LOCAL ACTION AND PCB MANAGEMENT

Introduction

Polychlorinated biphenyls (PCBs) are persistent chemical compounds that were extensively applied in industrial and consumer products for several decades. Due to their carcinogenic properties, their production has been banned internationally since 2001, with steps for the use and disposal of current stocks. PCBs were widely used in cutting oils, lubricants, and as electrical insulators in transformers and capacitors. They were also commonly used as flame retardants, dyes, adhesives, and pesticide additives in various applications.

Due to their extensive use, toxicity and environmental and health hazards, PCBs are noted as a hazardous pollutant alongside arsenic, lead, and mercury. For instance, PCBs have been found to have adverse impacts on the health of humans and animals including reproductive impairment and immune system dysfunctions. Various sources of human exposure to PCBs include ingestion of contaminated foods (largely foods such as fatty fish, meat, and dairy products), dermal contact (via soil and house dust) and the inhalation of ambient and indoor air. More than 90 percent of human exposure to PCBs is through food.

The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POPs). PCBs are listed in Annex A to the Stockholm Convention. The production and new uses of PCB are banned, and Parties to the Stockholm Convention must eliminate the use of PCBs in equipment by 2025 and to ensure the environmentally sound waste management of liquids containing PCBs and equipment contaminated with PCBs by 2028.

Community-based management of PCBs

The Small Grants Programme (SGP) is the largest and longest-standing corporate programme of the Global Environment Facility (GEF), dedicated to supporting civil society and local communities on addressing global environmental issues, while also improving livelihoods and reducing poverty. Since 1992, SGP has been implemented by the United Nations Development Programme, which is committed to significantly expanding the size and scope of its support to local actors through its Local Action Offer. Over the last 30 years, SGP has delivered more than US$720 million to support more than 27,000 community-based projects in 136 countries and is currently active in 127 countries.

Ensuring the safe management of PCBs across different scales requires a collective effort at various levels. For instance, civil society organizations (CSOs) can influence governments to develop and enforce regulations towards the safe management of PCBs. Similarly, CSOs and other local actors can provide local services such as research and capacity building to support the achievement of PCB-related goals. Despite these critical roles, many institutions and communities at the local level are generally weak and underfinanced.

SGP supports a community-based approach to the elimination and prevention of the use of PCB-containing products. It promotes safe handling of products containing PCBs, through the piloting and testing of innovative community-based interventions.

Over the past 15 years SGP has

16 PROJECTS
SUPPORTED ON PCBs

US$656,854
GRANT AMOUNT

US$597,124
CO-FINANCING GENERATED

IMPLEMENTED IN 9 COUNTRIES

SGP adopts an inclusive approach to community development and environmental management. As a result, some projects were implemented by women groups, persons with disabilities and youth leaders. SGP projects have focused on:

1. Baseline assessments, mapping of pollution hotspots and creation of inventories
2. Collection, and safe disposal of PCB-containing waste
3. Awareness raising, capacity building and advocacy
4. Support for policy development and implementation

Project Distribution Across Countries

4 PROJECTS
- BELARUS

3 PROJECTS EACH
- NEPAL
- SRI LANKA

1 PROJECT EACH
- CAMEROON
- COOK ISLANDS
- INDONESIA
- KENYA
- MALAYSIA
- PALESTINIAN AUTHORITY

PROJECT SPOTLIGHT

SRI LANKA

Baseline assessment and creation of PCB inventories

SGP supported a project that focused on creating an inventory of PCBs in the south-central area of Welimada Pradeshiya Sabha. Through this initiative, community members' knowledge of PCBs and other persistent organic pollutants (POPs) improved, and farmers were introduced to organic farming techniques to reduce their reliance on harmful chemical-based agricultural products containing PCBs. These natural and plant-based alternatives included the use of a water-based spray made from fermented tobacco leaves and neem leaves to control pests and diseases and producing compost from organic waste to improve soil fertility. The results of this project contributed to discussions on the national policy on POP management and regulation. The project also supported the establishment of a compost recycling centre as a solution to waste burning. This centre helped in sorting waste and accordingly using organic waste in preparing compost provided to farmers. Several agro-chemical awareness programmes were carried out for farmers and compost bins were provided to schools and households to reduce improper waste disposal.

INDONESIA

Mapping of pollution hotspots

Dragonflies are often used as an indicator species to monitor the health of ecosystems, especially aquatic habitats. Recent ecosystems assessments have relied on the use of the dragonfly biotic index (DBI) as a method of monitoring environmental quality and change. In Indonesia, SGP supported a baseline assessment and an educational initiative to help address PCBs using the DBI. Key activities included: 1) dragonfly sampling, data processing as well as mapping the water resources in the Kalongan area; and 2) the development of the PCBs 500 Dragonfly Biotic Index guidebook, which was distributed to teachers, students, households of the Pesucen village, and local and national government representatives. This project involved 150 people (of whom 60% were men and 40% women). The project improved public awareness on the benefits of dragonflies as indicators of environmental health and led to an uptake of pro-environmental behaviours such as best land-management practices and reduced littering of solid waste.

BELARUS

Collection, and safe disposal of PCB-containing waste

SGP supported an initiative that developed contractual, legal, organizational, and logistical schemes for the collection, packaging, and destruction of PCB-containing waste in Belarus. This project involved a baseline assessment and the collection of PCB-containing waste from enterprises associated with the production and processing of food or animal feed. Roughly 14.5 tons of PCB-containing waste was collected and managed in an environmentally friendly manner. The private sector (owners of PCB-containing products) allocated co-financing to cover the costs of packaging and the transportation of hazardous waste. Apart from improving knowledge of the impacts of PCBs and appropriate management techniques for more than 3,000 people, this project also provided evidence needed to inform national policies on the management of PCBs and other hazardous chemicals in Belarus. Due to the project, almost 50,000 local people living in the project area avoided the risk of exposure to the negative impacts of POPs. The experience gained from the SGP initiative successfully informed the preparation and implementation of the Global Environment Facility's (GEF-6) Belarus POPs Legacy and Sustainable Chemicals Management Project. The SGP project also contributed to the third sub-programme "Management of Persistent Organic Pollutants" of Belarus National State Programme "Environmental Protection and Sustainable Use of Natural Resources" for 2016-2020.

NEPAL

Awareness raising, capacity building and advocacy

In Nepal, SGP supported awareness raising, capacity building, and advocacy activities towards eliminating POPs including PCBs, and promoting environmentally sound management of PCB-containing welding machines. Through this project, 1,668 people including healthcare workers and welders or metal fabricators (1,291 men and 377 women) were trained and capacitated in the safe management of healthcare waste and PCB-containing welding machines, and the need to eradicate their use. The project also replaced wet-welding machines that were using PCB-containing transformer oil with four dry-welding machines that are PCB free. A follow-up survey in 2014 revealed that, of the 169 welders, 96 percent were using the new technology (compared to 47% in 2010). The project won the PCB Elimination Network award in 2011 from UN POPs Convention Secretariat for the outstanding results and led to a nation-wide PCB elimination campaign. Additionally, the project successfully advocated for the Government of Nepal to support the dichlorination of thousands of litres of PCB-containing transformer oil. The project also led to the developing of the GEF Medium-Sized project "Environmentally Sound Management and Disposal of POPs Pesticides and PCBs", which helped to completely neutralize PCBs in transformer oil stockpiled in Nepal.

SRI LANKA

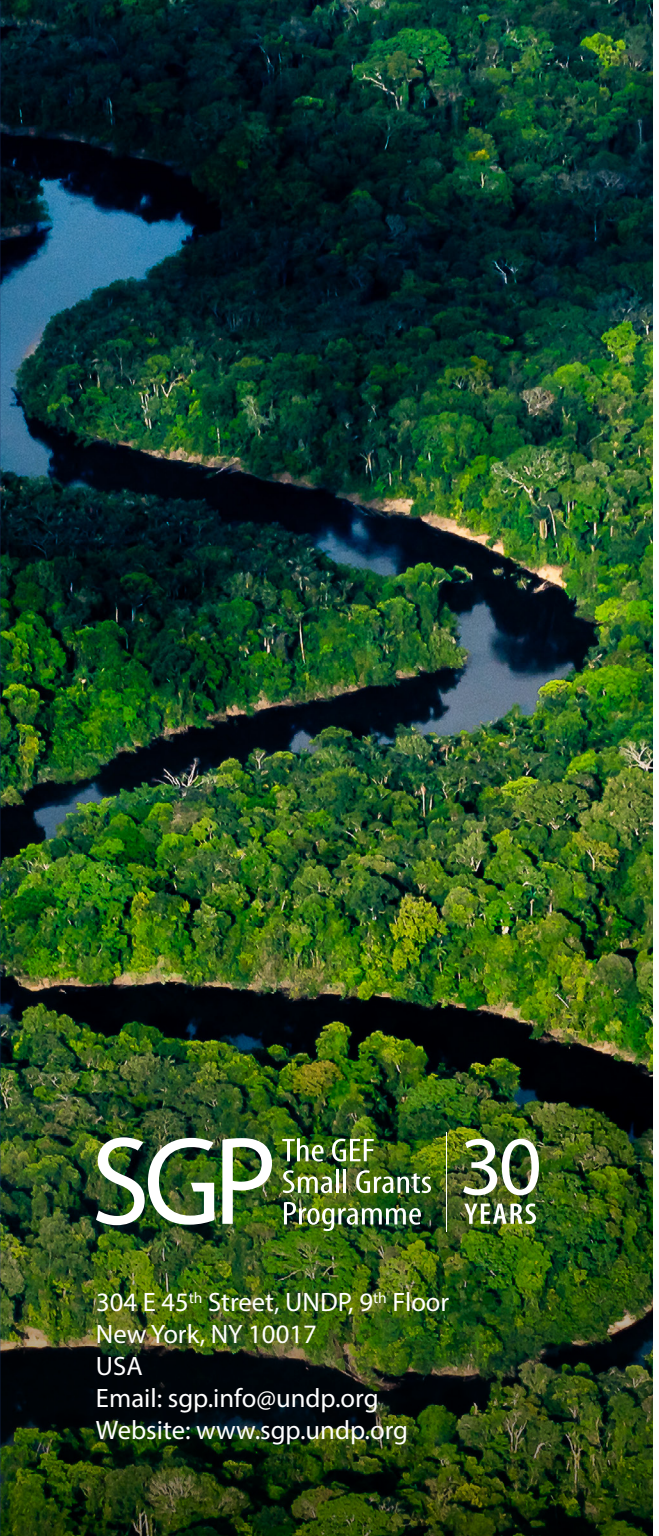
Support for policy development and implementation

SGP supported a policy-focused and capacity-building initiative for the safe collection and management of PCBs in Sri Lanka. The grant was used to coordinate the Ministry of Environment's environment activities for PCB management, awareness raising among the public, and the collection and safe disposal of oils containing PCBs. This project improved the awareness of more than 4,500 people on sustainable mechanisms for handling PCB and industrial chemicals, and supported government regulations on the elimination of PCBs use through 21 awareness programmes, which targeted school children, welders directly exposed to PCBs and women. The project also contributed to establishing an intermediate bulk container to store transformer oil (12,000 litres were stored), which yielded employment for three people. Moreover, a mobile truck was designed to safely dispose of welding waste, equipment, and transformer oil from the environment. Through this project, 59 welding machines were identified in the Kalutara District and were safely cleaned without using PCBs. The successes of this project were later scaled up through a national GEF-funded project with the United Nations Industrial Development Organization and the Ministry of the Environment that focused on eliminating PCBs from 4,300 welding workshops in Sri Lanka. This project also helped in setting up a laboratory facility in Sri Lanka to test POPs including PCBs.

LESSONS AND WAY FORWARD

With the support of a wide network of community groups and other local partners, SGP has implemented several initiatives to ensure the elimination and safe management of PCBs across various regions. The experiences and associated results reinforce the important role of partnerships and the need for collective action. SGP is committed to piloting innovative projects and providing catalytic support to accelerate actions towards the achievement of the 2025 and 2028 goals of the Stockholm Convention.

It is important to highlight that though PCBs continue to harm humans and the environment, there is still limited awareness of the problem, continued use of PCB containing products and unsafe disposal, and lack of regulations and policy enforcement to support PCB elimination. SGP is therefore committed to supporting research, awareness, advocacy, and capacity building towards the elimination of PCB use as well as ensuring the safe management of PCBs.



SGP The GEF Small Grants Programme 30 YEARS

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SGP The GEF Small Grants Programme 30 YEARS

The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP). Established in 1992, SGP is currently active in 127 countries and promotes community-based innovation, capacity development, and empowerment through sustainable development projects of local civil society organizations with special consideration for Indigenous Peoples, women, and youth. SGP has supported over 27,000 community-based projects on biodiversity conservation and sustainable use, climate change mitigation and adaptation, sustainable land management, conservation of international waters, and chemicals and waste management, while generating sustainable livelihoods.

gef

The GEF is a family of funds dedicated to confronting biodiversity loss, climate change, pollution, and strains on land and ocean health. Its grants, blended financing, and policy support helps developing countries address their biggest environmental priorities and adhere to international environmental conventions. Over the past three decades, the GEF has provided more than $22 billion and mobilized $120 billion in co-financing for more than 5,000 national and regional projects.

UNDP

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