

TOWARDS IMPLEMENTATION OF THE STOCKHOLM CONVENTION: AN OVERVIEW OF ACTIVITIES IN EAST AFRICA

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Abstract

The East Africa region has ratified the Stockholm Convention on Persistent Organic Pollutants (POPs). Article 11 of the convention requires parties to the Convention to undertake activities pertaining to (POPs) and their alternatives including monitoring sources and releases into the environment; their levels and trends in humans and the environment; as well as their fate, transformation and effects on human health. In order to accomplish the above activities, each party to the convention is required to develop National Implementation Plans (NIPs) describing how the obligations set by the Convention will be met. Kenya and Tanzania have developed their NIPs whereas in Uganda, the process of developing the plans is behind schedule. Both Kenya and Tanzania have proposed capacity building for analysis of POPs as well as partnering with specialized institutions in monitoring chemical pollution. In this paper, we present the progress in the NIP processes in the East African region and propose that IPCP becomes instrumental in the establishment, support and coordination of tandem PhD and M.Sc programs aimed at creating the necessary capacity.

Introduction

The Stockholm Convention on Persistent Organic Pollutants (POPs) is a global agreement that came into effect on 17 May 2004, with the objective of protecting human health and the environment from Persistent Organic Pollutants (POPs). POPs are composed of three categories of chemicals; namely the pesticides (i.e. Aldrin, Dieldrin, DDT, Endrin, Chlordane, Hexachlorobenzene, Mirex, Toxaphene and Heptachlor) which are intentionally produced. The second category are industrial chemicals, the Polychlorinated Biphenyls (PCBs) and Hexachlorobenzene (HCB) and the third category is the group of unintentionally produced emissions of certain industrial and combustion processes i.e. the Polychlorinated Dibenzo-p-dioxins (PCDD), Polychlorinated Dibenzofurans (PCDF) and unintentionally formed PCBs and HCB.

All the three East African countries acceded to the Stockholm convention in 2004, thereby pledging their commitment to protect human health and the environment from the 12 toxic chemicals of global concern. The three countries in the original East African Community¹ include Kenya, Tanzania and Uganda. Under Article 7 of the Convention, as contracting Parties the three countries are obligated to develop and implement National Implementation Plans (NIPs). By ratifying the Stockholm Convention, Parties agree to the management and control of the 12 POPs and to a formal process to consider additional substances for inclusion under the Convention. The development of the NIP involves four main phases, namely: establishment of coordination mechanism and process planning; establishment of POPs inventories and assessment of national infrastructure and capacity; priority assessment and objective setting; formulation of the NIP and its endorsement by stakeholders. The objective of the NIP is to come up with activities and programs related to the implementation of the Stockholm Convention. The NIP is also a pre-requisite to country obligations to the Convention of Parties. The NIP is therefore supposed to enable countries to take appropriate steps towards the management of POPs and to control processes that generate unintentional POPs.

Within the three countries, the development of the NIP has been based on consultations at the highest levels of the governments. This is one way of ensuring that the plans will receive high-level political commitment, which allows for harnessing of domestic resources to meet national obligations to the Convention. The implementation of the NIP constitutes a contribution to various national development endeavors, including policy development and legislation, environmental and public health protection, and development of agricultural, industrial and

¹ Rwanda and Burundi formally joined the east African Community on June 18, 2007.

private sectors. It is for this reason that a cross-section of stakeholders, including the public and various interest groups, were consulted.

In two of the three countries, the inventories have so far identified several gaps with regard to POPs management. The gaps include inadequate policies and legislation to govern POPs management, monitoring, search for suitable alternatives, liability for POPs waste disposal and remediation of sites contaminated with POPs, public information dissemination, education and awareness. It has also been noted that there are no guidelines for waste management and remediation of POP contaminated sites. There is weak enforcement of the existing legislation relevant to management of POPs. In addition, there is inadequate capacity and experience for tracking human and environmental effects caused by POPs and their alternatives. The management of such effects has not yet been established. A few institutions have laboratory facilities and trained personnel that can facilitate monitoring of POPs and their alternatives, although these need strengthening in terms of specialized training and upgrading of equipment. Other deficiencies include limited research on alternatives of intentionally produced POPs, poor documentation system of POPs information both in the private and government institutions and lack of awareness at all levels.

Progress of the NIP development processes

NIP progress in Uganda¹

In Uganda, the Project for the Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (POPs) is being implemented by the National Environment and Management Authority (NEMA) with technical assistance from United Nations Environment Programme (UNEP) and funding from the Global Environment Facility (GEF). The project started in July 2005. In September 2005, the Project was launched and an Inception Workshop to obtain commitment of Stakeholders was conducted. Participants were drawn from Government Departments, Research and Academic Institutions, the Private Sector, the Civil Society and Development Partners. During the year 2006, implementation of the project concentrated on the phase of Establishment of POPs Inventories and Assessment of National Infrastructure and Capacity. This phase of the project was contracted out to individual consultants by (NEMA) through a bidding process to work on selected areas, namely POPs pesticides, unintentional POPs, PCBs and DDT. In addition contracts were also given out to consultants to work on related areas as (a) Strategy on Public Awareness and Education, (b) Development of an Integrated Data base on POPs, (c) Risk Assessment, (d) Assessment of Economic and Social implications of POPs use/Elimination and National Profile for POPs Management in Uganda. At the time of drafting this paper, the data collection by the Task Team leaders or consultants on the above areas was incomplete. Because of these delays, NEMA has requested for extension of the project up June 2008 from UNEP

NIP progress in Kenya²

With respect to Intentionally Produced POPs, Kenya pledges to ensure that in future the compounds will not be produced in the country and that illegal entry will be controlled. The country will adopt legislation banning or restricting the use of PCBs, prepare institutions which generate and distribute power to label PCB equipment in use, undertake a comprehensive inventory of PCBs using better analytical technology to identify equipment containing PCBs in concentrations of 50ppm or greater and label such equipment accordingly and will undertake to monitor POPs currently in use and other compounds with POPs like characteristics. With respect to DDT the government pledges to undertake promotion of awareness as well finalizing a specific policy. The government will promote the development of alternatives to DDT with special emphasis on pyrethrum derived products. With respect to Unintentional POPs such as dioxins, furans, hexachlorobenzenes, and PCBs, the government pledges to develop regulations that will be geared to minimizing emissions from open burning processes, to introduce Best Available Technologies and Best Environmental Practices in order to assess their production. It will train personnel involved in the handling and disposal of medical wastes, upgrade incinerators to meet emission levels consistent with the BAT/BEP guidelines and other regulations and support public awareness programs on proper waste handling, especially biomass and municipal wastes, and the need to discontinue open burning practices of waste.

NIP progress in Tanzania³

Tanzania has submitted the NIP document. In the implementation plans, Tanzania has grouped the main priority issues in four major areas, namely: strengthening legal and institutional framework for managing POPs and

chemical pollutants; establishing a monitoring scheme of POPs and other chemical pollutants; enhancing transfer of appropriate technology for control of POPs releases; and improving public information, awareness and education. Some of the identified top priorities for four groups of POPs chemicals are as follows: establishing environmentally sound technologies to manage POPs pesticides wastes, developing mechanisms for promoting proper management of stockpiles of POP Pesticides wastes and contaminated sites, developing facilities for disposal of PCBs, establishing clean up and remediation schemes for PCB contaminated sites. In addition, Tanzania pledges to develop mechanisms for promoting management of stockpiles of DDT wastes, strengthening capacity in DDT and PCDD/PCDF management in terms of manpower and infrastructure. It will undertake to establish coordination mechanisms pertaining to the management of PCDD/PCDF. The specific priorities also cover capacity building in terms of human resource and technical infrastructure, establishment of schemes for monitoring of POPs, strengthening policy and regulatory regime and raising awareness.

Suggested approach for participation of IPCP

One of the prominent cross cutting requirements by Kenya and Tanzania is capacity building both in human resource and in the appropriate equipment for the handling of POPs, PCDD and PCDF. The Africa region and the institutions of higher learning lack capacity to conduct and generate quality data on POPs residues. This is attributed to lack of adequate scholarships for postgraduate students and lack of sophisticated instruments for analysis of all POPs. As a result of inadequate institutional infrastructure and dedicated quality staff able to analyse POPs, there is lack of quality data knowledge on the levels of POPs residues in the environment and foods. Similarly, most laboratories have weak Quality Assurance and Control (QA/QC) protocols. The IPCP could strengthen existing networks such as the African Network for Chemical Analysis of Pesticides (ANCAP)) and collaborate with other competent institutions of higher learning and networks to help enhance the capacity in the region.

The Summer School training method, which has been used by ANCAP, is being suggested. In this method, one university would be selected for the training in each region. If possible, the university would be equipped with appropriate equipment for analysis of the major chemical pollutants. The students would be selected from different universities in each region and IPCP would source for funding, select the best resource personnel to do the training and coordinate the training programs in different regions. This method creates a network of young scientists and facilitates the optimal use of laboratory equipment and other facilities pertinent to chemical analysis available in the region. The method promotes a regional research approach to solving common problems in the participating countries. It fosters intra-regional capacity and capability for the training of both M.Sc. and Ph.D. students and contributes towards increasing the potential to marshal both decision-makers and political support needed for policy formulations based on research results. This is one of the major aims of forming the IPCP. By creating a network of scientists working on common problems, sharing the use of best available technologies and using experts in the field for the training, such a program also minimises brain drain.

Conclusion

This paper highlights the progress made in the Project for the Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (POPs). The summary covers three East African countries of Kenya, Tanzania and Uganda. Each of the countries was financed by the Global Environmental Facility (GEF) to present to conference of parties, the information base and associated analysis supporting the development and implementation of effective Action Plans and Strategies to achieve reduction and elimination of POPs with associated improvement of environmental quality and human health. Each of the countries was required to present a document containing the above information in addition to providing a basis for monitoring the country's progress in addressing the POPs issue, and specifically the effectiveness of the actions it has committed to in reducing or eliminating POPs use and release to the environment. The National Implementation Plans document is supposed to elaborate current situation on POPs and should state the country's commitments and actions that it intends to undertake in respect of the management and control of POPs. Two of the three countries have already submitted their NIP documents whereas the third country is in the process of drafting the document. The implementation of the plans will require concerted effort from different stakeholders and collaboration with international organizations. The training of resource personnel will be very crucial and is best handled by a network of international experts. The use of summer schools for training on specific topics is suggested. The IPCP will play a critical role in the suggested training by designing a protocol for the training,

sourcing for expertise and funding for appropriate equipment and in bridging the gap between researchers and policy implementers.

References

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