The initiative's concerted advocacy of micro-level issues involving local women, farmers and traders informed the macro-level policy changes to customs, trade and border management in these countries. Promising developments opened new avenues for further cross-border trade and movement of transit cargo on other inland waterway routes between Bangladesh, Bhutan and India. The initiative could therefore be replicated in other subregions in similar landscapes with transboundary rivers.

Contact:

Name: Mr Bipul Chatterjee
Title: Executive Director
Organization: Consumer Unity & Trust Society (CUTS International)
Email: bc@cuts.org

Name: Dr Veena Vidyadharan
Title: Fellow and Centre Head; Centre for International Trade, Economics and Environment (CITEE)
Organization: CUTS International
Email: vv@cuts.org

Name: Dr Saurabh Kumar
Title: Fellow
Organization: CUTS International
Email: sbk@cuts.org

PROJECT NAME: Expanding Trade Benefits of Transboundary Waterways: Promoting Navigational Use of Inland Waterways in the Ganga and Brahmaputra Basins

COUNTRIES/REGIONS: Bangladesh, Bhutan, India, Nepal

NOMINATED BY: Consumer Unity & Trust Society (CUTS International)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.3, 9.1

SUPPORTED BY: Asia Foundation

IMPLEMENTING ENTITIES: CUTS International

PROJECT STATUS: Completed

PROJECT PERIOD: 2016–2018

URL OF THE PRACTICE: cuts-citee.org/iw-about-the-project/



Accelerating Digital Transformation in All Ministries in Bangladesh

Promoting the rapid design and implementation of plans to digitize all ministries and subordinate government institutions in Bangladesh

Challenge

It usually takes several weeks or months to access government services because there are several steps that must be done manually. Given that basic services are centralized, citizens must travel long distances to access them. In addition, departments become overloaded, which causes delays. The manual process comes at a cost in terms of procurement efforts and the time and budget of the Government, as well as the valuable time of its citizens. Moreover, in an emergency, citizens have difficulty receiving immediate services. Transparency and accountability in service delivery are also difficult to ensure with a manual process. All government services must therefore be digitized and simplified in order to achieve the 'Digital Bangladesh Vision 2021' and provide services at citizens' doorsteps.

Towards a Solution

To mitigate these challenges, the 'Digital Service Accelerator' initiative of the Aspire to Innovate (a2i) Programme played a coordination role with its technical knowledge and expertise to support government agencies. In 2017, a2i introduced the 'Digital Service Implementation Plan 2021', along with a unique and innovative methodology called 'Digital Service Design Lab' (DSDL), to execute the plan within the timeframe. This rapid methodology condenses the pre-procurement period from 12–14 months to 6–7 days. At the ministerial level, all planned digital services, functions and existing software will be integrated into a single platform. This methodology provides savings in terms of procurement efforts, time and the government budget. The rapid design and development, which involved government officials and local information technology resources, proved very effective.

If this initiative is executed successfully nationwide and promoted internationally, it will meet Sustainable Development Goal 10 on reducing inequalities within and among countries.

The objectives of the DSDL are to simplify government services with digitalization and ensure that they are delivered at citizens' doorsteps. The specific aims are as follows:

- Implement fast and effective digital services by 2021
- Demonstrate demand for digital services and simplify the design and overall planning
- Ensure standardization, interoperability and integration among all national systems
- Achieve savings in terms of procurement efforts, time and budget

The DSDL is arranged in collaboration with various ministries or government institutions. The services they provide are analysed in advance, and groups are created based on the results. A workshop is held to create a tangible output, which could include an analysis of the existing service delivery process, identification of the digital system's module and features, the interface for the beneficiary and service provider, a functional flow diagram, digital service module design, a pilot implementation plan, efficiency analysis (time, cost, visit), a user management plan, software development budget, pilot implementation budget, an integration management plan or design specifications. As a result of the workshop, an integrated service delivery platform is designed for all the relevant existing services provided by the ministry concerned. This methodology is unique in that both the service recipients and service providers are involved in the process.



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In the first phase, workshops were held in accordance with the 'Digital Service Implementation Plan 2021'. Participants were divided into 49 groups made up of 56 ministries, 349 organizations and 1,792 government officials. Of the systems identified, 1,856 were required, 597 were in operation and 273 were under development. The closing ceremony was attended by 4 ministers, 45 secretaries and 353 managing directors. The second phase, which began in 2019, involves 24 ministries. **To date, 26 DSDL have been created, 915 services have been covered and 10 services are under procurement.**

The implementation of this methodology has achieved a standardized, interoperable and distinctive digital system through an integrated service delivery platform. There have been significant savings in government resources and a significant reduction in the time, cost and number of visits required for service delivery. Through the DSDL, the software industry of Bangladesh receives ample new opportunities for work. Through digitalization, the transparency and accountability of the service delivery process is ensured, which improves social morale. Finally, citizens become more aware of their rights, information and regulations.

The DSDL methodology seems to be very effective in knowledge-sharing, responsiveness and cooperation. This innova-

tive methodology, which is currently popular in Bangladesh, is gradually gaining traction beyond its borders as well. In Fiji, a modified version of this initiative has already been launched, and the Government of the Philippines has expressed interest in implementing it in the province of Bangsamoro.

The DSDL model is sustainable, as ministry officials and civil servants are directly involved in this process and participate in the design and implementation of the service. As a result, ownership and accountability are ensured.

Every ministry and directorate is required to digitize their manual services to align with Vision 2021. To date, 24 ministries have accomplished this with the help of the a2i Digital Service Accelerator unit, and every ministry will eventually complete this process. This initiative can therefore be replicated within Bangladesh. It can also be adapted to meet the needs of countries in the global South.

Contact:

Name: Mr Forhad Zahid Shaikh
Title: Chief eGovernance Strategist
Organization: Aspire to Innovate (a2i) Programme
Email: forhadzahid@a2i.gov.bd
Phone: +8801711618368



PROJECT NAME: Accelerating Digital Transformation in All Ministries in Bangladesh
COUNTRIES/REGIONS: Bangladesh, Fiji, the Philippines
NOMINATED BY: Aspire to Innovate (a2i) Programme, Government of Bangladesh; United Nations Development Programme (UNDP) Bangladesh
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.1, 9.a, 9.b, 10.2, 10.3, 10.5, 10.6
SUPPORTED BY: Information and Communications Technology Division, Ministry of Posts, Telecommunications and Information Technology of Bangladesh; UNDP Bangladesh
IMPLEMENTING ENTITIES: a2i Programme, Government of Bangladesh; UNDP Bangladesh
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2018–2021
URL OF THE PRACTICE: dsa.a2i.gov.bd/



Relay Centre

Improving communication for people with impaired hearing using an online interpreting service with a website and a mobile application

Challenge

In Colombia and Paraguay, people with impaired hearing have specific communication needs. They require technological tools to be developed and implemented in order to exercise their rights to information and communication. Providing these communication tools helps to prevent discrimination and allows for their social, economic and political inclusion.

Towards a Solution

In Colombia, the Ministry of Information and Communication Technologies, in partnership with the Federación Nacional de Sordos de Colombia (National Federation of Deaf People of Colombia) (FENASCOL), created the Relay Centre, an interactive online platform designed to include deaf people in society by enabling them to communicate and exchange information with hearing people easily, independently and on a regular basis.

Deaf citizens access the platform via the Internet from computers or smartphones and communicate with sign language interpreters who interpret the signed message into spoken language for the hearing person on the telephone and then sign back to the deaf user. This service is free for users and operates every day.

This solution enables deaf people to communicate with friends and relatives, utilize government services, book medical appointments, coordinate meetings and access information. It therefore enables them to participate more actively in society, build connections and establish their path with independence. It also supports their social, economic, and political inclusion, thereby preventing inequalities.

In Colombia, the Relay Centre began operating in 2001 with coverage limited to the city of Bogota. It relied on text telephones and was led by FENASCOL. In 2003, in partnership with the Office of the Mayor of Bogota, a helpline was established; however, it only covered the capital. National coverage was achieved in 2006, thanks to an agreement signed with Telefonica Telecom, a private sector telecommunications company. In 2009, the Colombian Ministry of Information and Communications Technology pledged its full support to make the service available for free and to expand it to video chat capabilities. For July 2020, the Centre relayed over 3.4 million of bidirectional calls and provided over 83,000 online interpretation services. Each month, around 35,000 calls are received, and there are over 53,700 active users.

The Relay Centre has been replicated in Paraguay with the support of the Colombian international cooperation agency, APC-Colombia and the Technical Secretariat for Economic and Social Development Planning of Paraguay. Through the exchange of knowledge and experiences for reciprocal benefits, the National Federation of Deaf People of Colombia provided advice to the Paraguayan Association of the Deaf in creating and implementing a similar system. Technical assistance for the design of the system for the operation of the Centre was provided, as well as training for the professional team and sign language interpreters, which involved technical visits in both countries.



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As a result, Paraguay inaugurated the Accessible Communication Relay Centre for the Deaf in April 2013, and it constituted an historic milestone in terms of access to information and communication for deaf people in Paraguay. The Center currently has only the service for relay calls (deaf – hearing), and the access to the platform only through computers.

A second phase of cooperation (2018-2020) is currently ongoing to improve the Centre's services. The objective is to achieve the bidirectional communication (deaf-hearing and hearing-deaf) and access the platform through mobile phones. The cooperation and exchange of knowledge include a technical diagnostic to implement the new platform, support for installing the new services, and training for the technical team of sign interpreters.

Its commitment to improve and increase the services offered to citizens is remarkable. **In 2019, the Paraguay Relay Centre registered nearly 1,000 monthly calls with 522 registered users. In 2018, the Centre participated in creating a Digital Sign Language Dictionary (Signario) of approximately 2,500 signs. According to the Technical Secretariat for Economic and Social Development Planning of Paraguay, the Dictionary was validated by national organizations associated with the National Federation of Deaf People of Paraguay.** The Paraguay Relay Centre currently has an agreement with the public television channel in Paraguay to provide live

interpretations of newscasts, as well as sessions of the National Congress that facilitate the inclusion of deaf people.

Successful replication of the Relay Centre requires political will, represented by laws that guarantee the rights of people with disabilities. There must also be a fruitful dialogue between groups representing the deaf community and the national Government to provide momentum for sustainability. Strategic partnerships must be developed with private sector companies who can promote and support the centre within its portfolio of services. In addition, sign language interpreters must have access to education and training. And the Internet and equipment such as a computer, tablet or smartphone are also required.

Contact:

Name: Mr Luis Roa
Title: Triangular Cooperation Coordinator
Organization: Agencia Presidencial de Cooperación Internacional de Colombia (APC-Colombia)
Email: luisroa@apccolombia.gov.co

Name: Mr Mauricio Franco De Armas
Title: South-South and Triangular Cooperation Coordinator
Organization: Ministry of Foreign Affairs of Colombia
Email: mauricio.franco@cancilleria.gov.co

PROJECT NAME: Relay Centre

COUNTRIES/REGIONS: Colombia, Paraguay

NOMINATED BY: Ministry of Foreign Affairs of Colombia, Colombian Presidential Agency of International Cooperation (APC-Colombia)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.c, 10.2, 10.3

SUPPORTED BY: APC-Colombia, Technical Secretariat for Economic and Social Development Planning of Paraguay

IMPLEMENTING ENTITIES: National Federation of Deaf People of Colombia (FENASCOL); Paraguayan Association of the Deaf; Technical Secretariat for Economic and Social Development Planning of Paraguay

PROJECT STATUS: Ongoing

PROJECT PERIOD: First phase (2012–2013); second phase (2018-2020)

URL OF THE PRACTICE: <https://bit.ly/3aWynSt> (in Spanish)

Joint Efforts to an Innovative Programme for Persons with Disabilities: Cooperation Between GEF Small Grants Programmes in Ukraine and Belarus

Improving the lives of persons with disabilities through environmental activities

Challenge

According to official data, there are 2.6 million persons with disabilities in Ukraine, approximately 6 percent of the population. Nevertheless, most Ukrainian cities and villages are not disability friendly, and progress is slow because of a lack of political will and financial resources, the poor attitude of society towards people with disabilities and a misunderstanding of the problems that they face. Major issues for people with disabilities include mobility, access to education and rehabilitation, and advocacy to address these issues. In addition, over 1.4 million people have been internally displaced since 2014 as a result of the conflict in eastern Ukraine. Among them are over 372,000 people who have physical, sensorial and/or mental disabilities. Along with women and children, these are the most vulnerable victims, and they encounter more difficulties in finding a place in host communities.

Towards a Solution

To respond to these challenges, the Global Environment Facility (GEF) Small Grants Programme (SGP), implemented by the United Nations Development Programme (UNDP), supported a South-South exchange between local communities and civil society organizations (CSOs) from Ukraine and Belarus to find sustainable solutions to address the needs of persons with disabilities. The theme of the exchange was 'Nothing for us without us'.

In October 2019, the first knowledge exchange mission was carried out in Belarus for scientists, representatives of social protection departments, heads of rehabilitation centres, CSOs and SGP staff to share good practices and lessons learned during the implementation of the SGP programme.

Many of the ideas and approaches shared are being replicated in Ukraine, including creating non-barrier infrastructure. For example, solar photovoltaic modules are being installed at the Radomyshl Psychoneurological Rehabilitation Centre to provide cost-efficient electricity to the laundry unit, and the grounds are being equipped with outdoor light-emitting diode lamps. These measures provide energy savings of 9,550 kWh per year and reduce the Centre's energy bill. The project was supported by local authorities, communities, educational institutions and the media, which served as useful channels to promote the benefits of solar energy to the community and private users.

The Government of Belarus, particularly local authorities, strongly support and enhance the engagement of persons with disabilities in environmental and social businesses, such as traditional bakery, pottery and beeswax goods production. In Ukraine, social business models function only in big cities and do not yet exist in rural areas. In this context, the South-South exchange enabled representatives of Ukraine to learn about good models that are applicable to remote communities.

One of the participating non-governmental organizations has launched an online questionnaire¹ for local communities and community-based organizations working with persons with disabilities

1 www.zelena.org.ua/news/merezha-shukaye-uchasnykivpartneriv-zadlya-zaprovdzhennya-pilotnoyi-inicjatyvy-dlya-pidtrymky

10 REDUCED INEQUALITIES



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to identify possible pilot projects in order to establish social businesses led by these persons. Other social entrepreneur demonstration projects are also being implemented in Ukraine.

The initiative also created a network and established a community of practitioners to ensure the long-term sustainability of the impacts of the exchange. For example, participants regularly held follow-up digital workshops and peer-to-peer events. Scientists and other members of the network conducted research and developed guidelines that were used as the basis for a digital open course on social inclusion,² methodological guidelines on environmentally friendly social entrepreneurship for communities,³ and guidelines on social inclusion and tourism.⁴

2 www.ecoacademy.org.ua/book/socialna-inklyuziya

3 <http://www.ecoacademy.org.ua/publication/ekologo-oriyentovane-socialne-pidpryemnyctvo-u-gromadi>

4 www.ecoacademy.org.ua/publication/inklyuzyvno-reabilitacynyy-turyzm

Moreover, group members disseminate the knowledge, best practices and materials developed through the local CSO networks to promote social changes. An additional South-South cooperation exchange mission in Ukraine will be carried out in late 2020 or early 2021 to continue to strengthen cooperation on promoting the inclusion and mainstreaming of persons with disabilities.

Every country must ensure equal opportunities for its citizens and develop social policies for the inclusion of persons with disabilities, taking into consideration the national context. This project therefore has strong potential to be replicated in countries that have a similar social, cultural and administrative background.

Contact:

Name: Ms Svitlana Nigorodova

Title: National Coordinator

Organization: Global Environment Facility (GEF) Small Grants Programme (SGP) Ukraine

Email: svitlanan@unops.org

Skype: svitlana.nigorodova

PROJECT NAME: Capacity Development for Persons with Disabilities Using Tools for Modern Social Inclusion and Women's Empowerment

COUNTRIES/REGIONS: Belarus, Ukraine

NOMINATED BY: Global Environment Facility (GEF) Small Grants Programme (SGP), United Nations Development Programme

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.5, 4.a, 8.5, 10.2, 11.2, 11.7, 17.9, 17.18

SUPPORTED BY: GEF SGP, Zelena Zhytomyrshchyna (NGO), Taras Shevchenko National University (Ukraine)

IMPLEMENTING ENTITIES: Zelena Zhytomyrshchyna

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: <https://bit.ly/3hO3HFW>



Healthy Lanes in Bogota and La Paz

Improving quality of life for residents in the autonomous municipal government of La Paz, Bolivia by promoting physical and athletic activity in public spaces for all ages, based on the Bogota model

Challenge

Economic growth leads to a rapid increase in the number of vehicles, which causes a progressive decline in social and environmental conditions in cities, creating problems such as sedentary lifestyles, non-communicable diseases, the decline of the family nucleus, aggressive attitudes and violence.

The autonomous municipal government of La Paz, in the Plurinational State of Bolivia, determined that only approximately 22 percent of the population practises some physical or athletic activity. However, 98 percent of the population recognizes that physical activity improves quality of life and reduces stress.

This project addresses the challenge of encouraging a sports culture and healthy lifestyle through physical activity among the population.

Towards a Solution

Under this project, the District Institute of Recreation and Sports of Bogota [Instituto Distrital de Recreación y Deporte] (IDRD), supported by the Colombian International Cooperation Agency [Agencia Presidencial de Cooperación Internacional de Colombia] (APC Colombia), shared the knowledge and experience gained by the 'Ciclovía' programme with the autonomous municipal government of La Paz, Bolivia. The goal of the project, which ran from 2017 to 2019, was to increase the use of bicycles as a means of urban transport and encourage residents of La Paz to adopt a sports culture and healthy lifestyle through physical activity.

The 'Ciclovía' programme has existed for over 40 years in Bogota. Under this programme, vehicular traffic is restricted on certain roads on Sundays and holidays in order to encourage cycling and other physical activity, such as jogging or skating. The 'Ciclovía' roadways create free recreational spaces for all people and help to improve their physical and mental health.

This programme has helped to improve urban mobility, social transformation and access to safe and inclusive public spaces. It has also focused on increasing cycling, reducing traffic accidents and emissions, and contributing to healthy living. The programme in Bogota has:

- created 121 km of Ciclovía roadways (an additional 116 km since its inception, 40 years ago)
- mobilized approximately 1.45 million users per day, on average
- adapted and integrated over 2,000 Cicloparqueaderos (bicycle parking lots) into the city's mass transport system
- developed and implemented official programmes that promote the use of bicycles for daily transport
- implemented the IDRD mobile application for consulting weather forecasts and activities scheduled along the route

Under the 'La Paz Activa - Vía Activa' project, technical visits were carried out in Colombia and Bolivia, to exchange experiences and knowledge among the autonomous municipal government of La Paz, the Ministry of Sports of Bolivia and IDRD of Bogota.



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According to the autonomous municipal government of La Paz, the project targets one of the goals of the 'La Paz 2040' municipal development plan, which highlights the importance of promoting recreational activities to improve physical and mental health in the city.

Project organizers explored possible relationships with local organizations and institutions to promote physical activities, including psychomotor games for children, dance therapy and aerobics, as well as alternative sports like judo, karate, capoeira and tai chi.

With support from IDRDR, experts from the municipal autonomous government of La Paz came to Bogota to learn about the design and implementation of the Summer Festival.

In addition, various training workshops were held for government staff members on managing sports medical equipment and on motivating seniors and young people to do physical activity. There were also workshops on effort management for students of the Institute for Training of Physical Education Instructors and the Universidad Mayor de San Andrés.

Under the 'La Paz Activa - Vía Activa' Project, the La Paz model for establishing the cycling lanes took into consideration all recommendations made by IDRDR, as a member of the Red de Ciclovías Recreativas de las Américas [Network of Recreational Cycleways in the Americas]. In 2017, IDRDR and the municipal autonomous government of La Paz participated in the Twelfth Congress of the Network of Recreational Cycleways in the Americas, held in Panama City. The Network includes over ten cities and supports the creation of bike lanes.

The 'Ciclovía' initiative can be shared in other developing countries as an innovative programme that fosters the creation of social spaces, offers free recreational activities, contributes to physical and mental health, and improves the environment through noise reduction and better air quality.

In implementing this programme, the major challenge is to promote a healthy lifestyle in populations of all ages, which requires significant collaboration with local communities. In addition, the programme's implementation requires regular training for the people involved. Infrastructure must also be adapted to increase the length of the 'Ciclovía' roadways.

To be impactful, this programme should adapt to the targeted territory and population, strengthen solidarity, respect local principles, encourage participation at all ages, consider the equipment needed for activities and be implemented at the local level.

Contact:

Name: Mr Luis Roa
Title: Triangular Cooperation Coordinator
Organization: Agencia Presidencial de Cooperación Internacional de Colombia (APC-Colombia)
Email: luisroa@apccolombia.gov.co

Name: Mr Mauricio Franco De Armas
Title: South-South and Triangular Cooperation Coordinator
Organization: Ministry of Foreign Affairs of Colombia
Email: mauricio.franco@cancilleria.gov.co

PROJECT NAME: Healthy Lanes in Bogota and La Paz

COUNTRIES/REGIONS: Bolivia (Plurinational State of), Colombia

NOMINATED BY: Ministry of Foreign Affairs of Colombia, Agencia Presidencial de Cooperación Internacional de Colombia (APC-Colombia)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.4, 4.4, 11.2, 11.6

SUPPORTED BY: APC-Colombia, Vice-Ministry of Public Investment and External Financing of Bolivia

IMPLEMENTING ENTITIES: District Institute for Recreation and Sports (IDRDR), Autonomous Municipal Government of La Paz, Ministry of Sports of Bolivia

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2019

URL OF THE PRACTICE: www.idrdr.gov.co/ciclovía-bogotana (in Spanish)

ASEAN Smart Cities Network

Working towards smart and sustainable urban development to improve lives

Challenge

Most of the growth in the member States of the Association of Southeast Asian Nations (ASEAN) has been and will continue to be driven by urban centres. By 2030, an additional 90 million people are expected to move to urban areas. Middleweight cities, between 200,000 and 2,000,000 residents, are forecast to drive 40 percent of the region's growth. This rapid urbanization is not without its challenges. It impacts cross-cutting issues, such as city congestion, water and air quality, poverty, rising inequalities, the urban-rural divide and citizen security and safety. Cities in ASEAN aspire to address these pressing challenges; however, they lack the expertise, tools and financing to employ technology to implement smart and sustainable solutions.

Towards a Solution

ASEAN member States have recognized the need to identify technological solutions that can relieve the pressures of rapid urbanization, deliver integrated public services and improve lives. As such, one of the key deliverables of the 2018 ASEAN Chairmanship, held by Singapore, was to establish an ASEAN Smart Cities Network (ASCN) with 26 pilot cities.

While many ASEAN member States have already designated certain areas as smart cities or launched smart city development projects, ASCN is an inclusive and collaborative platform that would synergize these efforts and bring these smart cities together, thereby contributing to efforts to build an ASEAN Community.

ASCN recognizes the diversity within the ASEAN community and does not seek to impose a monolithic system. Rather, it is a set of national systems that gives due consideration to each country's developmental goals.

Since collaboration is at the heart of this initiative, ASCN aims to facilitate cooperation on smart city development and network with external partners of ASEAN, private sector solution providers and multilateral financial institutions. To that end, Singapore hosted the Smart Cities Governance Workshop in May 2018, as well as the Inaugural Meeting of the ASEAN Smart Cities Network in July 2018. To guide its activities, ASCN negotiated and endorsed a non-binding ASEAN Smart Cities Framework and developed Smart City Action Plans.

These connections have helped to catalyse bankable projects with the private sector. Pilot cities have looked beyond the region, entering into promising partnerships with private sector companies to boost ASCN's fast-expanding global reach. For example, the partnership between Banyuwangi in Indonesia and the publisher John Wiley and Sons promotes digital-based learning for students in 25 subdistricts in Banyuwangi. In Chonburi, Thailand, the Yokohama Urban Solution Alliance is supporting the development of a smart energy management system. The International Finance Corporation and IBM Asia Pacific have more broadly pledged to work together on the TechEmerge smart cities programme, which is designed to improve the delivery of urban services within ASEAN by matching technology companies with urban service providers and city governments. The

11 SUSTAINABLE CITIES AND COMMUNITIES



© ASEAN Economic Community

types of private sector partnerships are highly varied, which is indicative of the diverse needs of ASEAN cities.

ASCN also serves as a platform for member cities to form mutually beneficial partnerships with external partners to drive the development of smart cities through triangular cooperation. For example, under the United States-ASEAN Smart Cities Partnership, the United States organized a three-part smart cities programme in July 2019, which included the US-ASEAN Smart Cities Symposium. Singapore and the United States also jointly organized the Singapore-United States Third Country Training Programme workshop on smart cities in December 2019. Japan convened an ASEAN Smart Cities Network High-Level Meeting in Tokyo in October 2019, while the Republic of Korea organized the ASEAN-Republic of Korea High-Level Dialogue on Infrastructure and the ASEAN-Republic of Korea Smart Cities Forum in September 2019. Coinciding with the ASEAN-Republic of Korea Commemorative Summit, the Republic of Korea also organized the inaugural ASEAN-Republic of Korea Ministerial Meeting on Smart City in November 2019. The Ministry of Land, Infrastructure and Transport of the Republic of Korea has also invited ASCN members to submit applications to the 2020 K-City Network Global Cooperation Program, which is open to national and local governments and public sector entities. It is designed to offer training and support for project plan development to smart city projects overseas. Australia announced an ASEAN-Australia Smart Cities Initiative, investing 30 million Australian dollars in March 2018. As

a follow-up, Australia established a smart cities trust fund with the Asian Development Bank. In addition, the ASEAN-China Leaders' Statement on Smart City Cooperation was adopted during the 22nd ASEAN-China Summit in November 2019.

ASCN's partnerships also align with the Sustainable Development Goals. While the type of engagement from external partners or private sector solution providers might differ, all are committed to promoting sustainable growth, building resilient infrastructure and partnering with cities to achieve inclusive development. This inclusive approach is the ASCN's hallmark. It creates opportunities across the rural-urban continuum, leaves no one behind and improves the lives of ASEAN citizens.

Moving forward, ASCN invites external partners, such as non-ASCN cities, multilateral financial institutions and private sector solution providers, to engage with ASCN and ASCN cities to explore mutually beneficial partnerships for cooperation on smart city development in order to improve lives.

Contact:

Name: Ms Joy Boo

Title: Deputy Director

Organization: Association of Southeast Asian Nations (ASEAN) Directorate, Ministry of Foreign Affairs, Singapore

Email: joy_boo@mfa.gov.sg

Phone: +65 9636 9125

PROJECT NAME: ASEAN Smart Cities Network

COUNTRIES/REGIONS: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

NOMINATED BY: Ministry of Foreign Affairs of Singapore

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 9.4, 9.5, 9.b, 9.c, 11.3, 17.6, 17.7, 17.17

SUPPORTED BY: Association of Southeast Asian Nations (ASEAN) Connectivity Division, ASEAN Secretariat

IMPLEMENTING ENTITIES: ASEAN Smart Cities Network Chair (Viet Nam), ASEAN Smart Cities Network Shepherd (Singapore), National Representatives from each ASEAN member State overseeing smart and sustainable development, Chief Smart City Officers from each member city

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2025

URL OF THE PRACTICE: <https://bit.ly/32w55qb>



E-Waste Pilot Plant

Supporting the establishment of an e-waste pilot plant

Challenge

People are increasingly benefiting from the digital economy and joining the information society. With rapid changes in technology and increased access to and use of electrical and electronic equipment, product lifecycles become shorter and many designs do not support repair or reuse.

As a result, electronic waste, or e-waste, is growing rapidly. Used, broken or obsolete equipment, such as phones, laptops, sensors, televisions and batteries, contain substances that pose considerable environmental and health risks, especially if treated improperly. Most e-waste is not properly documented and not treated using appropriate recycling chains or methods.

E-waste management is one of the greatest challenges facing the information and communications technology (ICT) sector in Argentina. Due to the environmental, social and economic implications, products must be managed sustainably at the end of their useful lives. It is important to understand that the various types of e-waste are heterogeneous and have specific characteristics. Therefore, their management, treatment and disposal must be undertaken responsibly.

Towards a Solution

As the United Nations agency for ICTs, the International Telecommunication Union (ITU) helps Member States take advantage of ICTs to address challenges related to climate change. It also assists in addressing the issue of e-waste. Its activities include identifying guidelines, raising awareness, building capacity, collaborating with other UN agencies, implementing projects and providing direct assistance to Member States.

In collaboration with the National University of La Plata in Argentina, ITU established an e-waste pilot plant in 2017 to provide concrete responses to the e-waste problems facing cities, in line with the Sustainable Development Goals. This project employs a multi-stakeholder approach, involving partners from the private, public and academic sectors who are working together to raise awareness of the need to address e-waste and recycle ICT waste responsibly. One of the main activities of the pilot plant is to refurbish computers, which are donated to vulnerable populations, including rural schools, indigenous communities and penitentiaries in La Plata. The plant works with students from the University's various academic sectors, including engineering and science, as well as others who are responsible for the plant's activities. A needs assessment, feasibility study and project design were conducted to establish a cost-sharing arrangement between the University and ITU, with the latter providing the necessary equipment and acting as the project executing agency. The University provided the facilities for the project, the technical staff and daily supervision on location for the project's implementation and subsequent operationalization.

Students from the University receive scholarships and play various roles in the plant's operation. In addition, capacity-building activities and trainings are organized for students and other persons interested in e-waste management.



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During the project's implementation, the following activities were undertaken:

- Identified premises for the e-waste pilot plant
- Designed the plant and processes
- Prepared the site, including furniture, telecommunications, electrical power and other utilities
- Established the terms of reference and technical specifications for the required equipment
- Procured equipment
- Developed guidelines and established processes and procedures to be followed
- Recruited relevant personnel
- Installed and commissioned the purchased equipment
- Operationalized the plant (the inaugural ceremony took place on 06 September 2018)

Upon its completion, the project had established a fully functioning and operational e-waste pilot plant. In furtherance of South-South cooperation, this good practice was shared with developing countries. Information-sharing and technological transfer are used to follow up on enquiries regarding the technical aspects of the project and the way in which other countries and academic institutions could establish similar e-waste plants.

The plant was innovative; this was the first time that ITU and the University had worked on a project of this nature. While the University had established a rudimentary computer re-

cycling project, it did not address 'reducing' and 'reusing'. The new plant embraced all three 'Rs' prominent in e-waste: reduce, reuse and recycle.

Due to the project's relevance and success, the University's e-waste programme has been strengthened. The programme has become more sustainable as a result of improvements in processing electronic equipment and reconditioning and repairing computer equipment and mobile phones. It has also generated more interest and involvement from many other actors, including those from the private sector and academia, who would like to collaborate on the University's e-waste programme. The Government of Argentina also supported the project from its inception.

Lastly, the project helped to create and launch of communications campaigns to raise awareness among local communities about the importance of using appropriate recycling methods for electrical and electronic equipment.

Contact:

Name: Mr Cosmas Zavazava
Title: Chief *ad interim*, Partnerships for Digital Development Department
Organization: Telecommunication Development Bureau, International Telecommunication Union (ITU)
Email: cosmas.zavazava@itu.int

PROJECT NAME: E-Waste Pilot Plant
COUNTRIES/REGIONS: Argentina
NOMINATED BY: International Telecommunication Union (ITU)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.9, 3.d, 11.5, 11.6, 11.b, 12.4, 12.5, 12.a
SUPPORTED BY: National University of La Plata, Argentina
IMPLEMENTING ENTITIES: ITU
PROJECT STATUS: Completed
PROJECT PERIOD: 2017–2018
URL OF THE PRACTICE: <https://bit.ly/3j9L0fO>



Smart Cities: from City Performance Evaluation to Innovative Financing

Assisting UNECE member States in transitioning towards smart and sustainable cities by applying key performance indicators and preparing action-oriented plans and bankable projects for financing

Challenge

In the context of economic challenges, municipal and national governments face significant budget constraints and shortages, exacerbated by the coronavirus disease outbreak. This is particularly true for urban development projects. First, it is impossible to have sufficient funds in the public budget to meet all needs. Second, it is difficult to determine funding priorities. Given shrinking public budgets and the lasting effects of the global financial crisis, local authorities remain limited in their capacity to transition towards smart and sustainable cities and implement the 2030 Agenda for Sustainable Development.

Towards a Solution

The 'Sustainable Smart Cities' project, implemented by the United Nations Economic Commission for Europe (UNECE) and United Nations Human Settlements Programme (UN-Habitat), aims to support target countries in transitioning towards smart and sustainable cities, with a view to achieving Sustainable Development Goal (SDG) 11 and other urban-related SDGs. The project's objective is to improve the capacities of local and national government officials in Belarus, Georgia, Kazakhstan, Kyrgyzstan and Montenegro to develop and implement sustainable urban policies. The project evaluates a city's performance using the United for Smart Sustainable Cities (U4SSC) Collection Methodology for Key Performance Indicators for Smart Sustainable Cities, and helps find innovative financing solutions for smart sustainable city projects. It provides capacity-building activities to promote evidence-based policies and vertical and horizontal coordination between various government agencies, with the participation of the cities' residents. As a result, cities are better equipped to address city-specific problems, such as environmental pollution and a lack of affordable, energy-efficient housing.

The project deploys a comprehensive framework on collecting data from the KPIs¹ to be used by policymakers at the national and local levels. The KPIs are a self-assessment tool to help cities identify strengths and weaknesses in order to improve performance. They were developed to establish the criteria for evaluating the contributions made by information and communications technologies in making cities smarter and more sustainable. There are 91 comprehensive indicators that cover economic, social and environmental aspects of city life. The UNECE approach takes a city through the entire process, from evaluation to recommendations on legislation and concrete projects ideas. It also supports cities in organising seminars with potential investors, who could be interested to provide the necessary financing and investments. Cities use the data and evidence from the KPI evaluation to set priorities for sustainable urban development and provide a foundation for making investment decisions when implementing recommendations. Policymakers at the national and local levels are further encouraged to use the KPI framework as a monitoring tool to evaluate the city's progress. Under the leadership of the UNECE Secretariat, cities undergoing the KPI evaluation establish a valuable South-South cooperation platform for knowledge-sharing and peer learning, which also contributes to the transfer of relevant knowledge and experience across cities and countries.

1 Convention on Biological Diversity and others, *Collection Methodology for Key Performance Indicators for Smart Sustainable Cities* (2017)



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The methodology includes four steps:

- Preparing the Sustainable Smart City Profile based on the KPIs
- Facilitating the development of the city action plan
- Supporting the preparation of at least two priority project concepts from the list to pitch to investors
- Supporting the organization of national and local seminars to identify interested investors to further explore innovative financing options for projects

The project involved the following national stakeholders, with the following roles:

- City and/or national governments, which establish a working group in the city to collect data that will inform the 91 KPIs and help to create the list of project ideas
- National and local statistics offices, which are part of the working group and provide data to inform the KPIs
- The Ministry of Economy and/or the city department working with investors, which supports the city's work on developing investment proposals and attracting potential investors from international financial institutions, venture capital firms, etc.

This project is innovative in that the KPIs are aligned with SDG indicators. **As a result, their application allows cities to localize the SDGs and assess progress on their achievement at the local level. Furthermore, the city performance evaluation identifies priority projects and links them to innovative financing.** Public Private Partnerships, in this context, are suggested as one of the tools to foster sustainable urban development (along with legislation improvement, etc.). Lastly, the programme encourages the participation and active involvement of residents and key stakeholders in the evaluation process.

Local governments are able to assess their strengths and weaknesses by strengthening local authorities' capacities to evaluate the city's performance. By measuring it against the KPIs, it is easier to recognize which areas are most critical or performing well. The results are incorporated into city action plans and planning documents, which ensures the long-term sustainability of the process.

The application of a standardized approach based on the KPI evaluation for smart sustainable cities creates opportunities for further comparisons and benchmarking within the UNECE region. Hence, it can serve as a blueprint for conducting comparative evaluations for projects in other regions. The approach was initially tested in two towns, Goris, Armenia² and Voznesensk, Ukraine³. In Voznesensk, the KPI evaluation was used to develop and adopt a city development strategy through 2027 and implement investment projects on public health, urban transport, energy efficiency and other areas.

Contact:

Name: Ms Gulnara Roll

Title: Secretary to the Committee on Urban Development, Housing and Land Management

Organization: United Nations Economic Commission for Europe (UNECE)

Email: gulnara.roll@un.org

2 Economic Commission for Europe, *Smart Sustainable City Profile: Goris, Armenia*, ECE/HBP/192

3 Economic Commission for Europe, *Smart Sustainable City Profile: Voznesensk, Ukraine*, ECE/HBP/199

PROJECT NAME: Smart Sustainable Cities for the 2030 Agenda on Sustainable Development and the New Urban Agenda in the UNECE Region

COUNTRIES/REGIONS: Belarus, Georgia, Kazakhstan, Kyrgyzstan, Montenegro

NOMINATED BY: United Nations Economic Commission for Europe (UNECE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.6, 3.9, 6.1, 6.2, 6.3, 9.1, 9.4, 11.1, 11.3, 11.5, 11.7, 11.a, 11.c, 13.1, 13.2, 13.3

SUPPORTED BY: United Nations Development Account, Tranche 12

IMPLEMENTING ENTITIES: UNECE, United Nations Human Settlements Programme (UN-Habitat)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2020–2023

URL OF THE PRACTICE: <https://bit.ly/32nvhdn>

Comprehensive Waste Utilization and Sustainable Development in the Building Materials Sector for Asian Countries along the Belt and Road

Promoting waste utilization, energy saving and emissions reduction in building materials

Challenge

With rapid growth in economies and societies, most developing countries are facing common challenges in treating waste, such as municipal solid waste, sludge, hazardous waste, fly ash and slag. Industrial and municipal waste have caused heavy pollution, impacting the environment and human health.

Waste is a growing problem for all developing countries. Viet Nam produces over 15 million tonnes of waste each year from various sources. The reuse, recycling, collection, treatment and disposal of waste can pose a significant risk to the environment. Some Governments have issued policies to encourage recycling, but most do not have the capacity to develop waste utilization technologies. Both Viet Nam and Thailand have limited access to advanced waste utilization technologies nationwide.

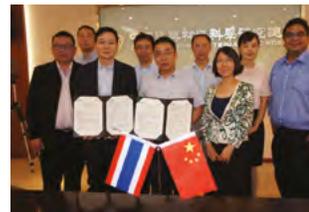
Towards a Solution

With a high burning temperature, cement kilns, which are used to produce cement clinker, are also well suited for utilizing a wide range of waste efficiently. In China, waste has been co-processed by cement kilns to replace fossil fuels and some raw materials. Waste coprocessing can decrease emissions from carbon dioxide and other pollutants, recover energy and contribute to long-term cost savings in cement plants.

The International Centre for Materials Technology Promotion (ICM) and the China Building Materials Academy (CBMA) partnered with the Viet Nam Institute for Building Materials (VIBM) and the Siam Cement Public Company (SCG) in Thailand to promote waste utilization, energy saving and emissions reduction in the building materials sector through joint research and development, technology transfer and capacity-building. The project also seeks to reduce the risks to human health and the environment resulting from waste.

The initiative employed the following methodology to promote South-South cooperation:

- Technical exchange: Three seminars on waste treatment technology in the building materials sector were organized, during which experts from China presented state-of-the-art coprocessing technology.
- Capacity-building: Three on-site trainings and visits were conducted for Viet Nam and Thailand at State Key Lab of Green Building Materials in Beijing, Tai'an Zhonglian Cement Plant in Shandong province and Zhuozhou Building Materials Company of Beijing New Building Material Group in Hebei province. Activities focused on testing technology and producing cleaner cement and green building materials.
- Technical guidance: ICM experts provided technical guidance for an energy-efficient retrofit on a cement production line for the Viet Nam Cement Industry Corporation.
- Awareness-raising: A seminar was held to promote waste utilization in building materials in Viet Nam by sharing advanced waste utilization technologies and experience. Eight experts from China were invited to deliver lectures and share their experiences. Participants from the Building Materials Department of the Ministry of Construction of Viet Nam and VIBM attended the seminar. Their par-



© ICM/CBMA

ticipation in this event will be useful in formulating sustainable development policies for the building materials sector.

The Project has made considerable progress to date and has achieved the following key outcomes:

- **Approximately 820 Vietnamese participants from the building materials sector have access to technical information on waste utilization.**
- **Approximately 560 Thai researchers, engineers and managers in the building materials sector mastered technology relating to waste utilization and cleaner production in building materials, which will improve innovation and research capabilities.**
- Two memoranda of understanding for future sustainable cooperation were signed with VIBM and SCG of Thailand. These agreements will promote deeper and wider South-South cooperation in the long term. More research and development projects on cement, concrete, refractory materials and some new materials will be carried out jointly. A lab will also be constructed for testing building materials. In addition, ICM will seek to provide more technical training for engineers from developing countries.
- This project provides technical and policy assistance to the Government of Viet Nam to formulate sustainable develop-

ment policies and norms for the building materials sector in their next 10-year plan. Once implemented, these policies and norms will significantly improve the environment and the health of tens of thousands of Vietnamese people.

The beneficiary countries have expressed strong interest in further cooperation with ICM and CBMA. Discussions are ongoing among ICM, various organizations and the Governments of Viet Nam and Thailand to expand cooperation under this cross-learning and knowledge-sharing initiative to further mainstream South-South and triangular cooperation in countries along the Belt and Road.

The project's methodologies could be replicated in the building materials sector of any developing country and adapted to other issues in the 2030 Agenda for Sustainable Development.

Contact:

Name: Dr Juan Li

Title: Deputy Director

Organization: International Centre for Materials Technology Promotion (ICM) / China Building Materials Academy (CBMA)

Email: lijuan@cbmamail.com.cn, lijuan_cbma@qq.com

WeChat: lijuan273838

PROJECT NAME: Comprehensive Waste Utilization and Sustainable Development in the Building Materials Sector for Asian Countries along the Belt and Road

COUNTRIES/REGIONS: China, Thailand, Viet Nam

NOMINATED BY: China International Center for Economic and Technical Exchanges

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 12.4, 17.9

SUPPORTED BY: China South-South Development Center Project

IMPLEMENTING ENTITIES: International Centre for Materials Technology Promotion (ICM) / China Building Materials Academy (CBMA)

PROJECT STATUS: Completed

PROJECT PERIOD: October 2017–December 2018

URL OF THE PRACTICE: www.cbma.com.cn (in Chinese)

Sustainable Coffee Production in Gorongosa National Park

De Moçambique, com amor [From Mozambique, with love]

Challenge

Agricultural production, particularly family production, is crucial to food and nutritional security and the well-being of the population in Mozambique. Although the productive potential is great, current systems fail to meet needs. The State's strategic plan for poverty reduction prioritizes increasing access to factors of production, particularly for women, and highlighting the availability of suitable technologies.

At the same time, weak commercialization of agricultural products is a disincentive to intensifying production, which limits the growth of household income. In order to improve market access, there must be improvements in the network infrastructure and the post-harvest handling, storage, conservation and processing of products.

Towards a Solution

To address these challenges, the 'Gorongosa Café' project aims to mitigate the effects of deforestation and climate change, promote agribusiness and increase income and food security for rural families in the region. The project is based on an agreement between Gorongosa National Park and local communities to set aside 1,000 ha to grow high-quality, shade-grown arabica coffee. This would translate into over 5,000 ha of protected and restored tropical forest and sustainable livelihoods for more than 2,500 families. It would also ensure the protection of 40,000 ha of national park land.

The project's targets are:

- to define and improve the environmental sustainability of the coffee production system (Coffea arabica) by using techniques that include shading, intercropping and the rational use of water resources and fertilizers.
- to analyse the resilience of plant material in the context of climate change in the region and select elite genotypes that are better suited to regional conditions.
- to evaluate the possibility of introducing Robusta coffee (*Coffea canephora* cv. Conilon), whose plant is generally more tolerant to higher temperatures than *C. arabica*, taking into account future global warming.
- to train the various stakeholders (farmers and their associations, technicians, traders, students, researchers and teachers) throughout the coffee value chain.

By training human resources (farmers, extension workers, technicians, students and researchers) in production, technology and scientific research, the project is:

- improving current coffee production systems by introducing or optimizing cultural practices, particularly with regard to water resources and fertilization, as well as selecting alternative (Arabica) and/or complementary (Robusta) cultivars.
- drafting a manual on good practices in crop management, focusing on determinant aspects such as the procedures for maintaining plants throughout the year, harvesting, processing and storing coffee locally.

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© Gorongosa Coffee

- adapting a quality certification system and promoting the Gorongosa Café brand, in accordance with international quality control standards.

Each partner plays an important role.

The Plant-Environment Interactions and Biodiversity Laboratory of the School of Agriculture at the University of Lisbon in Portugal has a long history of research in coffee and collaboration with institutions in Mozambique and Brazil in the fields of teaching, advanced training and research. These collaborations focus on the analysis and selection of genetic material in the context of climate change, as well as on biodiversity conservation programmes.

The Federal University of Espírito Santo in Brazil has scientific experience and provides human resources training, with a focus on crop management and plant improvement. As it has a long history in research, teaching and extension in the field of coffee growing, it will be able to contribute in a very practical way, guiding the cultural management (planting, fertilization, pruning, harvesting and other aspects) and training of human resources in Mozambique.

Gorongosa National Park in Mozambique promotes the project and has significant experience in conducting short courses on biodiversity. Three team members from the Park will be directly involved in supporting and supervising activities under this project.

The Camões Institute, the Brazilian Cooperation Agency, the University of Lisbon, the Federal University of Espírito Santo and Gorongosa National Park all provided financial support.

One hundred percent of the project's profits are directed to funding conservation and human development projects in and around Gorongosa National Park. In this case, triangular

cooperation allows for structured intervention on a larger scale. It provides a way to diversify partnerships with different development actors, such as universities and traditional and emerging donors from civil society organizations, on the basis of their comparative advantages and added value. The project also forges partnerships that go beyond the traditional North-South approach.

This project could have a multiplier effect. It creates synergies with other cooperation agencies and serves as an important tool to share and capitalize on resources and expertise. It also provides a mutual learning exercise, with significant benefits for all parties involved.

With its context-specific approach and tailored solutions, the project serves as an example of scaling up successful projects and taking ownership. The host country recognized and benefited from the added value that each of its triangular partners had to offer.

The project centres around Gorongosa National Park, and all activities operate within its intervention logic, ensuring improved ownership and leadership, which, in turn, increases impact and sustainability. It has also paved the way for partnerships between countries and academic institutions from Europe and South America that share cultural and linguistic ties. Lastly, the project seeks to meet the host country's demands and scale up development cooperation initiatives by partnering with States that have advantages in expertise, technology and know-how.

Contact:

Name: Mr Nuno Vaz

Title: Expert

Organization: Camões – Institute for Cooperation and Language (Ministry of Foreign Affairs, Portugal)

Email: nuno.vaz@camoes.mne.pt

PROJECT NAME: Sustainable Coffee Production in Gorongosa National Park

COUNTRIES/REGIONS: Brazil, Mozambique, Portugal

NOMINATED BY: Ministry of Land, Environment and Rural Development (Government of Mozambique); Gorongosa National Park (Government of Mozambique)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 5.a, 12.2, 12.8, 12.a, 13.1, 13.3, 13.b, 17.6, 17.9

SUPPORTED BY: School of Agriculture, University of Lisbon (Portugal); Federal University of Espírito Santo (Brazil); Gorongosa National Park (Government of Mozambique); Ministry of Land, Environment and Rural Development (Government of Mozambique); Camões – Institute for Cooperation and Language (Development Agency, Ministry of Foreign Affairs, Portugal); Brazilian Cooperation Agency (Development Agency, Ministry of Foreign Affairs, Brazil)

IMPLEMENTING ENTITIES: School of Agriculture, University of Lisbon (Portugal); Federal University of Espírito Santo (Brazil); Gorongosa National Park (Government of Mozambique); Ministry of Land, Environment and Rural Development (Government of Mozambique)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2022

URL OF THE PRACTICE: <https://bit.ly/2D2rUck>

Namibia Cheetah Conservation Centre Dairy Facility Installation Project

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Increasing nature-based production and tourism with community participation

Challenge

The economy of Namibia is highly dependent on mining, and the development gap among regions is remarkably high. The National Development Plan launched by the Government in 2017 defines tourism and livestock as two of the leading sectors that can help diversify sources of income and reduce high dependence on a limited number of economic activities in underdeveloped regions. The Otjozondu region has a low population density with a diverse wildlife, and most local people make their living from ovine breeding. The region also serves as a destination for tens of thousands of tourists who visit yearly to observe cheetahs. In this remote location, however, cheetahs attack livestock and are killed by local people trying to sustain their livelihood.

Towards a Solution

Under the partnership between the Turkish Cooperation and Coordination Agency (TIKA) and the Namibia Cheetah Conservation Fund, a support programme for wildlife protection, sustainable rural economic development and ecotourism was implemented in the rural Otjozondu region of Namibia, with a view to improving livelihoods in local communities. A cheese and yogurt production facility was constructed, and training on milk and milk product processing was carried out. Contributions were made to several Sustainable Development Goal targets. The project aimed to strengthen the effective use of natural resources (target 12.2), increase productivity in production and harmonization with natural life (target 8.4), support tourism that promotes employment by creating local products (target 8.9), secure sustainable food production systems (target 2.4), improve agricultural production capacity (target 2.a), end poverty (target 1.a) and stop biodiversity loss by preserving natural habitat (target 15.5).

The Cheetah Conservation Centre project to construct a cheese and yogurt production facility is part of the longer-term support programme. This project aims to promote development in the Otjozondu region with the cooperation of local stakeholders, in accordance with national goals. It has brought knowledge and infrastructure for cheese and yogurt production to the region. The project is sustainable because it generates income and is owned by the local community.

Given that the needs of local stakeholders aligned with the State's National Development Plan, the project was fully funded by a grant that covers training sessions, equipment and logistic expenses. The Cheetah Conservation Fund has assumed the role of facilitator and ensures that the project's income-generating activities are connected to wildlife protection.

Under the Cheetah Conservation Fund project, TIKA supported the construction and installation of a cheese and yogurt production facility to utilize locally produced goat milk. With a processing capacity of 300 litres per day, the facility has a fully equipped dairy farm with a pasteurization and standardization unit, white cheese unit, yogurt unit and auxiliary units, which were procured from Turkey. In addition, 12,000 units of cheese and yogurt containers were provided for the first batch of products. Turkish experts also provided training sessions for local producers and members of the Cheetah Conservation Fund. As a result, milk processing capacity has been increased to improve the value chain (Sustainable Development Goal targets 8.4, 12.2 and 2.a), employment is supported



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(target 8.9) and food production is encouraged (target 2.4). **These activities will help to reduce poverty by reducing regional development disparities (target 1.a); diversifying income in the region and establishing suitable facilities; ensuring a balance between natural life and local production (targets 2.a and 8.4); and supporting local initiatives that strive to protect biodiversity (target 15.5).** By using modern production techniques, it is possible to protect biodiversity and limit the hunting of wild predators, such as cheetahs, which are one of the biggest threats to ovine breeding.

The project, which was developed based on Turkey's experience in milk production, can be replicated in all developing

regions. Turkey's experience in the field of milk processing can be used as the basis for development cooperation with all relevant stakeholders in the relevant natural environment.

Contact:

Name: Strategy Development Department

Organization: Turkish Cooperation and Coordination Agency (TIKA)

Email: sgdb@tika.gov.tr

Phone: +90 312 939 70 00

PROJECT NAME: Namibia Cheetah Conservation Centre Dairy Facility Installation Project

COUNTRIES/REGIONS: Namibia, Turkey

NOMINATED BY: Turkish Cooperation and Coordination Agency (TIKA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 2.a, 2.4, 8.4, 8.9, 12.2, 15.5

SUPPORTED BY: TIKA

IMPLEMENTING ENTITIES: TIKA, Cheetah Conservation Fund

PROJECT STATUS: Completed

PROJECT PERIOD: 2019

URL OF THE PRACTICE: <https://bit.ly/34tr3g6>

Sustainable Agriculture and Food Security with Aquaponics Technology

Addressing food production challenges while taking advantage of the environmental benefits of aquaponics

Challenge

The Caribbean has experienced climatic changes over the past few decades, and recent studies project that these changes will continue in the future. One study estimates that mean annual temperatures in the Caribbean will increase by between 1° and 5°C by the 2080s. Warming is projected to be greater in the north-west Caribbean territories (Cuba, the Dominican Republic, Haiti and Jamaica).

These changes in the region's climatic conditions are predicted to adversely affect a number of key resources and economic sectors, including freshwater resources and agricultural systems.

Towards a Solution

Communities in Jamaica considered aquaponics as a possible solution to address these issues. According to the Food and Agriculture Organization of the United Nations:

Aquaponics is the integration of recirculating aquaculture and hydroponics in one production system. In an aquaponic unit, water from the fish tank cycles through filters, plant grow beds and then back to the fish. In the filters, the fish waste is removed from the water, first using a mechanical filter that removes the solid waste and then through a biofilter that processes the dissolved wastes. The biofilter provides a location for bacteria to convert ammonia, which is toxic for fish, into nitrate, a more accessible nutrient for plants. This process is called nitrification. As the water (containing nitrate and other nutrients) travels through plant grow beds the plants uptake these nutrients, and finally the water returns to the fish tank purified. This process allows the fish, plants, and bacteria to thrive symbiotically and to work together to create a healthy growing environment for each other, provided that the system is properly balanced.¹

As such, this smart technology could address the climate-related challenges impacting food production and security, given the advantages of soil conservation, water recycling and the provision of organic nutrients from the fish to the plants.

With the support of the GEF Small Grants Programme, administered by the United Nations Development Programme, Jamaica participated in a South-South exchange to learn from practical experiences in sustainable aquaponic farming on both a small and commercial scale in Mexico. This initiative directly addressed how farmers in Jamaica could adapt technology to improve change climate adaptation with regard to extreme drought and rainfall conditions. It would also serve to diversify income and improve farming productivity as a whole.

The discussions, presentations and study tours focused on obtaining information about the partnerships that communities require in order to ensure sustainability. Participants also learned about the processes involved in setting up and maintaining a viable aquaponics farm and how communities can benefit from the varying products. In particular, they learned about the role of Government in formulating the necessary policies and the role of academia in providing research. The experi-

1 FAO Fisheries and Aquaculture Technical Paper No. 589



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ence was enriched through exchanges with Bofish Aquaponic farms, the National Autonomous University of Mexico and consultations with community members and local non-governmental organizations (NGOs).

The good practices and innovations implemented by Bofish have resulted in significant growth and expansion for the business. Some of these innovations include the use of saltwater to increase production and food security, as well as the infusion of biofloc technology with aquaponics to create a more sustainable aquaculture through greater efficiency, production and environmental control.

Additionally, the University demonstrated that snook, pompano, yellow snapper, octopus and shrimp could be bred as the aquaculture component for market consumption. It was also suggested that algae and small plankton could be produced to feed fish and shrimp in the larvae stage.

Following the mission, under the GEF Small Grants Programme, the University and Bofish agreed to support efforts in Jamaica to improve and expand aquaponics technology and further guide agricultural policy developments.

Since the exchange, the Environmental Health Foundation (EHF) in Jamaica has established four small-scale aquaponics systems in the rural parish of Clarendon. EHF is one of the country's leading NGOs and plays a key role in improving health, the environment and the education system. For over 26 years, the Foundation has managed over 40 major projects in Jamaica, with significant results that benefit children and vulnerable groups and communities.

EarthStrong is a women-led NGO that established the first commercial aquaponics system in Jamaica. The design and construction mitigate disaster and facilitate agritourism. The

facility is equipped with cold storage to reduce waste from harvests, which contributes to food security, and runs exclusively on solar energy. The system requires up to one-quarter acre of land and has the potential to produce over 119,000 heads of lettuce and other leafy vegetables annually.

To date, both groups have established partnerships with various government agencies, including the Rural Agricultural Development Authority; the Jamaica Agricultural Society; and the College of Agriculture, Science and Education (CASE). These partnerships will assist in providing continuous oversight and technical support to farmers.

There is a growing cadre of aquaponics practitioners and influencers who are developing policies that will allow the Government to support farmers in adapting to and implementing aquaponics technology. Both the EHF and EarthStrong projects are currently demo sites. They are working on a manual and technical fact sheet to assist the targeted beneficiaries, particularly local farming communities that wish to become involved in aquaponics. The manual will be reviewed by the team in Mexico.

Contact:

Name: Ms Faradaine Forbes-Edwards
Title: Project Manager
Organization: Environmental Health Foundation
Email: faradaineedwards@ehfjamaica.com; ehf@cwjamaica.com
Phone: +1 876-577-8829

Name: Ms Karla Black
Title: Executive Director
Organization: EarthStrong
Email: karla1.black@gmail.com; earthstrong.ja@gmail.com
Phone: +1 876-546-0755

PROJECT NAME: Promoting Sustainable Agriculture and Food Security through Aquaponics Technology
COUNTRIES/REGIONS: Jamaica, Mexico
NOMINATED BY: Global Environment Facility (GEF) Small Grants Programme, United Nations Development Programme (UNDP)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.4, 9.a, 12.2, 12.8, 12.a
SUPPORTED BY: GEF Small Grants Programme, UNDP
IMPLEMENTING ENTITIES: Environmental Health Foundation, Jamaica
PROJECT STATUS: Completed (with ongoing scale-up)
PROJECT PERIOD: 2018–2019
URL OF THE PRACTICE: Not Available

An Innovation Model for Sustainable Low-Carbon Agriculture in the Americas – The System of Rice Intensification



Contributing to food security, competitiveness and resilience by adapting SRI to local contexts

Challenge

Rice is a staple food in most of Latin America and the Caribbean and a leading source of protein for the poorest 20 percent of the tropical population, supplying more per capita than beans, beef or milk. Although 23 countries in the region produce 28 million tonnes of rice annually, demand still exceeds supply. Rice is cultivated on about 7.2 million ha throughout the Americas in diverse conditions. Most of the rice grown in Central America is for subsistence.

Productivity in Latin America and the Caribbean is generally low for the millions of people who make a living growing rice, and crop production tends to be high risk due to limited resources, climate variability and climate change, which is causing more frequent droughts, higher temperatures and reduced water availability. Solutions are needed to help improve rice systems' resilience to climate change, increase their productivity and competitiveness, and reduce greenhouse gas emissions.

Towards a Solution

The System of Rice Intensification (SRI) addresses several key challenges posed by current conventional production methods in Latin America and the Caribbean, including low productivity, high input use (seeds, water and agrochemicals) and climate vulnerability. SRI employs an integrated approach that changes the management of plants, soil, water and nutrients to enhance productivity and resilience, while reducing greenhouse gas emissions. This approach capitalizes on system innovations at the local level and helps to reduce rice producers' vulnerability to the biophysical and socio-economic impacts of climate change.

Between 2015 and 2019, SRI was promoted throughout the Americas by the Inter-American Institute for Cooperation on Agriculture (IICA) and its partners, including the National Rice Growers' Association FEDEARROZ (Colombia), the Institute of Agricultural Research (Chile), Nestlé and DANAC Foundation (the Bolivarian Republic of Venezuela), the Ministry of Agriculture and the Agricultural Research Institute (Panama), the Asociación para la Diversificación y el Desarrollo Agrícola Comunal [Association for Communal Agriculture Diversification and Development] (Nicaragua) and Cornell University. The goal was to demonstrate the principles of SRI in the producers' own fields, working with them to adapt the relevant practices to their conditions. Capacity-building sessions with researchers, agricultural technicians and advisory service providers have also been carried out at different locations to test the variables that make SRI a local innovation, such as seed variety, plant spacing and the use of machinery. In addition, the project linked interested parties and institutions under the SRI Network of the Americas, which then connects to other regional networks and the global network established by the SRI International Network and Resources Center at Cornell University, with a view to accelerating action in the region by using the knowledge and experiences of others.

The agroecological methodology of SRI is based on four principles that focus on adapting crop, water, soil and nutrient management. These principles remain unchanged, regardless of the location or methods farmers use to grow rice; however, the practices used to implement them can be adjusted to local conditions and needs.



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The four interacting principles are:

- Careful and early establishment of healthy plants
- Reduced competition between plants
- Improved soil fertility and enhancement of its biota by adding organic matter.
- Efficient water management through intermittent irrigation, avoiding water stress and promoting aerobic conditions in non-flooded soils.

SRI is a work in progress for farmers and extension agents, as they develop and fine-tune the process for local conditions. Innovations are necessary to optimize the system in each local context. Given the high cost and scarcity of farm labour in Latin America and the Caribbean, one of the key challenges is mechanizing SRI in a manner consistent with its principles. To overcome this challenge, the project imported small machinery from Asia and, with the help of farmers and technicians, adapted it to local conditions to support transplanting, weeding and soil aeration.

Unlike most agricultural technologies used today, SRI is not based on material inputs. Instead, it primarily involves socio-cultural changes in crop management, an intensification of knowledge and a new mindset for this low-input system. As such, SRI requires farmers, technicians and the scientific community to commit to working together to identify and refine the practices that generate the best results.

The system's sustainability has been ensured through the continuous training of producers, which is supported by IICA and various partner organizations. Over 30 trainings, bilateral exchanges, farmer field days and other events have been held to demonstrate the benefits and results of SRI. Two regional workshops have been held, and a third is planned in 2020 to

ensure the exchange of knowledge between actors working with SRI in the region. In addition, a series of webinars are held each year to reach a wider audience. These activities have strengthened the knowledge and skills of over 3,000 technicians, producers and students. The project has also developed technical manuals, pamphlets for producers and tools to support data recording and analysis.

Using SRI, farmers have obtained increases of up to 40 percent in yields and 60 percent in profitability. They have seen savings of up to 90 percent in seed use and 40 percent in water. They have also reduced the use of agrochemicals.

The system has shown additional benefits, such as reduced lodging during strong storms, greater resistance to drought from larger and longer root systems, and a lower concentration of heavy metals in the plants and grains. Biofortified rice varieties can be incorporated in SRI to address nutritional issues.

SRI practices are developed for application in a wide variety of rice and other crop systems and are being implemented in over 60 countries around the world. The primary means of transferring the methodology—through practice and the exchange of knowledge among producers—allows it to be replicated continuously. Although this tends to make advances slower in nature, IICA and its partners are committed to supporting the process.

Contact:

Name: Mrs Kelly Witkowski

Title: Manager, Climate Change and Natural Resources Program
Organization: Inter-American Institute for Cooperation on Agriculture (IICA)

Email: kelly.witkowski@iica.int

PROJECT NAME: An Innovation Model for Sustainable Low-Carbon Agriculture in the Americas – The System of Rice Intensification

COUNTRIES/REGIONS: Chile, Colombia, Dominican Republic, Nicaragua, Panama, Suriname, Venezuela (Bolivarian Republic of)

NOMINATED BY: Inter-American Institute for Cooperation on Agriculture (IICA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 12.2, 12a

SUPPORTED BY: IICA, FEDEARROZ (Colombia), Institute of Agricultural Research (Chile), Nestlé and DANAC Foundation (Venezuela), Ministry of Agriculture and the Agricultural Research Institute (Panama), Asociación para la Diversificación y el Desarrollo Agrícola Comunal [Association for Communal Agriculture Diversification and Development] (Nicaragua), Cornell University

IMPLEMENTING ENTITIES: IICA, FEDEARROZ (Colombia), Institute of Agricultural Research (Chile), Nestlé and DANAC Foundation (Venezuela), Ministry of Agriculture and the Agricultural Research Institute (Panama), Asociación para la Diversificación y el Desarrollo Agrícola Comunal [Association for Communal Agriculture Diversification and Development] (Nicaragua), Cornell University (Suriname)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2015–2020

URL OF THE PRACTICE: <https://bit.ly/3hxY7Hx> (in Spanish)

Climate Box: Climate Change Education and Awareness Project

Raising awareness on the possible effects of climate change on nature and human-kind with an interactive learning toolkit

Challenge

Climate change has emerged as one of the most important issues facing humanity in the 21st Century. The semi-arid and arid climate of Central Asia will likely experience further aridification, affecting food production and water resources. It is estimated that glaciers in Central Asia have receded by 25 percent since 1970, and an equal amount is expected to disappear by 2040.

Changes in climate patterns are already evident in countries in the South Caucasus and Southern and Eastern Europe, where they are increasingly accompanied by severe heat waves and drought. Changes in precipitation patterns and more extreme weather events, such as heavy rains and unusual hailstorms, are also linked to climate change.

There is still a lack of education and awareness among the general public in Eastern Europe, Central Asia and the South Caucasus when it comes to the drivers of climate change, its impacts and mitigation and adaptation strategies. Most of the available information is written for scientists and policymakers rather than the general public and young people. There is an acute need to bridge the gap between scientific knowledge and community awareness.

Towards a Solution

To address this challenge, the Government of the Russian Federation supported the development and implementation of an innovative interactive learning programme and toolkit on climate change called Climate Box, through the Russia-UNDP Trust Fund for Development. The goal of the programme is to contribute to climate change mitigation and adaptation in Europe and the Commonwealth of Independent States (ECIS) region by promoting climate education and awareness, changes in consumer behaviour and a shift towards low emission- and resilient societies.

The Climate Box toolkit and school curriculum, targeting children aged 7 to 16 years, were developed by an interdisciplinary team of Russian experts. The toolkit includes an illustrated textbook for students, 'Climate Quiz' game cards, a wall map featuring possible effects of climate change and a poster with tips on reducing carbon footprints. Climate Box enables school teachers to share up-to-date climate change knowledge with their students and inspires young people to take climate action. The curriculum is flexible, with group activities, projects and experiments. There are also materials that students can use individually. The toolkit has allowed teachers and youth to take control of climate change education, engaging interactively with the subject matter and learning while having fun.

Over time, Climate Box has evolved from an interactive toolkit into a comprehensive climate education programme that engages with education ministries, schools and informal education activities. It has received strong support from national educational authorities in participating countries. The climate education approaches piloted in Climate Box are relevant in the context of a broader education reform towards more open, integrated, engaging and forward-looking learning methods. The programme has excellent potential for advocacy and youth mobilization and supports cross-border cooperation and exchanges between educational institutions, teachers and students. The current stage of the programme (2018–2020) builds upon previous activities. The Climate Box textbook and curriculum were initially developed and piloted in Russia (2014–2015). Then they were adapted for three Central Asian countries: Kazakhstan, Kyrgyzstan and Tajikistan (2016–2017). The new phase of the programme targets five additional partner countries: Armenia, Belarus, Moldova, Turkmenistan and Uzbekistan, which were selected following negotiations among the Government of the Russian Federation, UNDP Istanbul Regional Hub (IRH) and the relevant UNDP Country Offices.

The programme includes three main components. The first is to replicate the Climate Box toolkit in the new partner countries: Armenia, Belarus, Moldova, Turkmenistan and Uzbekistan. The second is to provide support and capacity-building to introduce Climate Box into the educational process in the eight beneficiary countries: Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan and Uzbekistan. The third is to promote climate change awareness and advocacy and enhance regional cooperation based on the Climate Box platform.

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In each country, the programme helps to bring together schools, formal and informal educational institutions, non-governmental and academic organizations, international agencies, national ministries of education and ministries in charge of climate change issues. Russian experts, who piloted Climate Box in Russia, have been closely involved in implementing programme activities by leading training sessions, providing technical advice on localizing the toolkit, facilitating international activities such as teacher conferences and youth competitions, and supporting the programme's global communication and outreach.

In addition to the North-South exchange of good practices and knowledge, there is also horizontal sharing of expertise and practices between participating countries of the ECIS region. For example, representatives from the pilot Central Asian countries have co-led trainings and workshops on Climate Box in new target countries, sharing their successful experiences and lessons learned with peers. Experts from Kazakhstan and Kyrgyzstan have helped to develop a Climate Box User Guide, a monitoring and evaluation system and tools for the Climate Box programme that are being used by new countries.

Moreover, all eight beneficiary countries have been equipped to continue the project, and there will be less support needed at the regional level. The UNDP IRH team has organized a series of working sessions for UNDP programme managers in the target countries to discuss the programme's sustainability. There are already successful examples of the programme's development. Partnerships have been established with national educational programmes, and other initiatives have been promoted beyond the scope of the activities funded through the Russia-UNDP Trust Fund for Development. All countries have conducted follow-up activities locally. These include additional training sessions for teachers, meetings with educational experts and collaboration with non-governmental organizations, without the engagement of international experts.

Moreover, under the third component, to promote climate change awareness and advocacy and enhance regional cooperation based on the Climate Box platform, the programme is undertaking broad global and regional outreach through digital technologies, awareness-raising campaigns, regional and international teacher platforms, student contests, advocacy events and engagement with government authorities and other partners in promoting and distributing Climate Box.

Encouraged by Climate Box, students in eight countries implemented practical climate-related projects in their schools and communities. The best projects in each country were presented at the first international school competition in two categories: reducing carbon footprint, and climate change and water resources. Three winners

from each of the seven beneficiary countries, three from Russia and two from the partner 'Ecopolis' toolkit project implemented in the Moscow Region were selected to take part in the final round of the international competition in Almaty, Kazakhstan in April 2019. An additional 16 students prepared posters of their projects for the event. The eight winners received an opportunity to travel to an international thematic summer camp in Russia in June 2019. The camp focused on energy efficiency and personal involvement in nature conservation. The Climate Box educational programme was also presented to 100 young people from the ECIS region attending the camp.

Two international conferences on climate education for teachers and education experts from the participating countries were organized during this phase of the programme. The first conference took place in Yerevan, Armenia in November 2018, with over 55 participants. The second conference was organized in Almaty, Kazakhstan in April 2019 and welcomed over 80 participants. Both conferences were opened by representatives from the national Ministries of Education, diplomatic missions of the Russian Federation and representatives of UNDP Country Offices. Conference participants recommended a new educational climate module for teachers, which is currently being developed by an international team of educational and climate experts from the participating countries.

To date, the programme has reached over 50,000 students and 3,000 teachers in the 8 beneficiary countries and Russia.

In addition, special editions of localized toolkits were self-funded and developed in the Yamalo-Nenets Autonomous Okrug and the Moscow Region, Russian Federation. In 2020, Serbia has voluntarily joined the programme, and countries beyond the ECIS region have already expressed interest in participating in Climate Box activities. Climate Box is available in 13 languages, including Arabic, English, French, Russian and Spanish, as well as the national languages of the participating countries. It has been presented at the United Nations Climate Conferences in Paris, Bonn, Katowice and Madrid.

The geographical scale of the project ensures its replicability. The existing toolbox, which has already been translated to several languages, helps to extend this good practice more broadly.

Contact:

Name: Ms Natalia Olofinskaya
Title: Climate and Disaster Risk Reduction Team
Organization: United Nations Development Programme (UNDP) Istanbul Regional Hub
Email: nataly.olofinskaya@undp.org
WhatsApp: +90 543 5323046

PROJECT NAME: Climate Change Education and Awareness Project: Climate Box
COUNTRIES/REGIONS: Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Serbia, Uzbekistan
NOMINATED BY: Government of the Russian Federation
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.7, 4.c, 13.3
SUPPORTED BY: UNDP-Russia Trust Fund (Government of the Russian Federation)
IMPLEMENTING ENTITIES: United Nations Development Programme (UNDP) Istanbul Regional Hub for Europe and the Commonwealth of Independent States
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2017–2020
URL OF THE PRACTICE: <https://bit.ly/2D6Jjkc> and <https://climate-box.com/>

Thailand: Promoting Climate Resilience in the Farming Communities of Cambodia

Increasing the productivity of climate-resilient fruit and vegetable crops in Cambodia

Challenge

Climate change has a significant impact on agricultural productivity for local farmers, especially small-holder farmers in developing countries, who are highly dependent on seasonal crops and vulnerable to unpredictable, rapid changes in climate. In Cambodia, small-scale farmers are facing even greater challenges in terms of product quality, damage from pests and disease, and production technology (particularly off-season technology, seed management and post-harvest technology). Moreover, half of all commercial production is dependent on overseas markets.

Cambodian farmers could respond effectively to these challenges by introducing appropriate and relevant technologies, such as greenhouses, compost fertilizers made from agricultural residue, pest control, post-harvest technology and packaging.

Towards a Solution

In order to take urgent action to combat climate change and its impacts, the 'Thailand-Cambodia Development Cooperation' project was initiated. Its aim is to share best practices in climate-smart agricultural technology from Thailand to increase environmentally friendly fruit and vegetable crop productivity in Cambodia. The project seeks to adapt farming systems to climate change with a focus on off-season fruit production in Battambang province and vegetable production in Siem Reap province in Cambodia.

The objectives of the three-year project are to enhance the ability of farming communities to adapt to the impacts of climate change and to strengthen cooperation through intensive capacity-building programmes on research and development in select agricultural communities. The project's outputs include guidelines on climate change resilience and adaptation, capacity-building for various stakeholders and relevant agencies, demonstration plots in selected provinces, and a standardized climate adaptation practice in Cambodia.

Study visits are being conducted to collect and synthesize data on farming systems in both Thailand and Cambodia. Once adequate data have been collected, a series of training courses and workshops are organized. They are tailored to fit the context of agricultural practices in Cambodia, with a view to developing national guidelines for climate change adaptation.

As a result, capacity-building programmes are designed for all relevant stakeholders, including Government officials, smart farmers and heads of farming communities. Stakeholders also participate in developing the content and training plan, as well as the training of trainers activities and on-site training for targeted communities in Cambodia.

In addition, demonstration plots are being set up in Battambang and Siem Reap provinces. Experts are dispatched to conduct surveys, select farms and set up the demonstration plots for fruit and vegetable production. Thai experts, alongside Cambodian stakeholders, formulate an operational plan for the demonstration plots, monitor its implementation and synthesize lessons learned in applying the

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climate change adaptation guidelines. Using these guidelines, climate adaptation practices and a monitoring and evaluation system will be expanded to other communities in Cambodia.

The climate-smart agricultural technology for fruit and vegetable production shared by Thai experts uses mini-sprinkler irrigation systems to save on water and labour, which is good for long-term investments. Moreover, the experts have applied a biocontrol agent, the entomopathogenic nematode, to control insects and pests in organic vegetable crops to improve health and safety in a way that is environmentally friendly. After setting up the demonstration plots and greenhouses in targeted communities, Cambodian farmers were able to use local materials to lower costs for organic vegetable production. Thai experts also shared post-harvest, processing and marketing methods. Furthermore, the project helps establish participatory guarantee systems to allow products to break into the organic vegetable market and be sold in supermarkets in Cambodia.

Local agricultural officials have been able to apply the good practices of climate-smart agricultural technology for fruit trees and vegetable crops developed under this project to other communities in Cambodia. There are five demonstration plots for three fruit crops in Battambang that focus on improving productivity and off-season fruit production. Twenty-five additional scale-up plots were established: 6 plots for citrus orchards, 14 plots for mango orchards and 5 plots for longan orchards. There are 7 vegetable demonstration plots and over 30 scaling-up plots in Siem Reap and Battambang combined.

As a result of the project, farming communities in Cambodia were able to adopt climate-resilient farming practices. The project helped strengthen resilience and promote mechanisms to increase capacity in effectively responding to climate change in Cambodia, as indicated in Sustainable

Development Goal (SDG) 13. The activities enhanced development cooperation to implement programmes and policies to end poverty (SDG 1), and to protect the health of farmers and consumers (SDG 3). Under the project, productivity was doubled, costs were lowered and a sustainable food production system was ensured (SDG 2). The outputs also enhanced partnerships for sustainable development by sharing knowledge and best practices developed in Thailand with partners (SDG 17).

The ongoing project in Cambodia is scheduled to be completed in 2020. The smart farmers plan to continue off-season agricultural production in their communities, in accordance with the climate change adaptation guidelines. The project's key success is the sense of ownership among farmers in the communities. The project was scaled up from the original 12 participants to 57 farmers who are applying the sustainable farming techniques and methods shared during the project, thereby increasing the possibility of replicating these techniques in other communities across Cambodia. This also paves the way for future cooperation between Thailand and Cambodia on food security, value chain and climate change adaptation in the coming years.

Contact:

Name: Ms Pin Sridurongkatum
Title: Development Cooperation Officer
Organization: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs
Email: pinsridurong@gmail.com

Name: Mr Somchai Boonpradub
Title: Senior Expert
Organization: Department of Agriculture, Ministry of Agriculture and Cooperatives, Royal Thai Government
Email: boonpradub@gmail.com

PROJECT NAME: The Promotion of Climate Resilience in the Farming Communities of Cambodia
COUNTRIES/REGIONS: Cambodia, Thailand
NOMINATED BY: Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs of Thailand
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 2.3, 2.4, 2.a, 3.9, 13.1, 13.b, 17.6, 17.9, 17.16, 17.17
SUPPORTED BY: TICA
IMPLEMENTING ENTITIES: TICA; Department of Agriculture, Ministry of Agriculture and Cooperatives of Thailand
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2017–2020
URL OF THE PRACTICE: Not available

IFAD: Fostering Climate Resilience and Agricultural Cooperation between China and Pakistan

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Promoting climate-resilient agriculture and reforestation in Pakistan

Challenge

Over 60 percent of the population of Pakistan (130 million of 217 million) resides in rural areas, and the rural population accounts for 80 percent of the country's poor. Pakistan is highly vulnerable to climate change, and its economy is heavily reliant on climate-sensitive, irrigated and rain-fed agriculture, as well as livestock, fisheries and forestry activities. Long periods of scanty rainfall and low river flows are interspersed with high-intensity flash flooding. Both the recurring droughts and flash floods result in internal displacement. Furthermore, Pakistan has the lowest forest cover in the region, with 4 percent of land area. There has been a rising trend in annual mean surface temperature and erratic weather patterns since the beginning of 20th Century. Pakistan currently ranks 23rd among the 167 States facing water scarcity, and water security for both agriculture and domestic use is increasingly critical. As such, the State's Vision 2025 prioritizes sufficient, reliable, clean and cost-effective access to water and food. To achieve this, Pakistan needs to build an agricultural sector that is resilient to climate change, in line with Sustainable Development Goals (SDGs).

Towards a Solution

China has made remarkable achievements in eco-safety and the sustainable development of natural resources. It has also used knowledge and technology to increase resilience and address climate change adaptation and mitigation.

Since September 2019, the International Fund for Agricultural Development (IFAD) has partnered with the Governments of China and Pakistan to exchange knowledge and increase experience-sharing. IFAD Pakistan, IFAD China, and the SSTC Facility Manager for the Asia and Pacific region acted as the focal points. A participatory methodology was used to stimulate discussion and actions. Discussions were held between the Chinese Academy of Agricultural Sciences and the National Rural Support Programme, from China and Pakistan respectively, to determine the project's objectives. A seminar on fostering agricultural development cooperation was proposed to discuss climate-resilient agricultural development, deforestation, desertification and water security in rural communities.

The IFAD South-South and triangular cooperation initiative delivered the seminar in 2019. Two implementing partners were identified in late September to reach out to project beneficiaries, including practitioners, academics, policymakers and rural organizations in China and Pakistan. The Institute of Environment and Sustainable Development in Agriculture, under the Chinese Academy of Agricultural Sciences, was responsible for sharing best practices from China, while the IFAD country office in Pakistan took the lead in assessing local needs. In line with SDG 1 on poverty, SDG 2 on hunger, SDG 13 on climate action, SDG 15 on life on land and SDG 17 on partnerships, the specific objectives of the initiative are to showcase the best climate-resilient agricultural practices in Pakistan and China, with a focus on deforestation, desertification and water management. **The initiative also sought to establish a network among relevant practitioners, academics, policymakers and rural organizations in Pakistan and China.**

Approximately 50 people attended the seminar. In addition to guest speakers from China and Pakistan, participants included senior government officials at the provincial and national levels, ex-



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perts, researchers, private sector actors, non-governmental organizations, representatives from IFAD-funded projects and implementing partners, university professors, students and representative from the media. A Chinese agricultural diplomat highlighted agricultural cooperation strategies in the China-Pakistan Economic Corridor (CPEC). Participants from Pakistan increased their knowledge of climate-resilient cropping systems, agricultural technologies and plastic film mulching, which is widely used in China. In turn, participants from China learned about solutions to deforestation and desertification, including community participation, awareness-raising, private sector involvement (in areas such as chilgoza nuts¹, medicinal plants and grazing management), proper land-use planning, ecotourism and payments for ecosystem services (REDD+).

In particular, representatives from Pakistan demonstrated interest in learning more about China's micro irrigation techniques, including rainwater cellars. The two parties had animated discussions on how to adapt the agricultural technology and experience of China to the context of Pakistan. Concrete recommendations and actions were put forward that aimed to

1 Chilgoza is a type of nut produced in Pakistan. Punjab has the world's largest pure stand of chilgoza forests, spread over 260 km². The chilgoza forests play an important role in maintaining the ecological and environmental balance and providing income to local communities. International organizations (the Global Environment Facility, the Food and Agriculture Organization of the United Nations) have been working with private sector actors to encourage local populations to play a role in the sustainable value chain for chilgoza nuts, in order to lift local communities out of poverty in a sustainable manner.

replicate tried and tested Chinese agricultural technologies in rural communities in Pakistan.

This one-day seminar was the first step in meeting the initiative's objectives. In line with national development strategies and the IFAD country strategic opportunities programme for Pakistan, additional actions will be taken to develop projects and policies that foster climate-resilient agricultural development in Pakistan. Throughout this process, IFAD will also seek synergies with other development initiatives, such as the agricultural cooperation initiative in the CPEC, to maximize the interests of smallholder farmers in Pakistan.

In the future, IFAD Pakistan will take the lead in exploring ways to develop pilot programmes, particularly for the technologies shared during the seminar. It will also work on strengthening and promoting South-South cooperation through both formal and informal interactions, including exposure visits and exchanges for expert practitioners, researchers, students and private sector actors. Technical trainings will be piloted in both countries to support investment. Upon completion of the pilot programmes, the initiative will explore private sector engagement in both countries to provide sustainable support and facilitate technology transfer.

Contact:

Name: Mr Hubert Boirard

Title: Country Director for Pakistan, Iran and Mongolia

Organization: International Fund for Agricultural Development (IFAD)

Email: h.boirard@ifad.org

PROJECT NAME: IFAD South-South Technical Cooperation Initiative: Pakistan-China Experience- Sharing Seminar on Building Climate Resilience and Sustainable Reforestation

COUNTRIES/REGIONS: China, Pakistan

NOMINATED BY: International Fund for Agricultural Development (IFAD)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 2.1, 13.3, 15.3, 15.4, 17.3, 17.4

SUPPORTED BY: Government of China, Government of Pakistan, IFAD

IMPLEMENTING ENTITIES: IFAD

PROJECT STATUS: Completed

PROJECT PERIOD: August 2019–December 2019

URL OF THE PRACTICE: <https://bit.ly/2YBur4H>



Drones for Resilience

Scaling up national capacity for disaster risk reduction and management in Maldives

Challenge

Formed by a chain of 1,200 islands in the Indian Ocean and home to nearly 400,000 people, Maldives is the lowest-lying country in the world. Most of the islands are threatened by climate change; 80 percent are only one metre above sea level. Maldives, and many other island nations around the world, could soon disappear without urgent action. Shorelines are already changing rapidly, and scientists predict that rising sea levels will submerge most of the islands by 2050.

Maldives also faces a constant risk of being impacted by natural events, such as tropical cyclones, storms, thunderstorms, drought, flooding from heavy rainfall, storm surges, swell waves and tsunamis. The islands also face climate-related hazards, such as changes in monsoon patterns and rising sea levels and surface temperatures. The consequences of these events are visible, and locals are already feeling their effects.

Towards a Solution

The 'Drones for Resilience' project, a public-private partnership between Dhiraagu Plc (a Maldivian telecommunications company) and the United Nations Development Programme (UNDP) Maldives, aims to promote the use of drone technology for community-based disaster resilience planning in Maldives.

The project focuses on incorporating drones to create detailed, real-time maps of four islands to be used in disaster risk assessment. The collected data improve local authorities' capacity for disaster preparedness and disaster risk management. The maps are also used by local and national officials for land-use planning and to identify high-risk areas and safe zones within the islands.

The project's objective is to improve the capacity of Addu City, in southern Maldives, to undertake risk-informed planning and develop evidence-based climate action plans. While data are a prerequisite for planning resilient communities, data collection for disaster risk reduction (DRR) is a challenge in Maldives, particularly at the local level. The project, therefore, provides information on integrating existing mapping efforts to create an evidence-based, data-driven disaster management information system. The collected data would be made available to both national decision makers and local communities.

As part of the project, representatives from the Addu City Council, the Maldivian Red Crescent (MRC) Addu Branch and Dhiraagu captured drone images of all the inhabited islands of Addu City. Once the images are processed, they will be used in a Geographic Information System (GIS). The National Disaster Management Authority (NDMA) assisted in layering these images with risk and hazard information collected by MRC. These maps will then be used by the Addu City Council for evidence-based planning that is mindful of disasters. The council can also layer additional information to be used in city planning that goes beyond DRR. A new subunit was formed within NDMA to serve as the primary hub for integrated disaster information and coordination.

While the newly formed subunit was tasked with addressing gaps in data, data integration, mapping and disaster information systems, the project also strengthened capacities in mapping and post analysis.



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To achieve Sustainable Development Goal target 13.1 on strengthening resilience and adaptive capacity to climate-related hazards and natural disasters, a two-day workshop on drone usage for resilience planning was held in Addu City for 20 participants. Presented under the partnership between Dhiraagu and UNDP Maldives, the workshop provided information on drone technology, practical lessons on manoeuvring, flight planning and execution, the risks and limitations of drone mapping and local regulations governing drone technology.

UNDP helped to facilitate the training with a consultant. After the trained group of volunteers produce the images, the consultant will process the raw data to create orthomosaic maps, which will be handed over to the council, along with the newly purchased drones, for future planning purposes. UNDP procured the drones through a local provider, and Dhiraagu provided the financing resources.

Drone technology can be used for disaster risk mapping, and drone operators require minimal training. The use of drones to **improve local disaster information systems is a cost-effective way to strengthen local capacities and collect reliable, real-time, high-quality data to improve local disaster prevention and action plans.** In addition, the drone training may be useful in future stages of risk assessment or could be applied to other areas. Finally, providing training to local communities encourages their involvement in finding solutions and helps to raise environmental awareness.

This innovative project combined drone mapping with techniques to capture quality images in order to improve the GIS, which was accessed through the private telecommunications company. Participants learned about local regulations on drone technology and helped to shape them. This collaboration between UNDP, MRC, the local community, the local gov-

ernment and the private sector is an example of a successful public-private partnership at the local level. Innovations in DRR can be applied to other areas, such as planning for housing, green projects, utility mapping and monitoring coastal erosion, particularly if these innovations could be linked to satellite imagery. This partnership can be duplicated and scaled up across all the atolls in Maldives.

With regard to sustainability, Maldives is moving towards fiscal decentralization. Local island councils will have access to 40 percent of local revenue and 5 percent of the national budget. They will establish and manage their own plans and budgets. This type of partnership could be incorporated in community-based DRR plans, in collaboration with the private sector, to ensure that this training and the expanded mapping feed into local policies.

In terms of replicability, NDMA, under the Ministry of Defence, was involved from the onset and is best placed to ensure that these good practices are incorporated in other areas and included in local budgets. This partnership model can also be replicated in other Small Island Developing States. The potential for replicating the use of drones in improving resilience relies on three components: cost-effectiveness; local capacity development; and reliable, high-quality information for local risk reduction action plans.

Contact:

Name: Mr Ahmed Shifaz

Title: Assistant Resident Representative, Resilience and Climate Change

Organization: United Nations Development Programme (UNDP) Maldives

Email: ahmed.shifaz@undp.org

PROJECT NAME: Drones for Resilience

COUNTRIES/REGIONS: Maldives

NOMINATED BY: United Nations Development Programme (UNDP) Maldives

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 11.b, 13.1

SUPPORTED BY: Dhiraagu Plc

IMPLEMENTING ENTITIES: UNDP Maldives, Addu City Council, Maldives Red Crescent (MRC) Addu Branch, National Disaster Management Authority (NDMA)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: tinyurl.com/trklo8t

Reduce Disaster Risks, Promote Country Resilience

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Reducing Risks, Promoting Resilience

17 PARTNERSHIPS FOR THE GOALS



Challenge

The hinterland of Eurasia experiences a typical arid climate and accounts for one third of the world's arid zones. This arid region is prone to a range of disasters, particularly flooding, earthquakes, landslides, drought and desertification. According to statistics released by the United Nations Economic and Social Commission for Asia and the Pacific in 2012, there were 16 earthquakes in Central Asia in the previous decade, with economic losses totalling US\$24 million. Floods impacted 19 percent of the population and caused an average of \$50.1 million in economic losses annually. Climatological disasters, including drought and desertification, impacted 7.2 percent of the population and caused \$107 million in economic losses.



Towards a Solution

China is highly effective in responding to climate change and natural disasters, including desertification, flooding and landslides. Significant efforts have been made to establish mechanisms for disaster risk reduction (DRR) and climate change adaptation (CCA) in disaster-prone areas. Since 2011, the United Nations Development Programme (UNDP) has been implementing climate change adaptation projects that aim to strengthen the institutional capacity and resilience of local communities that are vulnerable to climate risks.



Located in East Eurasia and bordering five Central Asian countries, the Xinjiang Uyghur autonomous region has the largest area of dry land in China and experiences similar climate conditions. As the core of the Silk Road Economic Belt, the government of Xinjiang has established a close partnership and fruitful cooperation on scientific research with colleges and institutions in Central Asian States.



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In order to strengthen regional international cooperation and share knowledge and experience in disaster risk reduction, a comprehensive mechanism is needed to promote knowledge-sharing between China and adjacent Central Asian States. The goal of this project is to raise public awareness of disaster prevention, strengthen the disaster risk reduction capacity of Central Asian States and improve capacities to respond to climate change and natural disasters. Drawing from the experiences and techniques acquired by China in previous decades, this project aimed to provide a model to guide construction in the Silk Road Economic Belt and sustainable development in Central Asia.

As the project manager, the Xinjiang Institute of Ecology and Geography (XIEG) was responsible for project operations and provided technical support in implementing and developing project activities. The Research Center for Ecology and Environment of Central Asia (RCEECA) acted as a collaborative partner and was responsible for implementing specific project activities. As the government representative, the China International Center for Economic and Technical Exchanges (CICETE) worked with UNDP to monitor project implementation and ensure overall project oversight and quality assurance.

With regard to the methodology applied, the following steps were taken:

- A platform was established, creating sub-centres for DRR/CCA research, ecosystem field obser-

- vation sites and a research network, as well as information sub-centres to strengthen capacity for DRR and CCA.
- Technical pilot demonstration sites were established to promote community-based DRR technology and facilitate knowledge-sharing in local communities.
 - Historical information was collected and a disaster database was created for flooding and drought in Central Asia.
 - A risk map was developed for flooding and drought in Central Asia and a disaster risk assessment report was drafted for Lake Sarez.
 - Technical training and capacity-building were carried out through workshops, field visits, policy dialogue and other exchange initiatives to shape DRR/CCA policies.

The project has achieved the following results:

- **Three RCEECA sub-centres were established in Almaty, Bishkek and Dushanbe. Each sub-centre comprises of an information sub-centre, joint laboratory, field observation, research station and demonstration base for agricultural technology. These sub-centres serve as an important platform for scientific, technological and educational cooperation between China and Central Asian States.** They play an active role in promoting cooperation and personnel training in the fields of ecological and environmental protection, the sustainable use of resources, agricultural development, mineral resource exploration, disaster monitoring and early warning systems.
- Twelve ecosystem field observation and research stations for glaciers, mountains, woodlands, grasslands, farmlands, wetlands and deserts were set up along the Altai Mountains, the Tianshan north slope, the Tianshan south slope and the Pamir Mountains in order to observe and evaluate the ecosystem's response to climate change in the Central Asian arid region.
- Five pilot demonstration sites were upgraded or established in Central Asian States. They focused on agricultural water saving and saline soil improvement in Kazakhstan, agricultural water saving in Uzbekistan, high-production agriculture in Tajikistan, facility agriculture in Kyrgyzstan and safe drinking water in Kyrgyzstan.

- Paper records from Central Asian States were collected, translated professionally, registered and digitized to create a preliminary database of disasters and historical information on flooding and drought in Central Asia.
- A risk map was developed for flooding in Kyrgyzstan and Tajikistan and drought in Kazakhstan.
- A comprehensive analysis of dam safety and flood prevention and control was undertaken using high-precision drone data from the Usoy Dam in Lake Sarez in combination with historical data on earthquakes, geology and hydrology. The report was prepared and submitted to the President of Tajikistan and the Secretary-General of the United Nations.
- Approximately nine DRR technical trainings, four trainings on drones and remote sensing technology, and one training on writing scientific papers were carried out.
- Over 10 international seminars and workshops, as well as a high-level forum, were organized successfully. There were over 7,500 participants from over 40 countries who shared knowledge and exchanged experiences.

Phases I and II of the project are easily replicable and have been successfully completed, due to the support of RCEECA, XIEG, CICETE, UNDP China and other academic institutions from Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. The project's cooperation modality and activities could be replicated in other developing countries in future projects, so long as the country has relevant needs that are consistent with the goals and results of this project. The Government and local scientific research institutions must also be willing to participate and provide support. In addition, the technology and achievements of this project must apply to local conditions, and there must be sufficient funds and human resources to support the project's implementation.

Contact:

Name: Ms Sujuan Zhang
 Title: Team Leader, China South-South Facility, Global Partnership Cluster
 Organization: United Nations Development Programme (UNDP) China
 Email: sujuan.zhang@undp.org

PROJECT NAME: Integrated Disaster Risk Reduction and Climate Change Adaptation in Central Asia
COUNTRIES/REGIONS: China, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan
NOMINATED BY: United Nations Development Programme (UNDP) China
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 13.1, 13.3, 13.b, 17.9, 17.16, 17.17
SUPPORTED BY: Xinjiang Institute of Ecology and Geography of the Chinese Academy of Sciences (XIEG), Research Center for Ecology and Environment of Central Asia (RCEECA)
IMPLEMENTING ENTITIES: UNDP, China International Center for Economic and Technical Exchanges (CICETE)
PROJECT STATUS: Completed
PROJECT PERIOD: 2015–2019
URL OF THE PRACTICE: <https://bit.ly/3jc31u4>

South-South Cooperation on Climate Change in Francophone Africa

Preventing the consequences of climate change by strengthening South-South cooperation in francophone Africa

Challenge

Action to tackle the impacts of climate change is key to addressing environmental and social challenges facing the African continent and finding relevant solutions to achieve the Sustainable Development Goals. It is difficult to identify good practices that can be replicated and promoted in francophone Africa and beyond. Capacities and expertise are limited in rural communities in Africa. In addition, community-based organizations do not engage effectively in South-South cooperation efforts. Many francophone African countries have fragile social and economic contexts. There is also a lack of capacity, financing and access to affordable technologies, as well as weak support from public authorities.

Towards a Solution

The objective of the non-governmental organization Initiatives Climat [Climate Initiatives] (IC) is to combat climate change through South-South cooperation in francophone Africa and to contribute to the implementation of the 2030 Agenda for Sustainable Development by:

- Identifying good practices to combat climate change and promoting them during international events and on media platforms.
- Transferring available good practices and technologies to civil society organizations (CSOs) and green and social entrepreneurs in francophone Africa.
- Engaging project leaders in the implementation of concrete South-South cooperation projects.

A learning platform and best practices database was established for communities, CSOs, green youth entrepreneurs and municipalities. To promote participation on the platform, IC organizes an annual competition to identify best practices, and winners receive awards. As a result, the platform currently contains 230 initiatives and has become a valuable tool for learning about and sharing good practices, designing ideas, learning from the experience of others and implementing projects.

To foster the acquisition of new knowledge and the dissemination of new practices (including technology transfer) between project leaders in 15 francophone Africa countries, IC organized four collaborative trainings and two research and development workshops on solar energy, green charcoal and agroecology.

These technology transfer trainings and workshops enabled the programme to identify the current needs of beneficiaries and respond with concrete actions in the field. **They also provided the opportunity to disseminate information, compare situations between countries and provide collective responses to common problems. As a result, project leaders can find solutions to the difficulties they encounter by examining the approaches used by others.** For example, Senegal has shared its experience in solar energy with Guinea and Morocco, and 10 countries are currently working to produce green charcoal based on prototypes designed during the research and development workshops. Furthermore, the 'Improved Traditional Granary' model for seed storage developed in Senegal has now been replicated in six countries.

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5 GENDER EQUALITY



7 AFFORDABLE AND CLEAN ENERGY



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In addition to the online database, IC has created several community networks, including a network of correspondents from 13 African countries who identify good practices and technologies and analyse local needs to improve and upscale them. The African Green Charcoal Cluster is a network of producers from 10 countries who exchange knowledge on the production and commercialization of green charcoal, including information on certification. The network of project leaders committed to agroecology established an African seed bank, and members regularly exchange knowledge on innovative practices. The network of Green Entrepreneurs from 15 African countries gathers once a year during its annual Forum on Youth and Green Entrepreneurship in Francophone Africa to review progress and challenges, design new common solutions and promote South-South collaboration.

Thanks to IC, the project leaders identified in the databases, particularly IC award winners, have improved their reputations among local authorities and governments, enabling them to create new partnerships.

Contact:

Name: Ms Meriem Houzir

Title: President and Coordinator of the Climate Initiatives Francophone Africa Programme

Organization: Initiatives Climat

Email: houzimeriem@gmail.com

WhatsApp: +212 622 117 038



PROJECT NAME: Climate Initiatives Francophone Africa

COUNTRIES/REGIONS: Algeria, Benin, Burkina Faso, Cameroon, Chad, Congo, Côte d'Ivoire, Djibouti, Gabon, Guinea, Madagascar, Mali, Mauritania, Morocco, Niger, Rwanda, Senegal, Togo, Tunisia

NOMINATED BY: Global Environment Facility (GEF) Small Grants Programme, United Nations Development Programme (UNDP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.1, 7.1, 7.2, 13.3

SUPPORTED BY: Swiss Development Cooperation, GEF Small Grant Programme, UNDP, International Organization of La Francophonie

IMPLEMENTING ENTITIES: Initiatives Climat

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <http://www.initiativesclimat.org>

Advancing the Green Economy for Sustainable Development

Bridging countries and facilitating partnerships for global action to promote the green economy

Challenge

The priorities and concerns identified during the United Nations Conference on Sustainable Development (Rio+20) provide a historic platform for establishing an international entity to promote the widespread and increased adoption of the green economy in the context of sustainable development and poverty eradication. Such an entity could serve as a platform for international cooperation and knowledge-sharing among industrialized and developing countries. In response, the World Green Economy Organization (WGEO) was established to support emerging global actions towards the widespread adoption of the green economy model.

As a global partner for developing countries transitioning to a green economy, WGEO would tap into the potential of South-South and triangular cooperation to balance growth and equity on a global scale, in complementarity with the traditional North-South cooperation model.

Towards a Solution

In order to achieve the ambitious agenda and long-term vision of WGEO, the United Nations Office for South-South Cooperation (UNOSSC) helped to mobilize action around seven WGEO partnership platforms. The role of UNOSSC in this project is also to showcase the effectiveness of the South-South and triangular cooperation model in further catalysing the adoption of green economy approaches, as well as enhancing its intensity and dynamics. Working in close cooperation with other partners, UNOSSC helped to connect the values of WGEO to the needs and aspirations of its numerous stakeholders.

In cooperation with the United Nations Development Programme (UNDP) and other United Nations agencies, funds and programmes, UNOSSC supported the partnership mobilization and global outreach efforts of WGEO, given that the majority of WGEO stakeholders and beneficiaries come from the global South. In doing so, UNOSSC facilitated the sharing of knowledge and expertise with relevant initiatives supported by UNOSSC, such as the annual Global South-South Development Expo, the Maritime-Continental Silk Road Cities Alliance and the Think Tank Network.

The partnership mobilization focused on engaging stakeholders as potential members of WGEO or partners in the implementation of its mandate. Membership within the WGEO is open to:

- Governments of WGEO member States
- International organizations, including United Nations agencies, funds and programmes such as the United Nations Industrial Development Organization, the United Nations Environment Programme, the United Nations Framework Convention on Climate Change (UNFCCC) and others
- Private sector entities, financial institutions, philanthropic organizations and other entities that meet the highest standards of reputability
- Municipalities (smart cities) and other constituent units or political subdivisions of WGEO member States or potential member States, as well as associations or other cooperative undertakings of municipalities and cities
- Leading academic institutions, including research and educational institutions whose activities are relevant to WGEO



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- International non-governmental organizations with experience in several States, of which at least one is a State member of WGEO
- Youth associations or organizations supported by the appropriate authorities of WGEO member States or potential member States

Global outreach efforts focused primarily on overall advocacy initiatives contributing to the widespread adoption of the green economy model, the promotion of home-grown systems and mechanisms for an inclusive green economy, and the upscaling of research and knowledge-sharing in the domain. A number of deliverables were produced to create platforms for further collaboration and build the capacities of policymakers around the world in adopting and advancing green economy strategies in national development agendas.

The initiative produced a range of strategic achievements, including:

- WGEO Executive Training is a recognizable brand that was created through engagement with strategic partners, including the International Solar Alliance, the Global Green Growth Institute (GGGI), UNDP, the Economic and Social Commission for Asia and the Pacific, the Economic and Social Commission for Western Asia, and the Economic Commission for Latin America and the Caribbean.
- A total of 330 executives and practitioners have been trained, including representatives from Governments, international organizations, the private sector and civil society institutions from around the world.
- **Policy dialogue was facilitated, leading to specific policy recommendations owned and shared by a wide range of stakeholders through the joint statements adopted at five regional ministerial conferences on green economy, issued by over 535 officials from 91 countries worldwide.**
- A network of government and institutional focal points on green economy has been developed, and regular contact is maintained.
- Partnerships were facilitated with GGGI, UNFCCC, the United Nations Global Compact, the International Solar Alliance, United Nations economic and social commissions, the Brazil Africa Institute, the Asia Foundation and a number of other institutions.

A series of substantive networking and knowledge exchange forums were organized in 2019:

- 2019 Asia-Pacific Regional High-Level Forum on Green Economy, held in Bangkok, Thailand from 10 to 12 June, with 95 participants from 21 countries
- 2019 Africa Regional Ministerial Conference on Green Economy, held in Cairo, Egypt from 17 to 19 June, with 100 participants from 22 countries
- 2019 Americas Regional Ministerial Conference on Green Economy, held in Fortaleza, Brazil from 24 to 26 June, with over 80 participants from 11 countries
- 2019 Middle East and North Africa Regional Ministerial Conference on Green Economy, held in Manama, Bahrain from 2 to 4 July, with 130 participants from over 20 countries
- 2019 Europe and the Commonwealth of Independent States Regional Ministerial Conference on Green Economy, held in Tashkent, Uzbekistan from 8 to 10 July, with over 130 participants from 17 countries
- 2019 Global High-Level Ministerial Conference on Green Economy, held in Dubai, United Arab Emirates on 20 and 21 October as part of the 2019 World Green Economy Summit, with 130 ministerial-level participants and senior members of international organizations and United Nations agencies

The joint statements issued at the regional conferences express the collective aspirations and intentions to advance the green economy. Outputs produced during the initiative are based on ownership and strong demand from countries and institutions for collaboration on climate action and the green economy, proof that the results achieved will be sustainable. This initiative can be replicated with other global development partners who intend to fulfil the potential of South-South and triangular cooperation in a variety of areas.

Contact:

Name: Mr Edem Bakhshish
 Title: Global Director of the Joint UNOSSC-WGEO Project
 Organization: United Nations Office for South-South Cooperation (UNOSSC)
 Email: edem.bakhshish@worldgreeneconomy.org
unosscc-information@unosscc.org

PROJECT NAME: Joint WGEO-UNOSSC Initiative on Partnership Mobilization and Global Outreach Support for the World Green Economy Organization
COUNTRIES/REGIONS: Global
NOMINATED BY: United Nations Office for South-South Cooperation (UNOSSC)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 13.1, 13.2, 17.13, 17.16
SUPPORTED BY: World Green Economy Organization (WGEO)
IMPLEMENTING ENTITIES: UNOSSC
PROJECT STATUS: First phase completed
PROJECT PERIOD: June 2018–2019
URL OF THE PRACTICE: <https://bit.ly/2FTKl3S>

The Initiative for the Adaptation of African Agriculture (AAA)

Promoting concrete projects on soil management, agricultural water management, and climate risk management to help African countries implement their Paris Agreement Nationally Determined Contributions

Challenge

Africa is particularly affected by climate change. Six of the ten most affected countries in the world are in Africa, 65 percent of the African population is already affected and the continent already has more than 10 million climate refugees. The negative effects of climate change are reducing Africa's Gross Domestic Product (GDP) by about 1.4 percent to date and entail adaptation costs of up to 3 percent of GDP per year in 2030. Adaptation to climate change is therefore a crucial issue for African agriculture, as it poses a direct threat to the living standards and food security of the continent's populations.

Africa's production potential remains enormous. Indeed, 60 percent of the world's remaining unused arable land is in Africa. According to experts, African agriculture is part of the solution to ensure food security for Africans and the world. With adequate resources, African agriculture would be able not only to adapt to climate change, but also to meet the challenges of productivity and sustainable development.

Towards a Solution

Launched upstream of the 2016 United Nations Climate Change Conference (COP22), organized in Morocco, the AAA Initiative aims to reduce the vulnerability of Africa and its agriculture to climate change.

The initiative aims to place the Adaptation of African Agriculture at the heart of climate negotiations and their financial aspect, and to foster the implementation of solutions, particularly within the framework of the Global Climate Action Agenda. It also aims to contribute to food security in Africa, improve the living standards of vulnerable farmers and promote employment in rural areas through adaptation practices to climate change, building the capacity of actors and channeling financial flows to the most vulnerable farmers.

Implemented by the AAA Initiative Foundation, this initiative makes a significant contribution to strengthening South-South cooperation. Indeed, it is included as an axis of cooperation in the framework of the agreements signed between Morocco and African countries (Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, Madagascar, Mali, Nigeria, Rwanda, South Sudan, the United Republic of Tanzania, and Zambia)

The AAA initiative aims to make South-South and triangular cooperation key mechanisms for sustainable development and the fight against climate change in Africa through the development and promotion of solutions to combat climate change and the promotion of technology and knowledge-sharing. The initiative contributes to the strengthening of collaboration and commercial networks in the service of Southern countries and to the implementation of solutions for development, thus contributing to the achievement of the 2030 Agenda for Sustainable Development.

In 2017, the AAA Initiative started preparing bankable Climate Smart Agriculture Investment Plans (CSAIPs) for African countries, in partnership with local African experts and international partners such as the World Bank, the NDC Partnership- Federal Ministry for Economic Cooperation and Development (BMZ), The Agence Française de Développement (AFD) Group funds, International Centre for Tropical Agriculture (CIAT), and the Food and Agriculture Organization of the United Nations (FAO). CSAIPs aim to support priority investments in agricultural systems for enhanced productivity, adaptation and/or mitigation of cli-

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mate change. They also aim to identify weaknesses in knowledge or readiness for implementation and propose actions to overcome these constraints. They build on countries' ongoing strategies and programs and are implemented within the institutional and policy frameworks and capacity constraints of individual countries at both national and subnational level.

In 2018, three CSAIPs were already prepared for Côte d'Ivoire, Mali and Morocco, and three others were launched in 2019, for Burkina Faso, Cameroon, Congo, and Ghana.

Climate Smart Agriculture (CSA) is not a set of practices. It is an innovative approach to selecting and implementing agricultural practices, policies and services that are tailored to the context, in both space and time, and are integrated to work together, maximize synergy and minimize tradeoffs. It focuses on the three pillars of enhancing food security: (i) sustainably increasing production, (ii) enhancing resilience (adapting) to climate change, and (iii) mitigating greenhouse gas emissions, where possible and appropriate.

In order to contribute to the achievement of the Sustainable Development Goals (SDGs) in the face of climate change, agricultural production systems must simultaneously address three interrelated challenges, namely increasing agricultural productivity and incomes in a sustainable manner, building resilience to the effects of climate change, and contributing to climate change mitigation where possible.

This is achieved through the promotion of climate-sound management practices that have a proven track record of evidence-based effectiveness, and the creation of an enabling environment in terms of policies, institutions and financing.

The result of the CSAIP is a suite of country-supported and scientifically vetted investments that are most likely to achieve national food security and climate targets. The tangible output of the CSAIP is a comprehensive document that summarizes (i) why CSA is important in the national context; (ii) which project concepts would, if financially supported, best achieve the desired CSA impacts; and (iii) a general framework for monitoring and evaluation for CSA that relates to other national monitoring frameworks.

The CSAIP development team may be selected within the country, contracted internationally or a combination of the two. All CSAIP teams need an in-country facilitator to engage stakeholders, a group that includes key individuals from multiple sectors specializing in agriculture, rural development, climate change and planning. For example, stakeholders could include high level representatives of government agencies and ministries, the private sector, relevant NGOs, farmer organizations and potential implementers and donors. Technical experts, extension workers, researchers, farmers and academics are all crucial to ensure that the investments are practical and viable within the context. Such diverse representation helps ensure that investments are aligned with policy, organizational goals and national priorities, and creates an authorizing environment for development of the CSAIP.

Contact:

Name: Mrs Loubna Chamim

Title: Advocacy Director

Organisation: AAA Initiative Foundation

Email: loubna.chamim@aaainitiative.org

WhatsApp: +212 657 831 991

PROJECT NAME: AAA Initiative

COUNTRIES/REGIONS: African countries

NOMINATED BY: Annual Conference of African Ministers

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.5, 2.4, 2.a, 3.9, 4.7, 5.1, 6.3, 6.a, 6.b, 7.a, 8.4, 8.2, 8.3, 8.10, 9.1, 9.a, 10.6, 10.b, 11.b, 12.2, 12.3, 12.a, 13.1, 13.2, 13.3, 13.a, 13.b, 15.9, 15.a, 16.8, 16.b, 17.1, 17.3, 17.6, 17.7, 17.8, 17.9, 17.14, 17.15, 17.16, 17.17

SUPPORTED BY: 36 African countries, +10 donors (French Development Agency, World Bank, African Development Bank, Food and Agriculture Organization of the United Nations (FAO), The Global Environment Facility (GEF), International Fund for Agricultural Development (IFAD), Green Climate Fund (GCF), Islamic Development Bank (IsDB), German Agency for International Cooperation (GIZ), NDC Partnership- Federal Ministry for Economic Cooperation and Development -BMZ), 8 scientific communities (National Institute of Agronomic Research (Morocco), Massachusetts Institute Technology, Consultative Group for International Agricultural Research (CGIAR), The Ohio State University, Centre for International Cooperation in Agricultural Research for Development (CIRAD), Grantham Institute, International Center for Agricultural Research in the Dry Areas (ICARDA), The Alliance of Biodiversity International, the International Center for Tropical Agriculture (CIAT), International Center for Bio saline Agriculture (ICBA), Hassan II Agronomic and Veterinary Institute (IAV), Meknes School of Agriculture (ENA), Global Partnership, The International Food Policy Research Institute (IFPRI), 9 private Sector (OCP Groupe, Crédit Agricole du Maroc, Land Degradation Neutrality Fund, Natixis, East Africa Exchange, Mirova, The Global Mechanism, Private sector in Germany such as Crop Trust, BASF...etc

IMPLEMENTING ENTITIES: AAA Foundation

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–ongoing

URL OF THE PRACTICE: www.aaainitiative.org



Coral Restoration Project

Reducing the impact of climate change on local communities and coral reef-dependent economic sectors in Mauritius and Seychelles by carrying out coral reef restoration with heat-tolerant corals

Challenge

In recent decades, climate change has intensified coral mortality and bleaching events, which are predicted to further increase in frequency and intensity. In Mauritius and Seychelles, coral reefs and their coastal and marine ecosystems have been threatened by habitat destruction and fragmentation caused by coastal development, overexploitation of fishery resources, destructive fishing practices, pollution, invasive alien species and recurrent bleaching events, particularly those that occurred in 1998, 2016 and 2018.

Beaches in Mauritius have shrunk by as much as 20 metres in recent decades due to rising sea levels and weakened coral ecosystems. The Government indicates that the resulting loss of tourism could cost over US\$100 million per year by 2060 if no action is taken. In Seychelles, the nation's marine ecosystems have been significantly impacted by chronic coastal erosion from increased demand for construction along the coasts, regular coastal flooding, the destruction of marine and coastal habitats, overfishing and other impacts.

Towards a Solution

In response to these challenges, the Mauritius Oceanography Institute (MOI) established a programme in 2008 to develop techniques for coral culture and small-scale reef rehabilitation. Successful implementation of this experimental phase has prompted MOI and other local partners, together with their Seychelles counterparts, to scale up the project to incorporate large-scale reef restoration in both countries.

To reduce the adverse impact of climate change on local communities and economic sectors dependent on coral reefs in Mauritius and Seychelles, the project entitled 'Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future' aims to develop sustainable partnerships and community-based, business-driven approaches for reef restoration. It also seeks to establish coral farming and nursery facilities and actively restore degraded reefs. On a regional and international level, the project will improve understanding on the use of coral reef restoration as a tool for climate change adaptation, provide models for the sustainable management of reef ecosystems and build capacity for the long-term restoration and management of these precious habitats. The project directly addresses Sustainable Development Goal target 14.2, on sustainably managing, protecting and restoring marine and coastal ecosystems, and target 14.5, on conserving at least 10 percent of coastal and marine areas.

The Governments of Mauritius and Seychelles have received a new US\$10 million grant from the United Nations Development Programme Adaptation Fund to restore their reef ecosystems. The new six-year **project will protect their growing tourism industries, which account for over 30 percent of their gross domestic product and employ approximately half of the population in both countries. It will also reduce risks from high-intensity storms and ensure food security for fishers who depend on the reefs to feed their families.**

In Mauritius, the project's objectives are to develop a sustainable partnership and community-based approach to reef restoration, establish coral farming and nursery facilities and actively restore degraded reefs. In Seychelles, the project aims to develop a sustainable partnership and business approach to reef restoration, establish coral farming and nursery facilities, actively restore degraded reefs, improve understanding and knowledge management on the use of coral reef restoration for climate change adaptation, share experiences learned in sustainable coral reef restoration at the regional and international level and provide training to build capacity for long-term, sustainable coral reef restoration.

The project also provides an opportunity for South-South exchange between the two countries. This will include knowledge-sharing on coral culture techniques. MOI will conduct

site selection surveys, geographic information system mapping and water analyses and will identify heat-resistant coral genetics for its counterparts in Seychelles. In return, experts in Seychelles will train their Mauritian counterparts on techniques in microfragmentation and sexual propagation of corals. Finally, a genetic connectivity study between the two countries will also be undertaken. A Restoration Toolkit Manual will also be published at the end of the project, which can be used as a good practice manual to replicate the project in the Western Indian Ocean region.

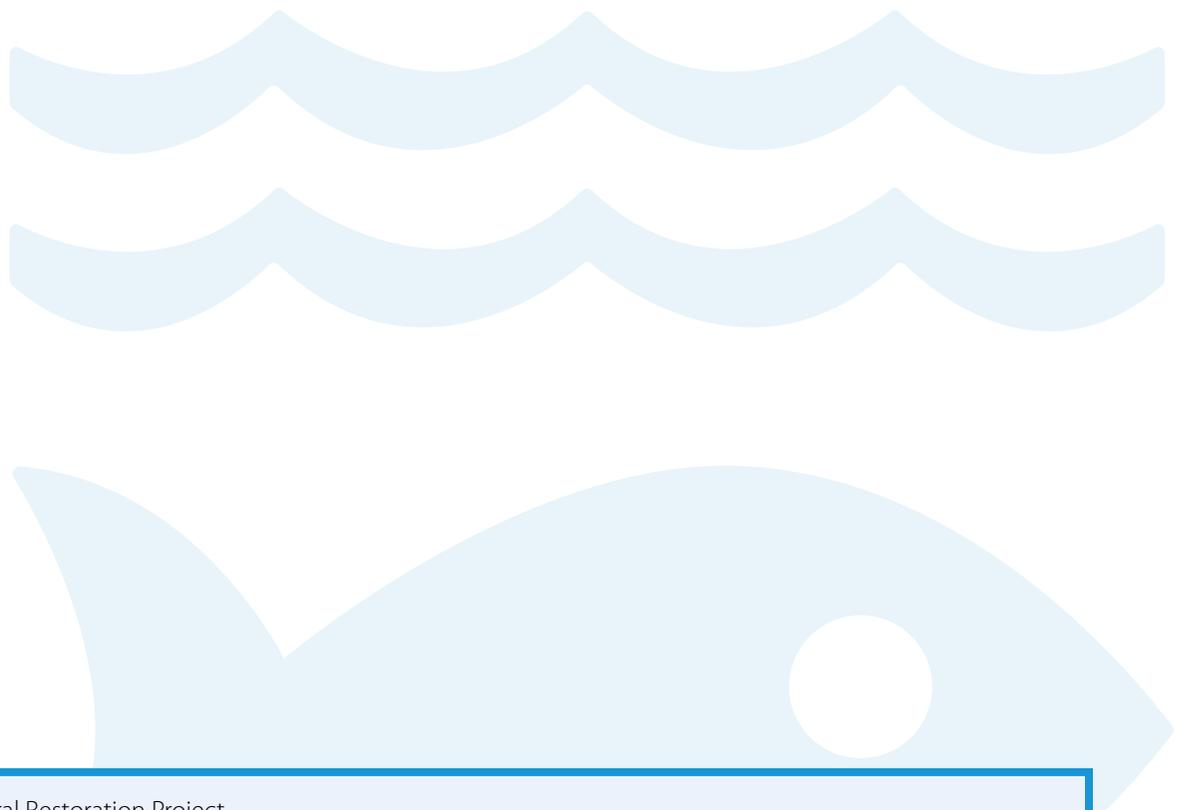
Contact:

Name: Dr Ruby Moothien Pillay

Title: Director

Organization: Mauritius Oceanography Institute

Email: rubykm@moi.intnet.mu



PROJECT NAME: Coral Restoration Project

COUNTRIES/REGIONS: Mauritius, Seychelles

NOMINATED BY: Government of Mauritius

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 14.2, 14.5, 14.7, 14.a

SUPPORTED BY: United Nations Development Programme (UNDP) Adaptation Fund Board

IMPLEMENTING ENTITIES: Mauritius: Ministry of Blue Economy, Marine Resources, Fisheries and Shipping - Albion Fisheries Research Centre; Mauritius Oceanography Institute

Seychelles: Ministry of Environment, Energy and Climate Change - National Parks Authority; Marine Conservation Society of Seychelles; Nature Seychelles

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2020–2025

URL OF THE PRACTICE: <https://bit.ly/2YE54iF>



Ecofish Programme

Enhancing economic growth by promoting sustainable fisheries in Eastern and Southern Africa and the Indian Ocean

Challenge

Inland and marine coastal fishery resources in the Eastern and Southern Africa and the Indian Ocean (ESA-IO) region represent a natural wealth of approximately 50 billion euros and could easily generate a gross annual income of approximately 5 billion euros. However, the challenge of sharing exclusive economic zones and lakes has caused disputes and led to unsustainable management of fish stocks, exacerbating inequalities and encouraging corrupt practices. The productivity of inland lakes and lagoons is undermined by overfishing, unethical fishing practices and environmental degradation, which is aggravated by land-based effluents and climate change.

In an effort to combat illegal, unreported and unregulated (IUU) fishing in the region and address unsustainability in capture fisheries, the Ecofish Programme was adopted by the five Indian Ocean Commission (IOC) member states and three ESA countries (Kenya, Mozambique and the United Republic of Tanzania).

Towards a Solution

Launched in July 2019, the Ecofish Programme is a multi-faceted undertaking funded by the Eleventh European Development Fund. This cross-regional initiative, which will receive 28 million euros over five years, aims to demonstrate the added value of regional cooperation in attaining sustainable fisheries, with a view to addressing post-harvest losses, maximizing economic and ecological benefits and combating IUU practices.

The Programme is managed jointly by the European Union (EU) Delegation to Mauritius and the IOC Secretariat, in partnership with the Duly Mandated Regional Organisation, regional fisheries bodies and several development partners. The ultimate beneficiaries of the Programme are the 22 countries of the African, Caribbean and Pacific Group of States that are located in the region. Ecofish builds on the achievements, lessons learned and best practices of the SmartFish Programme, funded by the Tenth European Development Fund, and seamless collaboration with other concurrent initiatives to enhance the sustainable management of inland and marine fisheries in the region. The goal of the Programme is to advance economic efficiency, social equity and environmental integrity.

The Ecofish Programme comprises five work plans that are implemented directly or indirectly by EU Mauritius and regional implementing partners. The Lake Victoria and Lake Tanganyika fisheries constitute the two inland shared fisheries work plans. The IOC Secretariat is responsible for the implementation of the ESA-IO marine fisheries work plan and is also hosting the Programme Integration Management Unit.

Ecofish is poised to effect a significant shift in the regional fisheries landscape by addressing the root causes and problems of overfishing and unsustainable fishing practices, as well as the degradation of fishery ecosystems, through the operationalization of appropriate policy, institutional and governance frameworks at various levels. Special attention is devoted to enforcement and compliance, monitoring, control and surveillance to combat IUU fishing and fisheries-related crimes that exacerbate inequalities among the poorest communities.



The Programme has called for proposals to champion model projects that demonstrate sustainable, inclusionary and climate-smart fish value chains in local communities across the region, with a view to promoting the sustainable and inclusive rehabilitation and modernization of small-scale fisheries as an engine for growth.

In the wild fisheries of the ESA-IO region, small-scale fisheries account for 100 percent of inland and 90 percent of marine fishery resources. These are predominantly poorly regulated, open access and fall under the informal economy. The remaining 10 percent of marine fisheries constitute the industrial segment, which is relatively well managed given the direct connection to the profitability of multinational business corporations. When managed well, these fishery resources can contribute to improving the livelihoods, well-being and cultural diversity of local communities and larger populations.

The Programme has established an Integrated Governance Architecture to engage all key stakeholders at the local, national and regional levels in a macro-to-micro and micro-to-macro approach to problem-solving.

A proactive Regional Coordination Platform has been developed to enhance synergies and partnerships among donors, development agencies and other key stakeholders in marine fisheries and related environmental sectors. The Programme is also launching the Blue Economy Fisheries Satellite Account

for a data-driven awareness-raising campaign on the sector's real economic contribution to national economies.

Although there are numerous fishery policies and strategies in the ESA-IO region, capacities are lacking to implement them effectively. The gap between policy declarations and actions is due to informational asymmetries, weak governance structures, a lack of basic social services in fishing communities, the absence of fishery infrastructure and market logistics.

The region must ensure that commitments are backed by action. It must reverse this trend by promoting an appropriate political economy to decouple economic growth and shared prosperity from the exploitation of fishery resources and the degradation of natural habitats amid climate risks.

This Programme may be replicated both for sustainable inland and high seas fishing where cooperation among neighbouring countries is essential.

Contact:

Name: Dr Soobaschand Sweenarain

Title: Team Leader/Technical Coordinator

Organization: Ecofish Programme, Eleventh European Development Fund

Email: sweenmru@gmail.com

Skype: sween2609

PROJECT NAME: Ecofish Programme

COUNTRIES/REGIONS: Eastern and Southern Africa and the Indian Ocean region: Madagascar, Mauritius, Mozambique, Seychelles, Somalia

NOMINATED BY: Government of Mauritius

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.b, 2.1, 5.a, 8.b, 14.7

SUPPORTED BY: European Union, Eleventh European Development Fund Cross-Regional Initiative

IMPLEMENTING ENTITIES: Indian Ocean Commission

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2024

URL OF THE PRACTICE: <https://bit.ly/2YCehYJ> (in French)

Technical Assistance for the ‘International Course on Sustainable Aquaculture in Molluscs and Macroalgae in Africa’

Coming together across three continents and three oceans

Challenge

The sustainable development of aquaculture could provide a real alternative for food production and a partial substitute for products derived exclusively from fisheries. In the long run, this will lead to more sustainable fishing.

The coasts of Mozambique and Angola are well suited to developing aquaculture projects for molluscs and macroalgae, as well as fish. In addition to providing an alternative source of food for domestic consumption and export revenue, mollusc farming and seaweed cultivation also provide an excellent opportunity to create jobs and limit the exploitation of fishing resources, which contributes to their sustainability.

Given the coastal characteristics, existing markets and export objectives of Mozambique and Angola, as well as the product and by-product values, the development of marine aquaculture will occur mainly through the cultivation of molluscs and macroalgae. Large-scale farming of saltwater fish will be employed in the future.

Mozambique and Angola are therefore seeking technical solutions to develop aquaculture and diversify the species cultivated and the production systems adopted.

Towards a Solution

This project resulted from a scientific mission in late-2016, during which representatives from the Universidad Católica del Norte [Catholic University of the North] in Chile travelled to Mozambique for a week of training at the National Institute for Fisheries and Aquaculture Development. The initiative also stemmed from discussions with authorities from Mozambique during a visit to Chile in April 2016, in which areas for sectoral cooperation between Santiago and Maputo were identified. At that time, aquaculture was prioritized.

On 19 May 2016, the Agencia Chilena de Cooperación Internacional para el Desarrollo [Chilean Agency for International Cooperation for Development] (AGCID) and the Camões Institute for Cooperation and Language of Portugal signed a memorandum of understanding for the development of triangular cooperation projects. Portugal provided technical assistance, in the form of two trainers, to an intensive aquaculture module entitled 'International Course on Sustainable Aquaculture in Molluscs and Macroalgae in Africa', which was offered to officials from the Ministries of Fisheries in Mozambique and Angola, as well as other experts. It was held at the Universidad Católica del Norte, in Coquimbo, Chile.

The international course focused on promoting sustainable aquaculture in Africa as a real alternative for food production and an opportunity to create jobs and limit the exploitation of fishery resources. The goal of the course was to train professional and technical personnel in the cultivation of molluscs and macroalgae at all stages, in order to improve the planning, execution and implementation of new government or community projects in that connection.



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Chile hosted the course at the Universidad Católica del Norte for trainees from Mozambique and Angola. AGCID provided financial support, and the Camões Institute provided two trainers.

The Portuguese trainers were selected from the private sector, in collaboration with the Ministry of the Sea of Portugal. They were able to share their experience in the field of aquaculture and strengthen technical and scientific ties with Angola, Chile and Mozambique.

Under this project, triangular cooperation allowed for a broader partnership with other development actors, such as the Portuguese private sector, to share expertise with public officials from Angola and Mozambique. This project forged partnerships that went beyond the traditional North-South approach.

The project's training contributions have had a multiplier effect in the beneficiary countries, as they **created synergies among sectoral institutions, academia and cooperation agencies. The project helped to share expertise and allowed for mutual learning, with significant benefits for all parties involved.** It also built trust between the parties, which is important for establishing new partnerships.

The project was tailored to the context and target beneficiaries, since Angola, Mozambique and Portugal share a language and other cultural aspects.

This project improved ownership and leadership by partner countries, which benefited from an effective division of responsibilities. It brought together experts from three continents and from the private sector to share their unique knowledge. The course also employed a context-specific approach, tailoring interventions to the country's specific needs, wherever possible, in an effort to adapt European and South American expertise to African contexts.

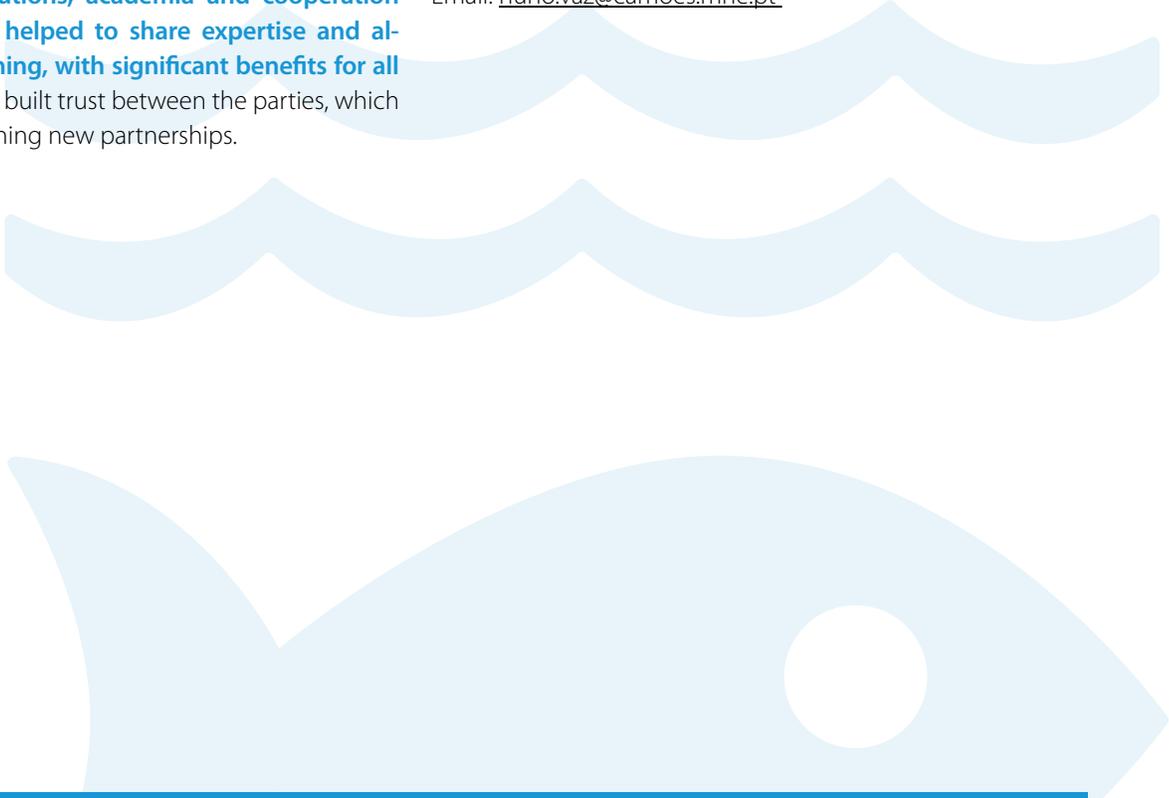
Contact:

Name: Mr Nuno Vaz

Title: Development Cooperation Expert

Organization: Camões – Institute for Cooperation and Language (Portuguese Ministry of Foreign Affairs)

Email: nuno.vaz@camoes.mne.pt



PROJECT NAME: Technical Assistance to the 'International Course on Sustainable Aquaculture in Molluscs and Macroalgae in Africa'

COUNTRIES/REGIONS: Angola, Chile, Mozambique, Portugal

NOMINATED BY: Chile

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.b, 12.a, 13.3, 14.7, 14.a, 15.5, 17.6, 17.9

SUPPORTED BY: Universidad Católica del Norte (Chile); Chilean Agency for International Cooperation for Development; Camões – Institute for Cooperation and Language (Development Agency, Ministry of Foreign Affairs, Portugal)

IMPLEMENTING ENTITIES: Universidad Católica del Norte

PROJECT STATUS: Completed

PROJECT PERIOD: 16–26 October 2017

URL OF THE PRACTICE: Not available

Integrated Biodiversity and Ecosystem Conservation in Asia and Africa for the Sustainable Use of Terrestrial Ecosystems

Mobilizing resources at all levels with an innovative horizontal approach for the global conservation of flora and fauna

Challenge

Given the threats posed by climate change, effective biodiversity conservation is essential to sustainable lives and livelihoods. It necessitates an integrated approach that engages local communities in the management of protected areas. However, developing countries face significant challenges in integrating local actors. Stakeholders at all levels must mobilize resources for sustainable forest management. The value of ecosystems and biodiversity should be considered in national and local planning, development processes and poverty reduction strategies. Isolated endeavours in a protected area may not be effective.

The knowledge and experiences gained in the sustainable use of terrestrial and inland freshwater ecosystems in Malaysia and other parts of the world could help others undertake integrated efforts to protect biodiversity.

Towards a Solution

The approach to integrated biodiversity and ecosystem conservation employed by the state government of Sabah in Malaysia incorporates strategy, protection, education, ecotourism and academic research from all sources and at all levels. It focuses on the sustainable management of terrestrial and inland freshwater ecosystems and their services, as well as the conservation of mountain ecosystems, natural habitats and threatened species. The Japan International Cooperation Agency (JICA) helped to develop this holistic process from 2002 to 2017, as part of a technical cooperation project. The experiences gained were shared with 17 developing countries from Asia, Africa and the Pacific through the Third Country Training Programme (TCTP), a strategic partnership between the Malaysian Technical Cooperation Programme and JICA. The TCTP in Sabah began in 2009, and the third cycle was completed in 2019. The project addressed Sustainable Development Goal 1 on poverty, Goal 13 on climate action and Goal 15 on life on land.

The TCTP aimed to **provide participants with knowledge and skills in conservation management, planning, monitoring and evaluation, with an emphasis on community-based implementation.** It also focused on engaging implementing agencies and local communities to better understand alternative livelihood opportunities within the context of conservation efforts. The TCTP facilitated the interaction and fostered a horizontal network for government officials and national park management who work in biodiversity conservation in developing countries in Asia and Africa.

Botswana, Cambodia, Kenya, Myanmar, the Philippines, Sri Lanka, Thailand, Uganda and Viet Nam were identified as target countries. Having participated in relevant JICA programmes worldwide, they would have more opportunities to replicate the TCTP in their home countries. Future opportunities could be extended to a wider group of stakeholders by leveraging the TCTP.

The core methodology of the programme is that the implementing entity is responsible for the project cycle management (PCM). In this case, the implementing entity is the Institute for Tropical Biology and Conservation of the Universiti Malaysia Sabah (ITBC-UMS). Staff members apply PCM to

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align the various components of the training course. Intensive workshops were offered to develop skills and share knowledge and experiences in creating an effective biodiversity and ecosystem conservation programme. PCM uses a multi-stakeholder participatory approach to identify problems. The output and lessons learned were compiled in the project plan of action to ensure that they can be replicated.

To enrich their experience and assist in developing a plan of action, TCTP participants evaluated several examples of conservation projects in Sabah. In addition to formal classroom lectures and other indoor workshops and presentations, the TCTP involved extensive field visits to protected areas around Sabah, interactions with local communities living in and around the protected areas, and discussions with conservation managers and other practitioners on the ground. With this horizontal approach, participants gained valuable knowledge by interacting with colleagues, who were mainly senior government officials directly involved in managing natural resources.

Furthermore, ITBC-UMS has followed up with all alumni of the third cycle of the TCTP using social media to collect information on their progress in replicating the programme.

In Uganda, three former participants developed a plan of action entitled 'Building Resilient Communities, Wetland Ecosystems and Associated Catchments in Uganda'. The five-year project was implemented in 2018 and is being funded primarily by the Green Climate Fund. They are also involved in a national wetlands restoration project.

Meanwhile, in the Philippines, a former participant conducted a training on green technology and green agriculture in 2018. The proposed project is currently being considered for funding and is scheduled to begin in 2020.

The strength of this programme is in mobilizing significant resources from all sources and at all levels to support the sustainable management of protected areas. It encouraged the collaboration and involvement of various departments and agencies from the Sabah state government, as well as Sabah-based non-governmental organizations, to develop significant and relevant components in the training modules.

Most former participants expressed great interest in research and education, park management, habitat management, public awareness and integration. They have applied these components to activities in their home countries, which demonstrates that the programme is effective and can be replicated and adapted.

Contact:

Name: Mr NAKAZAWA Shigeki
Title: Project Formulation Advisor
Organization: Japan International Cooperation Agency (JICA) Malaysia Office
Email: nakazawa.shigeki2@jica.go.jp

PROJECT NAME: Third Country Training Programme: Integrated Biodiversity and Ecosystem Conservation
COUNTRIES/REGIONS: Botswana, Cambodia, Japan, Kenya, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Uganda, Viet Nam
NOMINATED BY: Japan International Cooperation Agency (JICA)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 1.5, 13.1, 13.3, 13.b, 15.1, 15.2, 15.4, 15.5, 15.7, 15.9, 15.b, 15.c
SUPPORTED BY: JICA, Malaysian Technical Cooperation Programme
IMPLEMENTING ENTITIES: Institute for Tropical Biology and Conservation of the Universiti Malaysia Sabah
PROJECT STATUS: Completed
PROJECT PERIOD: 2016–2019
URL OF THE PRACTICE: sites.google.com/site/tctpsabah/home

Initiative on Sustainability, Stability and Security (3S)

Improving stability and reducing incentives for irregular migration by promoting sustainable land management and providing economic opportunities in rural areas

Challenge

Africa holds great promise to become the world's next powerhouse of economic development. The population is young, natural resources are plentiful, and many African countries are ready to transform their economies to lift millions out of poverty and into the middle class. At the same time, climate change causes widespread droughts and desertification; an estimated 74 percent of Africans will be living in drylands by 2030. Lost jobs in agriculture and forestry add to the employment crisis. The majority of Africans under the age of 30 years are already unemployed, and the number of young people will double by 2050, reaching 850 million. Without jobs and income, it is projected that 40 percent will decide to migrate to other countries and continents. Vulnerable young people who lack the resources to move away for a better future might remain trapped on degraded land and be at risk of exposure to extremist activity and terrorism.

Towards a Solution

The Initiative on Sustainability, Stability and Security (3S) was launched by the Governments of Morocco and Senegal at the 22nd Session of the Conference of the Parties (COP22) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2016. That same year, it was endorsed by the Heads of State and Government at the first African Action Summit in Morocco to promote climate resilience and youth employment in rural areas. Through South-South cooperation, Morocco shares value, knowledge, skills, expertise and resources. The country contributes to the 3S Initiative to create jobs for youth, women and migrants by restoring degraded land. To address this triple threat, a number of countries have joined the Initiative. Participants include Benin, Burkina Faso, the Central African Republic, Chad, The Gambia, Ghana, Mali, the Niger, Nigeria, Rwanda, Senegal, the Sudan, Zambia and Zimbabwe.

Within five years of implementation, the Initiative aims to **commit the financial resources necessary to restore 10 million hectares of degraded lands, primarily in the Sahel region of sub-Saharan Africa, through investment, policy reforms and technical and financial innovation. Achieving this goal will have an economic impact, as it will help to sustain and create 2 million land-based jobs.** This includes existing jobs at risk of being lost due to climate change and new jobs that will be created as a result of reversing land degradation. The final outcome of the Initiative will be reduced migration, as people choose to remain on their lands rather than moving away for economic reasons or falling prey to radicalized groups.

To achieve these goals, the Initiative is designed to provide vital rural investment in land restoration and sustainable land management in the most fragile areas and communities experiencing desertification and drought. Second, it will address the required economic policy changes, including the development of policies and measures to strengthen access to land through temporary land usage rights and permanent land tenure in rural and fragile areas, with a focus on vulnerable groups such as women, indigenous people and youth. Policies must also be developed to facilitate private investment in agriculture and forestry. Finally, it will promote innovative technical and financial solutions. In land restoration, new cost-effective technologies involve carbon sequestration, biodiversity protection, the use of windbreaks and water resource conservation. These innovations are deployed on a pilot basis and scaled up when proven effective, thereby contributing to their commercialization and market acceptance by investors in agriculture and forestry in Africa.

The Initiative draws on multiple implementing partners, depending on a project's location and types of activities. Financial contributors include public donors, such as the Government of Turkey through the Ankara Initiative and the Directorate-General for Development Cooperation of the Ministry of Foreign Affairs and International Cooperation of Italy. Private investors and commercial lenders also contribute to the Initiative. Implementing partners include African Governments (ministries of environment), regional and local authorities, bilateral donor agencies, non-governmental organizations, multilateral institutions and private enterprises. The United Nations Convention to Combat Desertification is coordinating the activities of the Secretariat, including resource mobilization, communication and Steering Committee meetings. At the country level, the Initiative will be implemented by the International Fund for Agricultural Development (IFAD).

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The 3S Initiative takes a programmatic approach and employs a thematic focus to address climate change and land degradation, as well as a geographic focus to help harmonize policies and interventions across Africa. It supports a set of projects that are linked under a common mechanism, which allows for the approval of individual projects unified by an overarching mission and a contribution to mutually agreed goals.

The Initiative also ensures country ownership of the supported activities, as projects are aligned with national development strategies. Moreover, project identification and development involve local populations in targeted rural areas, and projects are implemented using community-led development approaches.

The governance structure involves a development partnership among all stakeholders, which requires long-term commitments, defined expectations and shared responsibilities in order to be successful. The partnership approach values the unique strengths of all partners and is based upon open, accountable and transparent cooperation.

The Initiative follows a demand-driven approach. At the strategic level, each African country develops a national or subnational strategy to guide the project's implementation in order to define programmatic priorities with the involvement of stakeholders, including civil society and the private sector. These national strategies will be harmonized with and integrated into the assistance strategies of the hosting multilateral development bank. This will ensure that interventions of significant scale can be developed, appraised and implemented swiftly, in close coordination with national, regional and local authorities in beneficiary countries. For example, the International Organization for Migration (IOM), as a technical partner, has launched a community stabilization project in the Niger to support the Government and civil society in integrating migrants and creating jobs related to the restoration of degraded lands and their productive base. The project utilizes an inclusive approach to engage all community members, and participants are selected by a designated committee of local leaders. IOM staff in the Niger provide training and assist the participants in determining how to make full use of the given plots of land and choosing appropriate plants to grow.

In the current phase, the Initiative is developing its financial mechanism at IFAD. Projects on the ground are expected to be financed from 2021. For the Moroccan Government, the 3S Initiative serves as an important example of the role of triangular cooperation in resource mobilization. South-South cooperation activities in the field of sustainable land management, land restoration and climate change adaptation will be adopted across 3S countries once the Initiative is implemented by IFAD.

Institutionally, the 3S Initiative is anchored within the forthcoming IFAD Rural Resilience Programme and supported through the trust fund arrangements pending approval by the IFAD Executive Board in September 2020. The Programme is a global umbrella programme that primarily consolidates climate change and environmental funds to increase the resilience of small-scale producers, working in concert with IFAD country programme strategies and loans and grants. The Rural Resilience Programme will channel climate and environmental finance to smallholder farmers by incorporating the 3S Initiative and the successor to the IFAD flagship initiative Adaptation for Smallholder Agriculture Programme.

The delivery of individual projects supported by the 3S Initiative will follow IFAD operational policies and procedures and will go through the IFAD network of regional and country offices on the African continent. IFAD may draw on implementing partners with proven thematic expertise in the region, such as the African Union Development Agency. To design and implement programmes, multilateral institutions will involve relevant country ministries, private enterprises, academia and civil society, including youth, women and rural communities, thereby ensuring sound ownership of economic development policies and investment programmes at the local, national and regional levels.

IFAD will use a unified results measurement framework to evaluate the 3S Initiative in Africa. For each objective of the 3S Initiative, the results framework will provide a measurable indicator that will have a baseline established at the beginning of an individual project, an intended target value upon completion of a project and a current value measuring the actual achievement of the targeted output. Indicators of this results framework will feed into progress measurement and impact reporting by IFAD on the overall results related to the Rural Resilience Programme.

The sustainability of this Initiative has been demonstrated by firm commitments to implement projects made at the highest political level by participating countries. The Initiative is closely aligned with several Sustainable Development Goals (SDGs), including SDG 8 on decent work and economic growth, SDG 13 on climate action, SDG 15 on life on land and SDG 17 on partnerships.

Contact:

Name: Ms Barbara Bendandi

Title: Programme Officer, Secretariat Coordinator for the Initiative on Sustainability, Stability and Security (3S)

Organization: United Nations Convention to Combat Desertification (UNCCD)

Email: bbendandi@unccd.int

Skype: bar.ben

PROJECT NAME: Initiative on Sustainability, Stability and Security (3S)

COUNTRIES/REGIONS: Benin, Burkina Faso, Central African Republic, Chad, the Gambia, Ghana, Mali, Morocco, Niger, Nigeria, Rwanda, Senegal, Zambia, Zimbabwe (current member States). The Initiative is open to all the African countries recognized by the United Nations.

NOMINATED BY: Government of Morocco

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 8.5, 8.6, 12.4, 13.1, 15.1, 15.2, 15.3, 17.1, 17.6

SUPPORTED BY: Italy, Morocco, Senegal, Turkey, European Union

IMPLEMENTING ENTITIES: United Nations Convention to Combat Desertification, multi-donor trust fund to be hosted at the International Fund for Agricultural Development

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2021

URL OF THE PRACTICE: youtu.be/9oyrvXqpFg

Efficient Poverty Reduction through Natural Resource Management

Emphasizing the importance of natural capital and ecosystem services to enhance agricultural productivity and reduce hunger and poverty

Challenge

Sub-Saharan Africa is experiencing environmental degradation driven by unsustainable agricultural practices. One example is the highlands above Nairobi, which are home to over 100,000 smallholder farmers who rely on the river for irrigation. Since the 1970s, agricultural activities along the upper reaches of the Tana River have increased abstraction and siltation, which impacts communities and ecosystems downstream and has reduced the water supply to Nairobi. Another example is the Karamoja subregion of Uganda, which is significantly affected by unpredictable periods of drought and rising levels of environmental degradation. Additional factors impacting agricultural productivity include limited access to markets and insufficient policies for natural resource management. As a result, chronic food insecurity and poverty affect most of the population in Karamoja, particularly women. In an effort to reverse these challenges, the 'Resilient Food Systems' programme builds on successful approaches to scale up integrated natural resource management and sustainable land management (SLM).

Towards a Solution

The five-year 'Resilient Food Systems' programme, led by the International Fund for Agricultural Development (IFAD), aims to foster sustainability and resilience for food security in 12 sub-Saharan African countries. It promotes a holistic approach to enhancing agricultural productivity and restoring degraded landscapes in smallholder farming systems. Drawing on the successful past investments of IFAD, including the 'Upper Tana Natural Resource Management' project in Kenya, the 'Upper Tana-Nairobi Water Fund' (UTNWF) project established a water fund in Africa, the first of its kind. Through its extensive network, UTNWF is supporting smallholder farmers in rainwater harvesting, drip irrigation and climate-smart farming practices. Another project under the 'Resilient Food Systems' programme, 'Fostering Sustainability and Resilience for Food Security in Karamoja Subregion' (FSRFSU) in Uganda, seeks to build on successful practices that have yet to be promoted in the area, including rainwater harvesting and rangeland rehabilitation techniques. FSRFSU also promotes alternative sources of livelihood within existing value chains.

With the participation of several government delegates, the FSRFSU project in Uganda undertook a cross-country exchange that focused on the technologies and practices of SLM and climate-smart agriculture currently being implemented by the IFAD-funded UTNWF project in Kenya. These practices were shared with the FSRFSU team to improve food security and support watershed conservation techniques. The project team also learned about the benefits of improving practices on farms for commercial fishing and harvesting rainwater for irrigation. The exchange allowed participants to acquire the knowledge to address issues in the subregion and support the achievement of Sustainable Development Goal 2 on hunger, Goal 6 on clean water, Goal 13 on climate action and Goal 15 on life on land.

Given the similarities in the areas of intervention, the 'Resilient Food Systems' team in Uganda followed up with UTNWF for an educational visit. The South-South interaction was undertaken to share knowledge and best practices for using innovative SLM to mitigate the shocks from food insecurity



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and the associated pressures of environmental degradation and climate change.

As is the objective in any South-South interaction, the exchange between the delegations from Kenya and Uganda was mutually beneficial. The delegation from Uganda was composed of representatives from the Ministry of Agriculture, Animal Industry and Fisheries; the Ministry of Water and Environment; and other partners from the national and district levels. They were exposed to a number of innovative practices and techniques, while the hosting UTNWF project team benefited from the delegation's experience in promoting increased social organization among farmers. Given that it is customary for farmers in Kenya to work individually, which is labour intensive and costly, the delegation from Uganda discussed the importance of working as a community and encouraged the development of a rotational schedule among smallholder farmers. The delegation from Kenya also identified a capacity-building opportunity for youth groups from the FSRFSU project to learn from those involved in the UTNWF project, who have been instrumental in building water pans. These are small reservoirs, about one to three metres deep, usually dug off stream and surrounded by raised and compacted banks. They are constructed to collect and store run-off water from hillsides, roads, rocky areas and open rangeland.

The exchange highlighted a number of innovations, particularly those related to protecting watersheds and relocating economic activities away from riverbanks. One such innovation was the use of water pans lined with polyurethane to support the cultivation of arrowroot (a wetland crop) at higher elevations, in the upper areas of water catchments. This

alternative method reduces the need to access scarce water resources directly from riverbanks. For farmers with no direct access to the river, water pans were also constructed adjacent to roads and roofs, allowing for rainwater collection year-round. Such temporary measures are simple, cost-effective and easily replicable and will support farmers while they work to procure solar pumps.

Another innovation shared with the FSRFSU project was the introduction of land-use planning systems. The UTNWF project uses a successful farm planning strategy that facilitates water conservation by increasing tree cover from high-value crops, such as avocado trees. This tree cover has enabled farmers to grow other cash crops, such as coffee and bananas, as well as establish woodlots, thereby providing them with an additional source of income.

These innovative practices can be replicated with the proper technology, particularly that used for harnessing water for irrigation, which is adaptable to many socio-economic and ecological conditions. Exchange visits should be conducted to allow extension officers and farmers to learn from experiences of those who have adapted the technology.

Contact:

Name: Mr Stephen Muwaya

Title: Program Coordinator for Sustainable Land Management, United Nations Convention to Combat Desertification Focal Point

Organization: Ministry of Agriculture, Animal Industry and Fisheries of Uganda

Email: smuwaya@yahoo.com

PROJECT NAME: Upper Tana-Nairobi Water Fund (UTNWF)

COUNTRIES/REGIONS: Kenya, Sub-Saharan Africa

NOMINATED BY: International Fund for Agricultural Development (IFAD)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.2, 1.4, 1.5, 2.1, 5.a, 6.4, 6.5, 6.6, 13.1, 13.2, 13.3, 15.1, 15.2

SUPPORTED BY: Government of Kenya, Global Environment Facility, IFAD

IMPLEMENTING ENTITIES: Governments of Kenya and Uganda

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2021

URL OF THE PRACTICE: <https://bit.ly/2CZEuZL>

Sustainable Ecosystem Management and Livelihood Support to Improve the Resilience of Populations in the Lake Chad Basin Vulnerable to the Effects of Climate Change

Implementing legal, policy, institutional and investment reforms to improve water quality and quantity, biodiversity and livelihoods

Challenge

The 47 million people living in the Lake Chad basin — in Cameroon, the Central African Republic, Chad, Niger and Nigeria — rely on the Lake for a variety of economically diverse services, including the cultivation of sorghum and hydrophilic millet varieties, seasonal hunting and fishing, and extensive livestock farming, among others. For example, fishing produces an average of 50,000 tonnes per year, contributing significantly to the gross domestic product of the riparian countries. The lands bordering the Lake serve as essential grazing areas for livestock; the flood plains are a destination for extensive transhumant grazing. Unfortunately, environmental impacts, climate change and unsustainable practices have caused the Lake to decrease in size from 25,000 km² to 2,500 km², endangering the lives of the people who live there. In addition to these threats, the area is undergoing a security crisis.

Towards a Solution

This project, entitled 'Sustainable Ecosystem Management and Livelihood Support to Improve the Resilience of Populations in the Lake Chad Basin Vulnerable to the Effects of Climate Change', is being implemented in Cameroon, the Central African Republic, Chad, Niger and Nigeria with the active participation of village communities, particularly women and youth. It aims to restore degraded ecosystems in order to improve agro-sylvo-pastoral and fishery productivity. It also seeks to support socio-economic initiatives that strengthen the resilience of vulnerable communities to the adverse effects of climate variability among populations living along the shores of Lake Chad. It will be based on three main pillars: capacity-building for local actors on integrating certain themes in the planning process at the local level, the restoration of degraded ecosystems and the development of income-generating activities by improving production systems.

In addition to the Lake Chad Basin Commission, of which the five countries are members, the project relies on partnerships with other initiatives, such as the Great Green Wall movement, of which three of the five countries are partners. Other partners include national Governments, particularly ministries that focus on the environment, fisheries, water, agriculture, women and youth. Bilateral and multilateral partners also play a role, as well as key international actors, notably the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Given the sense of community in the Lake Chad basin, the additional States members of the Lake Chad Basin Commission have already committed to exchanging knowledge and lessons learned through other instruments, with a view to harmonizing policies, legislation and good practices for the protection and management of ecosystems, biodiversity and the livelihoods of the people living in the area.

With regard to capacity-building for local actors, planning documents at the local level do not sufficiently integrate cross-cutting themes, such as climate change, biodiversity and natural and cross-border resource management. In that connection, the Great Green Wall movement aimed to improve and update planning documents. To do so, it was necessary to strengthen the capacities of actors involved in the entire planning process at the local level. Partnership agreements have been concluded with civil society organizations, particularly non-governmental organizations and local associations working in social engineering, to raise awareness and conduct trainings as part of a gradual skills transfer process. This work was carried out in the Kanem and Lac regions located in the semi-arid Sahel zones in Chad and Niger. The project revitalized and implemented consultation frameworks, under which local actors exchange views on the aforementioned themes and integrate them into the development planning process at the local level. Four local development plans have been revised to mainstream biodiversity, which is an innovative approach.

Chad and Niger border the Sahelian strip and are similar in terms of semi-arid transition. They are particularly vulnerable to the effects of climate change due to their geographical location and the fact that their population is dependent on rain-fed, extensive, transhumant agro-sylvo-pastoral production systems. Climate variability has led



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to reduced rainfall and advanced soil degradation, and human activity has caused the destruction of plant cover. As a result, Lake Chad experiences drying and desertification, making the Sahelian strip one of the poorest and least secure areas in the world. Successes achieved during the project's previous phase can be extended to the transboundary lake province in Niger. These include the involvement of women and young people in environmental protection and the development of socio-economic activities compatible with fragile ecological systems.

With regard to restoring ecosystems, capacity-building and a participatory planning process have raised awareness among communities and local authorities on the importance of effective natural resource management for the survival of ecosystems. Ecosystem restoration was carried out in the Kanem region of Chad with the active participation of communities, particularly women and young people. Activities included reforestation, assisted natural regeneration and mechanical dune fixation. They were carried out by the National Agency for the Great Green Wall, an entity specialized in land restoration, under the supervision of the Ministry of Environment and Fisheries. These techniques have facilitated the regeneration of biomass and ground vegetation cover on over 1,000 hectares.

A major achievement of the previous phase was the signing of eight community agreements in eight localities in the regions of Kanem (Kekedina) and Lac (Tall, Melea, Baga-Sola, Dar El Salam, Liwa and Tataferom 1 and 2). Degraded land management and assisted natural regeneration allowed communities to be involved and empowered as stakeholders, rather than simply beneficiaries. The ecosystems are being restored as a result of efforts made under this initiative. Restored perimeters have stronger defences to protect plants from roving animals; four boreholes were installed and equipped with solar panels for soil humidification and watering plants. The successes achieved during the previous phase could be capitalized on, disseminated and scaled up to promote the effective restoration of ecosystems within the transboundary lake province and other provinces bordering Lake Chad in Cameroon and Niger.

With regard to the development component, income-generating activities were created as a result of improvements to the production systems. During the previous phase, development investments were integrated with efforts to manage degraded lands, assist natural regeneration and address land and ecosystem risks. The investments were developed in partnership with community-based organizations, local authorities and government employees from decentralized services. Emphasis was placed on sustainable oasis agriculture supported by innovative and sustainable financing mechanisms to better combat food insecurity and desertification. As a result, 75 hectares of hydro-agricultural developments in oases have contributed to food security and improved incomes for oasis producers in the target area. Each management committee recorded average annual revenues of between 1 million and 2 million CFA francs from the sale of the maize harvest. Several producers sold onions and

dried tomatoes, okra and chilli pepper. **As a result, some groups have been able to become self-sufficient by acquiring new agricultural land. Others have been able to increase the number of cattle and small ruminants, provide health care for their members, feed their families and buy inputs for the next campaigns. In addition, the National Agency for the Great Green Wall has established six integrated community agriculture farms covering 3 hectares each.** There are two in Kanem (Kekedina and Woli) and four in Lac (Tataferom, Liwa, Baga-Sola and Tall). These farms benefit 22 groups that engage in supported market gardening and arboricultural production.

With assistance from the United Nations Development Programme and the International Union for Conservation of Nature and Natural Resources, the goal is to extend the initiative to the Lake's transboundary province in order to evaluate invasive species. Taking advantage of South-South cooperation, an exchange trip was organized between Niger and Nigeria. During the trip, executives of entities involved in soil restoration transferred skills and technologies. The exchanges centred on more efficient and less expensive techniques for ecosystem rehabilitation, various approaches to reforestation, the management of natural forests, the creation of seed companies, a sustainable supply of wood energy to Sahelian cities and effective rural wood markets to benefit local communities. The two countries are formalizing an agreement for technical assistance and the provision of forest seeds.

The institutional foundation of this project supports its sustainability. To ensure coordination, the National Agency for the Great Green Wall under the Ministry of Environment was chosen as a specialized entity in soil restoration. In addition, the nature of the community and culture of the Lake Chad basin will help to duplicate the project's experiences and good practices, which will preserve the project's achievements. Lastly, the countries identified for the purpose of duplicating the project's experience participate in several subregional initiatives and community bodies, in particular the Lake Chad Basin Commission, the Great Green Wall movement and the Interstate Committee for Drought Control in the Sahel. This will facilitate rapid implementation, complementary objectives and synergy of actions for this project and other ongoing initiatives.

In order to replicate the experiences of this project, the key actors in these States should carry out a joint feasibility study of the project. Subsequently, subregional and national coordination must be undertaken to ensure the project's implementation, monitoring, evaluation and reporting.

Contact:

Name: Mr Serge Ndjekouneyom
Title: Programme Specialist, Sustainable Development
Organization: United Nations Development Programme (UNDP)
Email: serge.ndjekouneyom@undp.org

PROJECT NAME: Lake Chad Ecosystem Rehabilitation and Restoration Project

COUNTRIES/REGIONS: Chad, Cameroon, Central African Republic, Niger, Nigeria

NOMINATED BY: United Nations Development Programme (UNDP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.5, 13.1, 15.1

SUPPORTED BY: UNDP, Government of France, India-United Nations Development Partnership Fund, Global Environment Facility

IMPLEMENTING ENTITIES: Ministry of the Environment and Fisheries of Chad through the National Agency for the Great Green Wall

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2020

URL OF THE PRACTICE: Not available

Forest Landscape Restoration in the Caucasus and Central Asia

Restoring degraded and deforested land by 2030

Challenge

Landscape degradation is one of the main environmental challenges in the Caucasus and Central Asia. According to a 2016 paper by the Economics of Land Degradation Initiative,¹ land degradation in Central Asia is extensive, affecting 4 to 10 percent of cropland, 27 to 68 percent of pastureland and 1 to 8 percent of forests. In Armenia, national data show that 70 percent of forest land is degraded. The impact of climate change further exacerbates the biophysical and socio-economic factors that drive the degradation of land and natural resources. A 2019 study from the United Nations Economic Commission for Europe (UNECE) and the Food and Agriculture Organization of the United Nations (FAO) on the state of forests of the Caucasus and Central Asia² showed that the priorities for the forest sector are forest landscape restoration, the maintenance and restoration of existing forests, the reduction of illegal logging and overgrazing, as well as the identification and application of best practices in forest management. Political support is crucial to this work. It is therefore necessary to provide a public platform for political commitments on this topic in order to enhance and scale up forest landscape restoration in support of Sustainable Development Goal (SDG) 13 on climate action and Goal 15 on life on land.

Towards a Solution

The Bonn Challenge is a global effort to restore 150 million ha of deforested and degraded land by 2020, and 350 million ha by 2030. It serves as an open, voluntary platform to discuss and exchange ideas for concrete action and cooperation to facilitate forest landscape restoration around the world. Achieving the Bonn Challenge goal would result in the sequestration of at least 12 Gt of carbon dioxide between 2011 and 2030. In addition to reversing degradation, forest landscape restoration would help to improve productivity and landscape resilience, thereby providing environmental services that benefit people and biodiversity.

The project helped to accelerate progress on the relevant SDGs through the exchange of experiences, peer learning, brainstorming and the transfer of good practices and knowledge among participating countries. It also produced and distributed relevant studies on forest landscape restoration in the region. UNECE and FAO raised awareness of the Bonn Challenge among member States from the Caucasus and Central Asia, with support from the International Union for Conservation of Nature (IUCN). The parties also participated in a dialogue at regional meetings with relevant stakeholders, including those from academia and non-governmental organizations, and representatives from each country contributed by sharing their specific national perspectives.

1 Emmanuelle Quill rou and others, *Economics of Land Degradation Initiative Central Asia Regional Report, Broadening land management options for improved economic sustainability across Central Asia: A synthesis of national studies*, N. 2016 (Amman, 2016)

2 *State of Forests of the Caucasus and Central Asia, Geneva Timber and Forest Study Paper* (United Nations publication, Sales No. E.18.II.E.14).

15 LIFE ON LAND



13 CLIMATE ACTION



  UNECE

The project contributed to the sustainable management of all types of forests by halting deforestation, supporting the restoration of degraded forests and increasing afforestation and reforestation. It also supported mobilizing financial resources from all sources for the conservation and sustainable use of biodiversity and ecosystems. A ministerial round table on forest landscape restoration led to a publication entitled 'Forest Landscape Restoration in the Caucasus and Central Asia', which a single country could not have produced on its own. The high-level meeting also created momentum that resulted in pledges by Armenia, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan to restore over 2.5 million ha of forest landscape under the Bonn Challenge. Azerbaijan also joined the Bonn Challenge in 2019, bringing the total of restoration pledges in the region to almost 3 million ha.

This innovative good practice also led to the adoption of the Astana Resolution, the first regional resolution to strengthen partnerships and cooperation on forest landscape restoration, which improves the competitive advantage of participants by aligning national goals and priorities.

This good practice is sustainable because it led to long-term commitments under the Bonn Challenge and other cooperation agreements, such as the Astana Resolution. Further regional integration efforts will persist long after the framework of these agreements expires.

This good practice has already been extended to Eastern and South-Eastern Europe and can be extended to Central Europe through the ECCA30 regional initiative, which was launched in September 2019 to restore 30 million ha of degraded and deforested land in Europe, the Caucasus and Central Asia by 2030.

Contact:

Name: Mr Gianluca Sambucini

Title: Acting Chief

Organization: Joint Forestry and Timber Section from the Economic Commission for Europe (UNECE) and the Food and Agriculture Organization of the United Nations (FAO)

Email: gianluca.sambucini@un.org

Phone: +41 (0) 22 917 11 75

PROJECT NAME: Restoration of Deforested and Degraded Lands in Support of the Bonn Challenge and the Achievement of Sustainable Development Goals 13 and 15 in the Caucasus and Central Asia

COUNTRIES/REGIONS: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

NOMINATED BY: Economic Commission for Europe (UNECE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 13.1, 13.3, 15.1, 15.2, 15.3, 15.4, 15.5

SUPPORTED BY: Government of Germany (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

IMPLEMENTING ENTITIES: UNECE, Food and Agriculture Organization of the United Nations

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2018

URL OF THE PRACTICE: <https://bit.ly/2FYW1m4>

The Global Peatlands Initiative

Working to preserve the world's largest terrestrial organic carbon stock

Challenge

Peatlands are vital, superpowered ecosystems that capture and store carbon, protect and host biodiversity, control water supply and quality, cool the atmosphere and produce food. Found in over 180 countries, the international community is only beginning to understand their role in abating climate change. Peatlands cover only 3 percent of global land area but store 30 percent of the world's soil carbon. They contain twice as much carbon as the world's forests. Greenhouse gas emissions from drained or degraded peatlands account for 5 to 10 percent of the carbon budget.

In 2016, Indonesia declared a state of emergency and called for support to tackle peatland fires. The Government committed to halting any new conversion of peatlands to agricultural lands and launched an urgent, nationwide campaign to rewet and restore them. These challenges inspired bold South-South collaboration and the creation of the Global Peatlands Initiative.

Towards a Solution

The Global Peatlands Initiative, led by the United Nations Environment Programme (UNEP), was launched at the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Marrakech, Morocco in 2016. The Initiative seeks to develop and adopt new approaches to the conservation, restoration and sustainable management of peatlands, linking science to practice and policymaking. Four peat-rich tropical countries (the Congo, the Democratic Republic of the Congo, Indonesia and Peru) are serving as the Initiative's pilot countries. Due to the significant amount of carbon they hold and the catastrophic consequences of their drainage and degradation in the past, over 30 partners have committed to working together to halt further destruction of these peatlands. The Initiative is gaining international attention.

The project helps countries to comply with major Multilateral Environmental Agreements (MEAs), including UNFCCC, the Convention on Biological Diversity, the Convention to Combat Desertification, the Convention on the Conservation of Migratory Species of Wild Animals, and the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention). The goal of the Initiative is to provide targeted support to the Congo, the Democratic Republic of the Congo, Indonesia and Peru. It also seeks to help other countries achieve their intended nationally determined contribution by including goals concerning peatlands in efforts to advance progress towards the Sustainable Development Goals. By collecting, advocating for and supporting conservation practices and restoration efforts in the pilot countries, the project also contributes to the Aichi Biodiversity Targets, especially Target 5, on reduced habitat loss and degradation, Target 14, on the restoration and safeguarding of ecosystems that provide essential and valuable services, and Target 15, on the contribution of ecosystems to carbon stocks.

Partners work together to assess, measure and preserve peat carbon and biodiversity, sharing knowledge and experience through a South-South cooperation approach. They promote healthy peatlands through their restoration and conservation as one of the fastest ways to tackle the climate crisis.

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The Second Partner Meeting of the Global Peatlands Initiative took place in Jakarta, Indonesia in May 2017. Participants included representatives from the Governments of the pilot countries and over 80 specialists. The Initiative's partners shared their experience and knowledge and charted a collaborative path forward to support one another.

The Global Peatlands Initiative meeting culminated in a special thematic session entitled 'Peatlands Matter', hosted by the Global Landscapes Forum. Led by the Centre for International Forestry Research and jointly coordinated by UNEP and the World Bank, the session explored what it means to employ multidirectional and multi-stakeholder dialogues in practice, adopting a community-first and people-centred approach to peatlands management with a strong focus on South-South cooperation, innovation and learning.

Under the leadership of UNEP, the Global Peatlands Initiative released a Rapid Response Assessment for peatlands in November 2017 at a side event held at the COP23 in Bonn, Germany.

In March 2018, in an unprecedented move, **the Congo, the Democratic Republic of the Congo and Indonesia signed the Brazzaville Declaration on Peatlands to protect the Cuvette Centrale region in the Congo Basin (the world's largest tropical peatlands) from unregulated land use and to prevent its drainage and degradation.** The Declaration was an outcome of the three-day Third Partner Meeting of the Global Peatlands Initiative, held in Brazzaville and co-hosted by the Congo and the Democratic Republic of the Congo. The Minister of Environment and Forestry of Indonesia shared the country's experience in peatland conservation and restoration, as captured in the report entitled 'Managing Peatlands to Cope with Climate Change: Indonesia's Experience'.

The Brazzaville Declaration formalized the commitment of these three Governments to continue to work together and exchange knowledge with the support of Initiative partners to promote better management and conservation of the Cuvette Centrale peatlands, a globally important carbon store.

The Global Peatlands Initiative has continued to raise the profile of South-South cooperation on peatlands during a series of global policy-setting events. Collaboration on the MEAs was fostered during the Ramsar Convention COP13 and in a workshop held in Vilm, Germany. In addition, peatlands were featured during World Wetlands Day, World Environment Day and in the UNEP *Frontiers 2018/19* publication. They also served as a stand-out topic at over ten side events and discussion forums during the UNFCCC COP24 in Katowice, Poland and were featured at the UNFCCC COP25 held in Madrid, Spain.

As a significant global milestone for the Initiative, the first ever global resolution on the conservation and sustainable management of peatlands was adopted with the support of all countries during the fourth United Nations Environment Assembly in March 2019. The resolution acknowledges the contributions of the Global Peatlands Initiative and further requests UNEP "to coordinate efforts to create a comprehensive and accurate global peatlands inventory"¹

South-South and triangular cooperation are the primary delivery mechanisms of the Global Peatlands Initiative. This approach has facilitated the identification, collection and sharing of good practices. It has enabled exchanges, improved methods and promoted the adoption of approaches that support sustainable peatland management. Exchanges between countries in the global South have allowed stakeholders to make bold decisions, accelerate commitments to action and establish a coalition of like-minded actors to structure their collaboration.

Contact:

Name: Ms Dianna Kopansky
Title: Programme Management Officer and Global Peatlands Coordinator
Organization: United Nations Environment Programme (UNEP)
Email: dianna.kopansky@un.org

1 UNEP/EA.4/RES.16

PROJECT NAME: The Global Peatlands Initiative: Assessing, Measuring and Preserving Peat Carbon
COUNTRIES/REGIONS: Congo, Democratic Republic of the Congo, Indonesia, Peru
NOMINATED BY: United Nations Environment Programme (UNEP)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 13.2, 15.1
SUPPORTED BY: Over 30 partners, which can be found on the Initiative's website
IMPLEMENTING ENTITIES: UNEP, Food and Agriculture Organization of the United Nations
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2017–2022
URL OF THE PRACTICE: www.globalpeatlands.org/

African School of Humanitarian Forensic Action

Improving the forensic capacities of African countries

Challenge

Several African and Latin American countries have a long history of internal conflicts, human rights violations, mass disasters and, more recently, mass migration. One of the main consequences of these events is the disappearance of thousands of people who are buried in unmarked graves.

With the exception of South Africa, few African countries have developed a forensic system. In addition, the lack of development in various academic fields, such as anthropology or genetics, forces forensic specialists and doctors to work without the support of experts in other disciplines.

This situation is particularly worrisome because forensic work within a legal medical investigation frequently conflicts with the traditional beliefs and practices of local populations, especially with regard to the treatment of dead bodies. For forensic investigations to be successful, it is therefore important to connect forensic experts with the victims' families and with human rights organizations.

Towards a Solution

This project aimed to improve the forensic capacities of local experts in several African countries in identifying human remains in cases related to human rights violations, mass disasters, migration and other complex scenarios. Technical assistance was provided by the Argentine Forensic Anthropology Team [Equipo Argentino de Antropología Forense] (EAAF), a scientific non-governmental organization that pioneers the application of forensic sciences in human rights and humanitarian investigations. This initiative contributes to the achievement of Sustainable Development Goal 16 by increasing access to justice, strengthening local institutions and providing them with the necessary capabilities to carry out criminal investigations involving human rights issues in a transparent and accountable manner.

The experience gained in Argentina in identifying the human remains of people who disappeared during the previous military dictatorship has become an invaluable tool in supporting forensic capacities in Africa. Since 1994, EAAF has been working in the region to train and coach forensic experts, lawyers, attorneys and civil society organizations in applying forensic sciences to investigations involving human rights violations.

With the aim of strengthening capacities and institutional coordination at the regional level, EAAF organized a regional conference in Johannesburg in November 2011. It established the basis for a specialization network. As a result, the African School of Humanitarian Forensic Action offered its first course in Durban in 2012. The school was primarily intended to train specialists from African countries in applying various forensic disciplines to the documentation and investigation of human rights violations in their countries of origin. It also constitutes a key regional network of human rights advocates and forensic experts who, through exchanges and periodic dialogue, improve the quality of services provided to victims and their families, particularly in identifying human remains and creating genetic banks.



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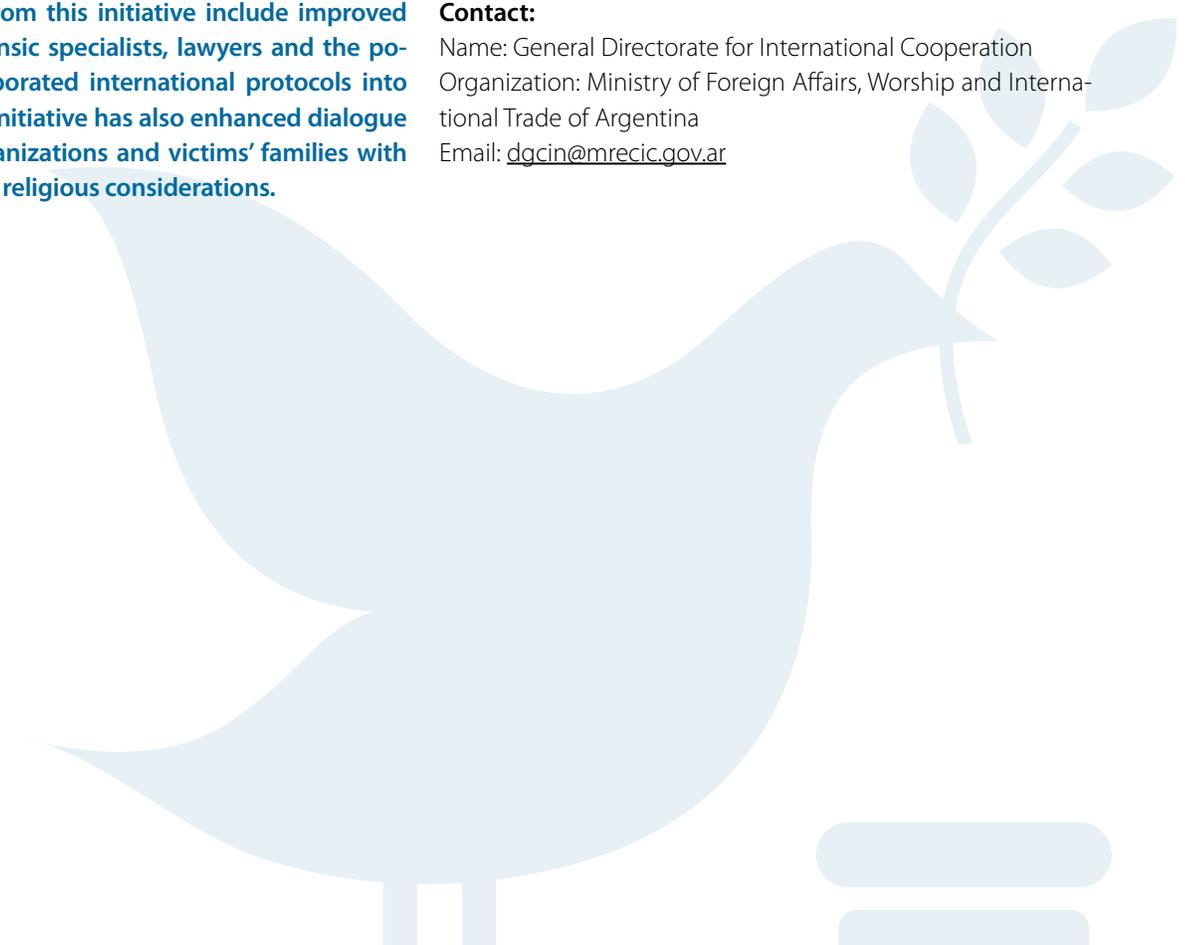
Since 2016, the Argentine Fund for International Cooperation has been collaborating with the International Committee of the Red Cross (ICRC) and the University of Pretoria to finance this initiative. Over 50 specialists from over 20 countries participated in the training courses offered by EAAF. Topics included the handling of dead bodies in disaster situations, complex crime scenes, exhumations, ante-mortem data collection, anthropological analysis of skeletal remains and multidisciplinary processes of identification, as well as the applications and limitations of forensic genetics.

Noteworthy results from this initiative include improved dialogue among forensic specialists, lawyers and the police, who have incorporated international protocols into their daily work. The initiative has also enhanced dialogue with civil society organizations and victims' families with regard to cultural and religious considerations.

The African School of Humanitarian Forensic Action continues to operate, drawing new experts from different specializations and countries in the region every year. Due to its success, the initiative was replicated in Tunisia. A new regional school for North Africa was inaugurated in November 2019, thanks to the joint efforts of the Argentine Fund for International Cooperation, EAAF and ICRC. The sustained presence and prestige of these organizations in the region ensures continuity while facilitating coordination with local actors in establishing new schools where there is interest.

Contact:

Name: General Directorate for International Cooperation
Organization: Ministry of Foreign Affairs, Worship and International Trade of Argentina
Email: dgcin@mrecic.gov.ar



PROJECT NAME: African School of Humanitarian Forensic Action

COUNTRIES/REGIONS: Argentina, Algeria, Burundi, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Libya, Morocco, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, South Sudan, Sudan, Togo, United Republic of Tanzania, Yemen, Zimbabwe

NOMINATED BY: Argentina

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.1, 16.a, 17.9

SUPPORTED BY: Argentine Fund for International Cooperation (FO.AR), Argentine Forensic Anthropology Team (EAAF), International Committee of the Red Cross (ICRC)

IMPLEMENTING ENTITIES: Argentina: General Directorate for International Cooperation (Ministry of Foreign Affairs, Worship and International Trade), EAAF

Africa: Institute for International and Comparative Law in Africa (University of Pretoria), ICRC

PROJECT STATUS: Completed

PROJECT PERIOD: 2016–2019

URL OF THE PRACTICE: Not available



Enhanced Oversight of the Extractives Industry in Francophone Africa

Leveraging triangular cooperation to enhance public accountability and transparency in the extractive sector under a six-year Pan-African initiative



Challenge

Despite falling prices of commodities, many African countries continue to record yearly growth in the extractive sector, and extractives remain one of the main sources of economic growth in sub-Saharan Africa. Yet, this growth has not always led to alleviating poverty or improving service delivery. The lack of effective oversight mechanisms across the sector emerges as the most significant explanation for this situation. Improved oversight is therefore critical and can be achieved with oversight bodies, such as technical inspectorates of Ministries of Natural Resources, civil society organizations and supreme audit institutions. Although the latter are a key oversight body for government expenditures and the use of public resources, these institutions often lack sufficient capacity to fulfil this important mandate and, therefore, require tailored support.

Towards a Solution

To address this challenge, Canada-based Cowater International is implementing a project entitled 'Enhanced Oversight of the Extractives Industry in Francophone Africa', in partnership with the Conseil Régional de Formation des Institutions Supérieures de Contrôle des Finances Publiques de l'Afrique Francophone Subsaharienne [Regional Council of the Supreme Audit Institutions of French-Speaking Sub-Saharan Africa] (CREFIAP), based in Cameroon, and with financial support from Global Affairs Canada. The project aims to achieve greater transparency and accountability of government activities in the extractive sector by improving monitoring nationwide in Burkina Faso, Cameroon, Madagascar, Mali and other Francophone sub-Saharan countries. The project's activities provide an effective way to address Sustainable Development Goal (SDG) 16, particularly target 16.6 on developing effective, accountable and transparent institutions at all levels; target 16.7 on ensuring responsive, inclusive, participatory and representative decision-making at all levels; and target 16.8 on broadening and strengthening the participation of developing countries in the institutions of global governance. The project's triangular approach also contributes to achieving SDG 17, as it strengthens implementation through a more inclusive and dynamic partnership.

As a pivotal partner in triangular cooperation, CREFIAP supports coordination with participating supreme audit institutions through its professional network of experts, which provide auditing services in Francophone sub-Saharan Africa. Leveraging this network, Cowater International assembled a multifaceted team of international, regional and local experts in fields such as mining, law, taxation, auditing, gender equality, the environment and revenue generation. These experts support the project in:

- Developing regional and country-specific training curricula, guidelines for performing audits of extractive industries and other technical resources aligned with international best practices, including tools focused on gender and the environment.
- Conducting pilot audits of extractive industries in target countries to test guidelines and technical resources.
- Delivering training on extractive industry audits and on-the-job coaching to supreme audit institutions and other national oversight bodies.
- Developing guidelines and processes to engage stakeholders in auditing, including citizens, women's groups, civil society organizations and the media.



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The project continues to make improvements in:

- National oversight of extractive industries in Burkina Faso, Cameroon, Madagascar and Mali
- Regional support provided by CREFIAF to oversee extractive industries in its 23 member countries in Francophone sub-Saharan Africa
- The role of CREFIAF as an important resource centre for oversight
- Stakeholders' capacity to oversee their respective extractive industries

Targeted supreme audit institutions participating in the project will be able to assume their role in monitoring extractive industries by:

- Using extractive industry audit tools effectively
- Implementing specialized training programmes
- Having specialized auditors and trainers
- Exchanging experiences and lessons learned among stakeholders in each country

This has led to several innovative and sustainable outcomes in support of the SDGs. **Greater transparency was achieved through relationship-building and the coordinated efforts required for triangular cooperation. The project underscored that oversight of extractive industries is a shared responsibility.** Participants therefore play an active role in oversight and benefit directly from the support and expertise provided by the project. The security challenges in Mali and Burkina Faso prevented Canadian experts from traveling to the area. As a result, Cowater International identified local and regional experts who had experience working in areas with ongoing security threats. This pool will be accessible to all CREFIAF member States that need to hire such experts in the future. Furthermore, the project demonstrated that civil society organizations can assist Governments in achieving more positive results by informing policy work.

From the project's inception and throughout its implementation, the project team has consistently coordinated and

consulted with beneficiaries and stakeholders. It has also participated actively in regional working groups, such as the Working Group on Audit of Extractive Industries in Uganda. Cooperation has been guided by feedback from formal consultations and informal discussions.

CREFIAF-designated trainers from the supreme audit institutions of several member States have been instrumental in drafting specialized audit guides under the tutelage of international and regional experts in auditing and extractives. These trainers will continue to lead trainings for auditors and other stakeholders in the use of the materials and tools developed under this project.

The project has been structured around establishing the foundation required for improved oversight of the extractives sector. The training materials and principles are based on international audit standards and best practices in extractive sector management. There are no prerequisites for a country to benefit from this material, and the team adapts its approach to the existing knowledge and capacities of each country. The training covers an introduction to the extractives sector, the fundamentals of auditing and the intersectionality of both disciplines. It addresses challenges in all areas, including financing, gender and the environment.

Contact:

Name: Mr Michael Bitz

Title: Project Director, Projet d'Amélioration de la Surveillance de l'Industrie Extractive en Afrique Francophone Subsaharienne (PASIE)

Organization: Cowater International

Email: michael.bitz@cowater.com

Skype: michaelbitz

WhatsApp: 613-869-6450

PROJECT NAME: Enhanced Oversight of the Extractives Industry in Francophone Africa (PASIE)

COUNTRIES/REGIONS: Burkina Faso, Cameroon, Canada, Madagascar, Mali

NOMINATED BY: Global Affairs Canada

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.6, 16.7, 16.8, 17.9, 17.16, 17.17

SUPPORTED BY: Global Affairs Canada (main financial contributor)

IMPLEMENTING ENTITIES: Cowater International (Canada), Conseil régional de formation des institutions supérieures de contrôle des finances publiques de l'Afrique francophone subsaharienne (Cameroon)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2022

URL OF THE PRACTICE: www.facebook.com/PASIE.CSi (in French)

The Role of Media in Supporting United Efforts to Achieve Sustainable Development in Africa

Enhancing the role of media in achieving sustainable development

Challenge

One of the major barriers to achieving prosperity in Africa is a lack of an African media sector that is unified and managed by Africans. African media should report on the aspirations of African nations, reflect their image and address their concerns from a genuine African perspective.

Media rights and freedom of expression in Africa are expanding progressively, but the continent has not yet reached a stage where they are fully and adequately granted. Despite the role increasingly played by media in creating an informed citizenry eager to participate in decision-making, the situation remains precarious due to political unrest and insecurity in many countries.

Towards a Solution

This programme acknowledges the vital role played by African media in addressing obstacles to the Sustainable Development Goals, as well as their role in raising public awareness of security concerns, mobilizing efforts to combat terrorism and extremism and promoting a holistic approach to sustainable development.

In 2020, 34 African media figures attended workshops organized by the Egyptian Agency of Partnership for Development (EAPD). Topics included the role of the media in supporting African relations, the impact of media on security and development, and the position of African media on women's empowerment. **The main goal was to emphasize the role of African media in creating and promoting a unified African identity.**

The programme also included seminars, events and meetings with official dignitaries and field visits in Egypt. Participants met with religious leaders to discuss spreading a culture of tolerance and living in harmony; ending bloodshed from wars and conflicts; addressing hate, intolerance, violence and extremism; protecting the environment and the rights of women; building a moral society; and achieving true citizenship for all. They also met with the Grand Imam of Al-Azhar to learn about imam training programmes in an effort to address misconceptions about Islam spread by terrorist groups. Although Christians are a minority in Egypt, religious tolerance is seen as a hallmark, as evidenced by the simultaneous inaugurations of the Al-Fattah Al-Aleem Mosque and the Cathedral of the Nativity in the new administrative capital east of Cairo in January 2019.

Participants also visited the Egyptian Media Production City, Nasser Military Academy, the Egyptian Police Academy, the National Training Academy, the Suez Canal, the new administrative capital and British and German universities in Egypt to learn about efforts to achieve sustainable development in the fields of education, women's empowerment, industry and exports and how to transfer these experiences to African partner countries.

Key recommendations from the workshops:

- Recognize that African media could play a significant role in promoting a positive image of African women, addressing their issues and supporting empowerment efforts at all levels.

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- Encourage media to produce constructive and objective ideas and initiatives to help decision makers face challenges and create positive opportunities for sustainable development. In this regard, a platform was created to facilitate the exchange of experiences and expertise between Egyptian and African media. It serves as a network for media executives to enhance cooperation in achieving the Agenda 2063 of the African Union, in light of the important role that media play in increasing community awareness of development challenges and constraints in African countries.
- Emphasize the role of the African media in constructing and promoting a unified African identity and highlighting the role of civil society in enriching dialogue among African nations.
- Agree on the need to establish a unified network of African media managed by Africans. In that connection, a decision was made to revitalize the role played by Shabaket Al Eza'at Al Mowagaha, the Egyptian overseas broadcasting network, which was created in 1953 to support African countries in

their struggle for independence. It will now play a pivotal role in supporting African nations in achieving sustainable development and will be broadcasting in seven different languages to reach African citizens throughout the continent.

Since its inception, EAPD has always stood by its commitments and supported partnerships to improve coordination, integration and communication among African media to promote sustainable development objectives that would fulfil the aspirations of African peoples.

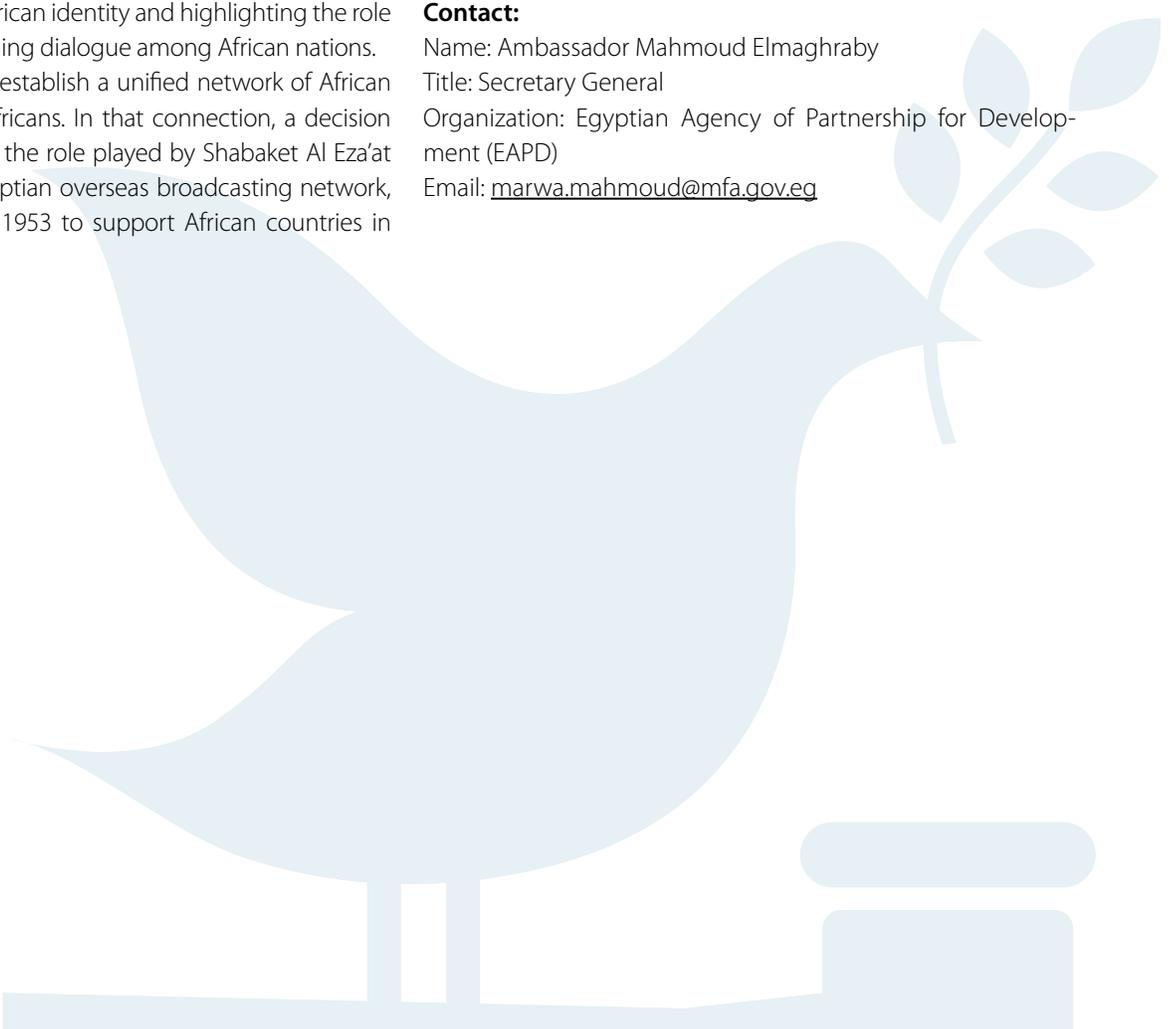
Contact:

Name: Ambassador Mahmoud Elmaghraby

Title: Secretary General

Organization: Egyptian Agency of Partnership for Development (EAPD)

Email: marwa.mahmoud@mfa.gov.eg



PROJECT NAME: The Role of Media in Supporting United Efforts to Achieve Sustainable Development in Africa
COUNTRIES/REGIONS: Approximately 44 African States
NOMINATED BY: Egyptian embassies in various African States; Ministries of Foreign Affairs in those States; national newspapers, radio and television stations
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 16.6, 16.8, 17.6
SUPPORTED BY: Egyptian Agency of Partnership for Development
IMPLEMENTING ENTITIES: National Egyptian institutions, Al-Ahram newspaper, Al-Azhar, Orthodox Church, State Information Service, National Council for Women
PROJECT STATUS: Completed
PROJECT PERIOD: July 2017–January 2020
URL OF THE PRACTICE: <https://bit.ly/34ARfVX>



Peace and Security Capacity-Building Programmes

Fostering cooperation for African peace and security, prioritizing post-conflict reconstruction and development in the Egyptian agenda

Challenge

Africa is currently facing a number of distinct security threats, from the rise of terrorist groups to civil wars and increased natural resource extraction. The situation is exacerbated by weak security forces that are ill-equipped to meet these challenges, the deep-rooted causes of which do not stem from deficiencies that could be readily addressed.

The threat from radical groups has been evident in the Group of Five for the Sahel (G5 Sahel), namely Burkina Faso, Chad, Mali, Mauritania and Niger. Violence and rebel groups have also spread across Kenya, Nigeria and Somalia. These countries must build national institutions and a security sector that would enable them to implement strategies and execute plans to safeguard their citizens from violence.

The Egyptian Agency of Partnership for Development (EAPD), in cooperation with various State agencies, has organized activities to build African capacities and transfer expertise and technical knowledge in order to meet the needs of countries across the African continent and support their development aspirations.

Towards a Solution

Addressing the needs of countries and communities affected by or emerging from conflict is among the most complex challenges facing Africa. Restoring and building state authority and its ability to perform basic functions, building trust in a new political order and governance structures, repairing the social fabric and addressing the root causes of conflict to prevent relapse are complex and long-term processes that span peacemaking, peacekeeping, peacebuilding and development mandates and efforts. They require comprehensive, integrated and inclusive politics and policies, sustained funding, and engagement and coordination among a wide array of local, national, regional and international actors across the humanitarian-development-peace nexus.

Mindful of the above and in response to the changing dynamics of conflict and the emergence of new threats, the international community's toolbox of conflict management and resolution is undergoing reform, with a view to ensuring integration and complementarity of efforts across the peace continuum.

Egypt has been a significant contributor to eight of the nine peacekeeping missions in Africa and has accumulated extensive experience in combating terrorism, securing borders and fighting organized crime. Many African officials are attending training programmes on human trafficking, illegal migration, antiterrorism, humanitarian law and leadership skills through partnerships with the Ministry of Justice, the Armed Forces and the Police Academy of Egypt. **Over 40 capacity-building programmes were implemented, reaching over 1,200 African participants. EAPD organizes these events in the spirit of promoting peace, with no hidden agenda or concealed conditionality.**

Since EAPD believes that development and security are closely linked, the Agency is collaborating with the Ministry of Defence, the Police Academy and the Cairo Centre for Conflict Resolution and

Peacekeeping in Africa to support other African countries in achieving Sustainable Development Goal 16 to promote just, peaceful and inclusive societies.

EAPD has also deployed technical and political experts to support African countries in building national security institutions and is hosting African students in the Egyptian Police Academy. To ensure the sustainability of this initiative, selected participants hold a position in the country that allows them to disseminate knowledge, such as extension officers or instructors at the relevant institution. In some cases, graduates assist in selecting new candidates, as this can help to strengthen the relationship between former and new participants, allowing them to become leaders in their countries.

Egypt deeply appreciates its African roots and is aware of the common challenges facing the continent. The country strives to build on and leverage its national expertise to complement efforts throughout the continent to promote sustainable development and fulfil aspirations for peace, stability, prosperity and welfare.

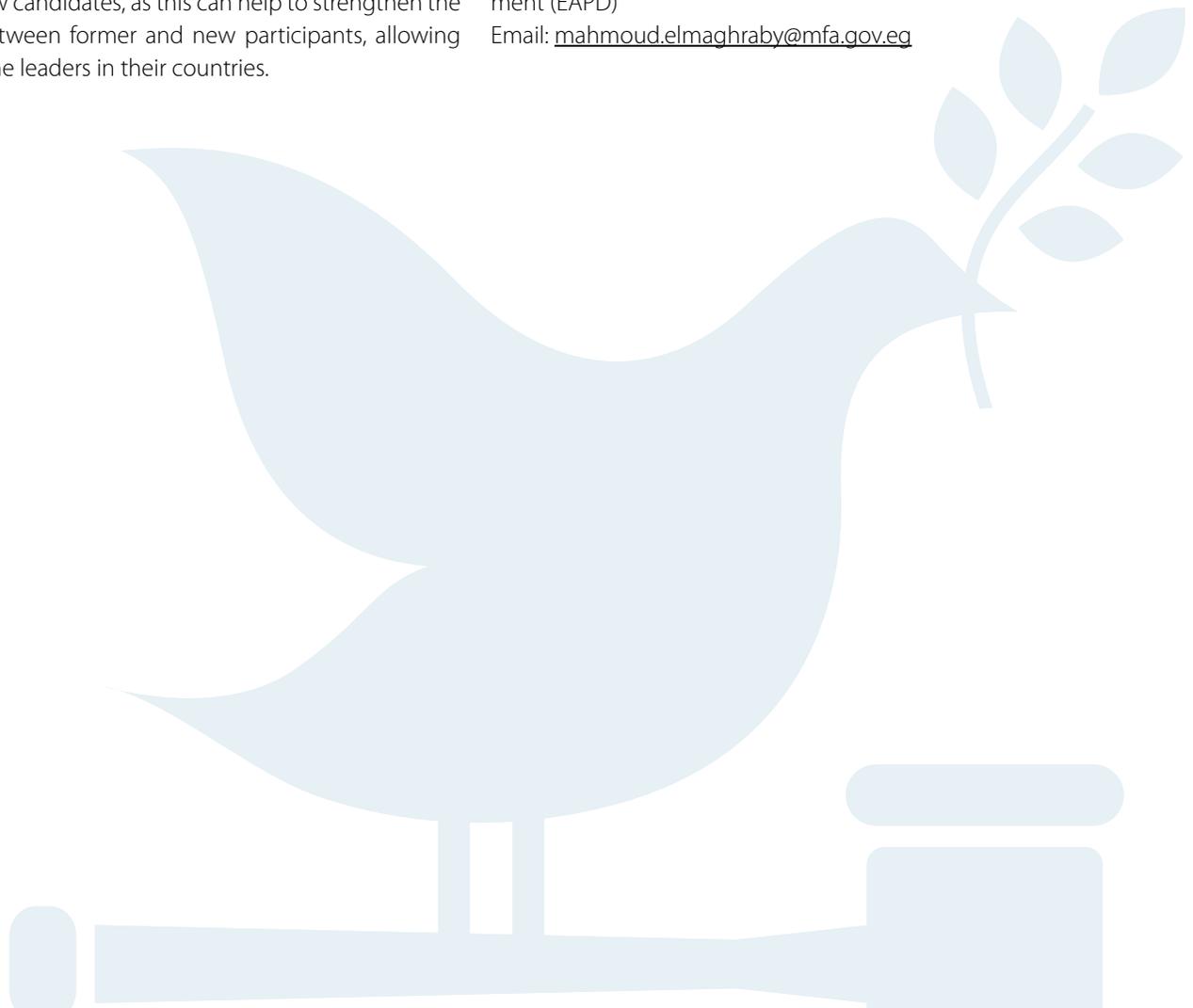
Contact:

Name: Ambassador Mahmoud El Maghraby

Title: Secretary General

Organization: Egyptian Agency of Partnership for Development (EAPD)

Email: mahmoud.elmaghraby@mfa.gov.eg



PROJECT NAME: Peace and Security Capacity-Building Programmes

COUNTRIES/REGIONS: Burkina Faso, Chad, Djibouti, Egypt, Mali, Mauritania, Niger, Somalia, Sudan

NOMINATED BY: Egyptian embassies in Africa, Ministries of Foreign Affairs in participant countries, Ministry of Defence of Egypt, Egyptian Police Academy, Cairo Centre for Conflict Resolution and Peacekeeping in Africa

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.2, 16.3, 16.4

SUPPORTED BY: Egyptian Police Academy, Nasser institute for Military Studies

IMPLEMENTING ENTITIES: Ministry of Defence of Egypt, Armed Forces, Police Academy

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2014–present

URL OF THE PRACTICE: <https://bit.ly/3jiPTmS>



Sustaining Peace through the Promotion of Tolerance, Pluralism and Democracy

Celebrating diversity and pluralism to support sustained peace



Challenge

The protracted armed conflict in Afghanistan, which has spanned almost four decades, creates political and societal instability. The Government and various elements of society seek to overcome this ongoing challenge. As a result, peacebuilding and reconciliation efforts in Afghanistan have become a major concern for the international community. Successful experiences in conflict resolution must be shared to enable the Government of Afghanistan to formulate its own peacebuilding and reconciliation strategy.

Towards a Solution

Peace and reconciliation efforts in Afghanistan are complex and require support from the international community. Indonesia has committed to supporting this noble endeavour through several means, including by providing political support and capacity-building. The Government convened a capacity-building programme entitled 'Capacity-Building for Afghan Diplomats: Indonesia and Peacebuilding through the Promotion of Tolerance, Pluralism and Democracy—Experiences and Lesson Learned'. The program was also part of Indonesia's commitment as UN Security Council's Non-Permanent Member for 2019-2020, and as well as the means to strengthen South-South cooperation framework.

This programme was convened for 10 diplomats from Afghanistan from 16 to 23 July 2019 in Jakarta and Ambon, Indonesia. The joint effort was organized by the Directorate of Technical Cooperation, the Centre for Education and Training, and the Directorate General of Multilateral Cooperation of the Ministry of Foreign Affairs of Indonesia. During the programme, Afghan diplomats learned strategies to resolve conflicts over severe differences, promote tolerance and live in peace and harmony. Indonesia could serve as a model for peacebuilding among heterogeneous communities.

During the opening ceremony of the programme, the head of the Centre for Education and Training underscored its significance in strengthening bilateral cooperation between Indonesia and Afghanistan. He reiterated that the programme was evidence of his Government's commitment to fully support peace in Afghanistan within the framework of South-South cooperation by enhancing the peacebuilding capacities of diplomats.

During their stay in Indonesia, the Afghan diplomats received classroom training in the Pancasila ideology, tolerance, pluralism in society, Islam and democracy in Indonesia. They were also briefed on the country's experiences in peacebuilding diplomacy. In order to explore conflict resolution and the atmosphere of religious tolerance in Indonesia, participants were invited to visit the Istiqlal Mosque and the Jakarta Cathedral and to observe daily life in Ambon. The city was chosen as an example of the peaceful resolution of conflicts between religious communities.

During a visit to Ambon, participants were informed that the core of conflict resolution involved not only central and regional governments and security forces, but also the aspirations of grass-roots communities, especially youth and women. They learned about the tradition of *Pela Gandong*,



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a designation given to two or more countries or villages that have a fraternal relationship or alliance, which is an ancestral custom of the Moluccans and plays an important role in unifying society.

The goal of the training was to increase the capacity of Afghan diplomats to foster peace in their country as they applied the knowledge gained in Indonesia. In addition, bilateral relations between the countries were expected to grow.

Several days after the training, the Minister of Foreign Affairs of Afghanistan and the Special Envoy of the Indonesian Foreign Ministry to Afghanistan met to discuss bilateral relations between the two countries, including the possibility of a follow-up training on conflict resolution and potential cooperation on interfaith dialogue and women's empowerment.

On 23 December 2019, the Minister of Foreign Affairs of Indonesia also hosted a two-day dialogue, attended by dozens

of Afghan women and led by the Acting Minister of Information and Culture of Afghanistan, to discuss the establishment of an Afghanistan-Indonesia Women Solidarity Network that would focus on empowering women in peacebuilding efforts in Afghanistan. The Network was officially launched on 1 March 2020, in Kabul, Afghanistan during an official visit of the Minister of Foreign Affairs of Indonesia.

This initiative contributed to the achievement of Sustainable Development Goal 16, as the training programme encouraged participants to embrace peaceful means to attain sustainable, inclusive and just institutions at all levels of society in Afghanistan.

Contact:

Name: Mr Mohammad Syarif Alatas

Title: Director for Technical Cooperation

Organization: Ministry of Foreign Affairs of Indonesia

Email: syarif.alatas@kemlu.go.id



PROJECT NAME: Sustaining Peace through the Promotion of Tolerance, Pluralism and Democracy

COUNTRIES/REGIONS: Afghanistan, Indonesia

NOMINATED BY: Ministry of Foreign Affairs of Indonesia

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.1, 17.9

SUPPORTED BY: Ministry of Foreign Affairs of Afghanistan

IMPLEMENTING ENTITIES: Ministry of Foreign Affairs of Indonesia

PROJECT STATUS: Completed

PROJECT PERIOD: 16–23 July 2019

URL OF THE PRACTICE: <https://bit.ly/31w2nSh> (in Bahasa Indonesia)



Community Policing

Promoting friendly relations, friendly societies and safe communities

Challenge

According to InSight Crime,¹ Guatemala had a homicide rate of 21.5 deaths per 100,000 inhabitants in 2019, ranking ninth among countries in Latin America and the Caribbean.

As a result of the 36-year civil war and, more recently, the rise of 'maras' gangs, distrust of police authority was widespread. Local authorities did not work with or support the police, which impacted the security of entire communities. Crime and homicides were rampant, but people were afraid to report incidents because of accounts of police corruption. The police had a negative perception in the community, and there was a poor relationship between mayors and police chiefs. All these elements contributed to worsening security in Guatemala.

Towards a Solution

To address these challenges, the Japan International Cooperation Agency (JICA) began a technical cooperation project in Guatemala, in which Brazilian police officers shared good practices with their Guatemalan counterparts. Brazil was known for its high crime rates in the 1990s. However, the government of Sao Paulo succeeded in drastically reducing the crime rate by implementing the Japanese koban community policing system and building trust with the community. JICA supported those efforts with a technical cooperation project on community policing, which uses the koban system. The project helped to reduce the murder rate in the state of Sao Paulo by 70 percent over a period of 10 years.

From 1964 to 1985, Brazil was governed by a military dictatorship that ruled by fear rather than trust. After the fall of that regime, the Government tried to restore trust by introducing community policing. It studied various community policing systems from a number of countries. The state of Sao Paulo decided to adopt the Japanese community policing model, in which Japanese police officers visit the community on foot or by bicycle and communicate with the people in person, building closer relationships with them.

JICA Brazil introduced the Japanese koban system to the Sao Paulo Military Police [Polícia Militar do Estado de São Paulo] (PMESP) in 2000. Under this system, police officers are encouraged to visit the community on foot, talk to residents in person and plan and attend community activities with the people. Through these activities, PMESP has succeeded in building confidence between the authorities and the community, causing the relationship to evolve from one based on confrontation to one based on harmony. PMESP now receives much more information from the communities, which helps to prevent crime. This project does not require any special technology or a significant financial investment.

JICA signed the Japan Brazil Partnership Program in 2000 to promote triangular cooperation, making the best use of Brazilian resources. It supports the Government of Brazil in formulating, moni-

1 Parker Asmann and Eimhin O'Reilly, "InSight Crime's 2019 Homicide Round-Up", InSight Crime, 28 January 2020.



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toring and evaluating international cooperation projects. This platform has allowed the Government to extend its good practices to neighbouring countries that are suffering from similar issues.

Upon the request of the Government of Guatemala, the 'Project for Strengthening Police Human Resources through the Promotion of Community Police Philosophy' was implemented in 2016, with support from the Brazilian Cooperation Agency, the Ministry of Justice and PMESP officers. The project aimed to reduce crime rates while restoring trust among the community for the National Civil Police. The PMESP officers now served as the experts on community policing, having adapted the Japanese system to the Brazilian context, and shared their knowledge and experiences with the Guatemalan police officers.

Over the course of the project, the Brazilian experts conducted 8 workshops in Brazil and 10 in Guatemala, during which approximately 1,300 Guatemalan officers learned about community policing. In Brazil, the Guatemalan officers accompanied their Brazilian counterparts on patrol to engage with local communities. Both senior and uniformed officers, some of

whom had never travelled outside of the country, were invited to attend the workshops in Brazil to see the impact of community policing on public security. Guatemalan officers have used the Brazilian project as a model and are actively involved in community activities, such as school traffic safety programmes and street clean-up initiatives. As a result of the project, officers of all ranks and members of the community learned that public security could be maintained by mutual trust. Police officers enjoyed a sense of pride for their work as they reduced crime rates and made communities safer. **The project succeeded in reducing the homicide rate from 76 deaths per 100,000 inhabitants in 2017 to 37 deaths in 2019 in San Pedro Ayampuc, and from 49 deaths to 12 deaths in Chiantla, Guatemala.**

Contact:

Name: Ms Marta Ventura

Title: Project Officer

Organization: Japan International Cooperation Agency (JICA) Guatemala

Email: venturamarta.gu@jica.go.jp

Phone: +502 5945-7252

PROJECT NAME: Project for Strengthening Police Human Resources through the Promotion of Community Police Philosophy

COUNTRIES/REGIONS: Brazil, Guatemala, Japan

NOMINATED BY: Japan International Cooperation Agency (JICA) Guatemala Office, JICA Brazil Office

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.1

SUPPORTED BY: JICA, Sao Paulo Military Police

IMPLEMENTING ENTITIES: National Civil Police of Guatemala

PROJECT STATUS: Completed

PROJECT PERIOD: July 2016–July 2019

URL OF THE PRACTICE: <https://bit.ly/32wAwkh> (in Portuguese)



Asia-Pacific Civil Registrars

Facilitating collaboration to strengthen national civil registration and vital statistics systems

Challenge

In the Asia-Pacific region, approximately 65 million children under the age of five are unregistered.¹ This lack of identity denies children an existence before the law. As they grow older, it prevents them from accessing social, educational, health and financial services, as well as employment markets. They do not benefit from the legal protections necessary to increase their quality of life. In promoting universal civil registration and a legal identity for all, a State may therefore strengthen its ability to achieve a number of Sustainable Development Goals (SDGs) and targets.

While civil registrars in Asia-Pacific face unique national challenges in achieving universal registration, they must also address practical registration issues, as well as cross-border issues such as migration caused by conflict, natural disasters and climate change. As such, civil registrars must strengthen information and communications technology and adopt innovative approaches to meet these challenges. They must network in an environment that is conducive to sharing ideas, learning from one another and finding common solutions through South-South cooperation.

Towards a Solution

Recognizing that universal civil registration is critical for sustainable and inclusive development, the Economic and Social Commission for Asia and the Pacific (ESCAP) and its development partners hosted a meeting of Asia-Pacific civil registrars in 2014. This meeting focused on improving the impact of civil registration and vital statistics (CRVS) systems on providing legal identity (SDG target 16.9), achieving universal health coverage (target 3.8) and early childhood education (target 4.2), eliminating child marriages (target 5.3), promoting entry into formal employment (target 8.7) and ensuring that women are not denied inheritance rights or financial services because of a lack of identification (target 5.a). Participants agreed to create subregional networks in Asia and the Pacific to collaborate on cross-border issues in CRVS and share knowledge, ideas, good practices and lessons learned.

Two subregional networks have since been established, with assistance from ESCAP, the United Nations Children's Fund (UNICEF), the Pacific Community and other development partners. In addition to the Pacific Civil Registrars Network and the Civil Registration Professionals of South Asia (CR8), a third subregional network for countries in North and Central Asia is currently underway. The networks have strengthened coordination and prioritized shared technological approaches to collaborate on common, transboundary challenges. For example, the Pacific Civil Registrars Network assist members in building resilience to natural disasters by adopting best practices for archiving data and use vital statistics to inform post-disaster services.

The subregional networks promote South-South cooperation by sharing innovative methods for improving CRVS systems among developing countries. They also promote the development of common data-sharing approaches and good practices to improve systems so that no one is left behind. These networks allow stakeholders to regularly communicate with one another and



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¹ United Nations Children's Fund, *Birth Registration for Every Child by 2030: Are we on track?* (New York, 2019).

develop collective approaches to the storage and retrieval of civil registration data.

The 2015–2026 strategic plan for the Pacific Civil Registrars Network includes a communication and information-sharing strategy. Through collaborative efforts, States in the Pacific subregion have witnessed an increase in birth registrations and donor support. Papua New Guinea recently registered births for over 1 million unregistered adults as part of a national programme to issue 8 million identification cards prior to the April 2021 elections. Between 2013 and 2019, Kiribati achieved a 14.2 percent increase in territorial births registered within one year (SDG target 16.9).

These innovative subregional networks are the first of their kind in Asia-Pacific to prioritize the needs of national civil registration authorities while seeking common solutions to transboundary challenges. The networks have facilitated the increased use of innovative, technological solutions, such as cloud-based servers for data storage and retrieval. Each network addresses common issues while remaining flexible to local needs. They also support the achievement of the shared Asia-Pacific vision to see all people benefit from universal and responsive CVRS systems that facilitate the enjoyment of their rights and support good governance, health and development by 2024².

By emphasizing South-South cooperation while placing the needs of national registration authorities at the heart of their mandates, the existing subregional networks are self-sustained and driven by the participating countries themselves. This sus-

tainability is further supported by subregional agreements. For example, under the Pacific Civil Registrars Network data-sharing agreement, national stakeholders are streamlining the process to recognize public documents from other members to facilitate data-sharing across borders and improve the daily work of registrars. The Pacific Civil Registrars Network quickly recognized the need to improve procedures for sharing civil registration data. Because Pacific Islanders frequently travel overseas for medical treatment, the lack of data-sharing prevented countries from collecting accurate information on vital events, including births and deaths.

Learning from the success of the Pacific Civil Registrars Network, the CR8 identified a group of experts dedicated to addressing issues common to their own subregion. Each meeting has led to the release of a compendium showcasing common challenges and the solutions to address them.

Finally, replicability in additional subregions relies upon political commitments to improve CRVS systems and an openness to sharing information. Civil registrars across Asia and the Pacific will continue working together to expand registration coverage and meet the related SDGs by guaranteeing a legal identity for all. Thus, these networks promote South-South cooperation at the national and subregional levels.

Contact:

Name: Ms Gemma Van Halderen
Title: Director, Statistics Division
Organization: Economic and Social Commission for Asia and the Pacific (ESCAP)
Email: gemma.vanhalderen@un.org

2 E/ESCAP/RES/71/14, Annex A

PROJECT NAME: Establishing Subregional Networks for Civil Registration Professionals in Asia and the Pacific
COUNTRIES/REGIONS: Pacific Civil Registrars Network: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu
Civil Registration Professionals of South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
NOMINATED BY: United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.8, 4.2, 5.3, 5.a, 8.7, 16.9, 17.19
SUPPORTED BY: ESCAP, United Nations Children’s Fund, Office of the United Nations High Commissioner for Refugees, World Health Organization and Plan International
IMPLEMENTING ENTITIES: Asian and Pacific Civil Registration Professionals
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2014–present
URL OF THE PRACTICE: <https://bit.ly/3aWWz7g>

Post-COP21 Phase II: Strengthening Media Capacity to Monitor and Report on Climate Change in Asia-Pacific and Africa

Raising awareness and understanding of climate change mitigation and adaptation strategies through journalism

Challenge

It has been five years since the historic climate agreement made in 2015 at the 21st Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris. With scientists continuing to share new information on climate change modelling, the need to convert emission targets from words into actions has never been more important. Journalists and journalism schools have a vital role to play in ensuring mitigation and adaptation strategies are discussed openly through strong journalism practices where freedom of expression thrives. This is particularly important in Small Island Developing States (SIDS) and South-East Asian and sub-Saharan African countries, where extreme weather events are likely to increase in the coming decades.

The UNFCCC, which preceded all COPs, addressed scientific information, education, training and public awareness and emphasized the role that non-governmental organizations could play in combating climate change in article 4 of the Treaty.

Towards a Solution

The project entitled 'Post-COP21 Phase II: Strengthening Media Capacity to Monitor and Report on Climate Change in Asia-Pacific and Africa' sought to consolidate and strengthen the work achieved during the first phase of the project, which was supported by the Cooperation Programme between Malaysia and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The second phase continued to put into practice article 4 of the UNFCCC Treaty, while strengthening various UNESCO resources on journalism education, sustainable development and climate change in regional contexts. These resources include:

- Getting the Message Across: Reporting on Climate Change and Sustainable Development in Asia and the Pacific: A Handbook for Journalists (2019)
- UNESCO Declaration on Ethical Principles in relation to Climate Change (2017)
- Teaching Journalism for Sustainable Development: New Syllabi (2015)
- Climate Change in Africa: A Guidebook for Journalists (2013)
- Model Curricula for Journalism Education: A Compendium of New Syllabi (2013)

The activities undertaken during the first phase of the Malaysia-UNESCO Cooperation Programme have had an impact on SIDS and in South-East Asia and Africa. Over 80 influential journalists from Malaysia and selected countries were equipped with greater knowledge on the science of climate change and strategies to better investigate, monitor and report on it to their respective audiences. One regional training targeting young journalists from South-East Asia was hosted by the Cambodia Institute for Media Studies and facilitated by climate- and photojournalists from the Philippines. One of the key lessons learned from the initial phase of this project was the need to focus on the human aspect of climate change and sustainable development. Beneficiaries felt that climate change mitigation and adaptation are best achieved when people are empowered within the 2030 Agenda for Sustainable Development, particularly with regard to Sustainable Development Goal (SDG) 5, on gender equality; SDG 11, on sustainable cities and communities; SDG 13, on climate action; and SDG 16, on peace, justice and strong institutions, thereby echoing the challenge to leave no one behind.

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During Phase I of this project, the UNESCO International Programme for the Development of Communication published *Getting the Message Across: Reporting on Climate Change and Sustainable Development in Asia and the Pacific: A Handbook for Journalists*. It explores the essential aspects of climate change, including its injustices to vulnerable communities, especially women and girls and least developed countries. The Handbook also provides examples of best practices and stories of hope unique to the region. It can be used as a resource for journalists to understand the science of climate change and help them to improve reporting on the environmental, social, economic, political and technological angles of the story, among others.

This Handbook is part of the UNESCO Series on Journalism Education, which aims to promote excellence in journalism. It is designed to reinforce the capacities of journalists, journalism educators and their institutions to promote sustainable development by enhancing coverage of science, development and democratic governance.

During the second phase of this project, the Handbook was adapted into a massive open online course. Additionally, in April 2019, UNESCO introduced the Handbook at the fifth Media Summit on Climate Action and Preparedness of the Asia-Pacific Broadcasting Union (ABU), which was held in Kathmandu, Nepal. During the Summit, public service broadcasters from the Asia-Pacific region were also trained on climate change reporting based on the Handbook, and the training was facilitated by a senior lecturer from the Universiti Sains Malaysia.

In October 2019, ABU organized a South-South twinning programme for approximately 20 broadcast journalists from SIDS

and African and South-East Asian States to promote the transfer of knowledge and good practices on climate change coverage. The twinning programme included the development of a training programme based on the UNESCO Handbook. In addition, a workshop was organized, and specialized reports were produced. There was also a follow-up to discuss how trainees would integrate these skills in their climate change reporting.

This is a multi-pronged approach to tackling the issues of climate change through journalism. The Handbook has contributed to the project's sustainability, as it has been translated into several languages in South-East Asia, including Thai. For example, the British Embassy in Thailand used the UNESCO Handbook to **train over 100 journalists, editors and journalism students from Thailand on climate change reporting**. Another key parameter that helps to ensure sustainability is the UNESCO field network and its partners, such as Internews, which was involved in the project's implementation in Asia and the Pacific and continues to advocate for the outcomes through its Earth Journalism Network.

Contact:

Name: Mr Ming Lim

Title: Advisor for Communication and Information

Organization: United Nations Educational, Scientific and Cultural Organization (UNESCO) Jakarta

Email: m.lim@unesco.org

Name: Ms Misako Ito

Title: Advisor for Communication and Information

Organization: United Nations Educational, Scientific and Cultural Organization (UNESCO) Bangkok

Email: m.ito@unesco.org

PROJECT NAME: Post-COP21 Phase II: Strengthening Media Capacity to Monitor and Report on Climate Change in Asia-Pacific and Africa

COUNTRIES/REGIONS: Small Island Developing States, Asia-Pacific and sub-Saharan African countries, Malaysia

NOMINATED BY: United Nations Educational, Scientific and Cultural Organization (UNESCO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.b, 13.3, 16.10

SUPPORTED BY: Malaysia Funds-in-Trust

IMPLEMENTING ENTITIES: UNESCO

PROJECT STATUS: Completed

PROJECT PERIOD: 2018–2019

URL OF THE PRACTICE: <https://bit.ly/2YNGaNK>; <https://bit.ly/2QFi8jE>; <https://bit.ly/3jtVkzz>; <https://bit.ly/31GXg1C>



Strengthening Environmental Governance through South-South Cooperation

Recognizing that even the most thoughtfully constructed environmental law will have little effect if not effectively enforced

Challenge

National environmental law is only effective in managing and protecting the environment when it is enforced, and the intended regulatory community complies. While many developing countries have put in place several pieces of national environmental legislation, enforcement remains a significant challenge owing to a lack of institutional capacity, competence among relevant officials and information and national guidance materials on enforcement. These challenges work to weaken the effectiveness of the law, resulting in environmental degradation. Some developing countries are more advanced than others in addressing challenges in enforcement. As a result, this project was designed to bring them together to share experiences and lessons learned in civil, criminal and administrative enforcement. Participating countries went on to generate and document best practices that could be used to build the capacity of other developing countries in the enforcement of national environmental laws.

Towards a Solution

The project entitled 'Strengthening the Institutional Capacity of African and Asian Countries for the Enforcement of Environmental Legislation through South-South Cooperation' provided a forum for developing countries to share experiences and learn lessons in addressing enforcement challenges and to generate and document good practices that could be replicated by other developing countries in addressing enforcement challenges. The meeting was highly interactive, and all participants fully engaged in sharing experience on various aspects of enforcement. During these deliberations, they generated a set of best practices, which enabled the pilot countries of Malawi, Nigeria and Viet Nam to develop their own national environmental laws and national institutional guidance materials. These best practices on enforcement have been widely disseminated online, thereby influencing institutional development beyond the targeted countries.

The second interregional initiative aimed to provide information to countries and institutions on promoting innovative enforcement action, calculating and compensating environmental damage and measuring enforcement. Examples of good practices in these three thematic areas were drawn from countries' experiences in developing relevant mechanisms. The good practices are solutions that have been implemented in particular countries to address specific difficulties in enforcing environmental law and which have been successful in resolving those difficulties or have shown significant promise. These focus areas were chosen because the developing countries required some clarity.

The project's major success was in enhancing the institutional capacities of countries to enforce environmental law. The set of best practices have been adopted by participating countries to strengthen institutions that were struggling with weak enforcement. The primary mechanism used throughout the project was the exchange of information. The good practices developed were documented, allowing individual countries to make use of the lessons. The project therefore facilitated peer-to-peer learning in strengthening the enforcement of laws among participating countries.

The United Nations Environment Programme was able to use the set of good practices to support enforcement efforts in a number of countries, imparting knowledge to enforcement officials on



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various potential solutions. For example, a training of trainers enforcement manual was developed in Malawi. In Viet Nam, a handbook was developed on environmental liabilities under environmental law and other types of law. In Nigeria, a new enforcement policy was also developed using this project's results and funding.

South-South cooperation was central to the project. It was the means through which the entire project was implemented and the results were achieved. The best practices were doc-

umented in two volumes for reference and capacity-building and made available online for various users, including compliance and enforcement practitioners in developing countries, thereby contributing to the sustainability of the project.

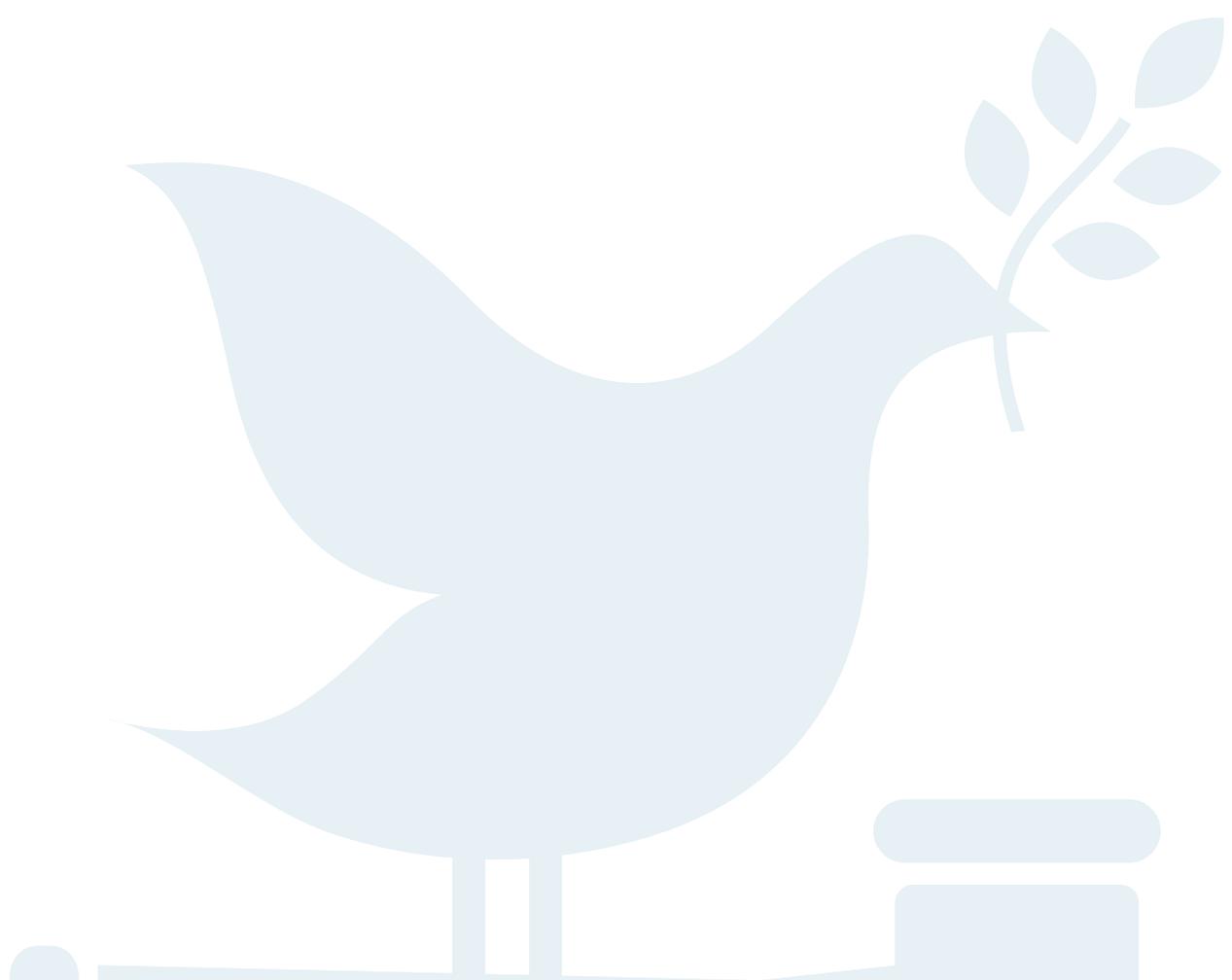
Contact:

Name: Ms Sylvia Bankobeza

Title: Legal Officer

Organization: United Nations Environment Programme (UNEP)

Email: sylvia.bankobeza@un.org



PROJECT NAME: Strengthening the Institutional Capacity of African and Asian Countries for the Enforcement of Environmental Legislation through South-South Cooperation

COUNTRIES/REGIONS: 24 countries from Africa, Central Asia and the Association of Southeast Asian Nations (ASEAN), as well as China

NOMINATED BY: United Nations Environment Programme (UNEP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.7, 16.10, 16.b

SUPPORTED BY: Government ministries of environment, environmental protection agencies and other enforcement agencies, China-ASEAN Environmental Cooperation Centre, regional organizations, enforcement networks, universities

IMPLEMENTING ENTITIES: UNEP

PROJECT STATUS: Completed

PROJECT PERIOD: 2014–2017

URL OF THE PRACTICE: Not available

Exchange of Good Municipal Practices in Urban Contexts Affected by Violence and Stronger Mechanisms for Access to Justice in Displacement Contexts



Exchanging experiences and good practices for capacity-building and national coordination in response to forced displacement

Challenge

In 2019, Honduras finalized a study on the impact of displacement and alternative solutions for displaced persons. It concluded that 58,500 households were displaced between 2004 and 2018. Of the 247,090 people affected, at least one member per household was displaced by violence. Although it has been established that displacement occurs as a result of violence in Honduras, the study highlighted the extensive impact of internal displacement on its citizens. Using this study as a baseline, the Government of Honduras endeavoured to develop a holistic response to internal displacement and to strengthen protections and care for displaced persons at the local and national levels.

Towards a Solution

In order to achieve those goals, the Government sought the support of Colombia, a country that had addressed internal displacement in a similar context. The exchange focused on the institutional response to forced displacement by local authorities and the judiciary in Colombia, which had developed and implemented mechanisms to promote coordination between the local and national levels.

The exchange aimed to support the Inter-institutional Commission for the Protection of Persons Displaced by Violence [Comisión Interinstitucional para la Protección de las Personas Desplazadas por la Violencia] (CIPPDV) of Honduras in designing public policies and local programmes with sustainable solutions to prevent and protect against forced displacement in the municipalities of San Pedro Sula and El Progreso. The Commission had formally delivered the draft law on prevention, care and protection for internally displaced persons to the Justice and Human Rights Commission within Congress.

The Office of the United Nations High Commissioner for Refugees (UNHCR) and CIPPDV facilitated an exchange between Colombian authorities from Bogota and Medellin and Honduran officials from the municipality of San Pedro Sula. The aim was to share knowledge about the lines of coordination available to local governments within a decentralized framework and about local mechanisms to prevent forced displacement, which all promote just, peaceful and inclusive societies at the local level.

The exchange of experiences strengthened the response to internal displacement in the municipality of San Pedro Sula, where mechanisms, public policies and local programmes were designed and updated to prevent forced displacement and to provide protection and care for those displaced by violence.

Following a visit to a local centre that provides care to victims of displacement in Colombia, the Honduran officials decided to replicate this valuable service, with adjustments for the local context. They requested technical assistance from UNHCR to establish a local care centre for victims in San Pedro Sula, and UNHCR has been coordinating with officials in Honduras in its development.

With regard to the judiciary, with the coordination and support of the juridical school of Honduras, 15 judges from various chambers of the Supreme Court of Honduras attended a meeting led by an expert on land restitution and magistrate from Colombia. They exchanged good practices and les-



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sons learned on the development of land restitution processes in Colombia in order to give continuity to efforts in Honduras and guarantee the application of justice in the context of forced displacement.

This experience aimed to provide examples on good practices regarding define the conditions necessary to facilitate access to justice and the promotion of peaceful and inclusive societies by establishing better criteria for revising legal frameworks, tools and mechanisms so as to guarantee the application of justice in the context of forced displacement, as well as land and property abandoned as a result of violence.

As a result of this exchange, various justice officials expanded their knowledge on how to handle possible requests for land/housing restitution cases in the future. This exchange on good

practice should be used to expand the criteria for updating existing instruments to address forced displacement, ensuring that the processes are sustainable and appropriately respond to the situation in Honduras. In this way, it is possible to promote access to peace and justice, guarantee sustainability by institutionalizing processes for legal protections and strengthen local capacities in the registration and restitution of abandoned land and property.

Contact:

Name: Mr Andres Celis

Title: Representative

Organization: Office of the United Nations High Commissioner for Refugees (UNHCR)

Email: celis@unhcr.org



PROJECT NAME: Exchange of Good Municipal Practices in Urban Contexts Affected by Violence and Stronger Mechanisms for Access to Justice in Displacement Contexts

COUNTRIES/REGIONS: Colombia, Honduras

NOMINATED BY: Office of the United Nations High Commissioner for Refugees (UNHCR)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.3, 16.7, 16.a

SUPPORTED BY: UNHCR

IMPLEMENTING ENTITIES: UNHCR, Inter-institutional Commission for the Protection of Persons Displaced by Violence (CIPPDV)

PROJECT STATUS: Completed

PROJECT PERIOD: 2–5 July 2019

URL OF THE PRACTICE: Not available

MIRPS Countries Sharing Good Practices in Refugee Status Determination, as an Application of the Comprehensive Refugee Response Framework

Working together to strengthen national asylum procedures in the spirit of the Global Compact on Refugees

Challenge

Belize is located in Northern Central America, which experienced high levels of forced displacement at the end of the 20th Century resulting in a significant influx of refugees. This phenomenon caused drastic demographic changes, the impacts of which are reflected in current public opinion. Although the State has adopted national refugee legislation, it has responded cautiously to the current forced regional displacement, maintaining a low refugee recognition rate and allocating limited resources to processing asylum claims. Refugee authorities have welcomed the opportunity to begin a regional exchange of best practices for asylum systems to better ensure that no one is left behind.

Towards a Solution

Created in 2017, the Comprehensive Regional Protection and Solutions Framework (known as MIRPS for its acronym in Spanish) is a subregional and State-led application of the Global Compact on Refugees. As members of the MIRPS, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico and Panama have committed to responding to forced displacement at the national and regional levels. Each of the seven countries has developed a national action plan, and regional priorities are also identified and implemented throughout each year.

Belize joined MIRPS in 2017, in response to an increase in the number of refugee applicants from Northern Central America. In early 2018, Belize officially recognized 28 refugees, the first in nearly two decades.

Under its national action plan, the government of Belize has prioritized strengthening key components of its national asylum system. Since 2018, capacity development efforts have been undertaken to create a more favourable protection environment and fairer asylum process, including efforts to operationalize the Quality Assurance Initiative.

Effective refugee status determination (RSD) procedures are a prerequisite for refugee protection. In order to ensure that refugees can exercise their rights under the 1951 Convention relating to the Status of Refugees, a determination as to whether the individual is entitled to these rights must be made within a robust RSD process. Even an asylum seeker, whose refugee status has not yet been determined, is afforded certain rights that are safeguarded under a strong asylum system.

Having benefited previously from assistance from Canada in this matter, Costa Rica was considered a prime example from which Belize could learn and share experiences. With its more advanced system, Costa Rica has been better able to adapt and respond to significant increases in asylum applications resulting from the increase in forced displacement in the region. The Government continues to prioritize the quality and responsiveness of its RSD system, in accordance with its MIRPS national action plan.

In that connection, the Office of the United Nations High Commissioner for Refugees (UNHCR) facilitated an exchange of good practices in MIRPS responses within the region, for which Costa Rica hosted refugee authorities and institutions from Belize. Officials from Belize received a briefing



from the Ministry of Foreign Affairs of Costa Rica concerning the inter-ministerial committee established to implement the national action plan. The committee brings together five different ministries to ensure a comprehensive response to the issues facing refugees and asylum seekers.

The remainder of the mission concentrated on the RSD process in Costa Rica. Observations of the registration and interview processes were followed by several discussions about the appeals procedure and a briefing from civil society partners who actively support refugees and asylum seekers throughout the process. There were several key takeaways for the Government of Belize, including changes in file management, the registration process, a simplified registration form and the issuance of work permits to asylum seekers.

In October 2019, Costa Rican government officials visited Belize to continue the exchange of information. A first-instance RSD adjudicator and a judge from the Costa Rican administrative tribunal met with their RSD counterparts in Belize. This mission helped identify priority areas, including pending amendments to legislation and practices that could ensure a faster, fairer process for refugee claimants and stronger institutions for all of Belize.

The exchange of good practices and knowledge connects government officials who work in the same areas, allowing both countries to strengthen their systems. The Government of Costa Rica and the Immigration and Refugee Board of Canada have established a similar programme; now Costa Rica can share that information with Belize.

Given that strengthening asylum systems is a key aspect of national action plans for several MIRPS countries, this sharing of good practices can be replicated within the region. Whether a country is a member of MIRPS or is participating in the Quality Assurance Initiative, the MIRPS countries are willing to work with their neighbours for the mutual benefit of all those responding to forced displacement in the region.

Contact:

Name: Mr Joseph Hendrixx

Title: Associate Liaison Officer

Organization: Office of the United Nations High Commissioner for Refugees (UNHCR)

Email: hendrixx@unhcr.org

PROJECT NAME: MIRPS Countries Sharing Good Practices in Refugee Status Determination, as an Application of the Comprehensive Refugee Response Framework

COUNTRIES/REGIONS: Belize, Costa Rica

NOMINATED BY: Office of the United Nations High Commissioner for Refugees (UNHCR)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.6, 17.17

SUPPORTED BY: UNHCR

IMPLEMENTING ENTITIES: Department of Refugees (Belize), Ministry of Foreign Affairs (Costa Rica)

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <https://bit.ly/3kLIJd>



ECOWAS Volunteer Programme

Tackling peace and development issues with volunteerism in West Africa

Challenge

Since the 1990s, the West African region has been at the centre of civil wars and transborder conflicts and has struggled constantly with armed conflict and insecurity. Such conflicts not only cause a significant number of casualties and bring mental and physical pain and suffering to communities, they also destabilize Governments, weaken economies and destroy basic infrastructure. A series of protocols, strategy frameworks and policies have been established by the Economic Community of West African States (ECOWAS), the African Union, the United Nations and other entities to eliminate the negative impact of conflict and build the resilience and reconstruction capabilities of post-conflict countries. Nevertheless, some problems remain unresolved, including the lack of a resource mobilization network, the gap between well-developed policies and their effective implementation, and weaknesses in the delivery of basic social services, such as education and health.

Innovative and effective solutions are needed to achieve mutual and sustainable development among countries located in West Africa, solve this plight and consolidate peace and regional integration.

Towards a Solution

The first regional volunteer scheme, the ECOWAS Volunteer Programme (EVP), was launched on 26 March 2010 in Monrovia, Liberia. It was implemented by ECOWAS and the United Nations Volunteers (UNV) programme, with financial support from the African Development Bank. In 2018, the ECOWAS Commission further developed the programme with various partners. The overall aim of the EVP is to facilitate youth engagement and participation in peace and development initiatives through volunteerism. Young people from ECOWAS are united in their conviction that conflict prevention and reconciliation can be used to consolidate peace in their countries and in the subregion. The Programme mobilized volunteers in West Africa to promote ECOWAS ideals and strategies, which include union, peace, democracy, sustainable development and regional integration. Additionally, the EVP enhanced the expertise and professional skills of citizens in the community under the themes of solidarity, union, hopes and dreams.

The role of the EVP included strengthening the capacities of local organizations in the development and implementation of projects and programmes in which volunteers participated (Sustainable Development Goal [SDG] 17); promoting peace (SDG 16); enhancing gender equality (SDG 5); establishing and supporting partnerships between communities (SDG 17); networking and collaborating with other development countries (SDG 17); and providing expertise and technical support to host communities in education, health and gender equality initiatives (SDGs 3, 4 and 5).

The EVP provided opportunities for young professionals from the ECOWAS community to serve in neighbouring countries, supporting post-crisis initiatives. Since the launch of the EVP, **around 200 volunteers have been deployed in three post-conflict countries in West Africa: Guinea, Liberia and Sierra Leone. By sharing their expertise and providing technical assistance in 14 areas of specialization, EVP volunteers worked closely with local governments and communities in promoting national priority development areas.** The EVP also provided an opportunity for young



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people to learn about and discover new cultures and strengthen the bonds between individuals from different countries. In addition, the Programme addressed the issue of intercommunity perception. In some countries affected by civil war, like Sierra Leone or Liberia, foreigners from other ECOWAS countries were not always well received. Volunteer engagement through the EVP has helped improve intercommunity relationships by changing host communities' perceptions. During the evaluation of this programme, nearly 99 percent of ECOWAS volunteers believed that the EPV had an important added value to them.

During the programme, an EVP online platform was established to further expand the possibility of cooperation among countries in West Africa, mobilize additional volunteers and share information. Furthermore, an ECOWAS Volunteer Forum was also developed, involving Governments, civil society organizations and volunteer organizations. The Forum has been held every year since 2016 to enhance South-South cooperation on volunteering in West Africa and facilitate volunteer exchanges between countries. In 2018, for example, 54 participants from 14 countries took part in various consultations around the theme 'The Place of Volunteering in the Fight against Youth Unemployment in ECOWAS'. In 2019, the theme of the annual Forum was 'Volunteerism for Peace and Security', and over 60 participants came from national agencies, Governments, international partners in the field of volunteering, as well as non-governmental organizations.

The success of the programme relied on improving the connection and coordination between stakeholders from the global South by raising public awareness of volunteering for SSC; fostering cross-national and regional networks; and building the capacities of volunteers, Governments, volunteer-involving organizations (VIOs) and academia to manage and engage volunteers in support of national and regional programmes.

ECOWAS is also interested in exploring options to increase South-South cooperation in order to expand the programme. Volunteers from different nationalities working together under

one roof to improve life in one member State contributes to national integration. The strong commitment among Governments, volunteers, VIOs and other stakeholders helped to solve critical issues, which demonstrates that the EVP could be replicated by countries facing the same challenges. As a next step, ECOWAS plans to share these activities and good practices with countries in Central Africa and other regions of the world. The Community is also currently exploring partnerships with volunteer agencies in China.

During the programme, UNV has been identified as the "key to the success of the project", and it "effectively contributed to the achievements of the targets of the project"¹. In the beginning, UNV supported the EVP in almost every aspect, from technical advice on policies and legislations to support in setting up volunteer management operations systems. In 2019, UNV and ECOWAS transitioned full management of the programme to ECOWAS to ensure ownership and sustainability. Since January 2020, ECOWAS has had complete control of the programme; the EVP is now fully autonomous.

Contact:

Name: Mr Paul Armand Menye
Title: Regional Portfolio Manager, UNV Regional Office for West and Central Africa
Organization: United Nations Volunteers (UNV) programme
Email: paul.menye@unv.org

Name: Mr Rafael Martinez Gil
Title: Partnership Development Specialist
Organization: UNV
Email: rafael.martinez@unv.org

Name: Ms Yu Tang
Title: Programme Analyst (South-South cooperation)
Organization: UNV
Email: yu.tang@unv.org

¹ UNV partnership with ECOWAS

PROJECT NAME: ECOWAS Volunteer Programme
COUNTRIES/REGIONS: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo
NOMINATED BY: United Nations Volunteers (UNV) programme
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.c, 4.5, 5.1, 5.c, 9.a, 16.a, 17.6, 17.16, 17.18
SUPPORTED BY: African Development Bank
IMPLEMENTING ENTITIES: Economic Community of West African States (ECOWAS), UNV
PROJECT STATUS: Completed
PROJECT PERIOD: 2010–2019 (Since 2016, EVP is an autonomous entity. UNV continued to manage some of its operational components until December 2019, as part of its exit and sustainability strategy)
URL OF THE PRACTICE: ecowasvolunteers.com (in French); <https://bit.ly/2QuNx8>



Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project

Tracking service delivery to reach the unreached

Challenge

The geography of Fiji poses unique challenges for basic access to social, economic and legal services, especially for those in urban informal settlements, maritime zones and other remote rural areas. Citizens, many of whom reside in such areas, usually cover long distances to reach government offices, which are typically situated in urban and semi-urban areas. As a result, they face delays and challenges, in addition to lost income, as they must bear additional costs in transportation and accommodations in order to access basic public services. Moreover, public service delivery faces difficulties in ensuring start-to-finish service provision. It is not possible to track and monitor individual service delivery requests or update citizens in remote locations on the progress and ultimate resolution of their requests.

Towards a Solution

To address this challenge, the Rights, Empowerment and Cohesion (REACH) for Rural and Urban Fijians Project was developed, with support from the Government of Japan and the United Nations Development Programme (UNDP). A mobile service delivery approach was undertaken to reach communities throughout Fiji, beginning with those furthest behind.

The project aimed to accomplish the following key results:

- Increase awareness in urban, rural and maritime communities of constitutional rights regarding socio-economic well-being and justice, with a focus on legal aid, through the deployment of mobile teams.
- Enhance the delivery of services provided by the Ministry of Women, Children and Poverty Alleviation and the Legal Aid Commission through the deployment of mobile teams to urban, rural and maritime communities.
- Strengthen the capacity of the Ministry of Women, Children and Poverty Alleviation and the Legal Aid Commission by supporting strategic planning and monitoring results for effective and coordinated service delivery.
- Inform evidence-based policymaking through the research and analysis of areas related to the empowerment of women and girls; the promotion of peaceful and inclusive societies for sustainable development; access to justice for all; and effective, accountable and inclusive institutions.

The Start-to-Finish (S2F) Service Delivery Tracker consists of web-based software with a mobile application specifically designed to track applications to the Poverty Benefit Scheme, under the Ministry of Women, Children and Poverty Alleviation. The existing services provided through the REACH mobile service delivery platform served as the foundation for an S2F pilot initiative, which was proposed for 2017 and 2018.

With support from the Aspire to Innovate (a2i) Programme of the Government of Bangladesh, UNDP experts shared innovations for initiating South-South learning opportunities with Fiji. Specialists from a2i innovation undertook a dedicated mission to Fiji and conducted multiple workshops on S2F service delivery from 5 to 7 July 2017 with key REACH Project stakeholders. During the mission,



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two additional consultations were undertaken with non-governmental organizations, civil society organizations and youth, as well as a small sample group in Suva to test the applicability of the S2F pilot programme. The feedback gathered was integrated into the overall design and tested during the pilot phase in the Eastern and Northern Divisions of Fiji in 2018.

The public service delivery system of Bangladesh had undergone systematic revisions to better meet the needs of its citizens, with a focus on the needs of the most vulnerable groups. As a result, it was easier to adapt a successful model to the context of Fiji. Adapting the existing Bangladesh system also provided savings in development costs. This partnership has created several opportunities for the two countries to share knowledge and resources to promote South-South cooperation and innovation in public service delivery.

As a result of the project, 22,233 people (9,306 women, 9,050 men and 3,877 children) benefited from the REACH mobile awareness-raising and service delivery, which impacted 956 communities in 139 districts in 15 provinces and the Rotuma dependency. The Ministry of Women, Children and Poverty Alleviation; the Legal Aid Commission; the Human Rights and Anti-Discrimination Commission; and other institutions immediately provided 37,807 services to 21,587 women and 16,220 men in the communities. In addition, 168 people

(94 women and 74 men) from the Ministry of Women, Children and Poverty Alleviation; the Legal Aid Commission; the Human Rights and Anti-Discrimination Commission; and other key stakeholders further strengthened their capacity to undertake awareness-raising and service delivery.

The mobile application initiated during the REACH project has been integrated into the main system to track the progress of applications, with the ultimate aim of empowering citizens with up-to-date information, including final approval and delivery. The project also seeks to ensure full accountability and transparency in the process, providing the Ministry of Women, Children and Poverty Alleviation with concrete data and information to streamline the application process and improve business processes, thereby ensuring the project's sustainability. Adapted to the country context, this project could easily be replicated in any country where the connectivity and availability of digital devices can be ensured.

Contact:

Name: Md. Asad – Uz – Zaman

Title: Policy Specialist, Aspire to Innovate (a2i) Programme

Organization: Secretariat, South-South Network for Public Service Innovation (SSN4PSI)

Email: asad.zaman@a2i.gov.bd

Phone: +8801712092922

PROJECT NAME: Tracking Service Delivery to Reach the Unreached

COUNTRIES/REGIONS: Bangladesh, Fiji

NOMINATED BY: South-South Network for Public Service Innovation, United Nations Office for South-South Cooperation

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.b, 16.3, 16.4, 16.5, 16.6, 16.10, 16.b

SUPPORTED BY: Government of Japan; United Nations Development Programme (UNDP); Ministry of Women, Children and Poverty Alleviation of Fiji; Legal Aid Commission of Fiji; UNDP Pacific Office

IMPLEMENTING ENTITIES: UNDP Pacific Office; Aspire to Innovate (a2i) Programme of the Government of Bangladesh/ UNDP Bangladesh; REACH Project; Ministry of Women, Children and Poverty Alleviation, Government of Fiji

PROJECT STATUS: Completed

PROJECT PERIOD: 2015–2018

URL OF THE PRACTICE: Not available

Village Courts in Bangladesh: Bridging the Justice Gap

Activating village courts in Bangladesh to ensure affordable justice at rural doorsteps

Challenge

Despite years of continued gross domestic product growth (expected to reach 7.2 percent in the 2019/2020 fiscal year) and progress in a range of human and social development indicators, the formal justice sector in Bangladesh continues to suffer from chronic problems at all stages of the justice chain. This significantly impedes access to justice through the courts. The police are understaffed, under-equipped and poorly trained. Court infrastructure is inadequate, and procedures are slow, complex and confusing, which causes cases to be delayed, often by years. According to the Supreme Court of Bangladesh, there is a backlog of 3.5 million cases. Legal aid is limited, and prisons are overcrowded. As a result, people simply do not report minor crimes to the police and prefer to seek support from traditional sources to settle both civil and criminal disputes. They turn to union parishad bodies and the traditional *shalish*, interventions by village elders or other local elites. In addition, women often face social and economic barriers in seeking justice that actively discourage them from reporting crimes. This makes it more likely that they will be excluded from economic activities in conservative communities as well.

Towards a Solution

To address these challenges, Phase II of the Activating Village Courts in Bangladesh (AVCB II) project has been designed and implemented, with a view to improving justice for disadvantaged and marginalized groups by strengthening village courts in 1,080 union parishads in Bangladesh. The goal of this project is to apply a simple legislative framework to the *shalish*, so as to formalize a mediated practice that has been part of Bangladeshi culture since time immemorial. This will empower poor local people, especially women, to seek remedies for small injustices that impact their quality of life and will help to restore social harmony to villages (Sustainable Development Goal [SDG] targets 16.3 and 16.b). It will also assist local authorities in being more responsive to local justice needs by providing appropriate legal services in the form of efficient village courts (target 16.6).

The project has been designed using a human rights-based approach to access to justice. Several innovations have been explored in the village court mechanism in the targeted areas, such as the participation of women in justice delivery, capacity development for key stakeholders and behavioural changes for those seeking legal services from the village court.

The cost to the Government for establishing a village court is low, particularly when compared to the social and economic benefits for the communities they serve. Crime appears to be decreasing, as strict actions are taken against every infraction. Cases are diverted away from the criminal justice system, which reduces pressure on the courts and the number of people entering prison. Local administrators see improvements in social harmony. In addition, women, who make up 36 percent of complainants, feel they will get a fair hearing in a safe environment. Complainants obtain a quick and generally positive outcome; in 80 percent of cases, a settlement is agreed upon and compensation is paid.

As of 2020, approximately one quarter of the union parishads (1,078 out of 4,571) have activated village courts, providing an accessible, lawful remedy to 21 million people. The average distance

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is 3 km, and cases seldom last longer than 28 days or take more than two visits. Monthly incomes remain the same (US\$50 to \$150), but the cost of cases, between \$1 and \$2.50, is a fraction of those brought in formal courts. To date, 169,304 cases have been reported, with an average of 5 cases reported per month per union parishad. Of those cases, 138,117, or approximately 80 percent, were resolved through village courts. Of those resolved cases, 130,754 decisions, or approximately 95 percent, have been implemented fully at this time (in line with SDG 16 on peace, justice and strong institutions).

The project has a good possibility of becoming sustainable since it is completely embedded in local government structures, was developed based on the Village Courts Act and is highly relevant to the people it serves, particularly the rural poor. It also impacts those responsible for justice services, including the judiciary, the police, the National Legal Aid Services Organization and civil society organizations. The Government has demonstrated its ownership of the village courts by amending the Village Court Act and disbursing 152.2 million takas (\$1.81 million) of national resources to establish village courts in 1,267 union parishads, which exceeds the goal of the project. It has also issued directives to local administrations regarding the management and monitoring of village courts. One of the major challenges to sustainability is the shortage of human resources in the union parishads to administer the village courts once they have phased out of the project. The Government has been addressing this human resources issue and has begun deploying dedicated staff, Assistant Accountant cum Computer Operators, to each union parishad in order to administer village court issues.

Lack of access to justice is a chronic problem for many developing countries. They could learn from the experience of

Bangladesh in running village courts and adapt these best practices to local contexts in order to fulfil the justice needs of poor and vulnerable people in rural areas, particularly women. In replicating these best practices, countries must focus on increasing the participation of women in the justice delivery process, promoting ownership in local administrations and developing a mechanism to refer cases from police and formal judiciary systems. In addition, integrated approaches that focus on community mobilization and awareness should also be considered to build trust in the village courts among villagers and promote the use of these services in resolving disputes locally and without hassle. The Bangsamoro Autonomous Region of the Philippines expressed interest in this initiative during a visit to Bangladesh. Successful replication in Bangsamoro could facilitate South-South cooperation.

Contact:

Name: Mr Sarder M. Asaduzzaman
Title: Senior Project Manager
Organization: United Nations Development Project (UNDP) Bangladesh
Email: sarder.asaduzzaman@undp.org
Phone: +88 01730336989

Name: Mr Asad – Uz – Zaman
Title: Policy Specialist, Aspire to Innovate(a2i) Programme
Organization: Secretariat, South-South Network for Public Service Innovation (SSN4PSI)
Email: asad.zaman@a2i.gov.bd
Phone: +8801712092922

PROJECT NAME: Activating Village Courts in Bangladesh Phase-II Project (AVCB II)

COUNTRIES/REGIONS: Bangladesh

NOMINATED BY: South-South Network for Public Service Innovation, United Nations Office for South-South Cooperation

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 5.5, 5.a, 10.2, 10.3, 16.3, 16.6, 16.7, 16.b, 17.6

SUPPORTED BY: Government of Bangladesh

IMPLEMENTING ENTITIES: Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2020

URL OF THE PRACTICE: www.villagecourts.org/

Global South-South Development Center Project

Sharing knowledge and solutions through a global platform for capacity-building, training and small grant proposals

Challenge

The year 2019 marked the beginning of a transformative era for South-South and triangular cooperation, with the conclusion of the second High-level United Nations Conference on South-South Cooperation in Buenos Aires and the adoption of its outcome document. South-South cooperation (SSC) is now emphasized in over 80 States as part of the United Nations Sustainable Development Cooperation Framework, and that there has been a surge in new partnerships.

As the largest developing country, China has been an active advocate and promoter of SSC. Nevertheless, South-South and triangular cooperation still face a number of significant challenges at the international level, as well as in China. For example, much of the transfer of knowledge and skills has been one way, and most activities are still carried out by Governments, with minimal participation from the private sector. In addition, the mobilization of funds is limited, and they are not used efficiently.

Towards a Solution

In 2008, the China International Centre for Economic and Technical Exchanges (CICETE) and the United Nations Office for South-South Cooperation (UNOSSC) jointly launched the China South-South Development Center (China SSDC) Project to facilitate the systematic sharing of Chinese expertise and knowledge with other developing countries. It also sought to consolidate resources and mobilize partnerships within China in a coordinated manner. Upon conclusion of the China SSDC Project, which ran from 2008 to 2019, a comprehensive independent evaluation indicated that the Project was well aligned with the principles of South-South cooperation, represented good value for the money and resources allocated, benefited from strong management, had a positive impact on beneficiaries, was sustainable and addressed cross-cutting issues.

Building on the Project's success, the Government of China has committed to providing continued institutional and financial support to UNOSSC on a second phase (2019–2023) under the Global South-South Development Center (Global SSDC) Project. CICETE will continue to serve as the national implementing partner in China and will host the Global SSDC Project Office.

The Global SSDC Project will:

- place greater emphasis on two-way sharing of knowledge and expertise for mutual learning between China and other countries
- expand the existing network beyond China, reposition itself as a true global network of centres of excellence for SSC and leverage partnerships with various stakeholders from multilateral agencies, civil society, the private sector and think tanks
- align support with the Sustainable Development Goals (SDGs) and other global development frameworks
- provide advocacy and advisory support and conduct sector-specific research and analysis to inform global policy discourse for SSC

The China SSDC Project and the Global SSDC Project have promoted economic and technical exchanges among developing countries through training, workshops and small-grant pro-



posals. To date, there have been 21 small-grant proposals under the two SSDC Projects across various thematic areas including agriculture, forestry, new energy, environmental protection and industrial development. These projects have benefited over 30 developing countries. The funding resources brought in through public-private partnerships exceeded the core funds provided by the SSDC Projects to implement these projects. Partners and participating institutions from developing countries gained access to technologies, equipment and facilities, as well as opportunities to gain knowledge and develop capacity. Some examples of small-grant proposals include:

- Proposal for comprehensive solutions for city waste management in Senegal
- Promotion of small hydropower in Nepal and Southern Asian countries
- Training stakeholders in forest fungi system agroforestry in Nepal, India and China
- Value-added bamboo processing development in Vanuatu
- Promoting prefabricated housing in Liberia
- Promoting Africa's broadcast television dubbing skills
- Technical demonstration of a standardized rice-fish farming system in Myanmar
- Technical cooperation for an environmentally friendly bioinsecticide of emamectin water dispersible granule formulation plant in South Africa
- Building efficiency, research and development, and the application of energy-efficient wall systems tailored for Viet Nam and Cambodia

Many good practices and lessons learned have been documented. Sector-specific analyses and timely news briefs were published and disseminated within and beyond the networks.

Given their wide thematic scope, the SSDC Projects have contributed to all the SDGs, particularly SDG 17 on partnerships. The SSDC Projects strongly value practical cooperation among developing countries. By facilitating the exchange of experiences and technical capacity-building workshops, the SSDC Projects allow partners in other countries to pass this knowledge on to peers and colleagues. Moving forward, the Global SSDC Project will continue to position itself as a platform and global knowledge hub for SSC.

Contact:

Name: Ms Bo Song
Title: Project Officer
Organization: China International Centre for Economic and Technical Exchanges (CICETE)
Email: songbo@cicete.org.cn
WeChat: +86 15101675439

Name: Ms Yang Liu
Title: Project Analyst
Organization: Project Office of the Global South-South Development Center (Global SSDC)
Email: liuyangpoppy@qq.com
WeChat: +86 15101675439

PROJECT NAME: Global South-South Development Center Project

COUNTRIES/REGIONS: Global

NOMINATED BY: China International Centre for Economic and Technical Exchanges (CICETE)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 2.3, 2.4, 2.a, 3.c, 4.4, 4.7, 5.1, 6.3, 6.6, 6.a, 7.a, 8.2, 8.5, 8.9, 9.1, 9.4, 9.a, 10.2, 11.1, 11.6, 12.2, 12.5, 12.8, 12.a, 13.1, 13.3, 14.7, 15.2, 15.4, 16.8, 17.6, 17.9, 17.16

SUPPORTED BY: United Nations Office for South-South Cooperation (UNOSSC)

IMPLEMENTING ENTITIES: CICETE

PROJECT STATUS: Ongoing

PROJECT PERIOD: June 2019–December 2023

URL OF THE PRACTICE: Not available



China South-South Cooperation Network

Leveraging partnerships with various stakeholders to promote South-South cooperation

Challenge

China was not only a supporter and initiator of South-South cooperation (SSC) in its nascent stage, it is also a major contributor to growth in Southern countries today, playing more of a leading role in SSC than ever before. It firmly safeguards the new globalization model, works to build a community with a shared future for humankind, advocates new development concepts nationwide and advances the 2030 Agenda for Sustainable Development.

Nevertheless, South-South and triangular cooperation still face a number of important challenges at the international level, as well as in China. For example, while globalization has enabled many people to escape poverty, its benefits are not shared equitably and its costs fall disproportionately on the poor and vulnerable. Improved cooperation is therefore needed so that countries may learn from each other, grow more quickly, close income gaps and build inclusive, resilient societies. Greater efforts are needed to leverage partnerships with stakeholders from multilateral agencies, civil society, the private sector and think tanks to increase their engagement in SSC.

Towards a Solution

The China South-South Cooperation Network (China SSC Network) was established in 1995. It connects over 20 national research and training centres set up through projects supported by the United Nations Development Programme (UNDP) and the United Nations Industrial Development Organization (UNIDO). **The Network has strongly promoted technical and economic cooperation among developing countries by providing consultancy services, sharing knowledge, organizing seminars and facilitating exchange visits.** Through the Network's platform, member institutions have access to seed money from the Pérez-Guerrero Trust Fund for South-South Cooperation (PGTF), which has been in operation for 37 years. In past decades, member institutions have successfully implemented 47 projects with support from PGTF, in areas including agriculture, forestry, fishery, renewable energy, information technology, clean water and financial services. PGTF projects have reached over 60 developing countries in Asia, Africa, Latin America and Oceania. Examples include:

- Demonstration and promotion of high-yield and high-quality cultivation and advanced processing technology of Spirulina in developing countries
- Successful bamboo development model in China and its implications in Indonesia and Viet Nam
- Improvement of recirculating aquaculture system performance in Viet Nam and Sri Lanka
- Application and dissemination of reinforced fiberglass biogas digester for remote and low-income households
- International cooperation of e-government promotion and exchange for developing countries
- Integrated solutions to drinking water safety issues in rural areas
- Accessibility of financial services and the private sector in Africa

The China SSC Network brings together resources and expertise from various industries and sectors. Member institutions include:

- Biogas Institute of Ministry of Agriculture
- Centre for Mountain Futures, Kunming Institute of Botany, Chinese Academy of Sciences



- China-Africa Business Council
- Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences
- Fujian Cross-Straits Technology Transfer Center
- International Centre for Materials Technology Promotion
- International Center on Small Hydropower
- Jiangxi Academy of Agricultural Sciences
- Nantong Pesticide Formulation Development Centre
- National Bamboo Research Center
- Promotion Association for Mountain-River-Lake Regional Sustainable Development of Jiangxi Province

Globalization has highlighted the need to strengthen multi-lateral cooperation, governance and global solidarity. Member institutions gather for the Network's annual meeting each year to explore deeper and more extensive South-South partnerships. Meeting themes have included a new orientation for SSC, as well as knowledge-sharing, capacity-building and technology transfer. Based on their international cooperation experience, meeting participants discuss opportunities, advantages and challenges facing SSC from both a theoretical and practical perspective. Thematic workshops are also organized during the annual meeting. Member institutions are experts in their fields and enjoy fruitful South-South and international partnerships. There are often lively discussions on how to better strengthen South-South and triangular cooperation. Member institutions appreciate the thematic workshops, which improve their capacity and awareness and provide them a platform to exchange views and experiences.

Given the China SSC Network's broad thematic scope, the platform has made considerable contributions to the achievement of the Sustainable Development Goals (SDGs), and the Millennium Development Goals before that. For example, the Network has primarily contributed to SDG 17 by promoting multi-stakeholder partnerships for sustainable development.

Special attention has been given to women in projects funded by PGTF to ensure their full and effective participation, which contributes markedly to SDG 5 on gender equality.

Every country addresses specific challenges in its path towards sustainable development. The many complex and interlinking challenges facing the international community require even stronger partnerships. Therefore, the China SSC Network will continue to facilitate and implement projects involving South-South and triangular cooperation in support of achieving the SDGs. Given its success, the Network could inspire institutions from the global South to work together. Bringing together a wide range of centres of excellence in multiple fields allows them to offset deficiencies and seek common development, to the benefit of all. The Network has continued to develop sustainably for over 25 years because of the willingness of its member institutions to look to the international stage and promote South-South and triangular cooperation with mutual benefit. The Network also receives support from the China International Centre for Economic and Technical Exchanges, a specialized executing agency under the Ministry of Commerce of China, as well as from United Nations projects, especially the China South-South Development Center project.

Contact:

Name: Ms Bo Song
 Organization: Secretariat of the China South-South Cooperation Network
 Email: songbo@cicete.org.cn
 Skype/WhatsApp/WeChat: +86 15101675439

Name: Ms Yang Liu
 Organization: Secretariat of the China South-South Cooperation Network
 Email: liuyangpoppy@qq.com
 Skype/WhatsApp/WeChat: +86 15101675439

PROJECT NAME: China South-South Cooperation Network
COUNTRIES/REGIONS: Global
NOMINATED BY: China International Centre for Economic and Technical Exchanges (CICETE)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.4, 2.3, 2.4, 2.a, 3.c, 4.4, 4.7, 5.1, 6.3, 6.6, 6.a, 7.a, 8.2, 8.5, 8.9, 9.1, 9.4, 9.a, 10.2, 11.1, 11.6, 12.2, 12.5, 12.8, 12.a, 13.1, 13.3, 14.7, 15.2, 15.4, 16.8, 17.6, 17.9, 17.16
SUPPORTED BY: Global South-South Development Center Project
IMPLEMENTING ENTITIES: Global South-South Development Center Project
PROJECT STATUS: Ongoing
PROJECT PERIOD: 1995–present
URL OF THE PRACTICE: Not Available

Knowledge Management for Research, Technology Transfer and Innovation in Biodiversity

Strengthening the strategic capabilities of INABIO through scientific and technical training and the corresponding management, planning and communication tools

Challenge

Brazil and Ecuador are both megadiverse countries, with some of the richest and most important ecosystems in the world. They face significant threats as a result of overexploitation of natural resources, habitat loss and climate change. In the 21st Century, these countries consider biodiversity to be an important tool for sustainable development. Research is essential to improving the availability, collection and management of data through collaboration and knowledge-sharing, which, in turn, can support the integrated valuation and sustainable management of ecosystems. It is therefore necessary to strengthen the capacities of the National Institute of Biodiversity [Instituto Nacional de Biodiversidad] (INABIO) in Ecuador and improve regional cooperation to promote biodiversity conservation.

Towards a Solution

Brazil and Germany have created effective mechanisms for transferring knowledge through their research institutes. The objective of the trilateral initiative between Brazil, Ecuador and Germany was to strengthen the technical and scientific capacities of INABIO, in accordance with Sustainable Development Goal (SDG) target 17.8. Although INABIO was created in 2014, it began operating with technical and financial autonomy in 2017.

As a result of the initiative, strategic instruments were created to better position INABIO, scientific and technical trainings were held to develop tools for researching and managing natural heritage, and computer systems were developed to create biodiversity databases. Contributions have been made to several of the SDGs, particularly SDG 5 on gender equality, SDG 12 on responsible consumption and production, SDG 15 on life on land and SDG 17 on partnerships.

In Brazil, the Institute Chico Mendes for the Conservation of Biodiversity, the National Institute for Amazonian Research and the Rio de Janeiro Botanical Garden have extensive experience in managing flora and fauna collections, developing protocols and methodologies for biodiversity and creating computer systems. Institutions in Ecuador are still strengthening this knowledge (SDG targets 17.8, 17.17 and 17.18), and the support provided by Brazil has been invaluable. The Zoological Research Museum Alexander Koenig, one of the most important natural history museums in Germany, provided financial support and advised on germ plasm. As a result of this research, two scientific papers have been published by colleagues in Germany and Ecuador, in furtherance of SDG target 15.6 on promoting access to genetic resources and fair sharing of the benefits.

Under this initiative, 18 technicians from INABIO, selected based on gender equity criteria, attended training sessions on managing flora and fauna collections held in Brazil and Germany. A strategic plan, institutional financial sustainability mechanisms and a strategic communication plan were developed and implemented to strengthen INABIO. Furthermore, protocols were developed for the use and storage of biodiversity databases in Ecuador (SDG targets 5.5, 12.a, 15.5, 17.6, 17.8, 17.16, 17.17).

Brazil, Ecuador and Germany have signed an agreement for future research, training and exchange of experiences in managing biodiversity knowledge, which has strengthened ties between them (SDG

17 PARTNERSHIPS FOR THE GOALS



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targets 12.a, 17.16, 17.17). The instruments developed under this initiative have set the standard to improve the actions and methodologies of INABIO and will serve to expand the institution's capabilities in the short and medium term.

The initiative was concluded in December 2019, with positive and encouraging results. Counterparts in Brazil and Germany are interested in continuing to participate in the efforts of INABIO and in working with additional partners in other countries through South-South and triangular cooperation. As a result, a new project entitled 'Consolidation of Scientific Research for Strengthening Biodiversity Monitoring' was proposed to the Regional Fund for Triangular Cooperation in Latin America and the Caribbean in November 2019. This new project has based its objectives on the results obtained from the initiative, which is evidence of its sustainability (SDG targets 12.a, 17.16, 17.17).

As a result of this initiative, tools were created to strengthen biodiversity research, including academic networks, protocols for the management and administration of INABIO zoological and botanical collections, and user manuals for the computer platform. Lastly, INABIO signed over 50 inter-institutional agreements during this initiative to create and strengthen research networks and increase scientific production.

Contact:

Name: Mr Diego Javier Inclán Luna

Title: Executive Director

Organization: National Institute of Biodiversity (INABIO)

Email: diego.inclan@biodiversidad.gob.ec

Phone: +593 96 909 5456



PROJECT NAME: Knowledge Management for Research, Technology Transfer and Innovation in Biodiversity

COUNTRIES/REGIONS: Brazil, Ecuador, Germany

NOMINATED BY: Ministry of Environment of Ecuador, National Institute of Biodiversity (INABIO)

SUSTAINABLE DEVELOPMENT GOAL OBJECTIVE(S): 5.5, 12.a, 15.5, 15.6, 17.8, 17.16, 17.17, 17.18

SUPPORTED BY: German Agency for International Cooperation (GIZ)

IMPLEMENTING ENTITIES:

Brazil: Brazilian Cooperation Agency; Institute Chico Mendes for the Conservation of Biodiversity; National Institute for Amazonian Research; Rio de Janeiro Botanical Garden; Ministry of Science, Technology, Innovation and Communications

Germany: GIZ, Zoological Research Museum Alexander Koenig

Ecuador: INABIO, Ministry of Environment

PROJECT STATUS: Completed

PROJECT PERIOD: July 2017–December 2019

PRACTICE URL: <https://bit.ly/32ruFwI> (in Spanish)

Triangular Cooperation between the International Development Agencies of Guatemala, Mexico and Germany

17 PARTNERSHIPS FOR THE GOALS



Strengthening the role of the Secretariat for Planning and Programming of the Presidency of Guatemala in managing relationships with donor countries and other international development organizations



Challenge

Complex global challenges such as regional migration, the effects of climate change or regional security, and the protection of global resources and values such as biodiversity and good governance cannot be addressed by individual countries alone. They require collective and coordinated action, particularly in the field of international development cooperation (DC). In addition, implementing the objectives and targets of the 2030 Agenda for Sustainable Development in each country requires funds, well-trained personnel, systematic strategic approaches and concrete timelines. All of these challenges increase the need to strengthen agencies or institutions responsible for the coordination of international DC and to foster global and regional alliances.

Towards a Solution

Guatemala's Secretariat for Planning and Programming of the Presidency of Guatemala (SEGEPLAN) aims to strengthen internal coordination in order to foster alliances and align international DC to national priorities and interests in sustainable development. There is interest in strengthening internal management mechanisms within SEGEPLAN in order to strengthen the Guatemalan DC policy and to foster collective and coordinated efforts for joint development.

It is expected that a collective and triangular learning and knowledge-sharing process will contribute to strengthen SEGEPLAN's internal management processes to ensure that international cooperation is closely linked to the Guatemalan development priorities. This initiative contributes to Sustainable Development Goals (SDGs) 16 (Promote just, peaceful and inclusive societies) and 17 (Partnerships for the goals). Thus, global and regional alliances as well as alliances in Guatemala for the sustainable development are fostered and managed.

In collaboration with Germany and Mexico and their respective DC agencies (AMEXCID, GIZ), the objective will be achieved by implementing the following actions and measures: (i) providing spaces for dialogue to identify best practices and lessons learned in technical DC management of other countries with similar challenges; (ii) providing assistance in the design and implementation of institutional strategies and methodologies for an effective monitoring and evaluation system of technical DC projects in Guatemala; and (iii) providing assistance in the registration of existing technical DC projects in Guatemala through a digital platform to improve information and knowledge management.

Germany supports the project through the Federal Ministry of Economic Cooperation and Development (BMZ) and provides methodological assistance in the strategic implementation of the technical DC policy. Mexico contributes with the transfer of know-how that the Mexican Agency of International Cooperation for Development (AMEXCID) has acquired and experienced in its own consolidation process of the DC policy. It is a unique triangular cooperation between DC agencies of an emerging economy (Mexico), an industrialized country (Germany) and a developing country (Guatemala) that may be replicated in other regions and countries. The results and lessons learned are of particular importance given the increasing role of DC agencies for effective DC and the implementation of the 2030 Agenda for Sustainable Development in each country.



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So far, exchanges of experience in networking modalities with cooperation partners and the promotion of internal coordination between the institutions (SEGEPLAN and AMEXCID) in both countries in 2017 and 2018 have already nurtured the internal analysis of SEGEPLAN's own plan of institutional strengthening. In addition, tools for an effective DC project management as well as for the existing DC systems, managed by SEGEPLAN and AMEXCID, were shared and jointly revised.

In the past few years, Mexico has experienced an institutional transformation of its development cooperation management after the approval and implementation of the DC policy in

2011. This process has been supported with technical assistance by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and hence, the interest in replicating the initiative with Guatemala.

Contact:

Name: Mr Lothar Rast

Title: Director of Projects with Mexican Agency of International Cooperation for Development (AMEXCID)

Organization: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in Mexico

Email: lothar.rast@giz.de

Tel: + 52 55 49 44 77 10



PROJECT NAME: Strengthening of the Undersecretary for International Cooperation of Guatemala

COUNTRIES/REGIONS: Germany, Guatemala, Mexico

NOMINATED BY: BMZ (Germany) and Mexican Agency of International Cooperation for Development (AMEXCID)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 16.6, 16.8, 17.3, 17.6, 17.16

SUPPORTED BY: SEGEPLAN (Guatemala)

IMPLEMENTING ENTITIES: AMEXCID, SEGEPLAN, GIZ

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2017–2020

URL OF THE PRACTICE: www.giz.de/en/worldwide/73470.html

Strengthening Capacity in Disaster Risk Management for Countries in Latin America, Europe and the Caribbean

17 PARTNERSHIPS FOR THE GOALS



Building resilience, securing a better future



Challenge

According to the 2016 World Disasters Report by the International Federation of Red Cross and Red Crescent Societies, for the period 2006–2015, there were 6,090 recorded natural disasters. They impacted over 1.5 billion lives; approximately 144 million people were displaced and lost their homes, 1.4 million were killed, and there was an estimated financial loss of approximately US\$1.3 trillion. The devastating impacts of disasters have raised the urgency and concern of every stakeholder to formulate a mitigation and management strategy in order to overcome this challenge. The global commitment to finding a solution was reiterated in the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015–2030, which serve as the basis for an international collaborative approach to achieving sustainable development through disaster risk reduction and management. As the responsibility to build better resilience is acknowledged as a common responsibility, there must be an exchange of knowledge and capacity-building to ensure that every nation is prepared in the wake of a disaster.



Towards a Solution

The Ministry of Foreign Affairs of Indonesia, in collaboration with the Tsunami and Disaster Mitigation Research Centre (TDMRC) established by Syiah Kuala University convened the 'International Workshop on Disaster Risk Management for Europe, America and the Caribbean Countries' in Banda Aceh, Indonesia from 26 June to 5 July 2019. The goal of the training was to support the implementation of the Sendai Framework in improving disaster risk management and mitigation efforts within the framework of global sustainable development.



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The training programme was attended by 10 participants from countries in Europe, Latin America and the Caribbean: Antigua and Barbuda, Chile, Colombia, Costa Rica, Dominica, Jamaica, North Macedonia, Panama, Paraguay and Peru. Most of the participants were officials and stakeholders in disaster management sectors.

The training was delivered by experts from the TDMRC using several methodological approaches, including classroom activities, interactive discussions, individual and group practice and field visits. Materials on disaster risk management within this training programme covered a basic understanding and the benefits of disaster risk management, mitigation and post-disaster recovery policies.

The participants were introduced to the disaster management approach employed by Indonesia, based on previous study cases in which the Government integrated disaster risk mapping into spatial planning and disaster management planning for districts and provinces. They were also presented with an overview of the Government's policy framework on post-disaster recovery, rehabilitation and reconstruction, as well as a community approach to redevelopment.

The participants were equipped with a training module to learn about the challenges and objectives of disaster risk management, particularly with regard to major disasters. To fully comprehend the mechanisms of disaster risk management policy, they were given materials on the typology of natu-

ral hazards and their impacts, with a focus on the impacts and treatment of geological and hydrometeorological hazards.

Module training on enhancing community resilience was also provided to highlight the importance of including grass-roots communities and civil society organizations in formulating a comprehensive disaster management strategy. This module also emphasized the importance of giving consideration to local knowledge in order to ensure a holistic disaster management strategy and to mitigate disaster risk.

The participants also learned about the supporting aspects of disaster management policy, which include disaster risk communication skills to inform the public about disasters in a coherent, reassuring and composed manner. Discussions also covered disaster risk financing and insurance, as well as the inclusion of disaster risk management within the framework of fiscal policy. Participants visited several sites to enhance their knowledge of disaster management through first-hand experiences.

At the end of the training, participants presented an action plan and policy recommendations to be implemented in their respective countries. Some highlights of the training programme include the importance of local knowledge regarding the histo-

ry of disasters in certain areas, the inclusion of grass-roots communities in disaster management policy, the collection of data and records on disasters in every region to map and analyse risk and exposure, and strong coordination among central and regional governments and other relevant institutions.

The participants implemented the knowledge and lessons learned from the training in their respective countries to develop training materials in order to improve their countries' disaster mitigation policy and to inform the development of new frameworks for disaster risk management policy. This training was especially valuable for countries from Latin America and the Caribbean, as Jamaica will host the seventh Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean in 2020.

This initiative contributed to the achievement of Sustainable Development Goal 17 on partnerships and Goal 1 on poverty.

Contact:

Name: Mr Mohammad Syarif Alatas
Title: Director for Technical Cooperation
Organization: Ministry of Foreign Affairs of Indonesia
Email: syarif.alatas@kemlu.go.id

PROJECT NAME: Strengthening Capacity in Disaster Risk Management for Countries in Latin America, Europe and the Caribbean

COUNTRIES/REGIONS: Antigua and Barbuda, Chile, Colombia, Costa Rica, Dominica, Indonesia, Jamaica, North Macedonia, Panama, Paraguay, Peru

NOMINATED BY: Ministry of Foreign Affairs of Indonesia

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.5, 17.9

SUPPORTED BY: Tsunami and Disaster Mitigation Research Centre of Syiah Kuala University

IMPLEMENTING ENTITIES: Ministry of Foreign Affairs of Indonesia

PROJECT STATUS: Completed

PROJECT PERIOD: June–July 2019

URL OF THE PRACTICE: <https://bit.ly/31xXjNb>

Assisting the Government of Belarus in Accessing to the World Trade Organization by Strengthening National Institutional Capacity and Expertise



Strengthening institutional capacity and raising public awareness about the WTO accession process and its impacts for Belarus



Challenge

The accession of the Republic of Belarus to the World Trade Organization (WTO) is an important priority under its national trade policy. WTO membership would help to attract foreign investments, integrate Belarus in international trade and improve the environment for the export of Belarusian goods and services to the markets of WTO member States. Securing national interests and benefits for private businesses is a key pillar of the country's accession to WTO.

All the partners of Belarus within the Eurasian Economic Union (EAEU) are WTO members: Kyrgyzstan, since 1998; Armenia, since 2003; the Russian Federation, since 2012; and Kazakhstan, since 2015. This partnership allows Belarus to maximize coordination of the accession terms and accelerate the accession process while ensuring that commitments assumed under WTO are compatible with maintaining opportunities for developing and deepening Eurasian integration.

Belarus has entered the final stage of negotiations, formulating the final commitments before WTO. Nevertheless, both government bodies and the business community have insufficient knowledge of the broad range of issues related to WTO accession and their impact on the country's socio-economic development. The relevant department of the Ministry of Foreign Affairs is understaffed, which does not allow to provide a full range of legal support and counselling services to government bodies and other stakeholders on foreign trade issues and relevant regulations within WTO.

The country does not have institutions with appropriate expertise and experience to offer counselling on a broad range of issues and to provide expert services on foreign economic activity, foreign trade and the facilitation of WTO membership.

Towards a Solution

Transition from the preparatory to the final stage of the negotiation process in accessing to WTO required additional support for the national negotiating panel and consolidation of all parties engaged in negotiations. National specialists and experts will undergo training at a 'school of negotiations' and prepare to implement the Government decisions during the post-accession stage.

The goal of the project is to assist the Government of Belarus in accessing to WTO by strengthening national expertise and raising public awareness of the process and impact of WTO accession. The key project objectives are to perform analytical studies leading to action-oriented recommendations on issues related to WTO accession; implement training activities for national organizations, institutions and government agencies on various aspects; and conduct an information and education campaign to improve public awareness regarding WTO rules and the country's accession process. Target audiences will include the business community, academia and the media.

Achieving these key project objectives will help to improve the country's negotiating position and the competence of its presentation in WTO accession. It will also raise awareness among responsible government officials and business community representatives of foreign trade policy in the context of WTO accession. Furthermore, it will contribute to training specialists in line ministries and agencies to enhance

professional skills related to multilateral agreements under WTO and the General Agreement on Tariffs and Trade in the context of achieving national goals on foreign trade, both at the national level and within integration associations to which Belarus is a party.

In the medium term, the key result of the project will be the accession of Belarus to WTO on terms that are favourable to the country and Eurasian integration. **This will improve the country's long-term trade and economic cooperation with the rest of the world, help to attract foreign investments and strengthen its export position through the liberalization of terms of access to foreign markets for its domestic products.** It will also enhance EAEU positions in the region.

The project's activities benefit the government bodies and organizations responsible for promoting Belarus in the WTO accession process. The successful implementation of the project also benefits regional governments, line universities and research institutes focused on foreign trade, as well as business associations and entrepreneurs. The project contributes to raise awareness among the population and business representatives about WTO-related issues.

To strengthen the capacity of experts in public institutions on various aspects of WTO accession, a National Centre on WTO will be established. The Centre will:

- Support the country's membership in WTO.
- Analyse the economic impacts of its accession.
- Develop recommendations on improving Belarusian legislation on foreign trade, in line with the provisions of WTO basic agreements.
- Offer expertise in formulating positions at international trade negotiations, drafting international economic agreements and addressing problems regarding access to foreign markets and settlement of international trade disputes.
- Build up national expertise on trade policy and WTO legal matters to reduce the country's dependency on foreign consultants and organizations for expert and legal support in resolving disputes within WTO.
- Provide expert support for participation in WTO bodies.

The National Centre on WTO will maintain close collaboration with the Centre of Expertise on WTO of the Russian Federation and the Centre of Trade Policy Development under the Ministry of National Economy of Kazakhstan.¹ This collaboration will strengthen the centres' expert capacity, creating synergies and improving efficiency in the use of intellectual resources from Belarus, Kazakhstan and Russia. This will generate substantial financial savings in upholding common interests and addressing potential common problems in the context of WTO membership.

The National Centre on WTO will implement all functions of the project, conducting analytical research and offering training, education and counselling on a broad range of issues. Upon completion of the project, the Centre will take over.

Representatives of the Ministry of Foreign Affairs of Belarus have already studied the experience of the centres in Russia and Kazakhstan to develop the concept of the National Centre on WTO. Other countries could replicate the establishment and operation of a national centre as well. In that regard, the concept has been shared with the United Nations Development Programme in Uzbekistan.

The sustainability of the project outcomes will be ensured. The Ministry of Foreign Affairs of Belarus has a strong interest in applying this international expertise and employing the established expert community, which has extensive knowledge and competencies in the areas of international trade and law.

Contact:

Name: Mr Maksim Hubski

Title: Project Manager

Organization: United Nations Development Programme (UNDP) Country Office in Belarus

Email: maksim.hubski@undp.org

1 The key strategic tasks of the Centre in the Russian Federation include developing national expertise on trade policy and WTO legal matters to reduce the country's dependency on foreign consultants and organizations for expert and legal support in resolving disputes within WTO.

PROJECT NAME: Assisting the Government of the Republic of Belarus in Accession to the World Trade Organization through Strengthening National Institutional Capacity and Expertise (Phase 5)

COUNTRIES/REGIONS: Belarus, Kazakhstan, Russian Federation, Uzbekistan

NOMINATED BY: Government of the Russian Federation

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 10.5; 17.10

SUPPORTED BY: Government of the Russian Federation through the Russian Federation-United Nations Development Programme (UNDP) Trust Fund for Development

IMPLEMENTING ENTITIES: UNDP Country Office in Belarus, Ministry of Foreign Affairs of Belarus

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <https://bit.ly/2QqYIP4>

Regulatory Development, Synergies and Training for Biotechnologies in the Global South

17 PARTNERSHIPS FOR THE GOALS



Implementing regulatory frameworks in accordance with international agreements to facilitate the use and trade of modern biotechnology products

Challenge

To facilitate the adoption of agricultural products and health programmes enhanced by modern biotechnologies, it has become imperative to define and implement policies in biosafety. Most developing countries have yet to begin or are still at the nascent stages of establishing the requisite regulatory domains. As a result, heterogeneous patchworks of national and regional regulations are emerging. These asynchronous and diverse regulatory frameworks are limiting the capacity of bio-innovators, negatively affecting research collaborations, disrupting commodity trade and impeding food security and innovations in public health, thereby threatening sustainable development. There is a tremendous need for support in the form of partnerships and international cooperation to implement fully operational regulatory systems in the Global South.

Towards a Solution

The effective and safe use of biotechnologies requires a broad portfolio of policies, regulations and processes to support national decision makers. Under its mandate, the Regulatory Science Group of the International Centre for Genetic Engineering and Biotechnology assists countries in the global South in improving national capacities in biotechnology regulation by applying an integrated, synergistic and tailored approach.

The Group focuses primarily on improving institutional capacities to ensure regulatory effectiveness in the changing landscape of evolving technologies and human resource mobilization. In the past 10 years, the Group has strengthened the institutional capacities of governments from sub-Saharan Africa, Central America and the Caribbean to regulate biotechnology products in line with their policy objectives.

The Group provides a range of administrative tools and approaches to help improve the effectiveness of competent national authorities and their technical committees. It works in partnership with the relevant government officials and experts to ensure that the resulting procedures and processes are tailored to the national regulatory framework and immediately applicable. This collaborative effort also helps guide and improve the skills of regulatory officials and encourages them to network with their regional and international peers. In this way, they are empowered to address their needs more autonomously, while becoming more aware of the regulatory challenges facing other countries, thereby increasing their preparedness. The ultimate goal is to develop robust, non-fragmented regulatory mechanisms that are independent of human resource fluctuations.

Peer networking is facilitated via regulatory exchanges. Regulators from the Global South are assigned to short-term placements in regulatory offices in Argentina, Australia, Canada and Uganda. Experienced staff from those offices are also embedded in institutions in beneficiary countries for a short period to provide local assistance in improving regulatory effectiveness. As a result of these efforts that rely on South-South (Africa-Africa, Africa-Latin America, Caribbean-Latin America) and North-South cooperation (Africa-Canada, Africa-Australia), 28 regulators have been trained, and five more will be participating in future trainings.



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The Group also brings together regulators, scientific advisors and inspectors from the global South to attend mentoring forums of 3 to 5 days, in order to enhance their contributions to decisions regarding emerging biotechnologies. This well-established, interactive training format empowers local officials to design and implement key regulatory activities and promotes knowledge transfer and exchange of experiences.

To date, at least 896 regulators and scientists (574 from Africa and 322 from the Caribbean) have attended forums on various technical and administrative aspects of biotechnology regulation.

In addition, the Group has awarded 15 fellowships to regulators and researchers to obtain biosafety-related master's degrees, in collaboration with British and Australian universities.

The sustainability of these capacity-building efforts has been improved by the creation of an online e-learning training portfolio, developed for and administered by competent national authorities in the global South to address their training needs autonomously. The blended learning experience incorporates new teaching methods and approaches for technology-assisted education. The portfolio is hosted in the cloud and delivered online at a low cost. It is continuously available to multiple audiences and can be accessed from anywhere in the world on an as-needed basis. Currently, 274 African regulators are active users of this online training platform.

The Group's highly respected international reputation in regulatory science has grown through collaborations with prestigious donors, such as the Bill and Melinda Gates Foundation, United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity, the European Commission, and the Ministry of Environment of Italy.

In summary, the Group's activities support and facilitate triangular cooperation to energize and strengthen biotechnology regulatory offices in the Global South. A strategic approach for personal and institutional capacity-building has been employed, which includes South-South partnerships, triangular cooperation and strategic alliances. The goal of autonomous, robust and structured regulation is to increase the availability of healthier and safer food and health products from fewer resources while reducing pressure on natural ecosystems, as well as to support the value-added commodities trade to improve sustainable development.

Contact:

Name: Dr Wendy Craig

Title: Group Leader, Regulatory Science

Organization: International Centre for Genetic Engineering and Biotechnology (ICGEB)

Email: craig@icgeb.org

PROJECT NAME: Regulatory Development, Synergies and Training for Biotechnologies in the Global South

COUNTRIES/REGIONS: Antigua and Barbuda, Bahamas, Barbados, Belize, Burkina Faso, Dominica, El Salvador, Ethiopia, Ghana, Grenada, Guyana, Nigeria, Panama, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uganda, United Republic of Tanzania and more developing countries

NOMINATED BY: International Centre for Genetic Engineering and Biotechnology (ICGEB)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.4, 3.9, 9.5, 12.a, 15.8, 15.9, 17.3, 17.6, 17.8, 17.9, 17.11, 17.14, 17.15

SUPPORTED BY: Bill and Melinda Gates Foundation, United Nations Environment Programme, and the Secretariat of the Convention on Biological Diversity (based in Canada)

IMPLEMENTING ENTITIES: ICGEB

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2012–2030

URL OF THE PRACTICE: www.icgeb.org/regulatory-science/

Statistical Capacity Building Programme for the Constituents of National Statistical Systems of OIC Member Countries

17 PARTNERSHIPS FOR THE GOALS



Strengthening the statistical capacities of national statistical systems of OIC Member States through South-South and triangular cooperation

Challenge

Spread over four continents, the 57 Member States of the Organisation of Islamic Cooperation (OIC) have varying levels of socio-economic development and capacities for producing statistical data in accordance with relevant international statistical standards. Using the Statistical Capacity Indicator (SCI) of the World Bank as a performance benchmark for developing countries, the 50 OIC Member States with data available recorded a collective decrease in their SCI average, from 62.31 in 2009 to 60.53 in 2019, which is lower than that of non-OIC developing countries and the world as a whole. The statistical capacities of OIC Member States could therefore be further developed in order to produce and disseminate high-quality statistics to support national policymaking mechanisms.

Towards a Solution

Against this background, the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) carries out a flagship statistical capacity development initiative entitled 'Statistical Capacity Building (StatCaB) Programme for the Constituents of the National Statistical Systems of OIC Member Countries'. Initiated in early 2007, the StatCaB programme of SESRIC aims to strengthen and improve the national statistical systems (NSSs) of OIC Member States to produce better national statistics, thereby assisting policymakers in improving national policies and implementing national, regional and global development plans.

The StatCaB programme assists in monitoring the achievement of the Sustainable Development Goals (SDGs) as prioritized by the OIC Member States in 2018, particularly SDG 1 on poverty; SDG 2 on hunger; SDG 3 on good health and well-being; SDG 4 on education; SDG 5 on gender equality; SDG 8 on decent work and economic growth; SDG 9 on industry, innovation and infrastructure; and SDG 13 on climate action. The StatCaB programme also strengthens the NSSs of OIC Member States to better achieve the targets of the OIC 2025 Programme of Action.

The StatCaB programme collects information by conducting biennial questionnaires in an effort to identify the statistical needs and capacities of the constituents of NSSs. As a result, statistical training courses, study visits and technical missions are organized through South-South and triangular cooperation. Similarity of training needs and capacities, geographical balance and language of instruction are taken into consideration to match OIC Member States so as to enhance the impact and cost-effectiveness of the StatCaB programme.

In line with SDG targets 17.9, 17.18, and 17.19 on partnerships, **a total of 309 StatCaB activities were conducted in 50 OIC Member States between 2007 and August 2020, with generous support from 26 OIC Member States and the Economic and Statistical Observatory for Sub-Saharan Africa (AFRISTAT). Approximately 2,000 experts participated in the 242 short-term statistical training courses, 45 study visits, 20 technical missions, and two online statistical training courses organised during the COVID-19 pandemic.**



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The StatCaB programme was born out of a necessity to cater to the statistical capacity development needs of OIC Member States and proved to be an innovative programme. It relies on the technical expertise of OIC Member States and their willingness to trust and benefit from the expertise of others. SESRIC serves as a facilitator between beneficiary and provider countries to provide the required secretarial and follow-up services. It also contributes co-financing for the organized activities.

It is evident that the StatCaB programme can only be sustainable if the OIC Member States are willing to provide and receive statistical capacity development. The relationship established among OIC Member States through the StatCaB programme facilitated by SESRIC must also lead to bilateral cooperation activities. In addition, sufficient resources must be provided to SESRIC to continue financing the StatCaB programme. In recent years, the number of OIC Member States to have statistical cooperation agreements with SESRIC has increased, whether in the form of memoranda of understanding (MOUs) or commitment letters (CLs). Currently, five OIC countries, including Malaysia, Morocco, Saudi Arabia, the State of Palestine and Uzbekistan, have signed MOUs with SESRIC to assist in statistical capacity development efforts at the OIC. Additionally, SESRIC has signed an MOU or CL with nine international and regional organizations including the Arab Institute for Training and Research in Statistics, AFRISTAT, the International Labour Organization, the Islamic World Educational, Scientific

and Cultural Organization, the Islamic Financial Services Board, the Statistical Centre for the Cooperation Council for the Arab States of the Gulf, the United Nations Statistics Division, the World Bank Development Data Group, and the World Tourism Organization. These partnerships mobilize the resources required to meet the statistical capacity development needs of OIC Member States.

This initiative has become the leading capacity development programme for SESRIC and serves as an exemplary model to establish other capacity-building programmes. Provided the target audience has been clearly identified, the SESRIC StatCaB programme can be replicated. When it first began, the StatCaB programme targeted only relevant officials at the national statistics offices of OIC countries. However, to enhance NSSs and to support the global development agenda, SESRIC extended its focus to institutions that produce official statistics, including relevant ministries and government agencies in OIC Member States.

Contact:

Name: Dr Atilla Karaman

Title: Director of Statistics and Information Department

Organization: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

Email: akaraman@sesric.org; statcab@sesric.org

Skype: sesric.sid

PROJECT NAME: Statistical Capacity Building (StatCaB) Programme for the Constituents of the National Statistical Systems of OIC Member Countries

COUNTRIES/REGIONS: OIC Member States

NOMINATED BY: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.1, 1.a, 2.1, 2.c, 3.1, 3.d, 4.1, 4.c, 5.1, 5.c, 8.1, 8.b, 9.1, 9.c, 13.1, 13.b, 17.9, 17.18, 17.19

SUPPORTED BY: National Statistics Offices and relevant Ministries and Government Agencies of OIC Member States, SESRIC

IMPLEMENTING ENTITIES: SESRIC

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2007–present

URL OF THE PRACTICE: www.oicstatcom.org/statcab.php

Network for the Implementation and Monitoring of the 2030 Agenda and Follow-up to the Sustainable Development Goals in Latin America and the Caribbean

Strengthening the institutional and technical capacities of Governments engaged in establishing and sustaining national mechanisms to implement the 2030 Agenda

Challenge

The Forum of the Countries of Latin America and the Caribbean on Sustainable Development, established by Resolution 700 (XXXVI) under the auspices of the Economic Commission for Latin America and the Caribbean (ECLAC), is the regional mechanism to monitor and review the implementation of the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development. The meetings of the Forum offer peer learning opportunities through voluntary presentations, the sharing of knowledge and best practices and discussions in that regard.

Nearly five years after the 2030 Agenda was adopted, the challenges facing its implementation are becoming greater and more complex. There is a need to align the Sustainable Development Goals (SDGs) to national, subnational and sectoral development plans; adopt national measures for the effective implementation of the 2030 Agenda; train technical specialists to monitor compliance with SDG indicators; and identify concrete national strategies that can enhance the role of international cooperation, particularly South-South and triangular cooperation, in supporting such measures. This requires a significant national effort to develop strategies, adapt indicators and connect cooperation policies with the global agenda. It is therefore essential to build national capacities, for which international cooperation plays a significant role.

Towards a Solution

The Committee on South-South Cooperation, a subsidiary body of ECLAC, provides a platform within the existing intergovernmental structure to discuss cooperation and share best practices and common challenges.

At the 37th session of ECLAC in 2018, member States created a network for the implementation of the 2030 Agenda and follow-up to the SDGs in Latin America and the Caribbean, which prioritizes South-South and triangular cooperation with a multi-stakeholder approach. The network's main objective is to strengthen the institutional and technical capacities of Governments in the region. The network's operational framework addresses SDG 17, particularly target 9 on enhancing international support for national plans; target 14 on enhancing policy coherence; target 16 on enhancing global partnership; target 17 on public, public-private and civil society partnerships; target 18 on capacity-building; and target 19 on building on existing initiatives.

The network has the following structure:

- Core Group—this decision-making body provides strategic leadership and coordination for the successful implementation of the programme of work. It is currently made up of Cuba, Mexico and Uruguay.
- Technical Secretariat—ECLAC provides logistical and technical support.
- Coordination Pillars Working Groups—made up of three countries, one assigned to each pillar: a strategy pillar (Uruguay), a statistics pillar (Mexico) and a cooperation pillar (Cuba). A work plan has been developed for each of these pillars.



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During the network's first meeting, held in Havana in May 2018, the network was defined as a technical forum for countries in need of or providing knowledge in three subject areas:

- Inter-institutional and intersectoral coordination mechanisms for monitoring achievement of the SDGs
- National frameworks and tools to monitor progress on SDG indicators and to govern the methodologies, processes and standards for improving the collection, processing, disaggregation, dissemination and analysis of data to produce reliable, good-quality statistics
- Tools for aligning international development cooperation projects with the SDGs and technological tools on good practices in international cooperation for development

During the second meeting, held in Mexico City in November 2019, the 2019–2020 programme of work was developed and agreed upon. Each pillar of the network gave a presentation: strategy, by the Office of Planning and Budget of the Presidency of Uruguay; statistics, by the Governing Board of the National Institute of Statistics and Geography of Mexico; and cooperation, by the Ministry of Science, Technology and Environment of Cuba.

As a result of these working meetings and the work carried out under the three pillars, with the support of ECLAC, **countries have come together to coordinate requests and offer support on topics such as addressing climate change, adapting SDGs to local and national contexts, budgeting for SDGs and strengthening national statistical capacities for monitoring their achievement.**

The network is expected to:

- Create spaces to exchange knowledge and good manage-

ment practices for the implementation and monitoring of the SDGs at the national and subnational levels, through South-South and triangular cooperation.

- Consider and incorporate cross-cutting approaches in support of the implementation, follow-up and review of the 2030 Agenda (focusing on areas such as gender, the environment and territorial decentralization).

Given that the network is still in its infancy, there has been no assessment of its results and impacts; however, it is expected to bring about multiple South-South cooperation projects.

In terms of funding, the network has worked with the Mexico-Uruguay Joint Cooperation Fund, as well as the cooperation agencies of Germany and Spain, to mobilize resources in order to carry out its coordination meetings and secure professional support from specialists in matters concerning its three pillars. At this stage, the network has drafted a 2020 programme of work for its three pillars, with plans to draft a medium- to long-term project for improving resource mobilization. If the network manages to have early success and mobilize regional resources, it will be possible to replicate these practices.

Contact:

Name: Mr Enrique Oviedo

Title: Political Affairs Officer

Organization: Economic Commission for Latin America and the Caribbean (ECLAC)

Email: enrique.oviedo@cepal.org

PROJECT NAME: Network for the implementation of the 2030 Agenda and follow-up to the Sustainable Development Goals in Latin America and the Caribbean

COUNTRIES/REGIONS: Latin America and the Caribbean

NOMINATED BY: Economic Commission for Latin America and the Caribbean (ECLAC)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.9, 17.14, 17.16, 17.17, 17.18, 17.19

SUPPORTED BY: ECLAC

IMPLEMENTING ENTITIES: Latin American and Caribbean countries

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2030

URL OF THE PRACTICE: Not available



The FAO International Sustainable Bioeconomy Working Group

Creating a platform for countries and regions to share knowledge and experience on transitioning to a sustainable and circular bioeconomy

Challenge

Bioeconomy is the production, utilization and conservation of biological resources, including related knowledge, science, technology and innovation, to provide information, products, processes and services across all economic sectors aiming toward a sustainable economy. It includes agriculture, forestry, fisheries and aquaculture, as well as the production of food, bioplastics, pharmaceutical products, biomaterials, cosmetics, textiles and a wide range of bioproducts. Bioeconomy touches upon many sustainability issues and Sustainable Development Goals (SDGs).

Its cross-cutting nature offers a unique opportunity to address a number of challenges in a comprehensive and coordinated manner. Best practices in bioeconomy should therefore facilitate positive interaction and collaboration between sectors. For instance, the combination of bioeconomy and digitalization is often seen as a major driver of the transformation of productive sectors.

However, bioeconomy activities are not necessarily sustainable and face several trade-offs. It is crucial that bioeconomy development contributes to sustainability and circularity in order to help achieve the SDGs. It is essential that the development of the bioeconomy does not undermine food security and nutrition.

Towards a Solution

Given the challenges and opportunities that the transition to a sustainable and circular bioeconomy can bring, 62 Ministers of Agriculture agreed on the importance of seizing opportunities to implement bioeconomy in a sustainable and circular manner, at the Global Forum for Food and Agriculture in January 2015. They recommended that the Food and Agriculture Organization of the United Nations (FAO) coordinate the international work on bioeconomy. Through the International Sustainable Bioeconomy Working Group (ISBWG), established in 2016, FAO aims to provide the international support needed to increase State capacities to develop bioeconomy in line with the SDGs.

The activities of the Working Group respond to two specific objectives. The first is to serve as a platform for international knowledge- and experience-sharing concerning sustainable and circular bioeconomy innovations, technologies, practices and policies. The second objective is to act as an advisory body for the technical work of the FAO on sustainable and circular bioeconomy, which includes producing knowledge products and supporting specific countries and regions in developing circular bioeconomy policies and strategies, with a focus on opportunities for food systems transformation. ISBWG is a unique and innovative international platform, as it builds national capacities in drafting policies for sustainability and circularity in the bioeconomy. The Group aims to mainstream sustainability and circularity into policies and strategies to ensure that bioeconomy, implemented correctly, can benefit societies and the planet as a whole.

ISBWG is an international, multi-stakeholder expert group. Members engage through consultations, the co-production of knowledge and the provision of capacity-building and technical information. FAO facilitates the Working Group's annual physical meetings and additional teleconferences on



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specific topics. The physical meetings include presentations, workshops and field visits. Members regularly share information on bioeconomy from their countries and institutions, as well as recent publications, events or news. In general, countries in the global South have extensive knowledge and experience in the production and use of food, feed, fibre, biopharmaceuticals and other bioproducts; however, only a few have developed a full-fledged formal bioeconomy strategy. ISBWG offers a unique opportunity for South-South and triangular cooperation in which countries in the global South can receive support, gain knowledge and share their experiences, improving coordination. To date, there is some South-South and triangular cooperation (SSTC) networks related to bioeconomy, such as the Latin American Bioeconomy Network, the EU-South Africa led International Bioeconomy Forum, the BioInnovate programme in Africa, or the German-led International Advisory Council on Bioeconomy. Different networks have different objectives. The uniqueness of the FAO ISBWG is that it advocates for the sustainable transformation of food systems through a circular bioeconomy.

The Working Group's first milestone was the Aspirational Principles and Criteria for Sustainable Bioeconomy, agreed upon in November 2016. ISBWG has also contributed to increasing knowledge-sharing and improving coordination, in line with several SDG targets, in order to improve synergies and reduce trade-offs between sustainability goals. **The knowledge acquired by all ISBWG members on mainstreaming sustainability and circularity in the bioeconomy informs national and regional development processes.** A draft National Bioeconomy Vision and Strategy was developed in Uruguay, with the support of FAO. Uruguay also benefited from the lessons learned, instruments used and challenges faced by other ISBWG countries in developing and implementing bioeconomy strategies. The exchange with international partners provided

understanding of the relevant synergies and trade-offs. As a result, the draft vision and strategy includes many considerations for sustainability and circularity, such as integrating biodiversity values into the systemic utilization of biological resources, which contributes to SDG target 15.9. Other countries and regions currently benefiting from the FAO project are Namibia and the Association of Southeast Asian Nations.

The mechanism adopted by the ISBWG is a good example of how to achieve SDG 17, in particular target 17.9 on enhancing international support for implementing national plans, including through SSTC. It provides opportunities for exchange and facilitates international dialogue through continuous meetings, events and conferences. It also facilitates knowledge- and experience-sharing on synergies and trade-offs in bioeconomy and opportunities for sustainability and circularity to support countries in decision-making processes.

Contact:

Name: Ms Anne Bogdanski
Title: Natural Resources Officer and Project Coordinator Bioeconomy
Organization: Food and Agriculture Organization of the United Nations (FAO)
Email: annekatrin.bogdanski@fao.org

Name: Ms Marta Gomez San Juan
Title: Agricultural Engineer and Project Adviser Bioeconomy
Organization: FAO
Email: marta.gomezsanjuan@fao.org

Name: Ms Maria Allegra Bruni
Title: South-South and Triangular Cooperation Consultant
Organization: FAO
Email: mariaallegra.bruni@fao.org

PROJECT NAME: The FAO International Sustainable Bioeconomy Working Group (ISBWG)

COUNTRIES/REGIONS: Argentina, Brazil, Canada, China, Finland, France, Germany, Italy, Malaysia, Namibia, Netherlands, New Zealand, South Africa, Thailand, United States of America, Uruguay, European Commission

NOMINATED BY: Food and Agriculture Organization of the United Nations (FAO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.4, 2.5, 12.8, 12.a, 13.3, 17.6, 17.9, 17.14, 17.16

SUPPORTED BY: Members of the FAO ISBWG: countries, regional governing bodies and affiliated institutions, non-governmental organizations, private sector entities, research institutions and intergovernmental organizations

IMPLEMENTING ENTITIES: Members of the FAO ISBWG

PROJECT STATUS: Ongoing

PROJECT PERIOD: January 2016–December 2021

URL OF THE PRACTICE: <https://bit.ly/3jmliE5>



Supporting Indian Trade and Investment for Africa

Building trade and investment linkages with knowledge-sharing and technology transfer between India and five countries in East Africa

Challenge

A number of challenges constrain South-South trade and investment, including the limited productive and operational capacities of firms, asymmetries in information and perception, low access to finance, weak institutional support and a lack of capital. In East Africa, although many Governments have prioritized economic development, they are still dependent on primary sectors, which require trade and investment for added value. In recent years, India has made efforts to strengthen trade and investment linkages with East Africa. In 2008, India introduced its Duty-Free Tariff Preference Scheme for Least Developed Countries. However, data indicate that trade with the subcontinent has been concentrated in a limited number of sectors and countries. According to the Export-Import Bank of India, 75 percent of exports from Africa to India are in natural resources and primary commodities. East African small- and medium-sized enterprises (SMEs) often require extra support to understand and access international trade and investment opportunities. They would also benefit from the knowledge and technology available in markets like India, which have followed a similar development path. Indian businesses are subject to information and perception asymmetries that impede their ability to forge partnerships with East African counterparts.

Towards a Solution

The 'Supporting Indian Trade and Investment for Africa' (SITA) initiative, implemented by the International Trade Centre (ITC), builds trade and investment linkages between India and five countries in East Africa, namely Ethiopia, Kenya, Rwanda, Uganda and the United Republic of Tanzania. The ultimate objective of the initiative is to achieve Sustainable Development Goal (SDG) 1 on poverty, SDG 2 on hunger, SDG 5 on gender equality, SDG 8 on decent work and economic growth and SDG 17 on partnerships. SITA aims to improve the competitiveness of select value chains in agribusiness and light manufacturing in East Africa through partnerships with institutions and businesses from India. The initiative has facilitated the systemic, cross-country transfer of good practices and knowledge in a variety of sectors.

The methodology underpinning the SITA initiative have been fully analysed in a joint publication by ITC and the Institute for Development Studies, *Designing for Impact: South-South Trade and Investment*, which was published in July 2020. SITA is a targeted programme that combines exposure to international markets with skill development and employment impact, targeting SMEs and businesses owned by women and youth. The programme incorporates the potential for additionality and demonstration effects with a minimum commitment from companies to comply with social and environmental standards. Furthermore, SITA was designed as a series of pilots that have allowed for incremental work, thereby demonstrating the feasibility and potential for scale-up. Southern approaches require gradual testing before scaling up to ensure buy-in and proper methods for localization. Actions under the initiative are monitored using a three-dimensional approach that includes tailored communication and institutional strengthening. Finally, a participatory and inclusive approach ensures national ownership and sustainability of South-South initiatives. Below are two examples of the programme's achievements, adapted from the publication, *Designing for Impact: South-South Trade and Investment*.



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Case 1: Spices Sector¹

SITA has developed linkages between the Indian and Rwandan agricultural sector, particularly in the cultivation of spices. Through feasibility studies, it was established that the geographic and climatic conditions of Rwanda were suitable for cultivating hybrid chillies. While India is a major cultivator of spices, including chillies, high demand in India encouraged companies to establish alternative locations for sourcing and production. SITA presented its feasibility study on spice production in Rwanda to various stakeholders including Indian companies, the Government of Rwanda and local farmers. Farmers were then identified, and support was provided to grow different hybrid chilli varieties in various provinces. The farmers were provided with the seeds, a package of practice and formal training by Indian agronomic experts in Rwanda and India. In addition, Indian buyers agreed to purchase the entire harvest for the current season, given that quality requirements were met. They also agreed to support export logistics to India. The buy-back arrangements help protect smallholders against any risk.

As a result of this project, the number of Indian buyers increased from one in 2016 to five in 2020, leading to a corresponding increase in production from 4 ha in 2016 to almost 200 ha in 2020. In 2018, Rwanda began exporting the first hybrid chillies to India. The introduction of hybrid chillies in Rwanda is an example of an innovative practice that contributed to diversifying the country's agricultural sector and doubling income for farmers.

Case 2: Textiles Sector²

Since 2015, SITA has supported Indian companies in and benefiting from new market and investment opportunities in

- 1 Adapted from Saha, A., Thorpe, J., O'Flynn, P., and H. Bucher. (2020). Designing for Impact: South-South Trade and Investment, International Trade Centre, Geneva, Switzerland.
- 2 Adapted from Saha, A., Thorpe, J., O'Flynn, P., and H. Bucher. (2020). Designing for Impact: South-South Trade and Investment, International Trade Centre, Geneva, Switzerland.

East Africa's textile and apparel sector. SITA undertook awareness-raising campaigns in major textile clusters across India to promote East Africa to potential investors through the sector's associations. SITA facilitated exposure missions to East Africa for those businesses that had voiced an interest in exploring the region. It also provided tailored support to help build trust through regular and open communication. In Ethiopia and Kenya, a value chain road map for the textile and clothing sector was developed. In Kenya, a private sector apex body was created to implement the road map. Through the apex body, the Indian Skills Development Council carried out a skills gap assessment in the Kenyan garment sector, which led to the creation of a new curriculum and training programme. This is an example of a sustainable and replicable intervention. These activities not only strengthened institutional capacity and sector coordination in Kenya, they also led two Indian companies to establish garmenting units in Mekelle Industrial Park in Ethiopia. These investments have created about 1,700 jobs to date, over 90 percent of which are held by women.

Under SITA, over 2,500 jobs were created as a result of direct and indirect support provided to stakeholders. These include jobs created by the investments of two Indian textile firms in Ethiopia and the first investment in leather shoes in Uganda by an Indian SME. **Between 2015 and 2020, SITA has generated over US\$58 million of investment value and \$52 million in trade deals between India and East Africa, as well as with third markets.** South-South trade and investment projects like SITA can be replicated in other regions provided there is a good rationale. Projects should take into account drivers for economic partnerships between source and recipient countries, possible challenges, the potential for South-South investment, government commitments to trade and investment with Southern partners and whether there is a basis for mutuality.

Contact:

Name: Ms Vandana Prakash Nair
Title: Programme Officer, Supporting Indian Trade and Investment for Africa (SITA)
Organization: International Trade Centre
Email: sita@intracen.org

PROJECT NAME: Supporting Indian Trade and Investment for Africa (SITA)
COUNTRIES/REGIONS: Ethiopia, India, Kenya, Rwanda, Uganda, United Republic of Tanzania
NOMINATED BY: International Trade Centre (ITC)
SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 1.b, 2.b, 5.b, 8.a, 17.6, 17.9, 17.11
SUPPORTED BY: Department for International Development (United Kingdom)
IMPLEMENTING ENTITIES: ITC
PROJECT STATUS: Ongoing
PROJECT PERIOD: 2015–2022
URL OF THE PRACTICE: www.intracen.org/sita/

Capacity-building and ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island States



Supporting harmonized policies for the ICT market in Africa, the Caribbean and the Pacific

Challenge

The 'Capacity-building and ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island States' (ICB4PAC) project focused on Pacific States members of the African, Caribbean and Pacific Group of States.

The project addressed the needs of regional organizations and Pacific island States relating to capacity-building in e-readiness, as well as information and communications technology (ICT) policies and regulations. It aimed to harmonize and promote closer collaboration on telecommunication policies, legislation, strategies and regulations, with a view to empowering each country to implement the necessary reforms.

In the Pacific islands, the greatest challenges were the lack of harmonized policy, a legal and regulatory framework in the (ICT) sector and the relevant institutions to incorporate a new framework into domestic laws and regulations. There was also a need to strengthen the relevant human capacities and skills.

Towards a Solution

The ICB4PAC project, implemented by the International Telecommunication Union (ITU), aimed to build human and institutional capacity in ICT through a range of targeted trainings and knowledge-sharing activities across the region. It addressed the need to develop competencies in sub-regional and national ICT sectors in terms of frameworks for policies, regulations, legislation and e-readiness. It also developed background material for harmonizing ICT market policies. Data were collected through questionnaires, in-person interviews and information-sharing during workshops. The ICB4PAC project was financed by the European Commission and ITU, the latter serving as the executing agency. The data were analysed to inform the outcome documents used by beneficiary countries to implement recommendations.

The project was co-financed by the European Commission and ITU with the latter being the project execution agency. As a result of the project, harmonized guidelines on policy, legislation and regulation were adopted and have since been implemented in beneficiary countries.

The project focused on the countries of the Pacific belonging to the African, Caribbean, and Pacific States (ACP) Group of States.

It addressed the needs expressed by Pacific regional organizations and the Pacific Island States (PIS) relating to capacity building in consistent ICT policies and regulations, and e-readiness. The Project was a response to a request for support and cooperation to promote and implement closer collaboration and harmonization of telecommunication policies, legislation, strategies and regulations within ACP group. This was meant to empower each country to implement the necessary reforms so that the region can reap the benefits of a harmonized ICT regulative landscape.



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Countries across the region have different levels of ICT development. More advanced countries have agreed to share their best practices with those less advanced, while also learning from international best practices. At all stages, the ICB4PAC project had to consider the challenging logistics created by the vast distances between countries. The dates of project meetings were therefore determined in close collaboration with regional organizations.

The objectives of the project were achieved **resulting in the adoption of harmonized guidelines on policy, legal, and regulation which have since been implemented domestically by beneficiary countries.** During in-person capacity-building trainings, countries from the global South shared experiences and jointly contributed to the project's outcomes.

With regard to sustainability, the project received continued support from ITU operational plan activities and benefited from projects financed by ITU and the Government of Australia. It has already been replicated successfully in Africa and the Caribbean. The key to this success is that participating countries must commit to the project.

Contact:

Name: Mr Cosmas Zavazava

Title: Chief *ad interim*, Partnerships for Digital Development Department

Organization: Telecommunication Development Bureau, International Telecommunication Union (ITU)

Email: cosmas.zavazava@itu.int



PROJECT NAME: Capacity-building and ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island States (ICB4PAC)

COUNTRIES/REGIONS: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

NOMINATED BY: International Telecommunication Union (ITU)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.9

SUPPORTED BY: European Commission

IMPLEMENTING ENTITIES: ITU

PROJECT STATUS: Completed

PROJECT PERIOD: 2009–2013

URL OF THE PRACTICE: <https://bit.ly/3guntEJ>



ADELANTE Programme Knowledge Bank

Creating a public repository of triangular cooperation learning

Challenge

The ADELANTE Programme aimed to provide evidence in support of triangular cooperation, while demonstrating that this international cooperation modality is a relevant collaborative tool in addressing development challenges in Latin America and the Caribbean. Since 2016 the Programme has harnessed valuable knowledge that must now be analysed and shared in a systematic and user-friendly format to aid in achieving this goal. Targets 17.6 and 17.16 of the Sustainable Development Goals (SDGs) are at the core of the ADELANTE knowledge bank, as an instrument that will assist the international development community in enhancing knowledge-sharing through multi-stakeholder partnerships.

Towards a Solution

ADELANTE is the European Union flagship programme on triangular cooperation, launched in 2015 with a budget of over 10 million euros. Its mission is to foster horizontal relations between countries in Latin America and the Caribbean and those in Europe, while encouraging them to exchange knowledge and take advantage of their partners' capacities to promote sustainable development in the region. The European Commission launched a call for proposals and co-financed eight projects that involve 54 organizations from 18 Latin American and Caribbean countries, as well as several European institutions.

The eight triangular cooperation ADELANTE projects target various issues and countries, with the participation of all types of actors. These projects have contributed significantly to the region's sustainable development and have generated valuable sectoral and cross-cutting learning. The eight projects contribute directly to 9 SDGs and 27 targets. Significant contributions have been made to SDG 16 on peace, justice and strong institutions. Notable contributions have also been made to SDG 1 on poverty, SDG 10 on reduced inequalities and SDG 17 on partnerships, which are pillars of the 2030 Agenda for Sustainable Development and cornerstones of the ADELANTE Programme. Special attention is also paid to SDG 5 on gender equality.

All stakeholders worked together to collect, analyse and share the knowledge harnessed during the four years of the ADELANTE Programme in a systematic and user-friendly format. An online repository with 28 components was created in order to share evidence of the added value, success stories and lessons learned from triangular cooperation initiatives to address organizational, sectoral and development challenges.

The joint exercise was structured around a knowledge management methodology that had been applied in previous development cooperation contexts. The Programme engaged a team of European and Latin American knowledge management experts to help guide the process and make the necessary methodological adaptations to reflect the triangular nature of the Programme and its projects. These included variables to assess learning in terms of increasing flexibility, building successful partnerships or sharing knowledge and solutions.



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Using this methodology, the Programme identified three types of knowledge: success stories, best practices and lessons learned.

Success stories are 'ways of doing' that have generated positive results and could be replicated in other projects to achieve the same results. These pieces of knowledge offer a summary of the case, including objectives, impacts, the critical success factors and the added value for a triangular cooperation approach.

Best practices are reports on achievements that highlight the critical success factors necessary to achieve them. In all cases, these practices could inspire other projects during the identification and formulation phases.

Lessons learned are experiences about events that occurred during the development of a project that were useful in its dissemination and reuse. The lessons from ADELANTE projects surfaced during their implementation but provide valuable data to consider throughout the project cycle.

The ADELANTE Programme management team launched this initiative; provided the methodology; and edited, consolidated and published the Knowledge Bank. However, the project coordinators and partners took charge of identifying, analysing and systematizing the knowledge that originated from their projects. As such, the Knowledge Bank comprises 28 records that highlight interesting elements that are important to the success of a project, such as:

- Promoting collaborative planning, identification and formulation of projects and providing grounds to foster continued discussion among partners for the duration of the project.
- Understanding the particularities of triangular cooperation, jointly creating suitable methodologies and procedures during the identification and planning phases and applying them throughout the project's execution.

- Orienting these methodologies and procedures to the exchange of knowledge so that all actors may capitalize on it, from partners to final beneficiaries.
- Ensuring that these methodologies and procedures strive to influence public policies, favouring participation and dialogue with senior policymakers and decision makers in relevant institutions.
- Adapting these methodologies and procedures to the context of each country (political, legal, administrative and sectoral), with the possibility of building frameworks for differentiated results.
- Allowing for sufficient flexibility and adaptation margins so that innovative elements may be introduced and have a strong impact throughout the execution of the project.

By identifying, analysing and systematizing this knowledge, project coordinators were able to understand the processes and decisions made in a particular context and draw valuable lessons. **This exercise allowed for reflections that will undoubtedly contribute to improving the design and implementation of future triangular cooperation initiatives. It also enhanced the abilities of project coordinators and their partners in managing knowledge, which directly contributed to strengthening public institutions in the region.**

The ADELANTE Knowledge Bank is a tool that is publicly available to all interested parties on the ADELANTE website and Capacity4dev, the knowledge-sharing platform of the European Union.

Contact:

Name: Ms Leticia Casañ Jensen

Title: Task Manager

Organization: Regional Operations Latin America and the Caribbean, Directorate-General for International Cooperation and Development, European Commission

Email: leticia.casan-jensen@ec.europa.eu

PROJECT NAME: ADELANTE Programme Knowledge Bank

COUNTRIES/REGIONS: Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Germany, Guatemala, Honduras, Italy, Mexico, Nicaragua, Panama, Paraguay, Peru, Portugal, Spain, Uruguay

NOMINATED BY: Regional Operations Latin America and the Caribbean (DEVCO - European Commission)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.2, 1.3, 1.a, 1.b, 2.1, 3.5, 3.8, 4.4, 5.1, 5.2, 5.5, 5.a, 5.b, 5.c, 8.2, 8.3, 8.4, 8.9, 9.3, 9.5, 10.2, 10.3, 10.7, 11.1, 11.3, 12.2, 12.a, 13.2, 13.b, 16.3, 16.6, 16.7, 16.10, 16.a, 16.b, 17.6, 17.9, 17.15, 17.16

SUPPORTED BY: European Union

IMPLEMENTING ENTITIES: European Union, Chilean Agency for International Cooperation, Presidential Agency of International Cooperation (APC-Colombia), International and Ibero-American Foundation for Administration and Public Policies of Spain, Office of the Intendant of Cerro Largo in Uruguay, National Institute of Industrial Technology of Argentina, Ministry of Social Development of Uruguay, Judiciary of Costa Rica

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2020

URL OF THE PRACTICE: www.adelante-i.eu/en/banco-de-conocimiento

Lessons learned from the EU-LAC Programme for Triangular Cooperation (ADELANTE) and the OECD Toolkit



Assessing the value added of working in triangular cooperation

Challenge

Implementing the 2030 Agenda for Sustainable Development and achieving the Sustainable Development Goals (SDGs) requires new and innovative forms of horizontal partnerships that break up the traditional binary relationship of one partner providing cooperation and the other receiving it. Triangular cooperation is such a partnership. In the spirit of the 2030 Agenda, no country is too economically poor to provide assistance and share experiences, and no country is too rich to learn from others. The challenge is determining how this spirit could be systematically planned for and incorporated into triangular partnerships. At times, it has been difficult to assess the impact of such partnerships.

Towards a Solution

Triangular cooperation complements South-South and North-South cooperation by drawing on the best experiences of both modalities, pooling resources and using complementary expertise to co-create innovative development solutions. In triangular cooperation, there is often a tendency either to focus on the development results in the beneficiary country, which neglects the process of joint and mutual learning among all partners, or to emphasize the strong partnership between the pivotal partner and the facilitator, which may give the impression that the beneficiary partner plays a weaker role.

To make best use of triangular cooperation, it is crucial to consider both dimensions—development and partnership results—as they are mutually reinforcing. Against this backdrop, the European Union (EU) ADELANTE Programme set out to assess the value added of working in triangular cooperation. EU ADELANTE joined forces with the Organisation for Economic Co-operation and Development (OECD) in piloting the 'Toolkit for identifying, monitoring and evaluating the value added of triangular cooperation'. Using the Toolkit, project partners can better assess the results of the partnership, in addition to the envisioned development results. The eight ADELANTE projects, each with its own triangular dynamics, used the OECD Toolkit to assess the value added of triangular cooperation based on their experiences. They provided valuable insights and recommendations for the next phase of the EU ADELANTE Programme. Teams from the EU Commission and OECD supported the process by providing advice and organizing workshops and follow-up calls.

For example, the Chilean Agency for International Cooperation for Development coordinated a project that has been implemented in Cuba to increase the availability of safe food of animal origin and promote animal health in order to improve food security for the population and achieve SDG 2 on hunger. In addition, the Presidential Agency for International Cooperation of Colombia coordinated a project to support entrepreneurs in developing and strengthening business ideas and to help small- and medium-sized enterprises increase their capacity for innovation. The project has been implemented in Belize, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama to achieve SDG 1 on poverty. Each project has its own dynamics and contributes to the achievement of several SDGs. **The OECD Toolkit provides three tools that aim to support projects in designing, implementing and evaluating triangular cooperation.**

The first tool identifies the value added of triangular cooperation using a checklist of six areas in which it may typically add value from a partnership perspective. It is derived from the work of the Global Partnership Initiative (GPI) on Effective Triangular Cooperation and broad international consultation.



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The six areas are: ownership and trust; complementarity and increasing coordination in development cooperation; sharing knowledge and learning jointly; co-creating solutions and flexibility; enhancing volume, scope and sustainability; and achieving global and regional development goals through strengthened partnerships for sustainable development.

The second tool provides guidance on developing results chains and indicators to account for the value added of triangular cooperation.

The third tool designs evaluations to measure the value added. It provides ideas for designing an evaluation that combines the evaluation criteria of the Development Assistance Committee and South-South cooperation principles into evaluation matrices that can support gathering evidence on the value added of triangular cooperation.

The joint initiative between OECD and the EU Commission assessed the partnership results in triangular cooperation by applying the third tool of the Toolkit to the eight ADELANTE projects. This peer-learning exercise was mutually beneficial, as the lessons learned will feed into the next phase of the ADELANTE programme. The Toolkit highlighted the strategic value and adequate, context-dependent use of triangular cooperation logic. The partners confirmed that these were captured well in the six areas mentioned above. At the same time, engaging in this exercise increased awareness among project partners about this modality and its value. Specifically, the ADELANTE team identified three advantages from piloting the Toolkit:

- Evaluative and learning: reflecting on how the modality of triangular cooperation worked for the ADELANTE projects and applying these lessons learned to the design of a potential next phase.
- Methodological and reinforcing ownership: helping partners better understand the dynamics, benefits and challenges of triangular cooperation, as well as how to increase engagement in this modality.
- Strategic: enhancing the visibility of the ADELANTE projects in each partner institution and identifying and highlighting the value added of each project under the ADELANTE Programme.

In working with the Toolkit, OECD learned valuable lessons on the importance of consciously designing projects with a triangular cooperation mindset. Planning projects to capture the value added of triangular cooperation will help to employ this modality more strategically and for greater impact. After all, triangular cooperation is a means to achieving the SDGs and national and regional development goals, not an end in itself. Based on this and future pilot exercises, the OECD Toolkit will be revised and adapted to best fit current demands, with the ultimate goal of supporting partners to engage more effectively in triangular cooperation projects and programmes.

Furthermore, the project reinforced the partnership between OECD and the EU Commission, as well as with the ADELANTE project representatives that contributed to this exercise. They found it to be insightful, enriching and inspiring. They also confirmed that the OECD Toolkit provided useful support in incorporating partnership objectives into project design, monitoring and evaluation. The results of this joint exercise could be replicated and scaled up to other regions, especially as the European Commission is stepping up its engagement in triangular cooperation around the world. A community of practice on triangular cooperation is forming through international meetings on triangular cooperation in Lisbon and the work of the GPI. Sharing these experiences will be useful for further partners worldwide and may change the way in which the international community discusses, plans and implements triangular cooperation on a global scale.

Contact:

Name: Ms Leticia Casañ Jensen
Title: Programme Manager, ADELANTE
Organization: Directorate-General for International Cooperation and Development (DG DEVCO), European Commission
Email: leticia.casan-jensen@ec.europa.eu

Name: Ms Nadine Piefer-Söyler
Title: Policy Analyst; Foresight, Outreach and Policy Reform Unit; Development Co-operation Directorate
Organization: Organisation for Economic Co-operation and Development (OECD)
Email: nadine.piefer-soyler@oecd.org

PROJECT NAME: Making Good Use of the Value Added of Triangular Cooperation – Experiences from an OECD-EU ADELANTE Pilot of the “Toolkit for identifying, monitoring and evaluating the value added of triangular cooperation”

COUNTRIES/REGIONS: Argentina, Belize, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Italy, Mexico, Nicaragua, Panama, Paraguay, Peru, Spain, Uruguay

NOMINATED BY: Organisation for Economic Co-operation and Development (OECD), European Union (EU)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.16

SUPPORTED BY: EU, OECD

IMPLEMENTING ENTITIES: OECD Development Co-operation Directorate, EU Directorate-General for International Cooperation and Development (DEVCO)

PROJECT STATUS: Completed

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: <https://bit.ly/32v5yJe>

Advanced International Training Programme on Municipal Finance and Local Democracy across Five African Countries

17 PARTNERSHIPS FOR THE GOALS



Pioneering the proof of concept that greater impact in capacity development for local governments requires a hybrid of methodologies to unlock resource flows

Challenge

A significant number of local governments in Africa do not have the requisite capacity and resources to discharge their administrative and technical responsibilities. The local government sector in most countries in sub-Saharan Africa faces the twin challenges of capacity gaps and unfunded mandates, despite decentralization. Consequently, the capacity to anchor sustainable local development, reduce poverty and achieve the Sustainable Development Goals (SDGs) remains a challenge. Given the lack of strategic national frameworks for skill development that respond to the specific capacity needs of the local government sector, the traditional response to this capacity gap has often been sporadic and disjointed project-based workshops.

Towards a Solution

The International Training Programme (ITP) is a partnership between the United Nations Capital Development Fund and the Swedish International Centre for Local Democracy. It targets South Africa, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe and provides a national and regional response to decentralization reforms impacting the local government sector.

The ITP seeks to pioneer the proof of concept that greater impact and sustainability in capacity development for local governments is grounded in combining theoretical knowledge with practical approaches anchored in a change in management processes. It is structured and driven by change agents, who include leaders and decision makers at intermediate and high levels of government. Using decentralization as the policy framework, the ITP designs and implements change projects that contribute to accelerating the achievement of the SDGs.

The methodologies and tools are designed to foster South-South learning and collaboration by drawing on the experiences of each country. For example, when municipalities undertake learning visits in the host country, representatives exchange ideas with individuals from municipalities, research institutions and other organizations. Good practices are chosen and used to enrich the change projects. Participants attend interactive sessions facilitated by national experts from the participating countries and designated national mentors. They also participate in an exchange programme that draws on the experiences of municipalities in Sweden. The two-week phase in Sweden enables ideas to be exchanged between African and European municipalities.

Through this collaborative learning process, the participating countries develop partnerships and expand networks in support of local development and decentralized governance at various levels in their countries and region. The participation of national stakeholders is essential to discussions on governance and accountability, as they are able to hold public institutions and governments accountable.

During the 18-month training, each participant is expected to identify and work on a change project, with the support of the sponsoring institution and a designated mentor. The change projects allow for practical implementation of the theoretical knowledge articulated throughout the training. They are explicit interventions designed to achieve the planned outcomes and development impact of an



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institution, as defined in its mandate. The projects are therefore anchored within the sponsoring institutions and supported by senior managers.

The ITP is informed by a range of themes to empower local governments to accelerate achievement of the SDGs, particularly SDG 1 on poverty; SDG 5 on gender equality; SDG 7 on affordable and clean energy; SDG 8 on decent work and economic growth; SDG 9 on industry, innovation and infrastructure; SDG 10 on reduced inequalities; SDG 11 on sustainable cities and communities; SDG 13 on climate action; and SDG 17 on partnerships. The themes include local government finance, infrastructure development, food security, climate change, public financial management and human skills development. Each module incorporates gender equality, human rights and the environment as cross-cutting issues. Over 150 participants have graduated from the training, and over 50 change projects have been designed and implemented. For example, in the Chipinge municipality in Zimbabwe, the team is working on a change project to improve the participation of people living with disabilities (PLWD) in service delivery management and the decision-making of the municipal council. In the municipality, PLWD and children are often excluded from participating in local development and service provision by the local authority. As a result, they are forced to accept the services provided, even if these services do not address their needs. The change project is addressing these inequalities by raising awareness among the population, creating a database for PLWD, assigning PLWD to collect user fees and manage public toilets and cultural heritage centres. The funds are used to provide support to PLWD. Other examples from various municipalities include income-generating projects for women's

economic empowerment, improved local revenue collection and management, increased women's participation in local government planning and budgeting, culture and tourism, solar energy, value added agriculture and the digitalization of municipal business processes and systems.

As a result of the ITP, tools and methodologies have been developed and tested. As the change project demonstrates their effectiveness, resources are increased by leveraging private resources with public funds for local development.

Policy impacts include a move from manual to digital local revenue collection, gender mainstreaming, public-private partnerships, improved policies on local government borrowing, a policy for the management and disposal of public assets, and physical planning. Cooperation agreements have been signed between municipalities and development banks to finance large projects, such as solar energy in Gutu, Zimbabwe. Individual municipalities have strengthened cooperation within and across borders in the region, as well as with municipalities in Sweden. There is significant potential for replicating the training in other countries, provided there is decentralized governance and the political will to initiate change.

Contact:

Name: Ms Jenifer Bukokhe Wakhungu

Title: Programme Manager

Organization: United Nations Capital Development Fund (UNCDF)

Email: jenifer.bukokhe@uncdf.org

Skype: jenifer.bukokhe

PROJECT NAME: Advanced International Training Programme (ITP)

COUNTRIES/REGIONS: South Africa, Sweden, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

NOMINATED BY: United Nations Capital Development Fund (UNCDF)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 1.a, 1.b, 5.5, 5.b, 7.1, 8.2, 9.a, 10.3, 11.3, 13.1, 17.9

SUPPORTED BY: International Centre for Local Democracy (ICLD)

IMPLEMENTING ENTITIES: UNCDF, with eight municipalities in target countries

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2010–2020

URL OF THE PRACTICE: <https://bit.ly/2EB6svm>



Monitoring the Effectiveness of South-South Cooperation in Mexico

Developing a monitoring approach for effective SSC in Mexico

Challenge

Mexico has evolved into an emerging economic power that is becoming a champion for South-South cooperation (SSC) in Latin America. Innovative partnerships that respond to unique country contexts are key to achieving the 2030 Agenda for Sustainable Development. As a result, efforts to strengthen the effectiveness of this cooperation modality are encouraged.

In the past, the Agencia Mexicana de Cooperación Internacional para el Desarrollo [Mexican Agency for International Development Cooperation] (AMEXCID) explored methods for monitoring the effectiveness of cooperation. Many countries use the Global Partnership Monitoring Framework. This instrument measures progress in implementing four internationally agreed effectiveness principles: country ownership, a focus on results, inclusive partnerships, and transparency and mutual accountability. In 2016, Mexico examined the framework's applicability from the perspective of a country with a dual role of both provider and recipient of SSC. At that time, the Global Partnership Monitoring Framework was not suited to the Mexican context. AMEXCID therefore proposed adjusting the indicators to measure the effectiveness of cooperation in a way that responded to the country's situation.

Towards a Solution

This initiative, led by Mexico, sought to adapt the Global Partnership Monitoring Framework to the country's context and needs. **The objective was to gather data and evidence in order to inform the national institutional framework for SSC and solidify the role of SSC in sustainable development.**

The initiative was implemented by AMEXCID, which led the overall monitoring process as well. The Agency designed a pilot framework, collected and validated data, and conducted an analysis and inclusive consultation. The initiative was supported by Germany and the United Nations Development Programme (UNDP) Mexico, and substantive technical guidance was provided by the Global Partnership Joint Support Team (JST). The monitoring exercise consisted of three fundamental steps.

The first step was to develop a pilot framework. In 2016, Mexico examined the applicability of the Global Partnership indicators. This assessment informed work undertaken in 2017 to develop a pilot framework to monitor the effectiveness of SSC. Developed by Mexico and guided by the Global Partnership JST, the adapted indicators under the pilot framework were as follows:

- The offer of SSC is aligned with the results frameworks and priorities of the recipient country.
- The provider countries use SSC strategic results frameworks.
- Civil society organizations participate in SSC and contribute to effective development cooperation.
- There are quality public-private dialogues in SSC.
- Information on SSC is publicly available.
- SSC is subject to parliamentary oversight.
- SSC incorporates gender equality.

The second step was to test the pilot framework. Data was collected on the monitoring indicators in 2018, with the participation of over 100 stakeholders from the Government, civil society and the



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private sector. Following the data collection and analysis, a national workshop was held to discuss the findings, bringing together participating actors, recipients of Mexican cooperation and other Southern providers. At the end of the multi-stakeholder workshop, a group session was held to discuss the most relevant conclusions. Based on the opinions of the participants, a list of recommendations was generated to improve the effectiveness of South-South cooperation in Mexico.

Participants found that the institutional framework for SSC had been strengthened, including monitoring and evaluation systems for cooperation programmes. This allows cooperation to be better aligned with development priorities and to increase focus on results. Nevertheless, there is room to strengthen operational mechanisms and stakeholder engagement in SSC programmes and projects. There must also be an effort to incorporate a more systematic gender perspective.

The results and recommendations are contained in the report entitled 'Monitoring Exercise in South-South Cooperation Effectiveness', which will guide national action to strengthen development cooperation in Mexico. The report will also inform the development of the next AMEXCID programme for international development cooperation. The results are currently being used to inform national reporting on progress made in achieving the Sustainable Development Goals, specifically on target 17.15, to respect each country's policy space and leadership, and target 17.16, to enhance the global partnership for sustainable development with multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources.

These initial results were presented by the Government of Mexico at a side event with representatives from other coun-

tries during the BAPA+40. The recommendations are pertinent to middle-income countries and countries with dual roles in international development cooperation. Given the multi-stakeholder nature of the proposed solutions, these ideas could benefit civil society organizations, the private sector and donor countries equally.

The third step of the exercise was to explore replicability. Understanding the diversity of SSC, the JST engaged a number of Southern providers to gauge the adapted framework's applicability for monitoring the effectiveness of SSC in other contexts. Officials from Chile, Indonesia, Malaysia and South Africa participated in an online questionnaire and a series of interviews. These consultations examined how SSC is organized and provided, including whether these providers have national and subnational strategies in place to guide cooperation. They also considered the process for deciding on SSC interventions, including how these arrangements are formalized, and which stakeholders are involved at the various stages.

The pilot framework developed by Mexico will serve as the basis for other SSC providers as they seek to assess the quality of the cooperation they provide. The framework will be a flexible tool that can be adapted to different SSC provider contexts. In fact, Colombia is currently planning a similar exercise.

Contact:

Name: Ms Yuko Suzuki NAAB

Title: Global Policy Adviser, Effectiveness Group

Organization: United Nations Development Programme (UNDP)

Email: yuko.suzuki@undp.org

PROJECT NAME: Monitoring the Effectiveness of South-South Cooperation in Mexico

COUNTRIES/REGIONS: Germany, Mexico

NOMINATED BY: United Nations Development Programme (UNDP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.15, 17.16

SUPPORTED BY: Government of Germany

IMPLEMENTING ENTITIES: Mexican Agency for International Development Cooperation (AMEXCID), UNDP, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

PROJECT STATUS: Completed

PROJECT PERIOD: 2017–2019

URL OF THE PRACTICE: shorturl.at/hmFOU

ESCAP Twinning Programme for the Implementation of the 2030 Agenda and the Voluntary National Reviews

17 PARTNERSHIPS FOR THE GOALS



Fostering cooperation and cross-learning to overcome systemic challenges in achieving the SDGs and preparing voluntary national reviews

Challenge

Voluntary national reviews are a key component of the follow-up and review mechanism of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). During the preparation of voluntary national reviews, countries presenting their reports for the first time face a number of common challenges, including data collection and stakeholder engagement. North and Central Asian countries preparing their reports for the first time can benefit from twinning with more experienced countries. For 10 of the 17 SDGs, countries in North and Central Asia have insufficient data to provide a clear picture. Compiling data is challenging because many countries are still in the process of fully adapting SDG targets and indicators to national contexts. The SDGs cover a broad range of issues that affect multiple stakeholders, such as line ministries and other governmental agencies, civil society organizations and the private sector. Coordination among these stakeholders is therefore critical. Organizing national multi-stakeholder consultations in a comprehensive, inclusive and meaningful way can be challenging, especially when this mode of governance is not commonly practiced.

Towards a Solution

In 2019, Kyrgyzstan and Uzbekistan were seeking practical guidance to prepare their first voluntary national reviews, to be presented at the high-level political forum on sustainable development in 2020. In response, the Economic and Social Commission for Asia and the Pacific (ESCAP) initiated a voluntary national review twinning programme for North and Central Asian countries to share knowledge, experiences and practical recommendations with countries that have similar administrative systems and economic, social and environmental circumstances. In the spirit of South-South cooperation, the objective of the twinning programme is to exchange best practices and methodologies for the preparation and follow-up of a voluntary national review in order to overcome some of the systemic challenges that countries encounter in the process.

In 2020, Armenia, Georgia, Kyrgyzstan and Uzbekistan have joined forces to exchange experiences and share lessons in preparing their respective voluntary national reviews as part of a twinning exercise. While Armenia and Georgia will be submitting their second reports at the high-level political forum on sustainable development in 2020, Kyrgyzstan and Uzbekistan will be submitting their first reports. As a result, two sets of twinning exercises have been piloted: one in Kyrgyzstan with Armenia and another in Uzbekistan with Georgia. These twinning exercises were facilitated by ESCAP in partnership with the Governments and the United Nations Resident Coordinator Offices of the countries concerned.

During these twinning exercises, members of the participating delegations had the opportunity to meet with their counterparts in Parliament; State institutions for statistics, the environment and national economies; non-governmental organizations; and mass media to **establish a direct connection, exchange good practices and share knowledge on preparing the voluntary national reviews**. The countries agreed to exchange the first draft of their reports for peer review by mid-April 2020. They continued to interact through the SDG Helpdesk, which is an online platform for knowledge-sharing, expertise and advice hosted by ESCAP (sdghelpdesk.unescap.org). The



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SDG Helpdesk provided these countries with an online community through which they could also exchange knowledge and information on voluntary national reviews and other issues related to achieving the SDGs.

Although the focus was on countries preparing their first voluntary national reviews, the countries preparing their second reports have also learned from the twinning exercise, which has proven that exchange of knowledge and practices can take place in both directions, promoting South-South peer learning.

The twinning exercise has raised significant interest in the development community within and beyond the Asia-Pacific region, as various United Nations agencies and donors are already planning to support efforts to replicate this exercise. This good practice can be easily replicated, as it requires only modest funding for a number of in-person and virtual

cross-country exchanges. The greatest requirement is that countries have the political will to share their experiences and processes with each other and with stakeholders. This good practice also helps to build capacity through peer learning in a setting in which countries facing similar challenges can find a sympathetic ear and share practical, operational ideas and proposals. Once contact has been formally established during the twinning meetings, informal and formal channels could also be opened for future communication and South-South and triangular cooperation.

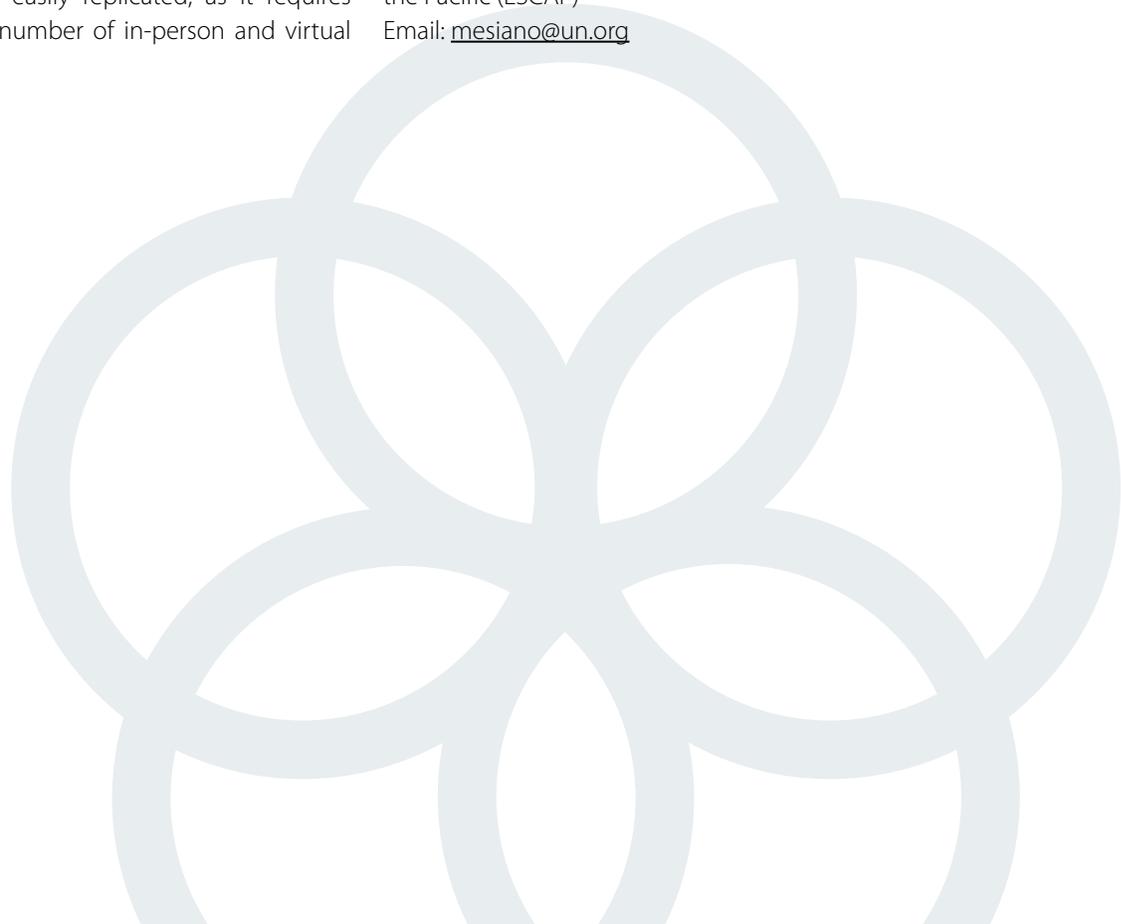
Contact:

Name: Dr Riccardo Mesiano

Title: Sustainable Development Officer

Organization: Economic and Social Commission for Asia and the Pacific (ESCAP)

Email: mesiano@un.org



PROJECT NAME: ESCAP Twinning Programme for the Implementation of the 2030 Agenda and the Voluntary National Reviews

COUNTRIES/REGIONS: Armenia, Georgia, Kyrgyzstan, Uzbekistan

NOMINATED BY: Economic and Social Commission for Asia and the Pacific (ESCAP)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.9, 17.14, 17.16, 17.17, 17.19

SUPPORTED BY: ESCAP Subregional Office for North and Central Asia, ESCAP Environment and Development Division

IMPLEMENTING ENTITIES: ESCAP; Governments of Armenia, Georgia, Kyrgyzstan and Uzbekistan; United Nations Resident Coordinator Offices in those countries

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2020

URL OF THE PRACTICE: <https://bit.ly/3jtt5Zz>

Knowledge and Technology Transfer for the 2020 Census Round in East and Southern Africa

Facilitating cooperation on the census with Botswana, Eswatini, Kenya, Malawi, Mauritius, Namibia, Seychelles, Uganda, United Republic of Tanzania, Zambia and Zimbabwe

Challenge

The countries covered by the United Nations Population Fund's East and Southern Africa Regional Office (UNFPA ESARO), which include Botswana, Burundi, Eswatini, Ethiopia, Lesotho, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, South Africa, South Sudan, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe, are at different stages of socio-economic development. This is reflected in the capacity of their national statistical offices (NSOs) to conduct the 2020 round of population and housing censuses. While some of the countries have strong statistical systems and capacity that can be leveraged for conducting a digital census, others have limited technical capacity and resources for acquiring the necessary digital technologies. Moreover, the presence and technical staffing levels of UNFPA are sometimes limited, particularly in the upper-middle income countries. Novel strategies are therefore needed to strengthen capacity for the 2020 census round across the region.

Towards a Solution

To address this challenge, UNFPA ESARO promotes the exchange of technical knowledge and technologies for the 2020 census round through South-South collaboration (SSC).

Lesotho and Eswatini were the first countries in the region to undertake digital censuses in 2016 and 2017, respectively, followed by Malawi in 2018 and Kenya in 2019, with technical support from UNFPA ESARO. Ten countries in the region—Botswana, Burundi, Mauritius, Namibia, Rwanda, Seychelles, South Africa, Tanzania, Uganda, and Zambia—plan to conduct their censuses between 2020 and 2022. In line with United Nations recommendations, all countries with upcoming censuses should adopt a digital census. To identify those most left behind, countries should use information and communications technologies throughout the data collection process for computer-assisted personal interviews (CAPI), cartographic mapping, geospatial analysis and data processing and analysis. While the adoption of technology in census undertaking offers the benefits of faster data collection, processing and analysis, as well as better quality data, countries must also strengthen technical capacity for using the technologies and ensure the availability of financial resources for their acquisition.

Recognizing the power of knowledge-sharing through peer learning, **UNFPA ESARO facilitates exchanges and encourages NSOs that have successfully conducted digital censuses to share their experiences, including challenges faced and solutions to overcome them, with countries preparing for their censuses. This is an effective strategy for identifying good practices and the precautions necessary for a successful digital census.** In this regard, UNFPA ESARO brokered both a technical learning exchange and an agreement to share census-taking electronic tablets between Eswatini, Kenya and Malawi and those countries preparing for their censuses. These technical knowledge exchanges were hosted for both individual countries and groups.

Having completed its digital census in 2017, Eswatini hosted separate teams of census managers from Ethiopia, Malawi, South Africa and South Sudan in 2018 to share practical experiences on using tablets for both mapping and data collection. Following its digital census in September 2018, Malawi hosted a joint mission from Zambia and Zimbabwe in April 2019 and Botswana and Mauritius in June 2019. The country shared its experiences on the technical, logistical and administrative aspects of the digital census, resource mobilization, outsourcing of cartographic mapping and the development of an application for data capture. Malawi also hosted individual missions from Kenya and Namibia in January and June 2019, respectively. The Kenyan mission to Malawi was comprised of senior government officials and members of Parliament representing relevant committees and was instrumental to the Government's decision to procure 140,000 tablets for its census. In February 2020, following its own census in August 2019, Kenya hosted a joint country delegation from Botswana, Liberia, Tanzania and Uganda in preparation for their forthcoming censuses between 2021 and 2022. All technical learning exchange programmes were prepared in advance with inputs from visiting NSOs.



UNFPA ESARO employs SSC as an effective strategy to address the need for tablets and strengthen technical capacity for digital censuses in the region. The Office initially procured 250 tablets for use in a pilot mapping process in Madagascar in 2017. These tablets were later transferred to Zambia for census cartographic mapping in 2018. Encouraged by the practicality of sharing tablets between countries, UNFPA ESARO procured a further 15,000 tablets in 2017 with funding support from the Department for International Development. These tablets were provided to supplement the 15,000 tablets procured by the Malawian Government for its 2018 census. The tablets procured by UNFPA were then transferred to Zambia for their 2020 census. Although the Kenyan Government fully funded the procurement of its own tablets, it agreed to donate them through government-to-government arrangements brokered by UNFPA ESARO to the following countries with upcoming censuses: Botswana (5,000); Liberia (15,000); Ghana (70,000); and Mauritius (8,000). At a cost of approximately US\$165 per tablet with accessories, sharing them ensures an optimal use of resources.

UNFPA ESARO also uses SSC to expose NSOs to the technical requirements for a successful digital census. For example, the most recent technical learning exchange was hosted by the Kenya National Bureau of Statistics (KNBS) in February 2020. In collaboration with UNFPA Kenya and UNFPA ESARO, KNBS developed an information package on every stage of digital census planning and implementation, which they shared with a joint mission of NSO representatives from Botswana, Liberia, Tanzania and Uganda. During this learning exchange, key factors for the successful digital census conducted by KNBS were identified. First, proper planning began four years ahead of the census. Second, government leadership played an important role, reflected in the fact that it covered 99 percent of the census budget, estimated at US\$185 million. Third, an early and firm decision to use digital technology was made, despite the significant preparation required and limited past experience. Fourth, building local capacity in digital technologies was essential; two public universities locally assembled 140,000 tablets used for census data collection. Fifth, in-house capacity was strengthened in CAPI programming. Sixth, sound recruitment guidelines were developed and implemented at the national and local government levels. Seventh, a strong multisectoral partnership with mobile phone service

providers was needed for data transmission, as well as with other government agencies and departments for the distribution and collection of census materials.

An anonymous evaluation of the 23 participants was conducted at the end of the five-day Kenya digital census learning exchange to gauge the benefits of the exercise. The majority of the participants (87 percent) strongly agreed that the objectives of the benchmarking study tour were clearly defined, with a similar percentage strongly agreeing that the experience gained during the study tour would be useful to their respective countries. With the exception of reports and dissemination (61 percent), questionnaire design (87 percent) and cartographic mapping (96 percent), all participants strongly agreed or agreed that they had found the following elements relevant to their countries: planning and field operations, human resources and administration logistics, CAPI and data transmission, and publicity and awareness-raising. The vast majority (96 percent) of participants also found the materials to be useful. The participants highly valued the opportunity for cross-learning from countries at different stages of the census process and recommended a similar structure for future learning exchanges.

To foster SCC, UNFPA ESARO is developing an online portal, with an integral community of practice, to facilitate the documentation and sharing of census experiences, which will include analysis, dissemination and the use of census data.

Contact:

Name: Mr Fredrick Okwayo
Title: Technical Adviser, Population Data and Data for Development
Organization: United Nations Population Fund (UNFPA) East and Southern Africa Regional Office
Email: okwayo@unfpa.org
Skype: fred.okwayo
Phone: +27609976934

Name: Dr Willis Odek
Title: Strategic Information Specialist, Middle-Income Country Technical Hub
Organization: UNFPA East and Southern Africa Regional Office
Email: odek@unfpa.org
Skype: dr.willis.odek
Phone: +27834888440

PROJECT NAME: Using South-South Cooperation as a Modality for Transferring Knowledge and Technology for the 2020 Census Round in East and Southern Africa

COUNTRIES/REGIONS: Botswana, Burundi, Eswatini, Ethiopia, Lesotho, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, South Africa, South Sudan, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

NOMINATED BY: United Nations Population Fund (UNFPA)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 3.1, 3.2, 3.7, 4.3, 4.7, 5.1, 5.2, 5.3, 5.6, 5.c, 8.5, 10.2, 10.7, 11.1, 11.5, 11.7, 11.a, 11.b, 13.1, 17.19

SUPPORTED BY: UNFPA East and Southern Africa Regional Office (ESARO), UNFPA Country Offices, Department for International Development, Kenya National Bureau of Statistics

IMPLEMENTING ENTITIES: UNFPA ESARO, UNFPA Country Offices

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2016–2024

URL OF THE PRACTICE: <https://bit.ly/3gxNhzN>



Interagency Response to the Venezuelan Situation in Peru

Coordinating the humanitarian and development response to refugees and migrants from Venezuela in Peru

Challenge

The displacement of approximately 5 million refugees and migrants from Venezuela peaked in 2019, impacting most countries in the region. As the situation in Venezuela remains volatile, more continue to be displaced.

Peru has shown great solidarity and currently hosts over 830,000 Venezuelans; however, the scale and suddenness of refugee and migrant flows put a strain on State institutions and host communities. The country's structural problems have been highlighted, and discontent has risen as Venezuelans are perceived as competitors for resources and jobs. Furthermore, the fact that Venezuelans are associated with higher crime rates has significantly increased xenophobia and discrimination. Approximately 100,000 Venezuelan children do not have access to education and 88.5 percent of economically active refugees and migrants work without a formal contract. Reported increases in irregular refugee and migrant flows further exacerbate the situation.

A coordinated and comprehensive response from authorities, the international community and local actors is the only way to provide continued and effective support to the Government and host communities.

Towards a Solution

The national coordination platform for Peru, the Refugee and Migrant Working Group [Grupo de Trabajo sobre Personas Refugiadas y Migrantes] (GTRM), works alongside its regional counterparts to coordinate the humanitarian and development response to the vast flows of refugees and migrants from Venezuela in Peru. It works to address needs and reduce risks and vulnerabilities through the humanitarian development nexus. GTRM is a pilot model for national and regional inter-agency coordination that incorporates greater collaboration and coherence among members to enhance their comparative advantages. By reducing risks and vulnerabilities for those in need of international protection and their host communities, GTRM partners ensure that development is accessible to all, especially those most affected by the Venezuelan situation.

This is key in a region comprised of developing countries that are working towards achieving the Sustainable Development Goals (SDGs). GTRM supports the Government of Peru in addressing the needs of refugees and migrants from Venezuela, which complement the country's own development challenges, particularly in poverty, public education, health and the informal economy. GTRM works to ensure an inclusive and equitable quality education for Venezuelans and host communities; promote sustained, inclusive and sustainable economic growth; encourage full and productive employment and decent work; promote an integrated, peaceful and inclusive society for sustainable development; and strengthen the means of implementation and revitalize global partnerships for sustainable development. Endorsed by 11 countries within the Quito Process, GTRM is instrumental in supporting government efforts across the region to receive and integrate refugees and migrants from Venezuela. GTRM partners contribute to developing and harmonizing national and regional strategic initiatives on documentation, protection, education, health and integration, among other areas. Through South-South cooperation, best practices have been shared with other coordination platforms in the region to disseminate and develop skills, knowledge and successful initiatives in areas including decent job creation and entrepreneurship; the protection of lesbian, gay, bisexual, transgender, queer and intersex persons, children and other vulnerable groups; and strengthening national systems for refugee status determination.



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In 2019, milestones were attained using a participatory and consultative approach in which United Nations agencies, international and national non-governmental organizations, community-based organizations and faith-based organizations aligned their efforts under a common response plan. The Refugee and Migrant Response Plan (RMRP) is therefore both a product of and a means for resourceful South-South cooperation among Governments and humanitarian and development actors across the region. By coordinating and channelling their efforts through thematic working groups, partners shared information, standardized procedures, reduced duplications and improved the effectiveness and efficiency of their response.

As a result, over 340,000 persons from Venezuela and host communities in Peru received direct emergency assistance, socio-economic and cultural integration support and protection services. These efforts also improved the capacities of government institutions.

In 2020, thanks to the coordination and information-sharing mechanisms, both the national and regional platforms moved to a new sectoral approach. The new sectors, reproduced across the region, consist of education, food security, health, humanitarian transport, integration, multipurpose cash-based interventions, non-food items, nutrition, protection, shelter and support services, as well as water, sanitation and hygiene for all. This sectoral approach allows GTRM partners to better address humanitarian and development challenges facing refugees, migrants and host communities.

To ensure an evidence-based response, the response plan for Peru is based on a joint needs analysis (JNA) involving all GTRM partners who contributed to identifying and discussing needs, gaps, risks and vulnerabilities. The JNA incorporates the views, capacities and needs of all partners. Moreover, regional projects include establishing a regional network of support spaces where communities of refugees, migrants and nationals and their organizations collaborate on efforts to support those in need. Other projects focus on sharing data and information on population trends and needs, which is essential to harmonizing strategies within the region.

To ensure sustainability, coordination mechanisms have been established to allow GTRM to work with the government at the local and national levels, which is a major achievement in Peru. At the national level, GTRM aligns its work with the Government's 'Mesa de Trabajo Intersectorial para la Gestión Migratoria' [Intersectoral Working Group for Managing Migration]. In Arequipa, Cusco, Tacna and Tumbes, coordination mechanisms are led by regional government institutions, with platform members providing direct technical support.

GTRM has developed a monitoring framework tailored to the 2020 RMRP. It contains a comprehensive list of activities in several sectors, each having strategic objectives and indicators at the national and regional levels. Regular monitoring exercises are being carried out, which include the systematic collection of quantitative and qualitative data. The monitoring framework will assist in measuring outputs against strategic objectives and indicators. It will also serve to further analyse the effectiveness of the response, identifying gaps and informing the programming changes needed to address SDG targets. Efficient coordination structures and platforms, such as GTRM, should be replicated. These forums allow key humanitarian and development actors and donors to collaborate on innovative and complementary issues and share knowledge and best practices. This is essential to developing successful initiatives that respond to specific humanitarian challenges. For developing countries in regions impacted by humanitarian crises and the resulting displacement of communities, technical cooperation and the exchange of successful experiences in emergency response could strengthen the resilience of host communities.

Contact:

Name: Margarida Loureiro

Title: Senior Interagency Coordination Officer

Organization: United Nations High Commissioner for Refugees (UNHCR)

Email: loureirm@unhcr.org

WhatsApp: +51 978234723

PROJECT NAME: Interagency Response to the Venezuelan Situation in Peru

COUNTRIES/REGIONS: Peru, Venezuela (the Bolivarian Republic)

NOMINATED BY: United Nations High Commissioner for Refugees (UNHCR)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.1, 4.4, 4.5, 4.7, 4.a, 8.3, 8.5, 8.7, 8.8, 8.10, 16.2, 16.9, 16.10, 16.a, 16.b, 17.7, 17.9

SUPPORTED BY: Government of the United States, Government of Japan, Government of Canada, Government of Sweden, European Civil Protection and Humanitarian Aid Operations (ECHO), Government of Denmark, World Food Programme (WFP), Central Emergency Response Fund, Joint United Nations Programme on HIV/AIDS (UNAIDS), European Commission and others

IMPLEMENTING ENTITIES: 75 members, including 14 United Nations agencies: UNHCR; International Labour Organization; International Organization for Migration; Office for the Coordination of Humanitarian Affairs; United Nations Volunteers; UNAIDS; World Health Organization; WFP; United Nations Development Programme; United Nations Educational, Scientific and Cultural Organization; United Nations Population Fund; United Nations Human Settlements Programme (UN-Habitat); United Nations Children's Fund; United Nations Office on Drugs and Crime, 42 national and international non-governmental, academic, community-based and faith-based organizations, 1 national private sector organization, 4 Red Cross Movements, 14 donors, embassies and cooperation-development agencies

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2018–2020

URL OF THE PRACTICE: <https://bit.ly/3hywnCA> (in Spanish)



Learning and Knowledge Development Facility

Equipping youth in developing countries with demand-driven industrial skills and knowledge

Challenge

In many developing countries, access to quality educational systems and training programmes is not adequate to meet new demands and address technological, social and environmental challenges. Uncoordinated dialogue between Governments and national and international private companies impacts the development and sustainability of a modern technical and vocational education training (TVET) system. In addition, poor collaboration between the private sector and TVET institutions often hampers their ability to provide programmes and curricula that meet market needs and future skill requirements. Moreover, limited financial investments and corporate commitment result in mistrust for an outdated TVET system that does not influence the job market. As a result, young people do not recognize the value of TVET as a driver for employment, decent work and entrepreneurship that promotes inclusive and sustainable growth and supports transitions to digital and green economies.

Towards a Solution

In line with Sustainable Development Goal (SDG) 17, the United Nations Industrial Development Organization (UNIDO) collaborates with public, private and development partners to design and scale up training centres in order to fill the skills gap in developing countries through the Learning and Knowledge Development Facility (LKDF). The innovative training and curricula equip young students with the demand-driven, future skills required to seize the opportunities created by technological progress (SDG 4 on quality education and SDG 9 on industry, innovation and infrastructure). To date, UNIDO has collaborated with over 40 partners to establish and upgrade approximately 15 training centres in Ethiopia, Iraq, Liberia, Morocco, Uruguay and Zambia, with a yearly intake of 100 to 500 students and 20 to 100 trainers per TVET centre. As a result of these projects, female participation in male-dominated sectors has reached 35 percent, and 60 percent of trainees have found a better job.

Through public-private development partnerships, UNIDO and its partners¹ develop curricula and establish, maintain, and upgrade training centres. Governments receive assistance to evaluate their TVET system and identify financial and human capacity requirements, linkages and gaps with the private sector. Contributions received from public and private donors are used to offer training services that meet international standards and market needs. Private companies connect with Governments to learn about the local context and identify the skills needed to increase the efficiency, effectiveness and safety of their businesses. In addition, students acquire needed skills and learn about job content and work readiness.

One example is the MISALE project² in Ethiopia. In 2017, the Training Institute for Commercial Vehicle Drivers was established in Ethiopia to create jobs in commercial vehicle driving and address the shortage of skilled labour for transport enterprises. The training academy provides a five-year training programme for 40 regular trainees annually. It also provides short-term modular trainings for approximately 480 drivers from various companies. Stakeholders from the private sector work together to

1 For a full list of LKDF partners, visit www.lkdfacility.org/partners/

2 For additional information about MISALE, visit <https://lkdfacility.org/misale-ethiopia/>



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formulate the curriculum according to their needs, while the Government develops the regulations and certifications for the trainers and students. The collaborative model and experience gained, particularly in management, is then shared with other schools, which contributes to improving the quality of TVET in Ethiopia.

The LKDF offers systematic monitoring and evaluation to track results by collecting, storing and analysing data on trainees. A key feature of this system is that information is shared between the LKDF and the programmes. The latter submit biannual reports and midterm evaluations and measure return on investment. The LKDF is responsible for project and country baseline reports, field visit reports and midterm and final evaluations. It evaluates the programmes' scale and sustainability in terms of results-based learning and knowledge development to measure their contributions to reducing youth unemployment. The Facility also provides transparent data that demonstrate the programmes' cost-effectiveness and justify expansions into other countries or sectors.

The LKDF knowledge-sharing component helps to ensure scalability and cross-country transfer of knowledge and good practices. For example, the Heavy-Duty Equipment and Commercial Vehicles Academy established in Morocco, in partnership with Volvo, was able to extend its training programme to 600 students from Côte d'Ivoire, Morocco and Senegal. UNIDO counterparts in Côte d'Ivoire and Senegal coordinated with the local private sector to recruit students. Partners designed integrated career support services to help trainees better define their professional objectives and supported graduates in their job search. The Academy facilitated over 500 internships with more than 62 host companies.

UNIDO has also improved regional collaboration on forestry and wood industry education in the Southern African Devel-

opment Community, which has led to green employment and sustainable forest management and use. Trainings were piloted in South Africa with the goal of replicating them in Malawi, Zambia and Zimbabwe.

Other projects, such as the Zambian Industrial Training Academy (ZAMITA) as well as the H20 Maghreb training hub in Morocco, rely on innovations to improve training effectiveness and competitive advantages. ZAMITA employs simulators of the latest engine technology and Euro 6 emission trucks. It also uses digital learning tools to ensure the appropriate level of competency. **The project has already increased employability for over 450 students in the transport and heavy equipment sector, with a focus on women and disadvantaged individuals.** Its collaborative approach increased private sector involvement; an additional six partners have entered into memoranda of understanding with a career service centre to guarantee a supply of skilled labour. Due to the success of the Academy, a similar project was developed in Liberia. Similarly, the H20 Maghreb project provides curricula that combine theoretical knowledge and hands-on experience using virtual reality and automation technology. H20 Maghreb prepares water professionals to respond to complex needs across municipalities, industries and the agricultural sector. The project has now entered its second phase, with plans to replicate it across the Maghreb region.

Contact:

Name: Mr Riccardo Savigliano

Title: Chief, Agro-industries and Skills Development Division, Department of Agribusiness Development

Organization: United Nations Industrial Development Organization (UNIDO)

Email: r.savigliano@unido.org

PROJECT NAME: Learning and Knowledge Development Facility (LKDF)

COUNTRIES/REGIONS: Ethiopia, Iraq, Liberia, Morocco, Uganda, Uruguay, Zambia

NOMINATED BY: United Nations Industrial Development Organization (UNIDO)

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.10, 5.8, 8.2, 8.5, 8.6, 9.1, 9.4, 9.6, 9.8, 17.6, 17.7, 17.8, 17.9, 17.16, 17.17, 17.18, 17.19

SUPPORTED BY: Swedish International Development Cooperation Agency (Sida)

IMPLEMENTING ENTITIES: UNIDO

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2012–2025

URL OF THE PRACTICE: www.lkdfacility.org/

Supporting Continental Networks for Regional Ownership of Food and Nutrition Security Policies

17 PARTNERSHIPS FOR THE GOALS



Delivering on an African Union decision that links school feeding to rural development in a multisectoral and multinational coordination group



Challenge

In 2016, the African Union (AU) Commission launched the Continental Education Strategy for Africa (CESA). Both the 2030 Agenda for Sustainable Development and the Agenda 2063 of the AU call for an education and skills revolution in Africa. In response, the CESA demands a shift in the way in which the continent provides education and training. School feeding is a central pillar for implementing the CESA, as these programmes incentivize school attendance and retention and provide healthy inputs to promote learning. Since the presentation of the CESA, the World Food Programme (WFP) joined forces with AU to support incorporating school feeding into the Strategy. Through South-South and triangular cooperation, WFP offices and the WFP Centre of Excellence in Brazil (CoE Brazil) developed a series of instruments, frameworks and documents to make school feeding an integral part of the CESA. The complete handover of these products occurred in 2020, and AU is currently moving forward with full ownership.



Towards a Solution

Launched in 2016, the CESA is led by the AU Department of Human Resources, Science and Technology (HRST). While the Strategy was being developed, AU and WFP triggered a new policy cycle for school feeding on the continent as a result of South-South events where knowledge was exchanged with Brazil. HRST invited AU leaders to incorporate school feeding in the Strategy's response. The effort to include school meals as one of the priority pillars of the CESA was formalized in a complementary decision passed in 2016, after the Strategy was launched.



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In this decision, HRST calls on WFP CoE Brazil and the WFP Africa Office to design multisectoral partnerships for school meals through AU formal public networks. To accomplish this task, the WFP Africa Office and WFP CoE Brazil, in partnership with the Government of Brazil and the AU Commission, designed and delivered three outputs: the instruments for a continental school feeding cluster, an AU study on school feeding and a monitoring and evaluation framework. The multinational and multisectoral cluster currently operates under AU administration. It is composed of AU; WFP; the Food and Agriculture Organization of the United Nations; the United Nations Educational, Scientific and Cultural Organization (UNESCO); and representatives from the Ministries of Education and Agriculture of AU member States. The instruments of this round of SSTC exchanges were handed over to AU in 2020 to promote ownership of the efforts.

Despite positive achievements in recent years, it is important to highlight the role of SSTC in prioritizing school feeding in the CESA. Between 2012 and 2014, WFP CoE Brazil hosted several delegations from AU member States and organized regional and international events in Africa to foster discussions on the link between school feeding and rural development. After a strong policy dialogue and advocacy work by the WFP Africa Office and WFP CoE Brazil to make school feeding a continental priority at global events held in South Africa and Rwanda, the AU HRST sent a delegation of AU staff and ministers from African countries to Brazil in 2015 to learn from their school feeding experience. They exchanged knowledge with the Brazilian Cooperation Agency and the Brazilian Fund for Education Development about the country's strategies and programmes to promote food and nutrition security and education development.

As a result of the SSTC exchanges with Brazil and the strong advocacy of the WFP Africa Office, the discussion began to consider including school feeding as part of the CESA in 2016. With policy support from WFP CoE Brazil, **AU also recognized school feeding as an opportunity to advance education, boost local economies and promote smallholder agriculture.** The deliverables of the decision have already inspired other regions, including Latin America and Southern Asia. The first day in March was designated as the African Day of School Feeding, and a Multidisciplinary Committee of African Experts was established to facilitate the implementation of this agenda. In addition, several countries mobilized to establish the Pan-African School Feeding Network (REPANS) and an online knowledge platform in 2016.

As part of the decision, AU called on WFP CoE Brazil and the WFP Africa Office to deliver a study on the impact of school feeding on inclusive, quality education in AU countries and the way in which it can facilitate progress across a range of sectors. The study developed a conceptual framework for school feeding that operates from a systems approach and makes recommendations for the multi-stakeholder committee.

In 2017, AU created thematic clusters to implement specific CESA objectives. In each cluster, stakeholders can access information on the design and implementation of school feeding programmes. Under this structure, WFP worked to transform and merge REPANS and the multisectoral committee into one

cluster. The formal CESA school feeding cluster was launched in 2017, and its members appointed a coordinating team to manage the work, which improved synergy, efficiency and effectiveness. In 2018, WFP CoE Brazil and the WFP Africa Office designed all the supporting documents to organize the clusters in a consultative process.

In 2019, those documents were handed over to AU during the third African Day of School Feeding. They guide the cluster's actions and are used to devise a strategic and operational plan for achieving the CESA vision and mission by 2023. This experience and methodology encouraged effective public multisectoral partnerships through formal networks owned by regional organizations. In order to replicate this experience, it is important to raise awareness among decision makers and policymakers, and there must be regional organizations in place to take ownership of processes and systems.

Contact:

Name: Ms Sharon Freitas
Title: Head of Programme
Organization: World Food Programme (WFP) Brazil
Email: sharon.freitas@wfp.org

Name: Mr Bruno Magalhaes
Title: South-South and Triangular Cooperation (SSTC) Focal Point
Organization: WFP Brazil
Email: bruno.magalhaes@wfp.org

PROJECT NAME: African Union Home Grown School Feeding Network

COUNTRIES/REGIONS: African Union member States, Brazil

NOMINATED BY: World Food Programme (WFP) Brazil Centre of Excellence against Hunger

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.3, 4.1, 17.14, 17.15, 17.16, 17.17

SUPPORTED BY: WFP Africa Office, African Union Commission, Brazilian Cooperation Agency (ABC), Brazilian Fund for Education Development (FNDE), WFP CoE Brazil

IMPLEMENTING ENTITIES: Human Resources, Science and Technology Department of the African Union

PROJECT STATUS: Completed

PROJECT PERIOD: 2015–2020

URL OF THE PRACTICE: edu-au.org/cesa/ and <https://bit.ly/2El6vfd>

Digital Transformation to Support Development Projects and Resource Mobilization in Asia and Africa

17 PARTNERSHIPS FOR THE GOALS



Using digital technologies to improve South-South and triangular cooperation, technical assistance and experiences to overcome stalling financial resources for development



Challenge

At the World Food Programme Centre of Excellence Brazil (WFP CoE Brazil), digital transformation is changing South-South and triangular cooperation (SSTC). Given the restrictions imposed by the coronavirus disease (COVID-19), digital tools facilitate innovative exchanges between Brazil and other developing countries. To foster the sustainability of SSTC in supporting the scale-up of national school feeding programmes, WFP CoE Brazil has been piloting remote assistance with Nepal and the Gambia. Since 2017, WFP CoE Brazil has supported the WFP Country Office in Nepal in developing the assessments, planning and technical frameworks necessary to scale up the national school meal pilot programmes. Since 2019, WFP CoE Brazil has supported the Gambia in linking its school feeding programme with the national agriculture sector and in applying for international funds to finance food production and market access for smallholder farmers. Experiences from both countries have helped to transform the remote assistance provided by WFP CoE Brazil into a larger assistance package called 'Virtual Exchanges'.



Towards a Solution

This digital transformation has allowed WFP CoE Brazil to replace the frequent air travel, deployment missions and temporary duty assignments necessary to promote technical and advisory services, partnerships, advocacy, and knowledge services through SSTC.



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Nepal was the first country to benefit from the SSTC initiative. In 2017, WFP CoE Brazil shared the Brazilian experience in home grown school feeding through virtual sessions and webinars, with a view to supporting the Country Office in Nepal in its assessment of a cash-based school meal pilot programme combined with complementary nutrition-sensitive literacy education. WFP Brazil has also been designing a package for remote technical support for WFP Nepal, which includes sharing knowledge on school menu design and holding conference calls on financing mechanisms for school feeding programmes. Upcoming deliverables include remote participation in events, workshops and seminars, with eventual in-country missions.

Learning from its experience with Nepal, WFP CoE Brazil developed the prototype for its 'Virtual Exchanges' methodology. The Centre designed a menu of services that can be tailored to request, and programme components incorporate knowledge management and technical assistance. The repository combines the global know-how with the valuable knowledge of the Brazilian experience in food and nutrition security and social protection. To share this knowledge, WFP CoE Brazil has designed four series of publications, a direct channel for remote technical support and a set of learning tools, all available on its website.

'Virtual Exchanges' promotes remote assistance that supports the design, implementation and delivery of a high-quality feeding programme and facilitates field operations under country strategic plans. This methodology develops data-informed and knowledge-based remote assistance that draws on the role and experience of WFP CoE Brazil as a knowledge hub. This approach defines needs and designs a package for remote technical support and the delivery of outputs. The exchange could

involve sharing knowledge through publications; conference calls; reviews of relevant documents; country-specific webinars; capacity-building trainings and videos; remote participation in missions, events, workshops and seminars; and in-person events, if there is demand and available country funding.

Between 2018 and 2019, WFP CoE Brazil proposed for the WFP Country Office in the Gambia to participate in some of the 'Virtual Exchanges'. **WFP Brazil, the WFP Country Office in the Gambia and the Government of the Gambia have supported the Home Grown School Feeding Multisector Working Group, which seeks to scale up the connection between the agriculture sector and existing school feeding programme models in the country.** WFP Brazil and the WFP Country Office are preparing several resource mobilization projects for international funds of over US\$10 million to finance capacity-building and develop smallholder farming through South-South cooperation with a gender-sensitive approach. In the Gambian case, air travel is still necessary; however, there has already been a significant reduction in physical deployment, given the scale of the project.

This sustainable approach is possible due to the role played by the WFP Country Office in the Gambia, which is responsible for coordinating with the Government on all aspects of the programme. The Country Office serves as the entry point, connecting WFP CoE Brazil with the national stakeholders. Through SSTC, WFP Brazil offers capacity strengthening knowledge, advocacy and technical advisory services for the WFP Country Office to better support the Government, particularly in resource mobilization. The Gambia Country Office

of the United Nations Population Fund supports WFP in Banjul on gender and health issues, providing knowledge and policy advice for a gender-sensitive approach. Activities include high-level meetings, webinars and the remote development of projects and publications. In-person missions were largely avoided, allowing officers on both sides flexibility in designing and delivering products; they were held only three times during project submission deadlines.

The outcomes of these two SSTC initiatives have already made contributions, including strategic planning and financing, stakeholder programme design and delivery, access to markets for smallholder farming and the engagement and participation of non-State actors. This digital transformation seeks new ways to support Governments, local actors, non-governmental organizations and WFP headquarters and field offices. Remote assistance will be a key component for countries seeking comprehensive, adaptive and agile, yet inexpensive, support, especially while the impacts of COVID-19 last.

Contact:

Name: Ms Sharon Freitas
Title: Head of Programme
Organization: World Food Programme (WFP) Brazil
Email: sharon.freitas@wfp.org

Name: Mr Bruno Magalhaes
Title: South-South and Triangular Cooperation (SSTC) Focal Point
Organization: WFP Brazil
Email: bruno.magalhaes@wfp.org

PROJECT NAME: WFP CoE Brazil Virtual Exchanges

COUNTRIES/REGIONS: Brazil, the Gambia, Nepal

NOMINATED BY: World Food Programme (WFP) Brazil Centre of Excellence against Hunger

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 2.1, 2.3, 4.1, 17.14, 17.15, 17.16, 17.17

SUPPORTED BY: Brazilian Cooperation Agency (ABC), Brazilian Fund for Education Development (FNDE), WFP CoE Brazil, WFP Country Office in The Gambia

IMPLEMENTING ENTITIES: WFP, African Development Bank, WFP Country Office in The Gambia, Government of the Gambia

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2025

URL OF THE PRACTICE: <https://bit.ly/3llsO4N> and <https://bit.ly/2EvBe99>



Codex Trust Fund

Empowering countries to improve food safety through South-South collaboration

Challenge

In 2010, food-borne illnesses caused by hazardous microbes, chemicals, metals and other contaminants resulted in an estimated 175,000 deaths in South-East Asia. In India alone, they cost an estimated US\$28 billion each year, which is 0.5 percent of gross domestic product. Many countries in the region lack the capacity to meet the international food safety and quality standards established by the Codex Alimentarius Commission. While this lack of capacity to monitor and regulate food safety could lead to unsafe domestic food supplies, it could also cause problems in international food trade. In South Asia, the Food Safety and Standards Authority of India, which is well versed in Codex standards and practices, has frequently quarantined ginger, tea and other foods imported from Nepal and Bhutan and has rejected results from their food safety laboratories. This has resulted in considerable mistrust and a lack of communication among the food safety authorities of the three countries.

Towards a Solution

The Codex Alimentarius, or Food Code, is a collection of internationally adopted, uniform food standards that are used to build sound national food control systems. All member States have a duty to ensure that Codex standards and guidelines are developed and updated to ensure that people have healthy diets and safe food. Nevertheless, in low- and middle-income countries, food safety and Codex activities are not given priority and lack investments.

The Codex Trust Fund (CTF) was established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) to support member States in building strong, sustainable national capacity to engage in Codex. The CTF provides a funding window for low- and middle-income countries to support strengthening Codex activities at the country and intercountry levels through individual or group applications. Bhutan, India and Nepal carried out a diagnosis of their Codex capacity using the FAO/WHO *Diagnostic Tool for Assessing Status of National Codex Programmes*, which helped them to identify gaps and priority areas for improvement. These countries prepared their applications using a national consultative process. In collaboration with FAO, WHO facilitated coordination among these countries during the application process. The project proposal was submitted in the online system by India on behalf of the three countries. The objectives were to strengthen the National Codex Structures by effectively engaging all stakeholders in codex activities and standard-setting processes, improving the scientific and technical capacity of national experts to contribute to the Codex and promoting subregional cooperation. With this strategic and innovative approach, three friendly neighbouring countries were able to come together, particularly as they share a traditionally interdependent economic relationship and cross-border trade. **This project provided them with an opportunity to develop trust, confidence and mutual understanding through bilateral and multilateral activities in order to move towards the development and harmonization of regional Codex standards.**

The food safety authorities of the three countries had to agree on common objectives for the group application. The WHO demonstrated leadership in facilitating the complex project's development



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and implementation. From the beginning, it provided technical support for the submission of the group application, in coordination with the respective WHO country offices. In addition, funds were channelled through its offices for implementation. This was the first multi-country project approved by the CTF at the global level and the first CTF project in Asia designed to promote South-South cooperation. This project will further strengthen national codex activities in participating countries through intercountry collaborations, focusing on common positions in setting codex standards. A total of \$464,120 has been allocated by CTF, WHO and participating countries for the project's implementation, and the future scope of group applications will depend on its success. The WHO has therefore been providing technical backstopping and coordination with headquarters and partner agencies.

Although many countries in the Codex Asian region will benefit from CTF support in the future, several have not been successful in preparing and submitting robust applications. A side event on CTF was organized at the Codex Committee for Asia meeting in Goa, India, held in September 2019, to help member countries better understand the application process and characteristics of successful applications. Bhutan, India and Nepal shared their experience in preparing their group

application, recommendations for better outcomes in the application process and their progress in implementing the group project. This project led to the transfer of knowledge and practice among countries to strengthen South-South technical cooperation. As a result, Myanmar submitted a group application on behalf of Cambodia, the Lao People's Democratic Republic and Myanmar, with assistance from FAO and WHO. In coordination with FAO, WHO facilitated member States' participation in the Codex Committee for Asia meeting and international food safety conferences held in 2019.

By helping to create a sustainable platform to allow food safety authorities in these three countries to work together, this project will potentially have a significant impact for a relatively low cost. In addition, all three countries feel a strong sense of ownership in this effort.

Contact:

Name: Dr Gyanendra Gongal

Title: Regional Adviser of Food Safety

Organization: World Health Organization (WHO) Regional Office for South-East Asia

Email: gongalg@who.int

Skype: gn_gongal

PROJECT NAME: Codex Trust Fund

COUNTRIES/REGIONS: Bhutan, India, Nepal

NOMINATED BY: Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) Evaluation Team

SUSTAINABLE DEVELOPMENT GOAL TARGET(S): 17.9

SUPPORTED BY: FAO/WHO Codex Trust Fund

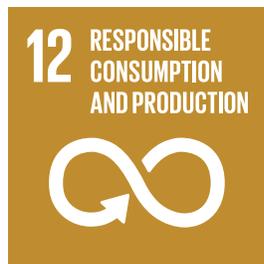
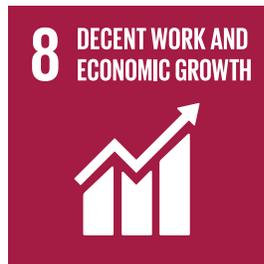
IMPLEMENTING ENTITIES: National food safety authorities of Bhutan, India and Nepal

PROJECT STATUS: Ongoing

PROJECT PERIOD: 2019–2021

URL OF THE PRACTICE: <https://bit.ly/2YQXSA2>

ANNEX: LIST OF SDGS AND TARGETS¹



¹ <https://sustainabledevelopment.un.org/?menu=1300>



End poverty in all its forms everywhere

Targets

- 1.1** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- 1.2** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 1.3** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
- 1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- 1.a** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions
- 1.b** Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Targets

- 2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- 2.2** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- 2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- 2.5** By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
- 2.a** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 2.b** Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
- 2.c** Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility



Ensure healthy lives and promote well-being for all at all ages

Targets

- 3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
- 3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
- 3.3** By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4** By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 3.5** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- 3.6** By 2020, halve the number of global deaths and injuries from road traffic accidents
- 3.7** By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
- 3.b** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 3.c** Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
- 3.d** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Targets

- 4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b** By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.c** By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States



Achieve gender equality and empower all women and girls

Targets

- 5.1** End all forms of discrimination against all women and girls everywhere
- 5.2** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- 5.3** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
- 5.4** Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
- 5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
- 5.6** Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
- 5.a** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- 5.b** Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
- 5.c** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels



Ensure availability and sustainable management of water and sanitation for all

Targets

- 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- 6.5** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 6.a** By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- 6.b** Support and strengthen the participation of local communities in improving water and sanitation management

7 AFFORDABLE AND CLEAN ENERGY



Ensure access to affordable, reliable, sustainable and modern energy for all

Targets

- 7.1** By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2** By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3** By 2030, double the global rate of improvement in energy efficiency
- 7.a** By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- 7.b** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support

8 DECENT WORK AND ECONOMIC GROWTH



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Targets

- 8.1** Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 8.4** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
- 8.5** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
- 8.6** By 2020, substantially reduce the proportion of youth not in employment, education or training
- 8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
- 8.8** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
- 8.9** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
- 8.10** Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
- 8.a** Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries
- 8.b** By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Targets

- 9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.2** Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.3** Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
- 9.4** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 9.5** Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
- 9.a** Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
- 9.b** Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
- 9.c** Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

10 REDUCED INEQUALITIES



Reduce inequality within and among countries

Targets

- 10.1** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
- 10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- 10.3** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
- 10.4** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
- 10.5** Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
- 10.6** Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions
- 10.7** Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
- 10.a** Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
- 10.b** Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes
- 10.c** By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent



11 SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

Targets

- 11.1** By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- 11.3** By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.4** Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- 11.5** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
- 11.6** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- 11.7** By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
- 11.a** Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- 11.b** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
- 11.c** Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

Targets

- 12.1** Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- 12.2** By 2030, achieve the sustainable management and efficient use of natural resources
- 12.3** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- 12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- 12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7** Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- 12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- 12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- 12.b** Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
- 12.c** Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities



Take urgent action to combat climate change and its impacts*



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Targets

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2** Integrate climate change measures into national policies, strategies and planning
- 13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- 13.a** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- 13.b** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, inter-governmental forum for negotiating the global response to climate change.

Targets

- 14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- 14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- 14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 14.4** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- 14.5** By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
- 14.6** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
- 14.7** By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- 14.a** Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
- 14.b** Provide access for small-scale artisanal fishers to marine resources and markets
- 14.c** Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Targets

- 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
- 15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- 15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
- 15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
- 15.6** Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
- 15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
- 15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
- 15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
- 15.a** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
- 15.b** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
- 15.c** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

Targets

- 16.1** Significantly reduce all forms of violence and related death rates everywhere
- 16.2** End abuse, exploitation, trafficking and all forms of violence against and torture of children
- 16.3** Promote the rule of law at the national and international levels and ensure equal access to justice for all
- 16.4** By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
- 16.5** Substantially reduce corruption and bribery in all their forms
- 16.6** Develop effective, accountable and transparent institutions at all levels
- 16.7** Ensure responsive, inclusive, participatory and representative decision-making at all levels
- 16.8** Broaden and strengthen the participation of developing countries in the institutions of global governance
- 16.9** By 2030, provide legal identity for all, including birth registration
- 16.10** Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
- 16.a** Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
- 16.b** Promote and enforce non-discriminatory laws and policies for sustainable development



Strengthen the means of implementation and revitalize the global partnership for sustainable development

Targets

Finance

- 17.1** Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
- 17.2** Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries
- 17.3** Mobilize additional financial resources for developing countries from multiple sources
- 17.4** Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress
- 17.5** Adopt and implement investment promotion regimes for least developed countries

Technology

- 17.6** Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
- 17.7** Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- 17.8** Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

Capacity-Building

- 17.9** Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation

Trade

- 17.10** Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda
- 17.11** Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
- 17.12** Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

Systemic issues

Policy and Institutional coherence

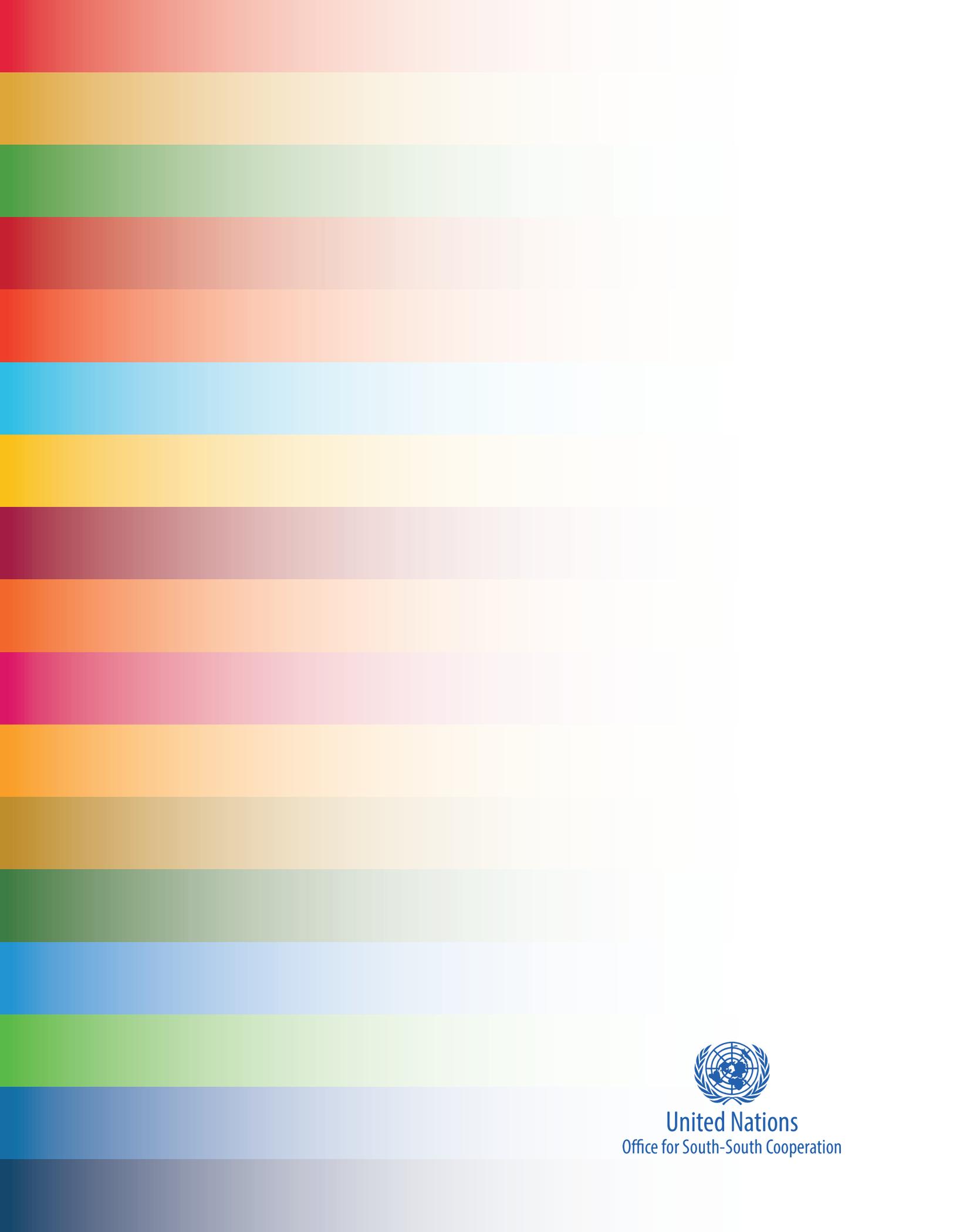
- 17.13** Enhance global macroeconomic stability, including through policy coordination and policy coherence
- 17.14** Enhance policy coherence for sustainable development
- 17.15** Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development

Multi-stakeholder partnerships

- 17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
- 17.17** Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

Data, monitoring and accountability

- 17.18** By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- 17.19** By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries



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