International POPs Elimination Project

Fostering Active and Efficient Civil Society Participation in Preparation for Implementation of the Stockholm Convention

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Stockholm Convention Awareness Activities

Syrian Coast Society for Environmental Protection

Syria
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About the International POPs Elimination Project

On May 1, 2004, the International POPs Elimination Network (IPEN http://www.ipen.org) began a global NGO project called the International POPs Elimination Project (IPEP) in partnership with the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Program (UNEP). The Global Environment Facility (GEF) provided core funding for the project.

IPEP has three principal objectives:

- Encourage and enable NGOs in 40 developing and transitional countries to engage in activities that provide concrete and immediate contributions to country efforts in preparing for the implementation of the Stockholm Convention;

- Enhance the skills and knowledge of NGOs to help build their capacity as effective stakeholders in the Convention implementation process;

- Help establish regional and national NGO coordination and capacity in all regions of the world in support of longer term efforts to achieve chemical safety.

IPEP will support preparation of reports on country situation, hotspots, policy briefs, and regional activities. Three principal types of activities will be supported by IPEP: participation in the National Implementation Plan, training and awareness workshops, and public information and awareness campaigns.

For more information, please see http://www.ipen.org

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Stockholm Convention Awareness Activities

The awareness-raising activities were divided into the following stages:
1-Formation of a team to collect information
2- Establishing a sheet for data recording
3- Hold three workshops in the coastal governorates Lazikia and Tartus for raising awareness about POPs and Stockholm Convention

Workshop activities

Dr. Sohar El Rais chair of the Coastal Society introduced POPs and the Stockholm Convention and stressed the importance of raising awareness among different stakeholders and the community and explained the nature of POPs and their effects on human health and the environment. She also mentioned how they cooperated with the Society of Environmental Protection and Sustainable Development in getting the information about POPs in Syria and Stockholm Convention implementation. She pointed out that generally the goals of the Stockholm Convention are the following:

1- Elimination of POPs through the international agreement for the protection of human health and the environment
2- Specifically eliminate the chemicals mentioned in the Convention
3- Stop the production and use of the pesticides mentioned in Convention and find substitutes which are safe and effective
4- Stop unintentional emissions by encouraging use of new techniques.
5- Safe disposal of these compounds.

Lecturers in these workshops were Eng. Foad El Ok., Dr. Akram El Kory, Dr. Yassin Mpalla, and Eng. Foad El Eitr. They work in the Environmental Agency in Syria including the main laboratories and are experts in chemicals

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- POPs had been defined as follows :

- Persistent organic pollutants are a group of chemicals having poisonous properties. They do not disintegrate but remain in the environment for a long period. It is well-known that such substances are concentrated in fats, and therefore they are stored in living organisms for a long period. They biologically accumulate over a long period.
- Persistent organic pollutants include pesticides (aldrin, endrin, chlordane, heptachlor, DDT, mirex, dieldrin and toxaphene), byproducts of incineration (dioxins and furans).and industrial chemicals (hexachlorobenzene and PCBs). These are called the Dirty Dozen.
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1. Aldrin

- Aldrin is a strong pesticide used to kill soil insects, cattle parasites, rice moth, wire worms, white-footed ant and locusts. Aldrin has been used on cotton, corn and potatoes.

2. Endrin

- Endrin is a pesticide used for fighting rodents and insects, and the insects of tree leaves. Endrin has been used on cotton, rice, corn and sugar cane.

3. Chlordane

- Chlordane has been used on cotton, jute crops, sugar cane, beets and fruit. It is a long term pesticide and used to kill white-footed ant and beetles and insects found in crops, vegetables and oily cereals.

4. Heptachlor

- Heptachlor is used for fighting stem cutting worms, soil insects, mosquitoes, white-footed ant, locusts and insects that affect cotton. It has also been used for processing timber and underground cables against ants.

5. Mirex

- Mirex has been used as a pesticide and flame retardant. As a flame retardant, it has been used in electrical equipment, plastics and rubber. As a pesticide, it has been used for fighting lice, ants, bugs and wasps.

6. Toxaphene

- Toxaphene has been used for fighting moths and mites. It is a mixture of 670 chemical substances. Toxaphene has been used on cotton, cereals, fruit, vegetables and beans.

7. Hexachlorobenzene (HCB)

- Hexachlorobenzene has been used on timber and unnatural rubber. It has also been used for the preparation of paints and ammunition. HCB is a fungicide for cereals, onion and wheat, and also a by-product of the pesticide manufacturing process.

8. PCBs

- PCBs are used in electrical transformers, condensers, hydraulic systems, heat transmission systems, coolers and insulators and added to paints, adhesives, colouring materials and greases. PCBs are a mixture of 209 chemical substances.

9. Furans

- Furans are unintentionally produced through the manufacture of PCBs and other chlorine-containing substances and by burning chlorine-containing substances. They are a mixture of 135 chemical substances and usually accompanied by dioxins.

10. Dioxin

- Dioxins are a mixture of 75 chemical substances. They are produced by the incineration of human, municipal, and hazardous waste, and by burning gasoline and diesel containing chlorine scavengers. Dioxins require the presence of chlorine to be produced and so paper production, metallurgy, and other production of chlorine compounds such as pesticides can form dioxins.

11. DDT

- DDT was used during the Second World War to protect soldiers and civilians from malaria, typhoid and other disease carrying insects. It is still used for fighting moths and malaria-carrying mosquitoes.

12. Dieldrin

- Dieldrin has been used on fruit, corn, cotton and potato crops and on stored crops. It kills root worms, white-footed ant, wood cutting insects, textile insects, and beetles.
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The main aims of the Convention

- The primary aim of the convention is to reduce with the goal of eliminating the emissions of 12 pollutants which are considered the most hazardous POPs.
- It also calls upon member countries to stop producing aldrin and heptachlor.
- The convention limits the production amount and restricts the use of hexachlorobenzene and mirex to very limited purposes.
- It bans the production of PCBs.
- The convention restricts the production and use of DDT only to the purposes of fighting disease carriers such as the malaria causing mosquito.
- It also restricts the import and export of POPs which are intentionally produced.
- The convention binds the international community to protect the health of humans and the environment from POPs.
- The convention bans the production and use of endrin and toxaphene in the countries which have ratified the convention.
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The engineer Fouad Elok talked about the Stockholm Convention and health considerations.

Health and Environmental Considerations

- They accumulate in fats and reach the body through the food chain.
  - ♦ Weakness and mental retardation in children
  - ♦ Abortion in women
  - ♦ Cancer threat

- Eating contaminated foods such as meat, chicken and fish which feed on contaminated plants, cereals and water and eating dairy products cause 90% of poisoning with dioxin.

Dioxin has had the following effects

- ♦ It affects the function of the endocrine glands.
- ♦ It decreases male sexual hormones.
- ♦ Dioxin can cause cancer.
- ♦ High concentrations can cause chloracne, which is a skin disease known to cause rash, blisters and pimples similar to the serious conditions of acne.
- ♦ It weakens the immune system.
- ♦ It causes deformities in fetuses.

Then, Dr. Suheir AL.Rayes talked about persistent organic pollutants (POPs). Realizing the great hazards that could be produced through POPs on human health and the environment as it possesses highly toxic properties, resists decomposing, biologically accumulates, and transports through migratory species of birds across international borders and settles far away from where it was launched, where it accumulates in the environmental systems and moves through food chains.

It was pointed in these workshops that in 2005 analysis for ground water in Lazikia and Tartus governorates was done in the laboratories of the faculty of agriculture and showed that all levels of POPs are in the safe levels. Also for pesticides I soil, all levels were in the permissible range except Lindane which was banned in 2000.

Recommendations

- Continuing the efforts to make people aware of persistent organic pollutants among people through non-government organizations and mass media.
- Avoiding the use of banned and smuggled substances even if they are cheaper.
- Conduct studies that show the reality of these pollutants, the effects left by them, the current concentrations and how and where they are used.
- Education and training of employees and people who deal in such substances on ways of protection, and providing them with the necessary equipment and technologies.