

Integrating Social, Technological and Economic Considerations to Tackle POPs Disposal ~ The Belarus Experience

**Experiences,
Lessons,
Opportunities:
The World
Bank's work
with partner**

**countries
and the GEF to
implement the
Stockholm
Convention**

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Session Overview



- **World Bank POPs Program
Overview**
 - What? / Why? / How?
 - Lessons learned
- **The Belarus Experience**

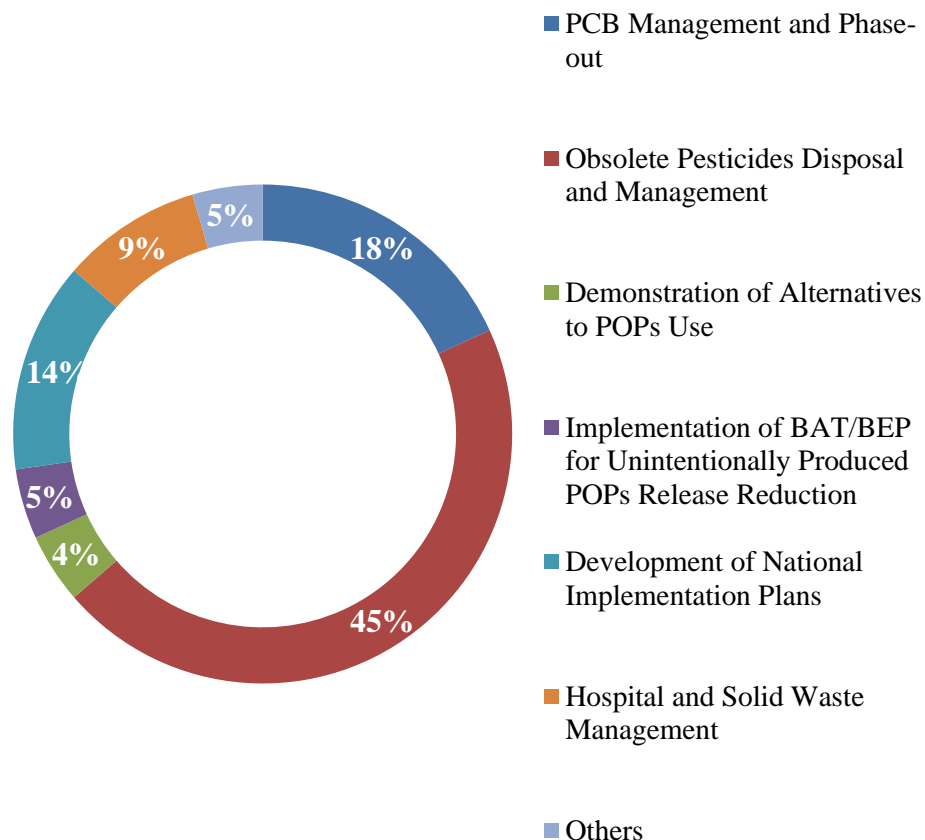
World Bank- GEF POPs Program: Overview



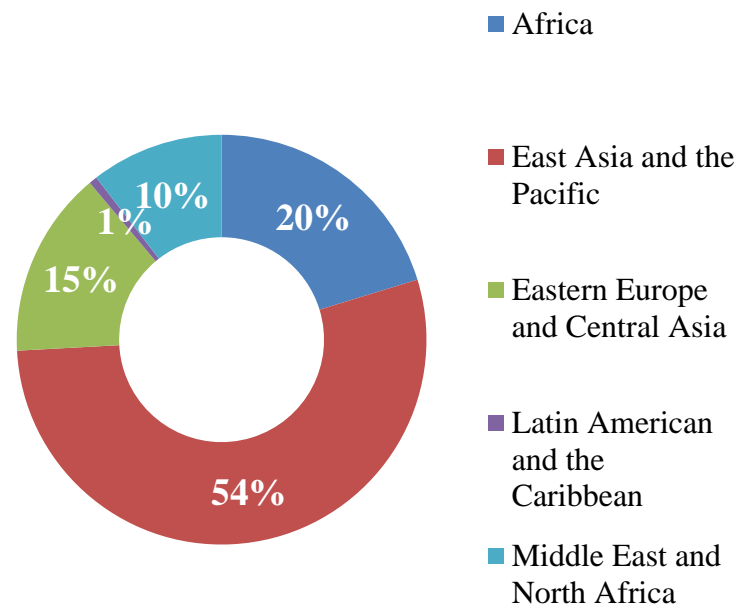
- **Management and disposal of obsolete pesticides**
 - **Releases from industrial and non industrial sources**
 - **Hospital and solid waste management**
- **PCB management and disposal**
 - **Closure of POPs production (reduction of intentional use)**
- **Demonstration of alternatives to POPs use**
 - **Development of national implementation plans**

WB-GEF POPs Program Overview

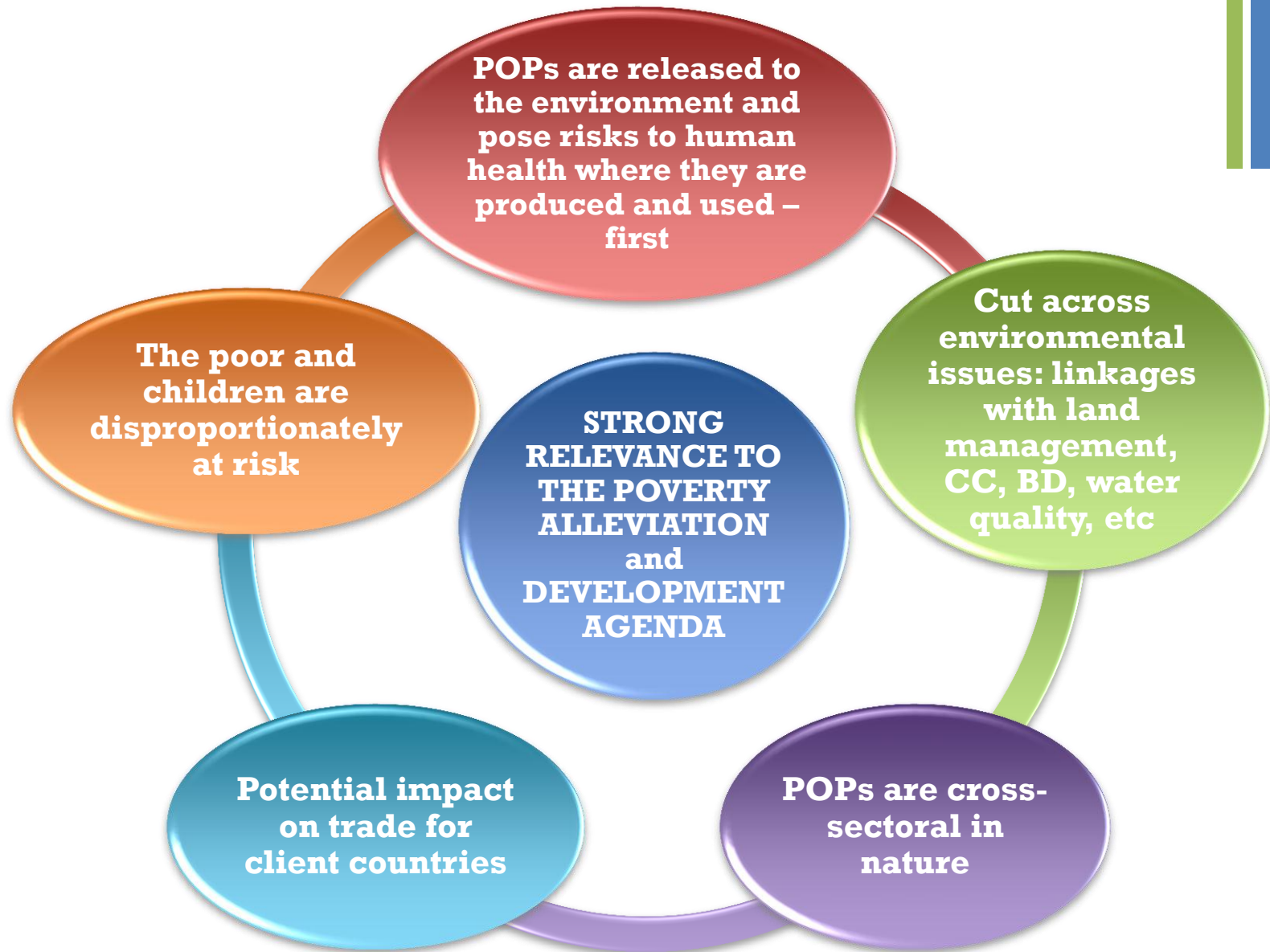
POPs themes and sectors



Regional Distribution



Partnering to Rid the World of POPs



What have we learned to date?

LESSONS AND CHALLENGES

Need to maintain flexibility: preliminary inventories are often underestimated

Importance of enforceable regulatory framework to sustain investments

Securing regulatory approval for activities linked to hazardous wastes management can be challenging

Importance of raising awareness of stakeholders at all levels to build broad coalitions in support of the project

Integrating Social, Technological and Economic Considerations to Tackle POPs Disposal

Destruction of high-priority POPs stockpiles, DDT and concentrated PCBs, as well as associated contaminated equipment



The Belarus Experience



Provide secure storage for lower-risk stockpiles, such as contaminated soils

Integrate POPs considerations into existing national health monitoring and environmental information systems

Baseline Situation

- About 100,000 people exposed to POPs
- 14 enterprises having the biggest PCB stockpiles not always properly stored
- No long term plan for PCB phase out
- Estimated 892 tons of priority POPs OP in Slonim landfill and 43 tons in Lida storage



Disposal of Priority PCBs Stockpiles

**Packaging and loading
PCB-containing
transformers**



**Pumping out liquid PCB
transformer oil (Sovtol)**



Outcomes of the PCB disposal activity

- The **14** biggest PCB hot spots eliminated (823 t destroyed)
- The total amount of all PCBs identified in Belarus reduced by **17%**
- Exposure of about **4, 800 people** to PCB waste eliminated
- Raised awareness and improved planning of enterprise resources for continued PCB phase out and disposal



Elimination of the Slonim OP Landfill



Key Partners

- Ministry of Emergencies (excavation and packaging)
- SAVA Gmbh, Germany (disposal)
- Accredited national laboratory (monitoring and laboratory control)
- Central/local authorities
- NGOs and mass media
- Local population
- GEF/World Bank



Restricted area, random landfilling of OP and no prevention measure at landfilling resulted in the need to adjust the technology during excavation



On-site control of the excavation efficiency: the MES mobile laboratory equipped with the GC takes express tests of soil



Disposal of metal barrels used for packaging was a challenge



Outcomes of POPs OP disposal activity

- Four landfill cells cleaned and closed
- 2,006 tons of OP and heavily contaminated soil extracted and packaged
- 950 tons incinerated
- Transportation of remaining 1,056 tons for elimination is underway
- Awareness raised and local people's concerns mitigated



Prioritizing Local Stakeholder Concerns

People are concerned about the OP transportation schedule

Sharing the outcomes of drinking water sampling for POPs content



Lessons Learned and Value-added



- Efficient use of modest resources
- Know-how for POP waste holders and MES on handling and disposal
- Triggering PCB phase out and disposal at expense of the PCB holders;
- Raised awareness
- Improved technological, methodological, technical and personnel capacity

Neutralizing Dangerous Chemical Stockpiles in Belarus (project video)



The World Bank

A Partner in Ridding the World of POPs

Over a decade ago, concern regarding the proliferation of persistent organic pollutants (POPs), a class of chemicals with high toxicity, persistence, trans-boundary properties and the ability to bio-accumulate in living organisms, spurred the global community to take measures to eliminate or reduce their release into the environment. The World Bank saw the opportunity to integrate the sound management and elimination of POPs across a broad range of sectors including, urban, agriculture and health, by building on decades' worth of experience gained through support of public and private sector pollution management efforts. The principal drivers behind the Bank's involvement in pollution management derive from the organization's mission to improve the quality of life for the poor, and on the recognition that global threats related to the proliferation and release of wastes and toxic chemicals result in adverse human and environmental health effects which, left unchecked, exacerbate poverty.

As the global scope and impact of such threats has become increasingly well understood, the Bank has worked to anchor environmental health concerns in its rural and urban services through projects that seek to improve the management of chemicals, solid hazardous wastes and wastewater, and put in place efforts to control pollution related to a large variety of sectors including, water and sanitation, transport, industry, energy, and mining, with the goal of enhancing sustainable growth and reducing poverty around the world. Solid waste management issues, such as collection and safe disposal of solid waste and greenhouse gas emission reductions through landfill gas collection, have been addressed through more than 270 Bank projects supported by US \$2.9 billion in loans, grants, and carbon finance. And, while the sound man-

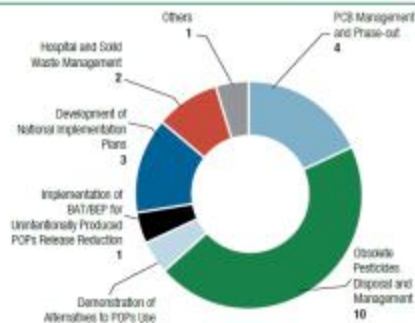
agement of chemicals has often arisen as a co-benefit of such World Bank activities, over the past decade benefits have also been direct.

Beginning in 2000, as the global community was negotiating the multilateral environmental agreement that would become the Stockholm Convention on POPs, the Bank began to assist client countries to address POPs concerns using financing mobilized through the Canadian POPs Trust Fund (CPTF), established in the Bank by the Canadian International Development Agency (CIDA). The C\$ 20 million CPTF, which leveraged an estimated US\$575 million in co-financing, supported a wide-range of POPs projects in more than 25 countries, from preparation of baseline studies to provision of access to technical expertise, knowledge and alternatives technologies with the aim of equipping clients with the capacity to take informed management decisions regarding priority actions to rid the world of POPs.

CPTF-funded baseline and analytic work has informed the preparation and implementation of many of the Bank's POPs projects supported by Global Environment Facility (GEF) grants, the Stockholm Convention's financial mechanism. GEF grants have allowed the Bank to channel 'green' financing to client countries to integrate sound chemicals and POPs management considerations into country partnership strategies, while testing innovative approaches, stimulating synergies and generating economies of scale. Through its GEF-funded POPs portfolio, the Bank has received approval to channel US \$154 million of GEF grants, complemented by US \$270 million in IBRD/IDA financing and US \$303 million in other co-financing, to client countries for projects both national and regional in focus.

The Bank's GEF-funded POPs portfolio addresses the development of programs to phase out the production and use of POPs, demonstrate safe chemical destruction techniques, identify alternative technologies and introduce new emission control technologies, encourage the safe disposal of toxic stockpiles and, in order to ensure the long-term sustainability of efforts at the country level, build capacity to ensure robust regulation

World Bank GEF Council-approved POPs projects (2002-2013)



Global Alliance on Health and Pollution

The Bank recently joined a host of national and multilateral organizations in forming the Global Alliance on Health and Pollution (GAHP) whose vision is a world safe from toxic pollution. The GAHP's members coordinate resources and activities to help low- and middle-income countries properly manage chemicals and wastes, clean-up legacy toxic hotspots, and prevent future pollution. The Bank currently chairs the GAHP's seven member Executive Committee. (www.gahp.net)

Available
at the
World
Bank booth



Thank you

