

Annex 2

POP pesticide production and use assessment

This module addresses baseline data gathering and assessment of POPs pesticides. Particular care is required to address DDT due to its use for vector control and Lindane due to its use for control of ecto-parasites in veterinary and human application, which may be under the responsibility of authorities other than those responsible for primarily agricultural chemicals. In addition, it is important that all uses of HCB, alpha hexachlorocyclohexane, beta hexachlorocyclohexane and pentachlorobenzene (industrial as well as pesticide) be properly addressed. Specialists with knowledge of each of these areas might be included in the task teams.

Objective

The objectives of a POPs assessment are:

To review and summarize the production, use, import and export of the chemicals listed in Annex A and Annex B of the Convention (excluding other chemicals listed under Annex A and B which are not considered as pesticides), PCB, which is covered by the PCB assessment module set out in annex 3;

To gather information on stockpiles and wastes containing, or thought to contain, POPs pesticides.

To assess the legal and institutional framework for control of the production, use, import, export and disposal of the chemicals listed in Annex A and Annex B (excluding PCBsother chemicals which are not classed as pesticides) of the Convention.

To identify gaps in information required to complete the assessment.

To identify whether the current situation meets the requirements of the Stockholm Convention and detail areas where it does not.

Outcome

Report detailing knowledge on historical and current production, import, export, use, stockpiles and waste disposal for POP pesticides

Assessment of the legal, institutional, regulatory and enforcement systems for POP pesticides

Assessment of the data gaps and deficiencies in the knowledge on POP pesticides

Primary responsibility

It is likely that a focused task team would be assigned the responsibility to carry out this assessment. This team would report back to the PCU as agreed.

The task team for this assignment should be made up of people in the country responsible for work on pesticides and in particular any initiative to address the process of moving from a chemical-based approach to a more integrated pest management system and also any initiatives to improve chemicals management, licensing, control, use and waste disposal.

It is particularly important that officials with responsibility for public health and vector control be included in the assessment of DDT. It is also important that links be made between the authorities responsible for vector control and those responsible for agricultural use of pesticides since DDT can become a valuable commodity for the agricultural sector and unauthorized "leakage" might occur from authorized use for vector control to other areas.

Similarly, it is important that officials with responsibility for public health and veterinary control be included in the assessment Lindane. It is also important that efforts be made to move away from Lindane based approach to a more integrated pest management focused initiative. Emphasis to be placed on the management of Lindane stocks due to potential leakage into the agricultural sector. Special note needs to be taken with respect to the alpha and beta isomers of hexachlorocyclohexane

[related to the identification of sites where it was produced during Lindane production. The reader is directed to the special guidance note for hexachlorocyclohexane.](#)

Experience from on-going programmes in identifying and dealing with obsolete stocks of pesticides should be used and built upon where possible.

Tasks

Establish a mechanism for making the assessment on POPs pesticides, develop a plan for the process to assign responsibilities and set time lines.

Review and summarize the existing legal and institutional framework that covers production, import, export, use, licensing, storage, handling and disposal of pesticides, formulated products, containers and residuals. Compare the legal framework to the requirements of the Stockholm Convention. Compare the existing system against the requirements of the Stockholm Convention and identify any deficiencies in policy, implementation and enforcement.

Carry out a preliminary inventory:

- For each chemical, summarize information, to the extent possible, on production, import, export, uses in the country, presence in stockpiles and data on wastes. [Special attention related to the alpha and beta isomers of hexachlorocyclohexane \(see above\).](#)
- It is valuable to record the availability of data and effectiveness of relevant information systems and to make some assessment of the reliability and quality of the data. This can help to identify and classify gaps and needs for additional data gathering and generation.
- The resulting information should show for each chemical whether it is now or was previously produced, imported, exported and formulated in the country, and if so, where and in what quantities. It should also reveal any past or current uses and the characteristics of the use (i.e., the scale and nature of the operation – individual farmers, pattern of use for vector control, etc.), conditions of storage and handling for stockpiles and stores and known or suspected presence in wastes or abandoned stores.

Any inventory activities that require physical inspection of pesticides in storage, use, stockpiles or wastes should only be carried out by staff with adequate training and protective equipment. The FAO series of manuals on [obsolete-pesticide disposal s](#) should be consulted for guidance. For example, the "[Training manual for inventory taking of obsolete pesticides](#)"; [FAO Pesticide Disposal Series 10](#) [FAO Disposal Series 12, 13, 14, 15 and 16](#) which cover the [inventory, environmental risk assessment, safeguarding and environmentally sound disposal of pesticide wastes. These documents](#) contain information on issues including pesticide inventory taking and management, proper protective equipment and necessary health and safety measures.

Gather information on sites that may have been used or are being used to manufacture, formulate or handle POPs (including wastes) in a manner that may have caused site contamination.

Identify programmes or initiatives in the country that are relevant to POPs pesticide management or replacement – for example, obsolete pesticide activities, integrated pest management programmes or proposals for these.

Alternatives

[Alternatives to the listed chemicals should be selected based on local studies taking into consideration the following factors:](#)

- [Adoption of integrated pesticide / vector management approaches \(IPM and IVM\);](#)
- [The promotion of environmental and user friendly economically viable alternatives;](#)
- [The completion of local field testing and adaption trials of the proposed alternative leading to local registration for use.](#)

Method and approach

The task team would develop a plan which would be approved by the PCU (and, if appropriate, the NCC). [The PCU should ensure adequate involvement of representatives from the Ministries of](#)

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Agriculture, Public Health and Veterinary Service plus the national Customs Authority to ensure the status of POPs pesticide management issues are adequately reflected.

Existing data sources and programmes would be drawn on for baseline information. This should be supplemented where required by the collection of primary data from site investigation and survey. Advice on the data collection process can be obtained from the FAO guidance referenced above. Special attention should be given to provision of adequate training of personnel engaged in data collection. Advice on training can be obtained in the FAO guidance.

A strategy would be drawn up for information gathering suited to the resources available, including a projected time frame. The best way to generate the necessary information is likely to vary from country to country depending on the situation and the nature of chemicals management and the scale and uses of POPs.

Attention should be given to difficulties that are likely to be encountered in carrying out a complete inventory of obsolete pesticides. Innovative and imaginative methods may need to be developed, for example, to find stocks of pesticides stored by individual farmers in unofficial stores.

Field work, whether initial inventories or complete inventories and site assessments, should be carried out by properly trained and equipped staff.

Guidance

Information and programmes on obsolete pesticides is available from FAO through contacting OPGroup@fao.org. The following guidelines can be downloaded from www.fao.

- Guidance on stakeholder engagement, FAO Disposal Series 11, Country Guidelines
- Guidance on environmental risk assessment, FAO Disposal Series 12, Environmental Management Tool Kit for Obsolete Pesticides Volume 1
- Guidance on storage and transport of pesticides, FAO Disposal Series 13, Environmental Management Tool Kit for Obsolete Pesticides Volume 2
- Guidance on inventory taking, FAO Disposal Series 14, The Preparation of Inventories of Pesticides and Associated Waste
- Guidance on environmental assessment and management plans for obsolete pesticides, FAO Disposal Series 15, Environmental Management Tool Kit Volume 3
- Guidance on safeguarding and disposal of obsolete pesticides, FAO Disposal Series 16, Environmental Management Tool Kit Volume 4

University of Cape Town post graduate diploma course on Pesticide Risk Management – Modules on International Conventions and Obsolete Pesticides available as short courses from March 2012; including on CD-ROM.

Guidance on risk profiles for POPs pesticides – UNEP/POPS/POPRC.3/20/Add.4 (Lindane), UNEP/POPS/POPRC.3/20/Add.8 (alpha hexachlorocyclohexane), UNEP/POPS/POPRC.3/20/Add.9 (beta hexachlorocyclohexane), UNEP/POPS/POPRC.3/20/Add.10 (chloredecone)

Guidance on risk management evaluations - UNEP/POPS/POPRC.3/20/Add.4 (Lindane), UNEP/POPS/POPRC.4/15/Add.3 (alpha hexachlorocyclohexane), UNEP/POPS/POPRC.4/15/Add.4 (beta hexachlorocyclohexane), UNEP/POPS/POPRC.3/20/Add.2 (chloredecone)

Guidance on alternatives - UNEP/POPS/POPRC.5/10/Add.1

Startup Guidance for the 9 new POPs, Stockholm Convention on persistent organic pollutants (POPs)

Training manual for inventory-taking of obsolete pesticides, FAO Pesticide Disposal Series 10, Rome

Crosschecking Tool For Informed Decision Making in the Development of Action Plans on Pesticides Under The Stockholm Convention.

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