

**Assessment of Lindane in Mexico:
*An effort towards risk reduction and
global elimination***

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Background



- Sound Management of Chemicals (SMOC) initiative of the North American Commission for Environmental Cooperation.
- Cooperation scheme to address priority chemicals of mutual concern aimed at management and control actions.
- A feature of this work is the development of North American Regional Action Plans (NARAPs), which are developed for specific substances.
- Additional work on the monitoring and assessment of pathways of exposure.
- This collaboration has resulted in information sharing on technical, scientific and policy issues and helped Mexico build its capacity for the sound management of chemicals.

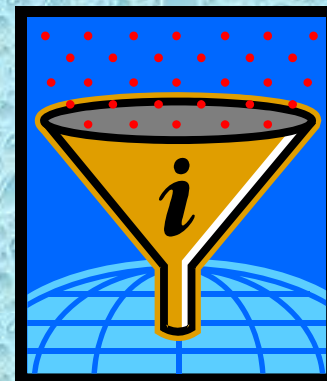


Background

- Lindane is a pesticide which was used in agriculture and as a human and animal drug.
- Its use in Mexico has led to its accumulation in humans and other organisms.
- Under the CEC framework, Mexico committed to develop a national assessment for lindane.
- This work provided a summary of its use in Mexico, and availability and cost of alternatives.
- Compilation of the data was done using a coordinated and collaborative effort with multi-stakeholder participation.

The Problem

- Insufficient information at the national level
- Scattered data on environmental media and humans indicated exposure to lindane and other HCH isomers
- Lack of support to establish regulatory and voluntary actions to phase-out its use.





The Approach

- The Mexican Government decided to conduct an assessment as the first step in the decision-making process.
- Multi-stakeholder committee established to evaluate the feasibility to restrict or eliminate the use of lindane in Mexico
- Participants:
 - Public sector : Ministries of Health, Environment, Finance (through its customs office), Economy, and Agriculture.
 - Industry associations
 - Environmental NGOs
 - Academia and research groups
- In kind contribution obtained through collaboration with Canada and the US
- This also contributed to the implementation of the North American Regional Action Plan on Lindane and other HCH Isomers.

National assessment project



- Objectives:
 - to obtain current information on production, import and export of lindane in Mexico
 - identify lindane-containing products, including commercial names, prices, and current uses
 - review existing regulation and control instruments, and
 - identify of feasible and cost effective substitutes and alternatives for lindane



National assessment project

- **Method**

- consultations with relevant public and private organizations were held to obtain information
- estimates of quantities of imports, exports and production were made
- a field survey in 5 states collected data on actual prices and uses of lindane containing products
- an analysis of the potential legal basis for elimination done, and
- ways to proceed with elimination assessed





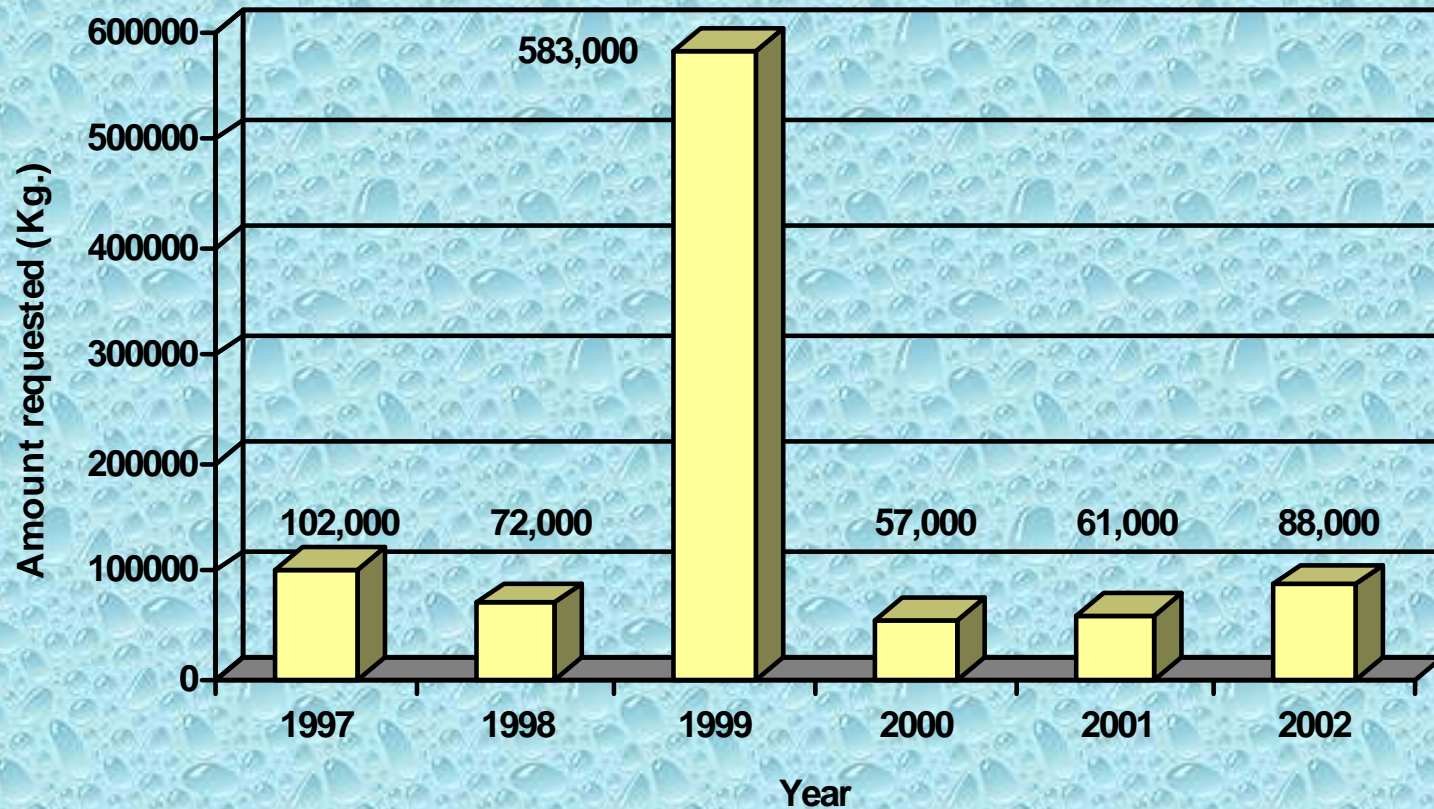
Implementation (1)

- Information gathered from the pesticide registration authorities showed that lindane was authorized for use to control ticks, fleas, common fly larvae, and other parasites on livestock.
- It was also registered for use as a seed treatment, treatment of fleas on domestic animals, and public health uses. The Ministry of Health provided data concerning registrations and companies to which they were issued.
- At the initial stage, stakeholders expressed their concerns and doubts on the feasibility of the eventual elimination or restriction on the use of lindane. For example, the Ministry of Health informed that it would need to give notice of any revocation.

Implementation (2)

- Several data gaps and information needs were identified. Challenges to moving forward in developing a proposal included:
 - poor data (lack of, incomplete or confusing) on import/export and historic production
 - difficulty in information sharing between and within government departments
 - lack of resources for a study of national scope
 - the different problems and thus different positions of national and multinational industry
 - difficulty in focusing the debate on alternatives
 - the need to evaluate toxicity, effectiveness and possible resistance of chemical alternatives for agricultural and pharmaceutical uses, and
 - the need to evaluate other alternatives (integrated pest management, organic agriculture, natural methods, etc.)

Quantity of Lindane authorized for import in Mexico, 1997-2002*



* The amounts reflect the quantities requested for authorization. Actual importation is likely lower. There was one unusually high request for importation in 1999.

Implementation (3)

- To address some of the data gaps, survey was conducted in five states.
- Insufficient information on imports and other data made it difficult to estimate the extent of consumption accurately
- Survey did show that potential substitutes for most of the uses of lindane were readily available.
- Survey results shared with committee
- Members agreed to share additional information they had available.
- Search in several databases and scientific papers.
- Together this provided the information needed to draft the supporting documentation for a decision on the future use of lindane.

Achievements (1)



- Effective and coordinated effort with active participation from all sectors resulted in an action plan which had support from all stakeholders.
- Improved collaboration between government and industry on other chemical management issues.
- Evidence assembled in the profile helped the government to decide to revoke the registration for all uses of lindane, including a phase-out for pharmaceutical uses.
- Mexico nominated lindane and related compounds as candidates for substances to be controlled under the Stockholm Convention on POPs.

Achievements (2)



- The methodology used to collect data in Mexico was also incorporated in the handbook to support the effective participation in the work of the POPs Review Committee (POPRC) of the Stockholm Convention.
- Establishment of initiatives aimed at:
 - promoting research on chemicals of concern, including monitoring and assessment
 - awareness raising and outreach campaigns to promote alternatives and substitutes
 - capacity building through the development of effective partnerships, and
 - recommendations for policy and decision making

Thank you for your attention!

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