

Stockholm Convention

Regional Capacity Building Workshop on New POPs And the Process of Reviewing and Updating of NIP

Kuwait City , Kuwait

14 – 16 December 2009

Ali Mohammed Ali

Sudan

Adequacy of existing legal and institutional framework considering new POPs

A part from pesticides, there are no general laws or regulation in force in Sudan to assess and list new chemicals. The pesticide substances (or in general the agro-chemicals) are reviewed and regulated as described in compliance with the pesticide act. The environmental protection act of 2000 refers to adverse effects of chemicals but does not establish any specific pre-screening procedures. Regulations on public health chemicals and occupational safety basically mandate the authorities to screen the impacts especially the adverse impacts of these chemicals.

cont

Regarding some specific chemicals like refrigeration's and other chemicals regulated under Montreal protocol, Sudan has established an effective pre-screening system to monitor the substance entering into the market. Basically this type of pre-screening system can be adopted to cover other toxic chemicals. Adding new POPs will be done as the Sudan is a party and committed to abide by SC

Good practices and lessons learned during NIP development

priority setting process

- Article 7 of the Stockholm convention (SC) provides that the signatories to the convention develop and Endeavour to implement a plan for the implementation of its obligations under the convention .

Further , the sc stipulate that the parties shall cooperate directly or through the global , regional and sub- regional organizations and consult their national stakeholders , including women's group and groups involved in the health in children , in order to facilitate the development , implementation and up dating of their implementation plans .

Cont.

The priorities were assessed in a process which involved the multi-stakeholders national coordination committee (MNCC) representing 25 different stakeholders groups extending from the technical expertise to the representatives of groups suffering from the adverse impacts of the POPS.

Cont.

The priority setting was a two – stage process .

First all the stakeholders were made aware of the pops issue / problems based on the inventories carried out indicating the extent and expected impacts of the pops . To set the priorities the MNCC discussed the criteria against which the priorities should be screened , and approved the following as baseline :

Cont.

- legal and regulatory requirements according to sc and national legislation
- expected / proven environmental impacts of pops
- human exposure .
- urgency of the actions needed .

It should be noted that the exact operational content of the criteria gives a lot of place for individual , subjective judgment , but this was also the purpose .

Cont.

- The members of MNCC gave certain scores for the separate POPs groups inventoried and by combining these individual assessments the following tentative priorities were set:
- The management and proper disposal of obsolete pesticide stocks(together with the contaminated soils surrounding the pesticide storages and contaminated pesticide containers) and the un controlled combustion(mainly waste burning) make the highest priority of activities needed to tackle the POPs issue.

Cont.

- second priority group consists of measures to manage dioxin and furan releases from waste incineration, power generation and heating (e.g biomass/wood burning for domestic purposes) from the production of chemical and consumer goods and from the production of mineral products.
- The third priority covers the management and phase-out of PCB of DDT in malaria control, waste disposal at landfills and transportation.

Cont.

- It should be noted that the priorities are not absolute reflect a compromise of the large group of stakeholders.
- The priorities set will be reflected as objectives in the action plan Sudan will compile as a part of the national implementation plan (NIP)

good practices and lessons learned

Action plan development

- ◆ Action plan is not an independent report but one task within the NIP exercise. However, for the practical purposes the action plan is the most important part of the NIP, since the plan defines what to do, when, and how much the actions will cost and where the funding is coming. It is therefore recommended that the action plan will also be compiled as a separate report.

Cont.

One important starting point for the action plan is the preceding priority setting exercise which results in national priorities regarding the Action to tackle the different pops and their adverse effects. These priorities, together with the activities and objectives mentioned in the Stockholm convention, are in fact defining the objectives of the Nip: what is the pops project aiming at. Further, the strategy, how to reach the objectives, is closely related to the priority setting: priority setting e.g. defines, in which order the objectives should be tackled.

The structure of the action plan is problem-oriented. The starting point is the current situation and adverse effects of pops

Cont.

Action plan elements :

- Objectives based on the Stockholm convention and priority setting
- Strategy : how to reach the objectives starting from the current situation
- Activities regarding pops categories : description of activities and costs and the corresponding resources & financing requirements

Evaluation of national Infrastructure and organization of inventories

1- Evaluation of national infrastructure

Sudan has currently no technical infrastructure for the assessment, measures and detailed analysis for some POPs. The most advanced knowledge, in respect of POPs, is related to the pesticides and there is some laboratory capacity.

Regarding management, research and development reference is made to the coming table, which elaborates on the current status and programmes of institutions and organizations with a potential to contribute in the POPs issue.

cont

- Sudan has no capacity to dispose the existing POPs waste except that there is a small (experimental) hospital waste incinerator and efforts to neutralize hospital waste by a chemical process.
- At this stage the actual linkages to international programmes, when it comes to the practical, operational activities, are not available, but the stakeholders, especially HCENR, are actively collecting information from external POPs related mitigation and phase-out programmes and technologies.

Organization of Inventories

- I. National consultant was recruited for this assignment
- II. Teams formed from plant protection staff (for Pesticide) who have around 28 regional offices all over the country we benefited from this spread .
- III. Training for Team by Foreign experts.
- IV. PCB inventory conducted by Engineers from the national electricity corporation .
- V. Unintentional Releases inventory was conducted by a national expert from the central laboratories supported by team from the health sector ,industrial sector and academic institution

Institutions Involved in Chemical analysis and could Potentially be Involved on POPs research

Name/Description of InstitutionSpeciality	Name/Description of InstitutionSpeciality
<p>Agriculture Research and Technology Corporation (ARTC)/ Ministry of Science and Technology. Analysis of pesticide formulations; Analysis of pesticide residues in supervised trials; Research on pesticides; Training on pesticides;Surveillance for pesticide susceptibility and resistance, Integrated pest management.</p>	<p>Agriculture Research and Technology Corporation (ARTC)/ Ministry of Science and Technology. Analysis of pesticide formulations; Analysis of pesticide residues in supervised trials; Research on pesticides; Training on pesticides;Surveillance for pesticide susceptibility and resistance, Integrated pest management.</p>
<p>University of Khartoum, Faculty of Agriculture, Faculty of Science, Institute of Environmental Studies.Teaching at both graduate and undergraduate levels;Training; and Research on pesticides and other environmental pollutants.</p>	<p>University of Khartoum, Faculty of Agriculture, Faculty of Science, Institute of Environmental Studies.Teaching at both graduate and undergraduate levels;Training; and Research on pesticides and other environmental pollutants.</p>

cont

<p>University of Gezira, Faculty of Agricultural Sciences Teaching at both graduate and undergraduate levels; Training; and Research on pesticides and other environmental pollutants. Other Universities Teaching at both graduate and undergraduate level, Research and Training.</p>	<p>University of Gezira, Faculty of Agricultural Sciences Teaching at both graduate and undergraduate levels; Training; and Research on pesticides and other environmental pollutants. Other Universities Teaching at both graduate and undergraduate level, Research and Training.</p>
<p>University of Gezira, Faculty of Agricultural Sciences Teaching at both graduate and undergraduate levels; Training; and Research on pesticides and other environmental pollutants. Other Universities Teaching at both graduate and undergraduate level, Research and Training.</p>	<p>University of Gezira, Faculty of Agricultural Sciences Teaching at both graduate and undergraduate levels; Training; and Research on pesticides and other environmental pollutants. Other Universities Teaching at both graduate and undergraduate level, Research and Training.</p>
<p>Food Processing and Research Centre, (ARTC), Ministry of Science and Technology Testing of samples of food & starting materials; Research in food processing.</p>	<p>Food Processing and Research Centre, (ARTC), Ministry of Science and Technology Testing of samples of food & starting materials; Research in food processing.</p>

cont

Industrial Consultancy & Research Centre,
Ministry of Science and Technology Analysis and
research related to food science; Testing physical
and mechanical properties of several industrial
products; Feasibility studies. National Centre for
Research, Ministry of Science and Technology
Analysis of ingredients of medicinal and toxic
plants; analysis of environmental chemicals with
special reference to water and soil
contaminants. Studies on tropical endemic diseases
(malaria).

Industrial Consultancy & Research Centre,
Ministry of Science and Technology Analysis and
research related to food science; Testing physical
and mechanical properties of several industrial
products; Feasibility studies. National Centre for
Research, Ministry of Science and Technology
Analysis of ingredients of medicinal and toxic
plants; analysis of environmental chemicals with
special reference to water and soil
contaminants. Studies on tropical endemic diseases
(malaria).

Industrial Consultancy & Research Centre,
Ministry of Science and Technology Analysis and
research related to food science; Testing physical
and mechanical properties of several industrial
products; Feasibility studies. National Centre for
Research, Ministry of Science and Technology
Analysis of ingredients of medicinal and toxic
plants; analysis of environmental chemicals with
special reference to water and soil
contaminants. Studies on tropical endemic diseases
(malaria).

Industrial Consultancy & Research Centre,
Ministry of Science and Technology Analysis and
research related to food science; Testing physical
and mechanical properties of several industrial
products; Feasibility studies. National Centre for
Research, Ministry of Science and Technology
Analysis of ingredients of medicinal and toxic
plants; analysis of environmental chemicals with
special reference to water and soil
contaminants. Studies on tropical endemic diseases
(malaria).

cont

National Chemical Laboratories, Ministry of Health (MOH) Analysis of Food and Feed & water for Quality control and their fitness for human consumption; Study and analysis of food products for registration; Analysis of Toxic chemicals and contaminants; Research and surveys; and Training. Sudanese Standards & Metrology Organization Analysis of exported and imported products for compliance with specifications; Research, supervision; and Training.

National Chemical Laboratories, Ministry of Health (MOH) Analysis of Food and Feed & water for Quality control and their fitness for human consumption; Study and analysis of food products for registration; Analysis of Toxic chemicals and contaminants; Research and surveys; and Training. Sudanese Standards & Metrology Organization Analysis of exported and imported products for compliance with specifications; Research, supervision; and Training.

National Chemical Laboratories, Ministry of Health (MOH) Analysis of Food and Feed & water for Quality control and their fitness for human consumption; Study and analysis of food products for registration; Analysis of Toxic chemicals and contaminants; Research and surveys; and Training. Sudanese Standards & Metrology Organization Analysis of exported and imported products for compliance with specifications; Research, supervision; and Training.

National Chemical Laboratories, Ministry of Health (MOH) Analysis of Food and Feed & water for Quality control and their fitness for human consumption; Study and analysis of food products for registration; Analysis of Toxic chemicals and contaminants; Research and surveys; and Training. Sudanese Standards & Metrology Organization Analysis of exported and imported products for compliance with specifications; Research, supervision; and Training.

cont

Central Petroleum Laboratories(CPL), Ministry of Energy and Mining Analysis of crude oil and petroleum products, water, and environmental sample for quality control and other purposes as required; Analysis of core samples, reservoirs fluids...etc.;Geological and geochemistry analysis; andTraining.Forensic Science Laboratory, Ministry of InteriorAnalysis of chemicals causing poisoning in homicidal, suicidal and accidental cases; On-job training.

Central Petroleum Laboratories(CPL), Ministry of Energy and Mining Analysis of crude oil and petroleum products, water, and environmental sample for quality control and other purposes as required; Analysis of core samples, reservoirs fluids...etc.;Geological and geochemistry analysis; andTraining.Forensic Science Laboratory, Ministry of InteriorAnalysis of chemicals causing poisoning in homicidal, suicidal and accidental cases; On-job training.

Central Petroleum Laboratories(CPL), Ministry of Energy and Mining Analysis of crude oil and petroleum products, water, and environmental sample for quality control and other purposes as required; Analysis of core samples, reservoirs fluids...etc.;Geological and geochemistry analysis; andTraining.Forensic Science Laboratory, Ministry of InteriorAnalysis of chemicals causing poisoning in homicidal, suicidal and accidental cases; On-job training.

Central Petroleum Laboratories(CPL), Ministry of Energy and Mining Analysis of crude oil and petroleum products, water, and environmental sample for quality control and other purposes as required; Analysis of core samples, reservoirs fluids...etc.;Geological and geochemistry analysis; andTraining.Forensic Science Laboratory, Ministry of InteriorAnalysis of chemicals causing poisoning in homicidal, suicidal and accidental cases; On-job training.

cont

<p>National Medical Laboratory, Ministry of Health Analysis of biomedical samples; Research; Training; and Supervision on private medical laboratories; Evaluation of public health pesticides for registration purposes; Monitoring of susceptibility and resistance to pesticides. National Malaria Administration, Ministry of Health Monitoring of vector susceptibility and/or resistance; Research and Training on IVM methods and DDT alternatives.</p>	<p>National Medical Laboratory, Ministry of Health Analysis of biomedical samples; Research; Training; and Supervision on private medical laboratories; Evaluation of public health pesticides for registration purposes; Monitoring of susceptibility and resistance to pesticides. National Malaria Administration, Ministry of Health Monitoring of vector susceptibility and/or resistance; Research and Training on IVM methods and DDT alternatives.</p>
<p>National Medical Laboratory, Ministry of Health Analysis of biomedical samples; Research; Training; and Supervision on private medical laboratories; Evaluation of public health pesticides for registration purposes; Monitoring of susceptibility and resistance to pesticides. National Malaria Administration, Ministry of Health Monitoring of vector susceptibility and/or resistance; Research and Training on IVM methods and DDT alternatives.</p>	<p>National Medical Laboratory, Ministry of Health Analysis of biomedical samples; Research; Training; and Supervision on private medical laboratories; Evaluation of public health pesticides for registration purposes; Monitoring of susceptibility and resistance to pesticides. National Malaria Administration, Ministry of Health Monitoring of vector susceptibility and/or resistance; Research and Training on IVM methods and DDT alternatives.</p>

cont

Occupational Health Laboratory Determine the levels of toxic pollutants in the work place and environment & their adverse health effects; Survey; Research; and Training. Customs Laboratories Testing of samples for tariff classification and control of goods and narcotics in entry ports (sea, air.. etc).

Occupational Health Laboratory Determine the levels of toxic pollutants in the work place and environment & their adverse health effects; Survey; Research; and Training. Customs Laboratories Testing of samples for tariff classification and control of goods and narcotics in entry ports (sea, air.. etc).

Occupational Health Laboratory Determine the levels of toxic pollutants in the work place and environment & their adverse health effects; Survey; Research; and Training. Customs Laboratories Testing of samples for tariff classification and control of goods and narcotics in entry ports (sea, air.. etc).

Occupational Health Laboratory Determine the levels of toxic pollutants in the work place and environment & their adverse health effects; Survey; Research; and Training. Customs Laboratories Testing of samples for tariff classification and control of goods and narcotics in entry ports (sea, air.. etc).

cont

Geological Research Laboratory Hard rock analysis; Minerals studies. Quality Control laboratory, Ministry of Electricity Quality control aspects of water, petroleum products and lubricants; Training.

Geological Research Laboratory Hard rock analysis; Minerals studies. Quality Control laboratory, Ministry of Electricity Quality control aspects of water, petroleum products and lubricants; Training.

Geological Research Laboratory Hard rock analysis; Minerals studies. Quality Control laboratory, Ministry of Electricity Quality control aspects of water, petroleum products and lubricants; Training.

Geological Research Laboratory Hard rock analysis; Minerals studies. Quality Control laboratory, Ministry of Electricity Quality control aspects of water, petroleum products and lubricants; Training.

Implementation strategy

- This implementation strategy serves as a road-map; how to reach the objectives set in the Stockholm convention. The main elements of the strategy, from the Sudanese perspective, are as follows:
- * Sudan is prepared to eliminate the use of the eight pesticides mentioned in Annex A; In practice this objective means that Sudan will not allow the re-use or re-introduction of these substances, which are no more used and, further, will actively seek cooperation and means to manage and eliminate the existing obsolete stocks. The pesticide strategy is supported by a concrete action plan.

Cont.

Sudan will identify, label and remove from use the equipment using polychlorinated biphenyls (PCB) and make efforts to reduce the possible exposures and to control risks as far as the equipment containing PCB is still in use. Further, Sudan will make efforts to manage and treat the PCB containing equipment and PCB as substance by the agreed deadlines of 2025 and 2028, respectively. An accelerated phase-out of PCB is sought. The PCB elimination strategy is supported by a concrete action plan.

Cont.

Sudan will restrict the application of DDT in disease vector control when in utmost need only, if ever, and apply it in accordance with the World Health Organization recommendations. However, Sudan will actively continue the national research work on alternative methods and substances to replace DDT. To avoid the risks, however, Sudan will seek an entry to the DDT in the register of exemptions as established by the Stockholm Convention. However, Sudan is aware that entry to the register is a temporary action that doesn't replace the efforts to phase-out and eliminate the use of DDT.

Cont.

Sudan will identify the known and assumed sources of the production of dioxins and furans and will further put extensive efforts and other resources to reduce the unintentional production by adopting the Best Available Technologies (BAT) and the Best Environmental Practices (BEP). The strategy is supported by concrete action plans covering the most important and critical emission sources.

Operational Objectives

- The implementation strategy consists of five major parts covering the actual, operational objectives in the management, phase-out and elimination of POPs; the five parts are:
 - a) Development and setting up the necessary legal and administrative framework including the awareness raising within the stakeholders, non-sector specific support activities such as information exchange, monitoring and reporting mainly to inform the international community and the parties of the Stockholm Convention to keep Sudan in the page of the development.

Cont.

- b) Management of POP pesticides and their obsolete stocks,
- c) Management of unintentional production of dioxins and furans,
- d) The management and elimination of PCB, and
- e) Management and/or elimination (as appropriate) of DDT in vector control

Cont.

The overall strategy to reach the objectives established above will be a combination of several measures including direct government involvement (regulations and law enforcement efforts), support to the local actors, direct market instruments like possible subventions and tax-breaks, seeking international cooperation and co-funding. An essential part of the POPs management and phase-out efforts is the extensive regional and international cooperation regarding both the impacts assessment as well as the management and phase-out measures, both regulatory and technical.

Cont.

The major, tangible implementation strategies are supported by action plans and largely quantified programmes and projects while some POPs areas still need further elaboration within the opted strategy before being tuned into more tangible actions and projects. Further, the important support activities like monitoring, reporting and POPs related research and development are also dealt with.

■ **THANK YOU**