National Implementation Plans: POPs Research Needs and Opportunities in Africa

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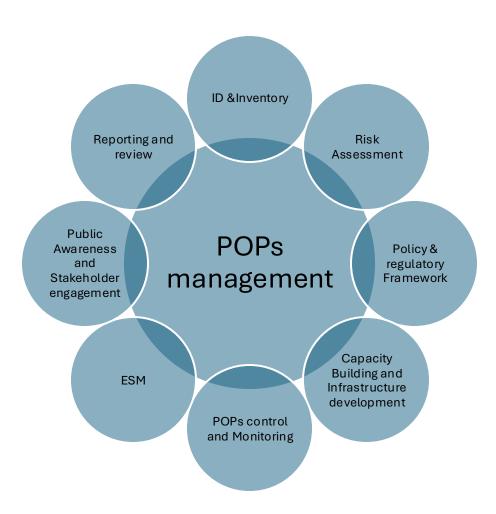


Introduction

Botswana is party to the Stockholm Convention, committed to the sound management of persistent organic pollutants (POPs).

Implementation of the National Implementation Plan (NIP) is key to meeting international obligations and protecting human health and the environment.

Capacity for research or analysis of POPs is also key in ensuring that POPs are adequately managed



National Research Needs and Priorities

Identification of POP sources and pathways, especially newly listed POPs (e.g., chlorpyrifos, MCCPs).

Monitoring and data generation for baseline studies and effectiveness evaluation.

Development of alternatives for POPs in agriculture, industry, and waste management.

Risk assessments to inform decision-making and regulatory updates.

Need for **interdisciplinary research** linking environmental science, toxicology, and policy.

Existing Research and Analytical Capacity

National Environmental Laboratory (NEL):

- monitors the environment for compliance to National and international standards with regards to pollution.
- Equipped and trained to analyse for PCBs, Dioxins and Furans.
- The NEL was capacitated for Dioxin and Furan analysis with assistance from UNIDO through the uPOPs project. This assistance was also extended to Tanzania and Eswatini
- Currently undertaking an assessment of uPOPs at areas around selected landfill sites especially those prone to burning.

Academia e.g. University of Botswana:

• Department of Environmental Science and Chemistry: academic research on POPs and hazardous substances.



NATIONAL

ENVIRONMENTAL

LABORATORY

Regional and International Technical Support Opportunities

UNIDO, UNEP, GEF Projects: Funding and technical support for POPs elimination and NIP updates.

African Regional Centre in South Africa (The Africa Institute): Capacity-building and analytical training for POPs.

BRS Secretariat Clearinghouse: Shared tools, best practices, and expert contacts.

SADC Initiatives: Regional collaboration on POPs waste management and chemical regulation.

Practical Avenues for Collaboration

Joint research projects between academia and regulatory institutions.

Bilateral
exchanges with
laboratories in the
region for training
and
benchmarking.

Data-sharing platforms and
national chemical
inventories.

Stakeholder forums for coordinated policy and technical dialogue.

Integrating Science and Policy

There is need to:

Establish a **national science-policy interface platform** for chemicals and waste.

Embed researchers in policymaking processes through secondments or technical committees.

Encourage **policy-relevant research** and **evidence-based decision-making**.

Regular policy briefs and updates from research institutions to government ministries.

Conclusion and Way Forward

Strengthening POPs research capacity and integrating science into policy will ensure better protection of health and environment.

Collaboration, investment in laboratories, and alignment with international efforts are essential.

Botswana must leverage its national strengths and regional partnerships to achieve effective POPs management.

Thank you