

# SGP CHEMICALS & WASTE FOCAL AREA



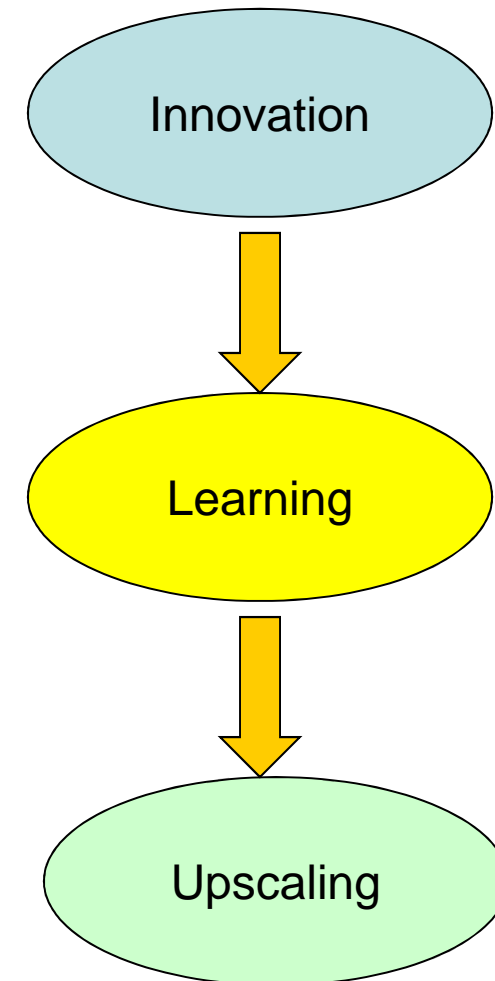
## GEF-6 Chemicals & Waste

**Goal: to prevent the exposure of humans and the environment to harmful chemicals and waste, including POPs, mercury, other harmful chemicals and heavy metals, through community based approach to prevent, reduce or eliminate the production, use, consumption and emissions/releases of these harmful substances.**

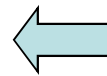
# SGP Approach & Strategy

## Local to Global Coalition

- Knowledge generation and sharing
- Networking
- Policy Advocacy



# Multiple Benefits



**Global Environmental  
Benefits**

**Livelihoods and  
socio-economic  
benefits**

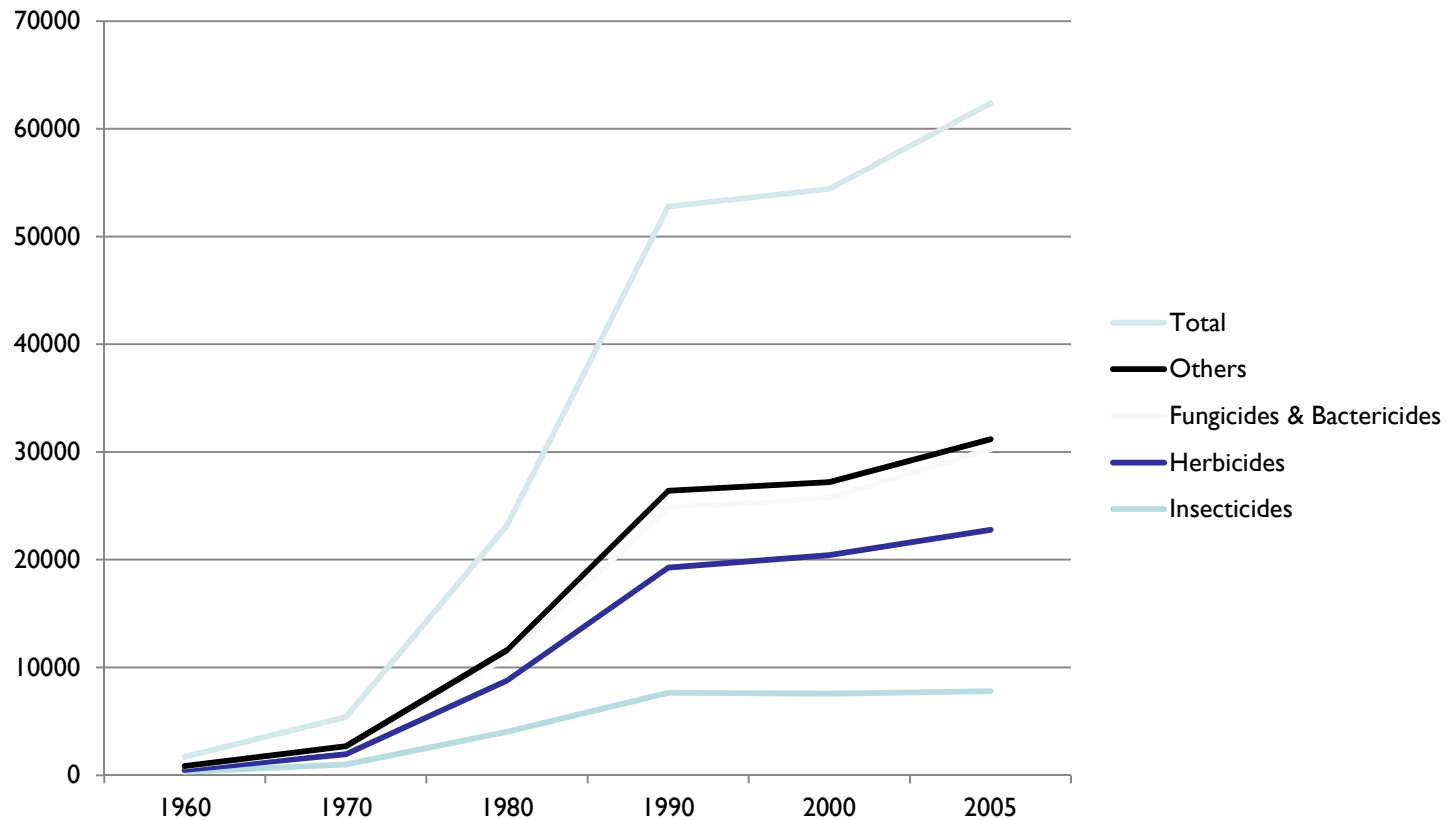


**Community Empowerment**



# Thematic Area I: Pesticide Management

## Pesticides Consumption Worldwide (Unit: \$1 million)



Source: Zhang, 2011



# Thematic Area I: Pesticide Management

## Pesticide Management

- Packing, storage and environmental disposal of obsolete pesticide
- Organic farming and certification
- Technologies & alternatives to pesticides (e.g. traditional knowledge)



## Thematic Area I: Pesticide Management

### **Proposed activities:**

- Introduction of alternatives to DDT for vector control including approaches to improve their safe and rational use for public health
- Introduction of non-chemical alternatives
- Integrated pesticide management including in the context of food security
- Design of products and processes that minimize the use and generation of hazardous substances and waste

## Thematic Area 2: Waste Management

The issues we are facing:

- E-waste: 48.9 million metric tons worldwide in 2012 to 65.4 million metric tons in 2017 (equivalent to 200 Empire State Buildings)
- Plastics: In 2010 alone, 265 million tonnes of plastics were produced, 5% increase every year



## Thematic Area 2: Waste Management

**Waste Management** (solid waste sorting, collection and recycling to avoid open burning)

- Domestic solid waste
- Medical waste
- E-waste
- Plastics recycling



## Thematic Area 2: Waste Management

### Proposed Activities

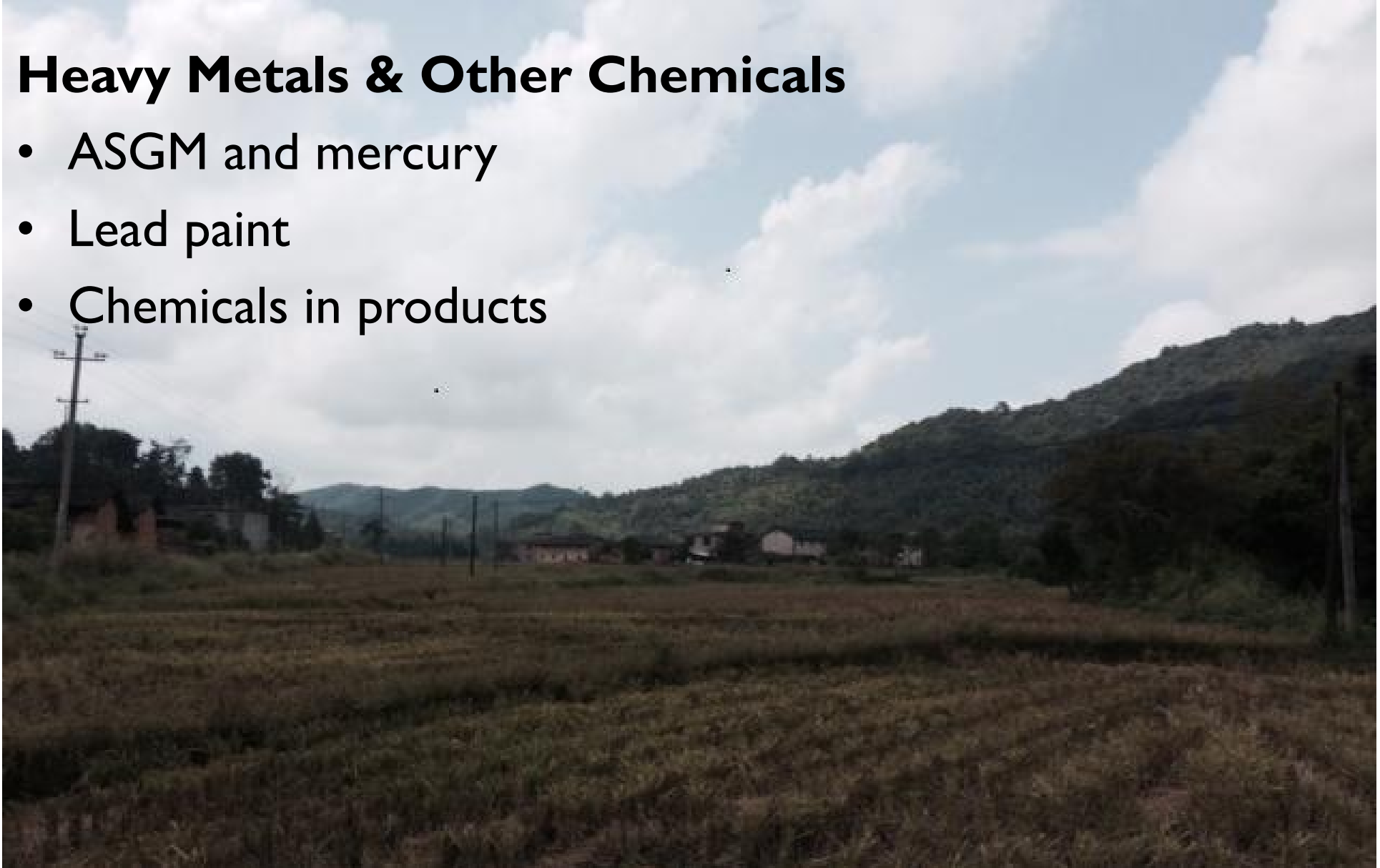
- Promote sound solid waste management to avoid public open burning through alternative environmentally sound waste disposal and management
- Develop or establish community-based waste sorting, collection, recycling or environmentally sound waste management (e.g. sustainable cities)
- Develop and implement integrated waste management plan at the community level generating livelihoods, health and other benefits
- Promote awareness-raising, knowledge and technical capacity for waste management



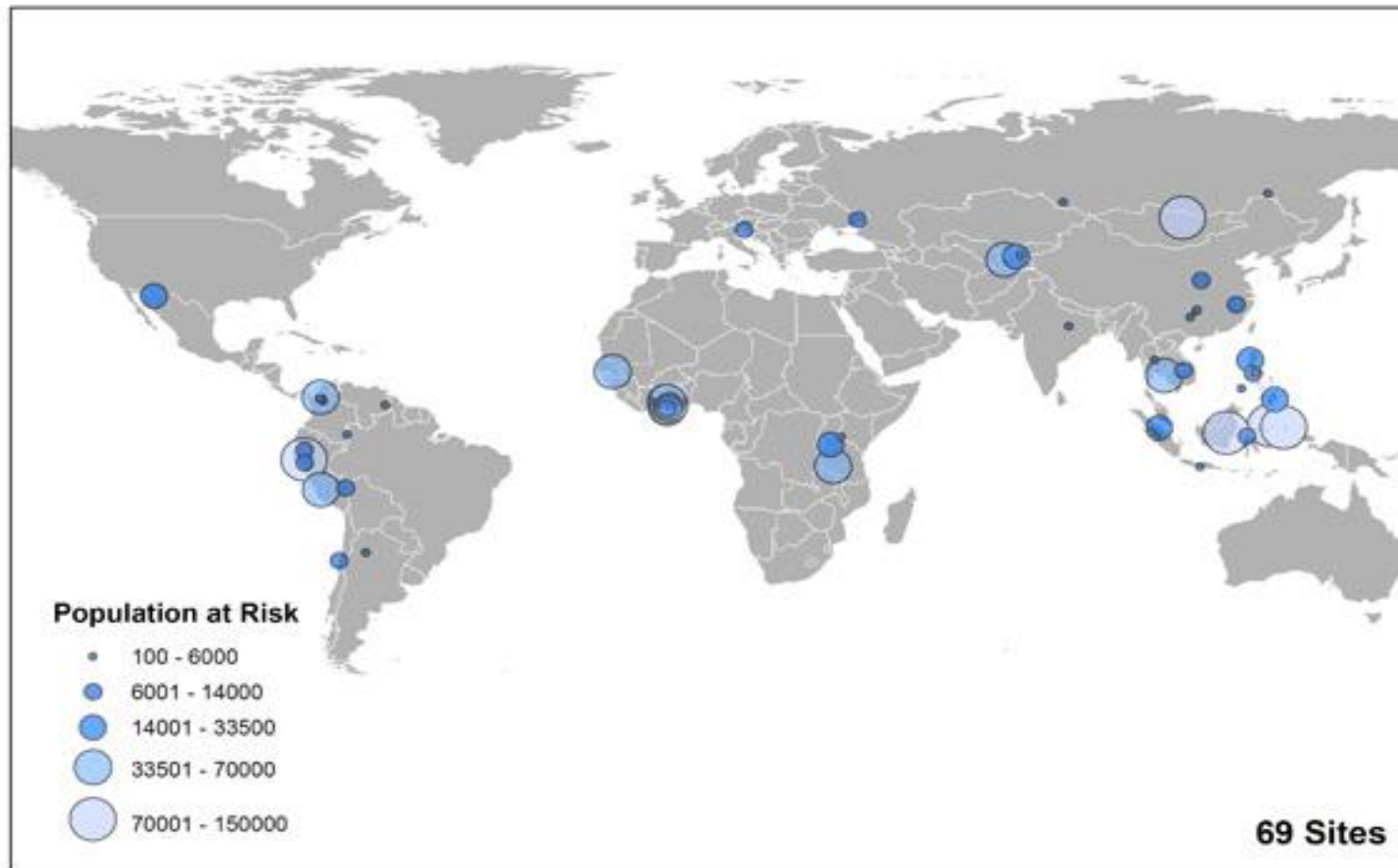
## Thematic Area 3

### **Heavy Metals & Other Chemicals**

- ASGM and mercury
- Lead paint
- Chemicals in products



## Mercury Pollution from Mining and Ore Processing



Source: Blacksmith Institute, 2015

# Top Gold Mining Countries

- Uzbekistan (9<sup>th</sup> World largest producing country)
- Kyrgyzstan (24<sup>th</sup>)
- Kazakhstan (27<sup>th</sup>)
- Turkey (30<sup>th</sup>)
- Tajikistan (54<sup>th</sup>)
- Armenia (60<sup>th</sup>)





## Thematic Area 3

### Artisanal and Small-scale Gold Mining (ASGM)



**Most Artisanal miners use mercury amalgamation with no personal or environmental precautions**



## Gold-mining and mercury




Whole ore amalgamation is very common and is the most polluting practice possible.





## Thematic Area 3

### Heavy metals and other chemicals

- Support the development, testing and demonstration of technologies, alternatives, techniques to avoid the use or release of heavy metals and other chemicals
  - Introduce technology and training that will help artisanal miners reduce the amount of mercury (e.g. mercury retort device)
  - Promote alternative livelihoods activities for miners
  - Enhance local communities' awareness
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#### **Local to global coalition**

- Systems of local certification of producers and/or their products
- Development and implementation of local certification manual/guidelines
- Networking of producers
- Strategic linkages and agreements between producers and consumers
- Advocacy for national policies that will influence chemicals import and export.

## Case: Agriculture Waste Management in Macedonia

- Awareness and capacity development workshops
- Individual village plans
- Waste collection sites were created in the two villages
- Establishment of waste management system, including collection and recycling
- Project results upscaled by four local governments and USAID





## Case: Turning Tires Burning into Shoe Making

- Stockholders' meetings
- Baseline survey to map major open burning spots in Mombasa
- Awareness raising and capacity building
- Demonstration



# Case: PEN Award PCB Project in Nepal

## Project activities

- Media, knowledge and campaign
- Medical waste sorting and appropriate disposal
- An alternative welding machine model introduced reduce POPs release



## Project Results:

- Reduced dioxin and furan release by preventing the burning of medical waste treatment in Kanti children hospital
- Approximately 2,000 litres of PCBs contaminated transformer oil avoided



# Mercury Waste Management, China

## Community-based Mercury-contained Waste Investigation and Collection



- ✓ **9** hardware stores joined project and become the mercury-contained lamps collection stations
- ✓ **300** volunteers involved and 4548 mercury-contained lamps collected
- ✓ **Mercury-contained waste sorting** has been incorporated into the waste sorting demonstration sites in Shanghai

## Results, Reporting & Sharing

### **Project level indicators:**

- Tons of waste avoided open burning
- Tons of pesticides avoided and reduced

### **Portfolio level indicators:**

- Number of technologies, alternatives and practices to avoid the use of chemicals/harmful substances
- Number of coalitions/networks

