

COMMUNITY-BASED

MERCURY MANAGEMENT

INTRODUCTION

Mercury is a naturally occurring element and is found throughout the world. Mercury is contained in many minerals, including cinnabar, an ore mined to produce mercury. Human activity, especially mining and the burning of coal, has increased the mobilization of mercury into the environment, raising its amounts in the atmosphere, soils, fresh waters, and oceans. According to the latest Global Mercury Assessment by the United Nations Environment Programme (UNEP), total anthropogenic emissions of mercury in 2015 were estimated at 2,220 tonnes.

Human activities have increased overall atmospheric mercury concentrations by nearly 450 per cent above natural levels. Human-made sources account for a total of 90 per cent of total annual mercury emissions, with 30 per cent from current anthropogenic sources, while 60 per cent is from re-emissions of previously released mercury that had built up over centuries in surface soils and oceans.¹

There are two categories of anthropogenic sources of mercury emissions:

- by-product or unintentional emissions from coal burning, mining and industrial activities that use fuels and raw materials that contain mercury as an impurity;
- and intentional emissions of mercury, mainly in artisanal and small-scale gold mining (ASGM) that uses mercury to extract gold from rocks, soils, and sediments (annual emissions from ASGM are estimated at 838 tonnes, making this the largest sector accounting for 38 per cent of total anthropogenic emissions²).

FROM 2011-2021, SGP HAS SUPPORTED



121 COMMUNITY-BASED PROJECTS IN
MERCURY REDUCTION AND MANAGEMENT



US\$3.7 million
TOTAL FUNDING



\$3.4 million
GENERATED IN CO-FINANCING

¹ UN Environment, 2019. Global Mercury Assessment 2018. UN Environment Programme, Chemicals and Health Branch Geneva, Switzerland.

² Ibid.



In Mongolia, an artisanal miner operates a shaking table made locally with SGP support to avoid using mercury. Photo by SGP Mongolia.

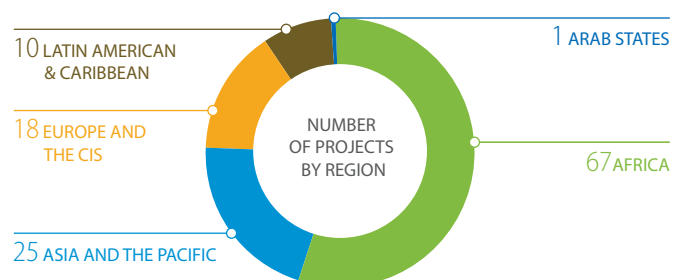
GEF SMALL GRANTS PROGRAMME

The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) that is implemented by the United Nations Development Programme (UNDP), on behalf of the GEF Partnership. It provides financial and technical support to local civil society and community-based organizations to develop and implement innovative local actions that address global environmental issues, while also improving livelihoods and reducing poverty. Since 1992, SGP has supported over 26,000 projects and is currently active in 128 countries on issues related to biodiversity conservation, climate change mitigation and adaptation, prevention of land degradation, protection of international waters, and reduction of the impacts of chemicals, which includes mercury management.

COMMUNITY-BASED APPROACH TO SUSTAINABLE MERCURY MANAGEMENT

SGP supports a community-based approach to the reduction, elimination, and prevention of mercury use. It promotes safe handling of products containing mercury, seeking to pilot and test innovative community-based mercury reduction and management practices, in support of the implementation of the Minamata Convention at the community level, especially in artisanal gold mining. Between 2011 and 2021, SGP supported 121 community-based projects in mercury reduction and management with total funding of US\$3.7 million, having generated \$3.4 million in co-financing. Among those, 117 projects were supported by a total of US\$3.5 million in GEF funding. These projects were executed by 94 non-governmental organizations, and 20 community-based organizations and were spread across 30 countries.

The main activities of SGP projects have focused on baseline assessments, awareness raising and capacity building, as well as providing systems and infrastructure for collecting and recycling e-waste to avoid mercury contamination, reducing the use of mercury in gold mining and jewelry production, and holding policy dialogues and campaigns to influence government policies.



PROJECTS SPOTLIGHT

In **Mali**, SGP supported key activities such as baseline assessment, awareness raising, capacity building and advocacy, which improved the knowledge about the impacts of mercury use and pollution among at least 1,550 people (including 736 women) and strengthened networks and partnerships. The initiative supported by the SGP has led to policy change and scaled up with the adoption of a ministerial decree in 2019 suspending mercury use for gold mining activities by dredging in the country.

In **Ghana**, SGP supported community-based activities to build capacities of artisanal miners and local communities to reduce the use of mercury. The project created networks and formalized the regulation of the Community Licensed Small-scale Mining Activities within the Black Volta Basin, one of the major transboundary basins in Ghana. Alternative to using mercury, the project also introduced the GoldKacha, a centrifugal gravity concentrator processing system that is especially suited to recover precious metals from dump tailings, rubble beds, and alluvial sands without using mercury.



Women working in artisanal gold mining in Mali. Photo by SGP Mali.



Model waste management system launched at Manakamana Hospital in Bharatpur, Nepal. Photo by SGP Nepal.

In **Uganda**, SGP supported the National Association of Professional Environmentalists to implement a project aimed at phasing out mercury use in artisanal gold mining in Kassanda District. The project involved baseline assessment, awareness raising and capacity building of at least 100 miners (mostly women and youth) on the use of borax, a mercury-free alternative to gold mining. The extensive stakeholder engagement and improved awareness of the negative impacts of mercury pollution led to Kassanda's government authorities initiating the process of developing a by-law on mercury use and good environmental practices in artisanal mining. Artisanal miners in the project area also created a radio listeners club, which enables local communities to effectively participate in social and economic change processes.

In **Nepal**, an award-winning civil society organization supported by SGP led the country to a mercury-free health sector. In 2017, the Center for Public Health and Environmental Development launched a project with support from SGP to address the medical waste management problem in Bharatpur, a city with a highly developed healthcare system that contaminated the waters and fish of the Narayani river with mercury and persistent organic pollutants (POPs). The project made Bharatpur the first mercury-free medical city in Nepal and provided a successful model that has been scaled up and replicated across the country, leading the government of Nepal to ban the use of mercury dental amalgam in the country in 2019.



In Nepal, medical students hold a rally asking for Bharatpur to become a mercury-free city. Photo by SGP Nepal.

LOCAL TO GLOBAL COALITIONS ON CHEMICALS, WASTE AND MERCURY

SGP works with European Environmental Bureau's Zero Mercury Working Group, the International POPs Elimination Network and other partners to develop and strengthen local to global coalitions on chemicals, waste and mercury management to ensure actions at local, national and global level are connected, coordinated, mutually reinforcing and ensure that local experiences are reflected in global policy dialogues.

SGP's efforts in mercury elimination, reduction and management have highlighted the vulnerabilities of key actors, including small-scale miners, and the need to redesign policies to create an enabling environment to make their livelihoods resilient, while protecting the environment and human lives. The results achieved so far reinforce the need for an integrated multi-stakeholder approach to tackling mercury pollution and the need to urgently scale up community level success stories.



Women working in artisanal gold mining in Ghana. Photo by SGP Ghana.