



**UNITED NATIONS  
ENVIRONMENT PROGRAMME  
CHEMICALS**



**PROCEEDINGS**

**Subregional Workshop on Support for the Implementation  
of the Stockholm Convention on Persistent Organic  
Pollutants (POPs)**

**Ouagadougou, Burkina Faso  
25 February - 1 March 2002**



**Global Environment Facility**

**IOMC**

**INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS**  
A cooperative agreement among UNEP, ILO, FAO, WHO, UNIDO, UNITAR and OECD



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This publication is produced within the framework of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC).

The **Inter-Organization Programme for the Sound Management of Chemicals (IOMC)**, was established in 1995 by UNEP, ILO, FAO, WHO, UNIDO and OECD (Participating Organizations), following recommendations made by the 1992 UN Conference on Environment and Development to strengthen cooperation and increase coordination in the field of chemical safety. In January 1998, UNITAR formally joined the IOMC as a Participating Organization. The purpose of the IOMC is to promote coordination of the policies and activities pursued by the Participating Organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

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## **1 INTRODUCTION**

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The Stockholm Convention on Persistent Organic Pollutants was adopted and opened for signature at the Diplomatic Conference held 22 to 23 May 2001 in Stockholm, Sweden. Countries will need to determine whether they will ratify the Convention and if so begin taking the legal, administrative and other steps necessary to ratify. The early development of national implementation plans (NIP) as required by Article 7 of the Convention will help them in this process, and will enable countries to meet their obligations under the Convention.

It is highly desirable that the Convention becomes operational quickly. Early ratification by countries is the key. It is thus essential that all countries become familiar with the Convention, its benefits, and sources of support for its implementation as quickly as is possible. Early coverage of all regions is also necessary to ensure equitable access to the interim financial mechanism and other funding sources.

UNEP Chemicals, together with the Global Environmental Facility (GEF) secretariat is organizing a series of sub-regional workshops to Support the Implementation of the Stockholm Convention on POPs. The workshops are funded through a GEF Medium Sized Project with co-funding from the Government of Sweden. The third workshop, organized in collaboration with the Ministry of Environment and Water, Ouagadougou, Burkina Faso, was held at the International Conference Centre, Ouagadougou, Burkina Faso, 25 February to 1 March 2002. The meeting was organized within the framework of the UNEP Chemicals capacity building program and primarily aimed at providing assistance to developing countries in strengthening their national chemicals management programs with regard to their implementation and ratification of the Stockholm convention on POPs and related instruments, e.g. the Rotterdam convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Basle Convention on the Control of Transboundary Movement of Hazardous Wastes.

The participants were senior government managers and decision-makers from environment and other government authorities from 25 Francophone African countries and representatives from international organizations, industry, academia and environmental NGOs.

The purpose of the workshop was to inform countries on the obligations and the steps needed for ratification and implementation of the Stockholm Convention on POPs, and the Rotterdam Convention on Prior Informed Consent (PIC) and to advise them on how to consider approaches for obtaining support for implementation related activities, e.g. development of National Implementation Plans (NIPs). In addition, countries were informed on how to develop adequate and effective policies and legislation as part of their national strategies, action plans and programs for the sound management of chemicals and to assist national officials in implementing national and regional or sub-regional actions to reduce and/or eliminate releases of persistent organic pollutants (POPs).

The present report contains the programme and the presentations given by countries and lecturers during the workshop. In addition, it presents the outcome of working group discussions on the obligations of the Stockholm Convention and its interim financial mechanism.

## 2 WORKSHOP PROGRAMME

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*24 February (Sunday)*

Arrival of participants, hotel accommodation

*25 February (Monday)*

09:00-09:30 Registration of participants

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### I. OPENING SESSION

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Session chair: : Mr. Michel Yamaogo, Directeur, MEE

09:30-10:00	<p>Official opening of the meeting</p> <ul style="list-style-type: none"> <li>• Welcoming remarks by hosts and organizers</li> </ul>	<p>Director, MEW and Ms. Fatoumata Ouane, UNEP Chemicals, Geneva, Switzerland</p>
10:00-10:15	<b>Coffee break</b>	
10:15-10:30	<ul style="list-style-type: none"> <li>• Introduction of participants</li> </ul>	All
10:30-10:40	<ul style="list-style-type: none"> <li>• Overview of programme</li> </ul>	Dr. Bo Wahlström, UNEP
10:40-11:00	<ul style="list-style-type: none"> <li>• Expectations from UNEP Chemicals</li> </ul>	Ms. Fatoumata Ouane, UNEP
11:00-11:15	<ul style="list-style-type: none"> <li>• Expectations from the Global Environmental Facility (GEF)</li> </ul>	Mr Stefano Bologna, UNEP/GEFCO

### II. THE CONVENTIONS

11:15-12:30	<p>Overview of Stockholm Convention on POPs</p> <p>Overview of Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade</p> <p>Overview of the Basel Convention on the Control of Transboundary Movement of Hazardous Waste</p>	<p>Dr. John Buccini, Chair, POPs INC</p> <p>Ms. Fatoumata Ouane, UNEP</p> <p>Mr Ibrahima Sow, SBC</p>
12:30-13:30	<b>Lunch break</b>	

### III. CURRENT STATUS OF TOXICS LEGISLATION IN THE SUBREGION

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Session chair:

13:30-15:30 Country presentations, focusing on legislative and regulatory action on toxic substances, pesticides, industrial chemicals and by-product POPs.

15:30-16:00 **Coffee break**

16:00-18:00 Country presentations (continued)

Industry and public interest NGO presentations

*26 February (Tuesday)*

#### **IV. STOCKHOLM CONVENTION OBLIGATIONS FOR POPS AND RELATED INSTRUMENTS**

Session Chair: Mr. Amule Pascal Mady, RDC

##### **A. Intentionally Produced POPs**

09.00-10.30 Pesticides and Industrial Chemicals Dr. John Buccini

10.30-11.00 **Coffee break**

##### **B. Unintentionally Produced POPs**

11:00-12:30 By-products Dr. John Buccini

National approach to unintentionally produced POPs

##### **C. Stockpile and Waste Issues**

12.30-13.30 Stockholm Convention requirements Dr. John Buccini

Relationship between Basel, Rotterdam and Stockholm Convention Ms. Fatoumata Ouane, UNEP

13.30-14.30 **Lunch break**

14.30-15.30 Activities of the Basel Regional Training and Technology Transfer Center Mr. Ibrahima Sow, SBC

Obsolete pesticides issues FAO

15:30-16:00 **Coffee break**

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**D. General obligations**

16.00-16.30 National Implementation plans Dr. John Buccini

**E. Interim activities and INC-6**

16.30-17.00 Final Act of the Stockholm Convention and preparations for INC-6 Dr. Bo Wahlström, UNEP

*27 February (Wednesday)*

**V. BASIC FEATURES OF CHEMICALS LEGISLATION AND MANAGEMENT**

Session chair: Mr. Mohamed El-Kebir Lekehal, Algérie

09:00-10.00 Chemicals Control, responsibilities, management, institutions Mr. Bengt Bucht, KemI, Sweden

10.00-10.15 Chemicals control, continued, National Profiles Mr. Ian Huismans, UNITAR

10.15-10.45 General features of chemicals legislation and regulation, principles, legislative hierarchies etc. Mr. Masa Nagai, UNEP

10.45-11.15 **Coffee break**

11.15-11.45 Model legislation Mr. Masa Nagai, UNEP

11.45-12.30 Questions on legislation and management

**VI. FUTURE NATIONAL ACTION AND REGIONAL CO-OPERATION**

12.30-13.00 Introduction to Working Groups, tasks and expected outcome Dr. Bo Wahlström, UNEP

Formation of working groups on: (1) intentionally produced POPs (pesticides and industrial chemicals), stockpiles and wastes, and (2) unintentionally produced POPs ( by-products) and wastes.

**Working Group discussions:**

Development of national strategies, action plans, programmes and projects for implementing legislation to meet obligations in the Stockholm Convention on POPs and

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related instruments.

13.00-14:00 **Lunch break**

14:00-15:30 Continued group discussions.

15:30-16:00 **Coffee break**

16:00-19:00 Continued group discussions

**28 February (Thursday)**

Session chair: M Gustave Doungoube , Central African Rep.

9:00-10:00 Working Group presentations in plenary

10:00-11:00 General discussion  
 Follow up on working group discussions  
 National needs for implementing legislation and chemicals management tools  
 Needs and prospects for sub-regional and regional co-operation  
 Needs and prospects for identifying partners inside and outside the sub-region for co-operation in implementing chemicals legislation in countries of the sub-region

11:00-11:30 **Coffee break**

**VII. FINANCIAL MECHANISM FOR THE STOCKHOLM CONVENTION ON POPS**

11.30-12.30 Introduction to the Global Environmental Facility (GEF) M Stefano Bologna, UNEP/GEFCO

12.30-13.30 **Lunch break**

13.30-15.00 GEF Initial Guidelines for Enabling Activities M Stefano Bologna, UNEP/GEFCO

15.00-15.30 Country roundtable; situation regarding National Implementation Plans (NIPs)

15.30-16.00 **Coffee break**

16.00-16.30 Questions and answers

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16.30-17.00	Introduction to Working Group discussions on GEF enabling activities and national implementation plans	M Stefano Bologna, UNEP/GEFCO
17.00-18.00	<b>Working Group discussions</b>  Session chair: Ms Bouchra Dahri, Marocco  <i>1 March (Friday)</i>	All
9.00-12.00	Working groups discussions (continued)	
12.00-13.00	<b>Lunch break</b>	
13.00-14.00	<b>Working Group presentations in plenary</b>	
14.00-15.00	The GEF implementing and executing agencies <ul style="list-style-type: none"><li>• WB</li><li>• FAO</li><li>• UNIDO</li><li>• UNITAR</li><li>• UNEP</li></ul>	
15.00-16.00	<b>General discussion on the development of NIPs</b>	All
16.00-16.30	<b>Closing remarks</b>	M Michel Yamaogo, Dir. MEE M Stefano Bologna, UNEP/GEFCO Ms. Fatoumata Ouane, UNEP
16.30	Closure of the meeting	

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## 4 SIGNATORY COUNTRIES AND PARTIES TO THE STOCKHOLM CONVENTION ON POPS AS OF 22 MAY 2002.

### Francophone Africa

Countries	Signatory	Not signatory	Party
Algeria	X		
Angola		X	
Benin	X		
Burkina Faso	X		
Burundi	X		
Cameroon	X		
Cap Verde		X	
Central African Republic	X		
Chad	X		
Comoros	X		
Congo(Brazzaville)	X		
Côte d'Ivoire	X		
Democratic Republic of Congo		X	
Djibouti	X		
Guinea Equatorial		X	
Gabon	X		
Guinea	X		
Guinea Bissau	X		
Madagascar	X		
Mali	X		
Mauritania	X		
Morocco	X		
Mozambique	X		
Niger	X		
Rwanda			X
Sao Tomé and Principe	X		
Senegal	X		
Togo	X		
Tunisia	X		

## 5 WORKING GROUPS

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### Issues and Questions on Intentionally Produced POPs Stockholm Convention

1. Legal and/or administrative measures to control intentionally produced POPs:
  - legal or administrative means to restrict and/or eliminate POPs
  - control of production and use
  - addressing pesticides
  - addressing industrial chemicals
2. Exemptions:
  - Specific exemptions needed for any of the (8) POPs in Annex A and B
    - mechanism to notify the secretariat
    - means to control/minimize releases to environment and exposure to humans
  - Site-limited exemptions needed for HCB or DDT
    - reporting measures, etc.
3. Implementation of trade measures:
  - Measures for Parties
  - Non-parties
    - reporting requirements
4. Implementation of PCB regime to achieve the main goals:
  - Cessation of production (immediately/entry-into-force)
  - Phase out of existing equipment by 2025
  - ESM of wastes by 2028
5. Implementation of DDT regime to achieve the main goals:
  - Need to produce or use for the acceptable purpose (disease control programs)
  - Ability to develop national action plan
  - Ability to inventory existing/produced DDT
  - Research and development plans/needs
6. Assessment of new and existing chemicals and pesticides:
  - Planned or existing programs
  - Ability to use Annex D criteria into existing/planned programs
7. Provisions for stockpiles and wastes:
  - Strategies for stockpiles and wastes

- for identification
- for ESM collection, transport, handling and transport
- for meeting requirements for transboundary movement (N.B. PCB regime)
- for ESM disposal
- Strategies for identifying contaminated sites

**General Provisions:**

1. Information exchange
  - establish Designated National Authority
2. Public information, awareness and education
3. Research, development and monitoring
4. Reporting requirements
5. Development of national implementation plan (NIP).
  - How would the above link into the development of a NIP?
  - Steps to take
  - Assistance needed
  - Funding required

**Points to stimulate discussion (not meant to be a limiting list!):**

- How does present legislation handle intentionally produced POPs identified under the Stockholm convention?
  - Is there legislation for their generation and release?
  - Is there legislation for stockpiles and wastes containing these?
  - What changes are needed to implement and ratify the Stockholm convention?
  - What are the needs in developing national legislation that UNEP/other IGOs can help meeting?
  - Needs for infrastructure changes?
- How would enforcement of legislation and other regulatory measures, adopted in implementation of the Stockholm convention, be carried out?
- What are the needs and possibilities for co-operation on implementing the Stockholm convention?
  - Sub/regional
  - Bilateral
- What would be the necessary steps for countries to take to ratify the Stockholm convention?



**Rotterdam Convention**

Legal and or administrative measures to implement the Rotterdam Convention.

- Nomination of Designated National Authority (DNA)
- Notification of Ban or Severe Reduction
- Proposal of Severely Hazardous Pesticide Formulations
- Import decisions
- Import and export control

## **Working Group 1 Intentionally Produced POPs**

President: Mr Zadi Dakouri Raphaël

Focal Point for the Stockholm Convention (Ivory Coast)

Rapporteur: Mr Essobiyou Thiyu

Focal Point for the Stockholm Convention (Togo)

After discussion, group 1 retained the following points :

- Legal aspects of industrial chemicals and pesticides
- Changes required in view of implementing and ratifying the Stockholm Convention

### **1) Legal aspects**

#### **Present Situation**

Existence in some States of legal texts covering industrial chemicals and pesticides in a broad manner

Existence of specific texts related to pesticides in certain countries.

Existence of specific texts concerning POPs (PCBs) in two countries (Algeria – Ivory Coast)

Need to reinforce national legislation on industrial chemicals and pesticides

Training of jurists with a view to developing legislative texts

Integration of the three conventions (Rotterdam, Basel, and Stockholm) into national legislation

Development of specific texts for each POP

Harmonisation of legislation at national, sub-regional and regional levels

Information, and awareness raising in the population concerned (Publication of the texts, etc.)

### **2) Strengthening of capacities in the infrastructures, and co-operation between states**

Capacity building of technical infrastructures at the national or sub-regional and regional levels, of technical, scientific, administrative, and technical and financial assistance infrastructures, etc.

Co-operation between states, (exchange of information, exchange of experiences between States, etc.)

### **Changes Which Are Necessary For Applying And Ratifying The Stockholm Convention**

Implementation of the Stockholm Convention

#### **1) Development of enabling activities**

Information and awareness-raising of political decision makers for the signature of the Convention

Choice of the implementing agencies  
Development of the request for finance (approval by the GEF Focal Point)  
Development of the National Plan for the Implementation of the Stockholm Convention  
Adoption and implementation of the NIP

2) Capacity building in infrastructures :

Administrative  
Technical  
Technological  
Scientific

3) Co-operation between States

Exchange of information  
Exchange of experiences between States  
Good use of the Sub-regional Training and Technology Transfer Centres, in particular the Dakar Centre

**Ratification of the Stockholm Convention**

Information and awareness raising of political decision makers and other national partners.

**RECOMMENDATIONS**

- Ratification, as soon as possible, of the Stockholm Convention by all countries (before May 2002)
- Encouragement of the Focal Points to participate in all meetings concerning the Stockholm Convention
- Integration of the Basel, Rotterdam, and Stockholm Conventions into all National, sub-regional and regional legislation
- Involvement of the African organisations, (OAU, CEDEAO, etc.) in the implementation of the three Conventions
- Participation of the private sector and of the civil community (NGOs) in the implementation of the three Conventions
- Making maximum use of Regional Training and Technology Transfer Centres in the implementation of the three Conventions
- Exchange of experiences between countries (PCB Project, etc.)

**Existing legislation for Pesticides and Industrial Chemicals, including POPs**

Country	Pesticides		Industrial chemicals	
	Yes	No	Yes	No
Guinea Bissau	X			X
Benin	X			X
Madagascar	X			X
Comoros	X			X
Morocco	X			
Mauritania	X (DDT)			
Chad	X			
Gabon	X (global)			
Senegal	X (global)			
Congo Brazzaville	X (global)			
C. A. R	X			
Cameroon	X (Partial)			
Sao Tome			X	
Niger	X			
Mali	X			X
Burundi	X (global)			
Algeria	X			
Burkina	X			?
Democratic Republic of Congo		X		
	(project)			
Côte d'Ivoire		X	X	
Togo	X			X
Djibouti				

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## Issues and Questions on Unintentionally Produced by-products

### Stockholm Convention

#### Provisions for unintentionally produced POPs:

1. Legal and/or administrative measures to control unintentionally produced POPs:
  - Legal or administrative means to restrict and/or eliminate generation and release of these POPs
    - Ability to develop action plan within 2 years
    - Ability to implement action plan
    - Existing or planned inventories/estimates of releases
    - Release reduction vs source elimination
    - Substitution or modification of materials, products and processes
2. Provisions for identified sources:
  - New vs. existing
  - BAT requirements for new sources
  - Promotion of BAT for existing and some new sources
  - Promotion of BEP for new and existing sources
3. Provisions for wastes:
  - Strategies for wastes
    - for identification
    - for ESM collection, transport, handling and transport
    - for meeting requirements for transboundary movement (N.B. PCB regime)
    - for ESM disposal
  - Strategies for identifying contaminated sites

#### General Provisions:

1. Information exchange
  - establish Stockholm Focal Point
2. Public information, awareness and education
3. Research, development and monitoring
4. Reporting requirements
5. Development of implementation plan.
  - How would the above link into the development of a NIP?
  - Steps to take

- Assistance needed
- Funding required

**Points to stimulate discussion (not meant to be a limiting list!):**

- How does present legislation handle unintentionally produced POPs identified under the Stockholm convention?
  - Is there legislation for their generation and release?
  - Is there legislation for wastes containing these?
  - What changes are needed to implement and ratify the Stockholm convention?
  - What are the needs in developing national legislation that UNEP/other IGOs can help meeting?
  - Needs for infrastructure changes?
- How would enforcement of legislation and other regulatory measures, adopted in implementation of the Stockholm convention, be carried out?
- What are the needs and possibilities for co-operation on implementing the Stockholm convention?
  - Sub/regional
  - Bilateral
- What would be the necessary steps for countries to take to ratify the Stockholm convention?

## Working Group 2 Unintentionally Produced POPs

President: Mlle Bouchra DAHRI

Rapporteur\_: Mme Fagamous SY

### POINTS TO STIMULATE DISCUSSIONS

How does present legislation deal with pops listed in the Stockholm Convention which are produced non-intentionally?

#### **I- Does legislation exist concerning their production and emissions they can produce?**

Certain countries have legislation on these chemicals but they are not specific for non-intentional pops.

In this respect, the group recommends:

Reinforcing of legislation, where basic texts already exist, by complementary texts, in order to take into account pops, which are produced non-intentionally; for countries not having such legislation, it should be created.

#### **II- Does legislation exist covering wastes, which contain some of these products?**

African countries, which are parties to the Basel Convention, possess legislation concerning wastes.

For those for which this is not the case, encourage them to develop national legislation on wastes.

In this legislation, take into account pops emissions.

#### **III- What changes are necessary for implementing and ratifying the Stockholm convention?**

- Inform, and raise awareness of decision makers and of all stakeholders involved, on the importance of the Stockholm Convention in order to encourage countries to ratify it.
- Strengthen capacities of the convention focal points of countries so that they can better inform and sensitise all stakeholders concerned.

#### **IV- What are the requirements concerning the development of national legislations to which UNEP and IGOs can contribute?**

- Technical and financial assistance (in particular assistance from the GEF) to help develop environmental codes and national standards for countries which do not already have them, and strengthening of the national legislation to take into account questions relating to pops, in countries where it exists.



**V- What are the changes, which infrastructures require?**

Putting into place or adaptation of appropriate infrastructures (administrative, legal, and technical) for implementation of the convention

**– in what way could legislation, as well as other regulatory measures adopted during the implementation of the Stockholm Convention, be put into place?**

- Strengthen legislation in countries where it exists by means of additional texts specific to pops;
- Induce public powers to adopt legislative texts specific to pops;
- Strengthen capacities with a view to adapting legislation to the needs of the implementation of the Stockholm convention

**Vii – what are requirements, and possibilities of co-operation, in the framework of the implementation of the Stockholm Convention?**

- Sub-regional
- Bilateral
- Reinforcement and use of the regional Basel Convention centres as structures for co-operation in the framework of the implementation of the Stockholm Convention;
- Promote technical and financial co-operation from the bilateral and multi-lateral points of view.

**Viii – what are the necessary steps, which countries should take in order to ratify the Stockholm Convention?**

- Inform, and sensitise decision makers, parliamentarians, the civil community, and all stakeholders involved by promotional campaigns for the convention.

Mauritania: framework law on the conservation of the environment, which takes into account, pops by-products;

Burkina Faso: environmental code with fairly general application texts;

Djibouti: taking into account of recent environmental questions – non-existence of an environmental code;

Guinea: no regulations, which are specific to pops, but this, is implicitly included in the texts of laws on the environment;

Congo Brazzaville: recent questions on pops. During the development of the environmental code, these questions were not taken into account

## **Financial mechanism for the Stockholm Convention on POPs Working Group discussion**

### *Scope & Objective*

This WG discussion is concerned i) with the steps that countries need to take to access GEF funding for preparation of their NIP; and ii) the additional type of assistance that may be required from the GEF (in addition to funding for NIP; at the sub-regional level for example).

Participants should discuss and understand the process of developing proposals for a NIP, and make recommendations to the GEF (and its Agencies) on how best to assist countries in this interim period in the first years of the implementation of the Convention.

### *Some leads for discussion*

#### 1. The GEF guidelines for enabling activities

Adequacy of the guidelines  
Suggestions for improvements

#### 2. The process of accessing GEF funding for NIP

Steps required to access funding  
Need for assistance in developing a proposal / what type?

#### 3. The GEF

Questions about the GEF. Are they mostly covered by the workshop?  
What other type of information would you like to see?

#### 4. Assistance other than NIP at the regional/sub-regional level

Need for training / courses, regional centres of excellence, etc?

In this first phase of initial assistance, GEF's assistance will be focused on NIPs, which will serve as a basis for addressing priority issues in a further phase. However, the GEF guidelines recognise that there might be a need for some additional activities at the regional/sub-regional level. This workshop is an example of such activities.

#### 5. Other efforts at the sub-regional level?

Preparation of action plans at the Subregional level  
Support needed for what type of regional actions? (Laboratory facilities? Disposal facilities? Etc?).

## **Working Group 1 Financial Mechanism of the Stockholm Convention on POPs:**

President: Mr ZADI Dakouri Raphaël

Rapporteur: Mr HAMOUD OULD SID HAMED

After fruitful discussions, Group 1 adopted the following Action Programme, taking into account the GEF questionnaire:

### **GEF assistance for States with a view to implementing the National Plans**

a) GEF directives for accessing finance

After analysing the different steps of the GEF financing procedures which the Group considered to be relevant, certain difficulties were identified, in particular :

- The limiting date for signing the Convention
- Choice of the Implementing agency
- Lack of experience for preparing the request for finance
- Absence of Focal Points in certain countries
- The partiality of Focal Points in the choice of the implementing agency
- Slowness of the Implementing agency in preparing the application

### ***Recommendations***

- Extension of the limiting date for signature of the Convention (6 months)
- Respect of the country's wishes concerning the choice of the Implementing agency (right of the country to choose)
- Acceleration of the process of preparing the request for finance, and of its submission to the GEF
- Designation of GEF Focal Points in countries where they do not exist
- Capacity building of the GEF Operational Focal Points
- Taking into account of needs expressed by countries in their request for finance
- Economic expert evaluation before presenting the request for finance
- Simplification of procedures for making funds available
- Up-front payment of at least 30% to cover initial activities

### **GEF assistance in addition to the National Implementation Plans**

a) Assistance for Regional and Sub-regional Centres

- Capacity building in Regional and Sub-regional Centres (training, equipment, etc.)
- Exchanges of information and of expertise
- Increase in the number of sub-regional workshops
- Popularisation of the Centres' activities
- Financial and technical assistance for Centres, for developing and implementing POPs projects at the regional and sub-regional levels

- Organisation of a regional and sub-regional workshop to discuss the development of a sub-regional, regional Plan for defining a regional, sub-regional profile
- b) Assistance for sub-regional and regional infrastructures
  - Identification and reinforcement of POPs treatment units
  - Reinforcement of analytical and research laboratories

**GROUP 1: MEMBERS**

NAME AND FIRST NAMES	COUNTRY
M. ZADI Dakouri	Ivory Coast
M. ESSOBIYOU Thiya	Togo
M. Mohamed Ali Youssoufa	Comoros
M. Yambré BAYILI	Burkina Faso (Observer)
M. DOAMBA Jean Baptiste	Burkina Faso (Observer)
M. BALDE Alpha Oumar	Republic of Guinea
M. GATTA Souley Bâ	Senegal
M. BABADOUNGA Jean Baptiste	Gabon
M. Henry René DIOUF	PAN /AFRICA /IPEN
M. MADY AMULE Pascal	D. R. Congo
M. Léon HAKIZAMUNGU	Rwanda
M. Rachid Elmi HUSI	Djibouti
M. Paul W. SAVADOGO	G.C Burkina Faso (Observer)
M. Gustave DOUNGOUBE	Central African Republic
M. ADOUN Moustapha Brahim	Chad Republic
M. Ranarou MAAZOU	Niger
M. MBEGBA Alexi	Congo (Brazzaville)
M. KARIMUMURYANGO Jérôme	Burundi
M. Ibrahima SOW	UNEP/SBC
M. BILLONG Jacques	Cameroon
M. ABENILDE PIRES DOS SANTOS	Sao Tome and Principe
M. ARABIOU BARRY	Guinea Bissau
M. LEKEHAL El Kébir	Algeria
M. AZRARAK Bouodem	Algeria
M. BENALI Samir	Morocco
M. RAKOTOARISETRA HARITIANA	Madagascar
M. HAMOUD Ould Sid Ahmed	Mauritania

## **Working Group 2 Financial Mechanism of the Stockholm Convention on POPs**

President: KOUKA MAPENGO Michel / Congo Republic

Rapporteur : BEYALA Joséphine T.B. / Cameroon

After having read the terms of reference, and having clarifying certain key words, the group decided to work according to the scheme proposed (**some points for discussion**) on the two following points:

- The procedures, which countries must follow in order to accede to GEF financing,
- The sort of additional assistance from the GEF, which might be necessary, in addition to the funds, granted for the NIP.

### **PROCEDURES FOR OBTAINING GEF FINANCING**

The group was unanimous concerning the relevance of the GEF directives for enabling activities. However, taking into account the numerous discussions which took place on the clarification of certain concepts, it was suggested that the GEF increase the number of information workshops and forums in order to allow countries to better understand and familiarise themselves with the GEF directives.

Concerning the procedures for accessing GEF financing, the following was regretted:

- the lack of reliable information for countries concerning the criteria for the choice and expertise of the implementing agencies ;
- the complexity of administrative procedures at the level of the implementing agencies ;
- the difficulty of respecting the time limits for signing the Convention in countries which are in a state of insecurity (civil war, natural catastrophes).

In addition, the needs for technical and financial assistance appeared to be of the utmost importance for the preparation of the NIPs at the level of steps 2 and 3, i.e. :

- The development of POPs inventories, and evaluation of national infrastructures and capacities
- The development of a national implementation plan, and of specific action plans on POPs.

As for steps 1 to 5, related respectively to:

- the setting up of mechanisms for co-ordinating and organising the process ;
  - the approval of the NIP by the partners,
- these call for financial assistance.

Concerning the GEF, the group considers that all aspects were more or less covered, on condition that clarification be obtained on the following points :

- Outline of the application to the GEF ;
- Model for setting up a GEF project ;
- Possibilities of obtaining finance for the elimination of obsolete pesticides and for combating the pollution of continental waters by POPs

### **TYPE OF EXTRA ASSISTANCE, IN ADDITION TO NIP FUNDING**

The importance of capacity building at the sub-regional level, in order to attain a better harmonisation and co-ordination of the activities with a view to achieving an efficient implementation of the Stockholm Convention, was recognised. This could be done by reinforcing and making better use of the regional centres of the Basel Convention, and by implementing the Bamako Convention.

### **RECOMMENDATIONS**

On the basis of the above, the group recommends:

- Increasing the number of workshops and information forums in order to get a better understanding of the GEF directives;
- Increasing the time made available for signing the Stockholm Convention for countries at war, or victims of natural catastrophes;
- Easing of administrative procedures at the level of the implementing agencies;
- Organisation of workshops or forums for the presentation of the expertise of the GEF implementing agencies, with the objective of explaining the situation to countries before they make their choices;
- Strengthening of the Basel Convention regional workshops so that they can fulfil their role of training centres in fields related to POPs;
- Creation of other regional centres, in particular in Central Africa;
- Promotion of sub-regional co-operation in order to allow States to compare their experiences in the field of the development of their NIPs, this through workshops and forums;
- Implementation of the Bamako Convention for a sub-regional harmonisation of legislation.
- Setting up, in the Basel Convention Regional Centres, of laboratories capable of replying to the needs of the Stockholm Convention.

**LIST OF GROUP 2 PARTICIPANTS**

<b>N°</b>	<b>Name, first name(s)</b>	<b>COUNTRY</b>
1	BEYALA Joséphine B. Thérèse	Cameroon
2	KOUKA MAPENGO Michel	Congo
3	MUKONKOLE Marie-Rose	R.D. Congo
4	GAZA Victorine	CAR
5	Fagamou SY	Senegal
6	BOUCHRA Dahri	Morocco
7	NDIZEYE Rusakana Eliezer	Rwanda
8	Lamine THERA	Mali
9	Lawson A. LATEVI	Togo
10	PIOUPARE Françoise	Burkina
11	CONTE Lansana	Guinea
12	Assoul MOUFIDA	Algeria
13	Arlindo Carvalho	Sao-Tome
14	DIAFAROU Boubacar	Niger
15	VI Amenoun	Ivory Coast
16	Djamila HASSANBAHDON	Djibouti
17	Youssof MOURIDI	Comoros
18	Injai Julio MALAM	Guinea-Bissau
19	Mohamed OULD EL GHAOUTH	Mauritania

## 6 PRESENTATIONS

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### Overview of Programme and discussion of Goals and Output by Dr. Bo Wahlstrom

#### *Programme overview*

#### *Goals and Outputs*



MSP Workshops

#### *Purpose*

To make country officials familiar with the Stockholm Convention, its benefits and sources of support for its implementation in order for their countries to ratify the convention and take early action on POPs.



MSP Workshops



### ***Objectives***

Improve Government understanding of the Stockholm Convention, and the benefits of and the need to become a Party;

- Improve Government understanding of the nature of the problems caused by POPs;
- Help countries understand what their obligations are under the Stockholm Convention;
- Encourage and facilitate early ratification of the Convention;



MSP Workshops

### ***Objectives, continued***

- Identify some of the legislative, capacity building, investment and other infrastructural measures needed to support the implementation of the Stockholm Convention and related instruments (Basel and Rotterdam Conventions, regional agreements);
- Facilitate eligible countries' access to GEF resources for enabling activities, National Implementation Plan (NIP) development and the implementation of the Convention;



MSP Workshops

### ***Objectives, continued***

- Help Governments to begin the process of developing a NIP and other implementation/enabling activities under the Convention;
- Encourage co-operative partnerships among different sectors and stakeholders for the implementation of the Convention; and



MSP Workshops

### ***Objectives, continued***

Report on the current situation in countries of the subregion with regard to existing and planned measures for control and management of toxic substances, including plans to implement action on POPs and other toxic chemicals and to ratify the Stockholm Convention and related instruments.



MSP Workshops

## General structure of the workshop

- I. Opening Session
- II. The Conventions
- III. Current status of legislation in the region
- IV. Stockholm Convention obligations for POPs and related instruments



MSP Workshops

## V. Basic features of chemicals legislation and management

- VI. Future national action and regional cooperation (Working groups)
- VII. Financial mechanism for the Stockholm Convention (including Working Groups)





MSP Workshops

**Workshop Expectations from UNEP presented by Ms. Fatoumata Ouane**



**Workshop expectations from UNEP**

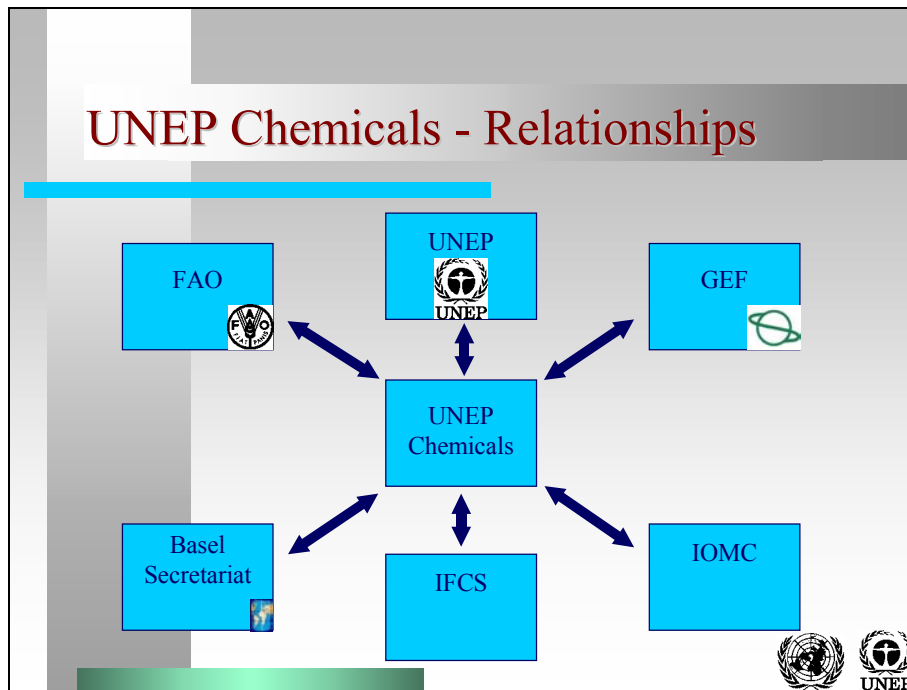
Jim Willis, Director  
UNEP Chemicals

**UNEP Chemicals - Functions**

- **Main Functional Areas:**
  - Stockholm Convention Secretariat (May 2001)
  - Rotterdam Convention Secretariat (September 1998)
  - Capacity Building
  - Assessment (POPs, PTS, Mercury)
  - Policy Development
  - Technical Support
- **Clustered with Basel Convention Secretariat (1989)**
- **Capacity Assistance Network with GEF**



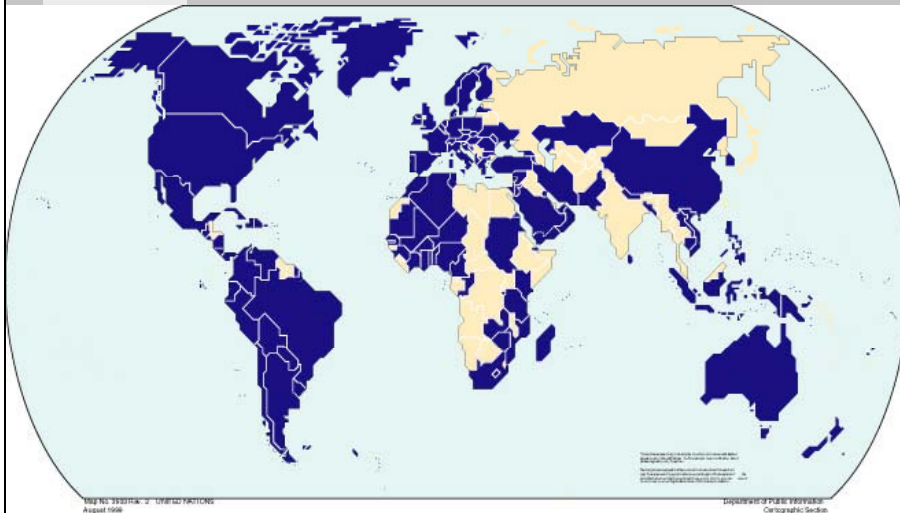
- ### UNEP Chemicals - Priorities
- **Entry into force of the Rotterdam Convention**
  - **Entry into force of the Stockholm Convention**
  - **Stockholm Convention implementation plans and support for implementation**
  - **Capacity building**
  - **Assessment: POPs, PTSs and Mercury**
  - **Chemical strategy**

## Status of signature and ratification

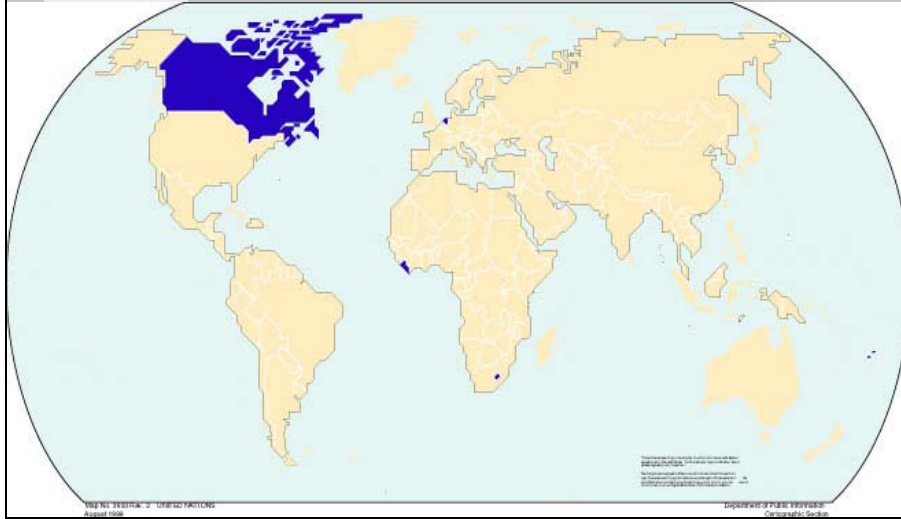
- Stockholm
- Rotterdam
- Basel



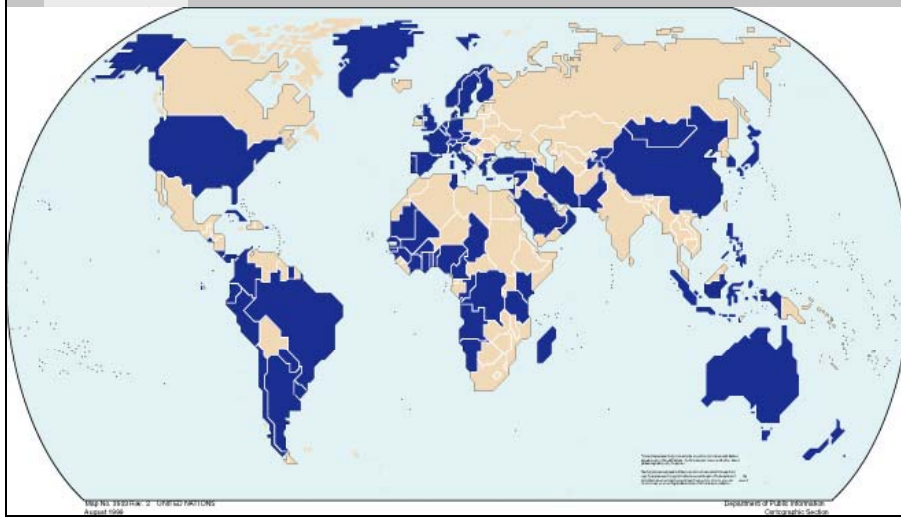
## Stockholm Signatures -127



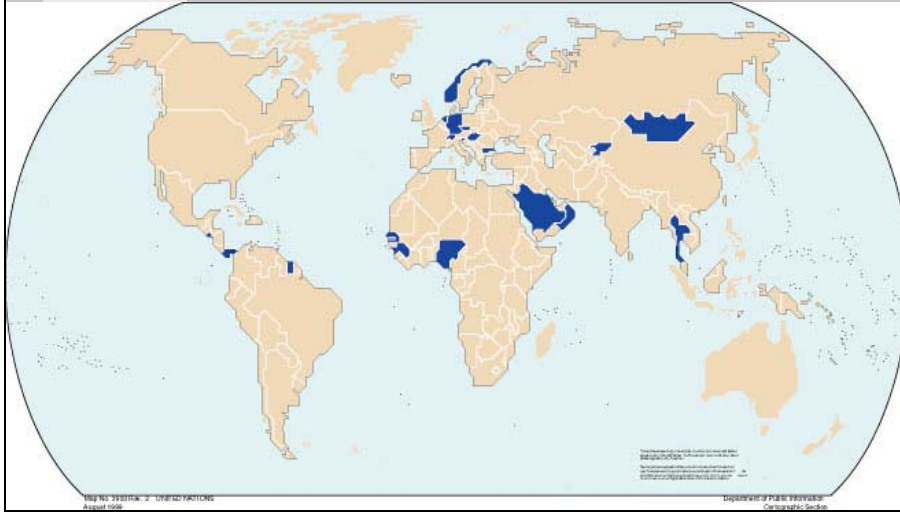
## Stockholm Ratifications - 6



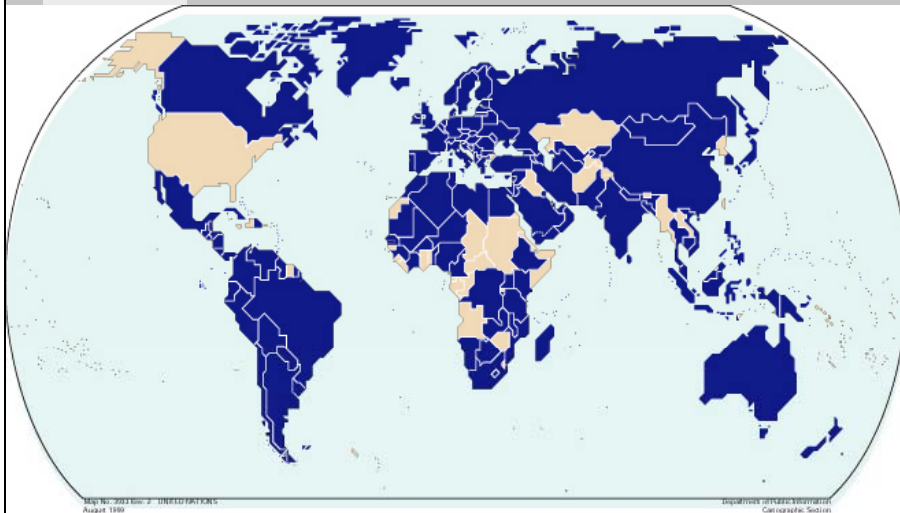
## Rotterdam Signatures - 73



## Rotterdam Ratifications - 20




## Basel Ratifications - 149






**Expectation from the Global Environment Facility** *by Mr Stefano Bologna*



 **The Global Environment Facility**  
and **Persistent Organic Pollutants**


What is the GEF?

- An independent financial mechanism that helps developing countries and economies in transition protect the global environment.
- 167 countries are members (May 2001).
- 36 countries contribute to the GEF trust fund, including developing countries.
- GEF partnerships unite governments, NGOs, scientists and the private sector.

 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

Since 1991, the GEF  
has funded more than 800  
projects in 160 countries

\$3 billion in GEF grants  
\$8 billion in co-financing




 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

The GEF Fills a Unique Niche


- GEF funding complements, and does not substitute for existing aid programs.
- GEF supports projects with global environmental benefits for which official development funds are *not* available.
- GEF pays the added costs of making development projects friendly to the global environment.




 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

### What is the GEF?

- **Project types**
  - Biodiversity
  - Climate change
  - International waters
  - Ozone depletion
  - Land degradation
- **New initiatives**
  - Sustainable transportation
  - Integrated ecosystem management
  - Agro-biodiversity
  - Persistent organic pollutants (POPs)



 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

### The Role of the GEF


- GEF is the “interim financial mechanism” for the Stockholm Convention.
- Following Convention guidance, GEF will provide funding to developing and transition countries for the implementation of some activities to address POPs
- GEF’s approach builds on its previous experience addressing the issue of contaminants, including POPs, in international waterbodies.

 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

### GEF's Initial Assistance


1. GEF will initially help countries strengthen their capacity to prepare *National Implementation Plans* (NIPs). This activity is known in the GEF as "enabling activities."
2. The NIP will help countries identify and prioritize capacity building, policy and regulatory reforms, and investments needed to address the issue of POPs.




 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

### GEF's Initial Assistance


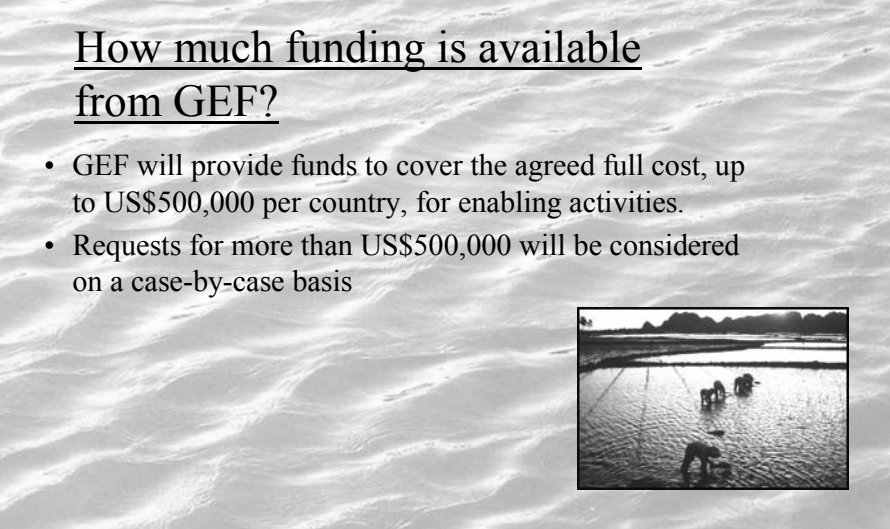
3. See the GEF document "*Initial Guidelines for Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants*" for information on NIP-eligible activities.
4. The "*Initial Guidelines*" document is available from the GEF website at [www.gefweb.org](http://www.gefweb.org).




 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

How much funding is available from GEF?


- GEF will provide funds to cover the agreed full cost, up to US\$500,000 per country, for enabling activities.
- Requests for more than US\$500,000 will be considered on a case-by-case basis




 The  
Global Environment Facility  
and **Persistent Organic Pollutants**

How can I improve my country's technical capacity to prepare its NIP?


1. GEF will provide capacity building support to countries by organizing:
  - a. workshops to familiarize countries with the application of the GEF's initial guidelines for enabling activities;
  - b. specialized training at the regional or sub-regional level



 The Global Environment Facility  
and **Persistent Organic Pollutants**

How can I apply for GEF funding?

- The “Initial Guidelines” document includes a proposal outline.
- Contact one of the GEF’s partner agencies to assist you throughout the application process and during the implementation of the enabling activities

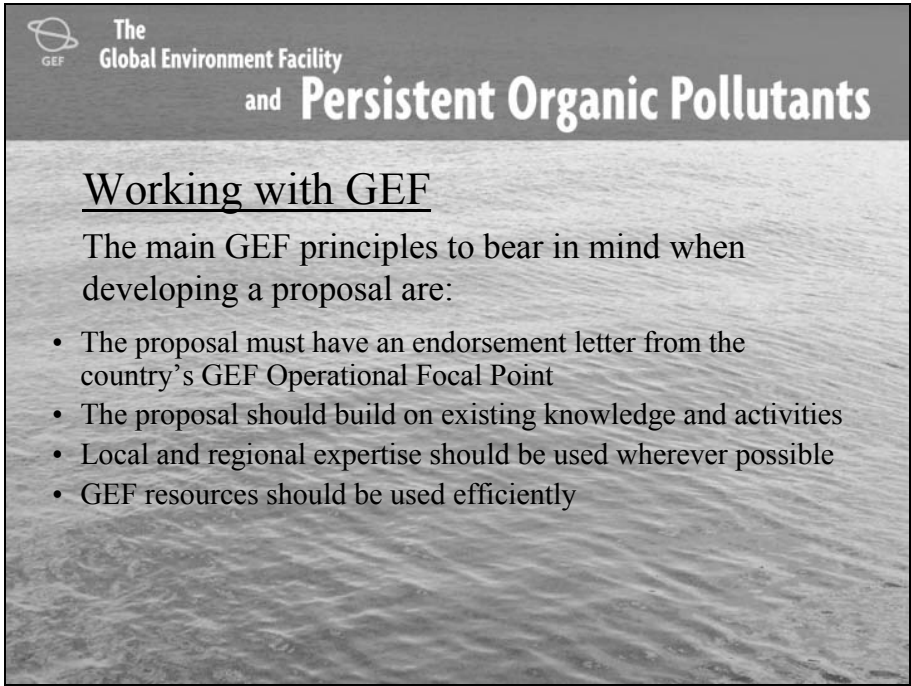


 The Global Environment Facility  
and **Persistent Organic Pollutants**

GEF Partner Agencies

- United Nations Environment Programme
- United Nations Development Programme
- World Bank
- African Development Bank
- Asian Development Bank
- European Bank for Reconstruction and Development
- Food and Agriculture Organization
- Inter-American Development Bank
- UN Industrial Development Organization





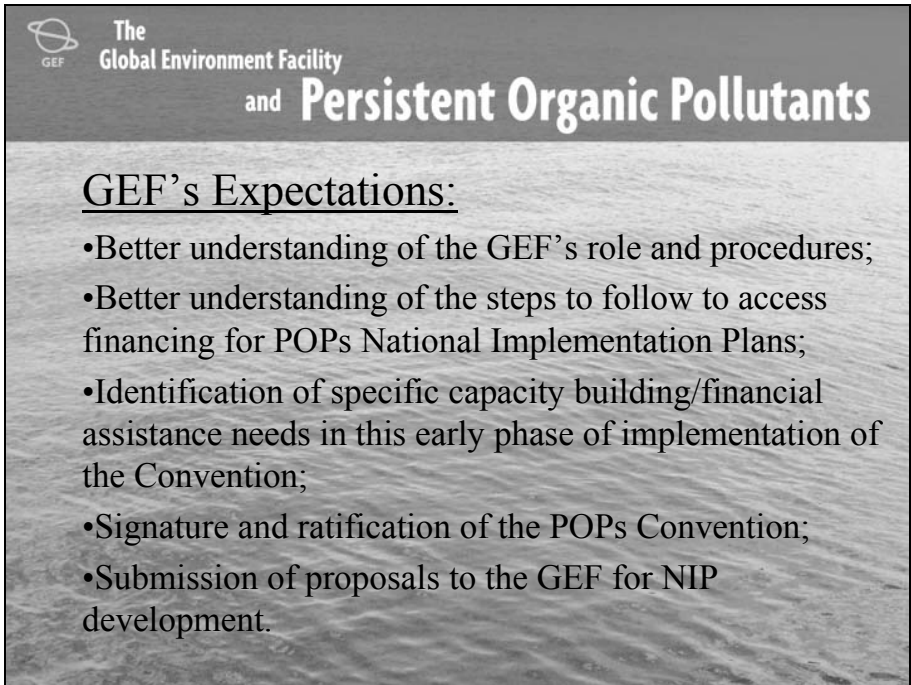
The slide features a dark grey header with the GEF logo (a globe with 'GEF' below it) on the left. To the right of the logo, the text reads 'The Global Environment Facility' in a smaller font, followed by 'and Persistent Organic Pollutants' in a larger, bold font. The background of the slide is a light grey image of water ripples. The main content is centered and includes a section header, a paragraph, and a bulleted list.

**The Global Environment Facility  
and Persistent Organic Pollutants**

Working with GEF

The main GEF principles to bear in mind when developing a proposal are:

- The proposal must have an endorsement letter from the country's GEF Operational Focal Point
- The proposal should build on existing knowledge and activities
- Local and regional expertise should be used wherever possible
- GEF resources should be used efficiently

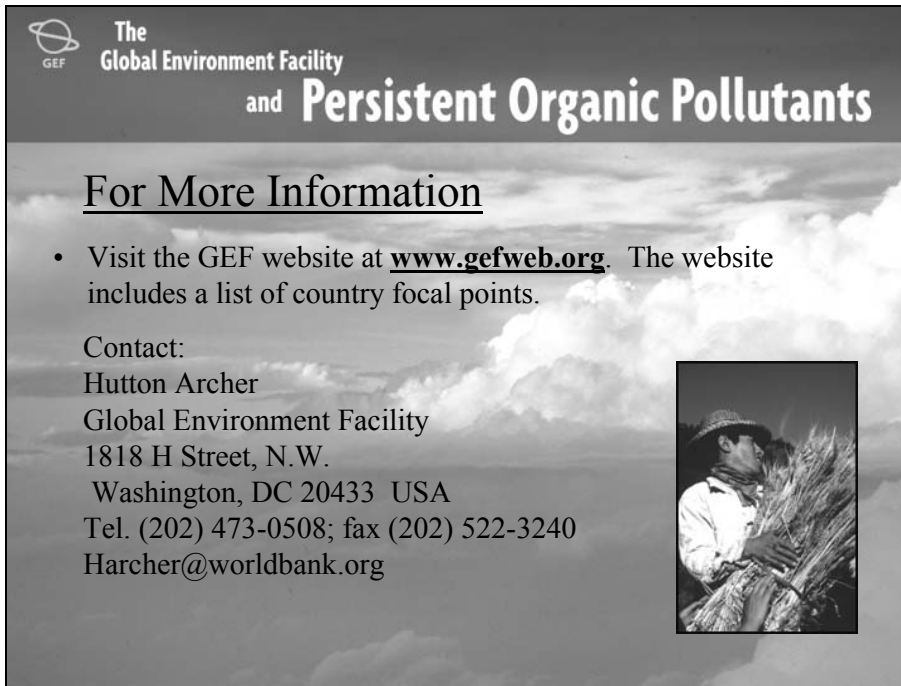



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**The Global Environment Facility  
and Persistent Organic Pollutants**

GEF's Expectations:

- Better understanding of the GEF's role and procedures;
- Better understanding of the steps to follow to access financing for POPs National Implementation Plans;
- Identification of specific capacity building/financial assistance needs in this early phase of implementation of the Convention;
- Signature and ratification of the POPs Convention;
- Submission of proposals to the GEF for NIP development.


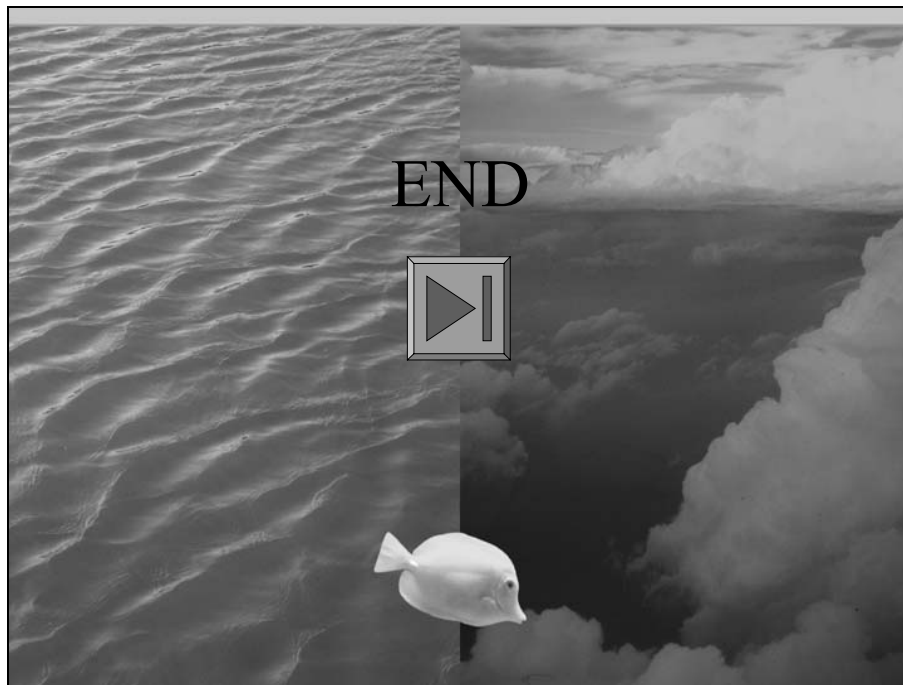


 **The  
Global Environment Facility  
and Persistent Organic Pollutants**

**For More Information**

- Visit the GEF website at [www.gefweb.org](http://www.gefweb.org). The website includes a list of country focal points.

Contact:  
 Hutton Archer  
 Global Environment Facility  
 1818 H Street, N.W.  
 Washington, DC 20433 USA  
 Tel. (202) 473-0508; fax (202) 522-3240  
[Harcher@worldbank.org](mailto:Harcher@worldbank.org)



## Overview of the Stockholm Convention *by Dr. John Buccini*

### Stockholm Convention on POPs

1. Background
2. Convention Provisions
3. Current Status

John Buccini  
Chairman  
UNEP POPs Intergovernmental Negotiating Committee  
Ottawa, Canada

### Background: What are POPs?

- POPs are organic compounds (*i.e.*, carbon-based)
  - natural or anthropogenic origin
- unique combination of physical & chemical properties:
  - resist degradation in environment (*i.e.*, persistent)
  - low, but significant, vapor pressure (“semi-volatile”) leads to distribution in all environmental media
  - low water solubility + high fat solubility
- regional and global distribution by air, water, wildlife
- long-term exposure to humans and wildlife
- bioaccumulation in fatty tissues of living organisms
- acute and chronic toxic effects on humans & wildlife

## Background: The “UNEP 12”

Stockholm Convention

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## Convention Provisions

**Objective** = protection of health and environment

[*Precaution* is acknowledged as an important element]

**Main provisions:**

- control measures
  - intentionally produced POPs
  - unintentionally produced POPs
  - stockpiles and wastes
- general obligations
- addition of new chemicals
- financial and technical assistance
- implementation aspects

Stockholm Convention

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## Intentionally Produced POPs

### → Goal = elimination of production and use of all intentionally produced POPs

- Chemicals slated for **elimination** are listed in Annex A:
  - aldrin, chlordane, dieldrin, endrin, heptachlor
  - hexachlorobenzene (HCB), mirex, PCBs, toxaphene
- Chemicals slated for **restriction** are listed in Annex B:
  - DDT (“acceptable purpose” for production and/or use in disease vector control programs)
- “specific exemptions” for these for some Parties
- other types of exemptions exist - some have conditions, accountability requirements, time limits (extensions)

Stockholm Convention

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## Intentionally Produced POPs

### For PCBs (Annex A):

- **3 main goals:**
  - cease production of new PCBs ***immediately***
    - *i.e.*, entry into force of the Convention
  - eliminate use of in-place PCB equipment ***by 2025***
    - continued use is subject to conditions and restrictions
  - achieve the environmentally sound management of PCB wastes *as soon as possible and ***by 2028****
- **Parties must** report to the COP every 5 years on progress
- **COP will** review progress on 2025 & 2028 targets every 5 years

Stockholm Convention

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## Intentionally Produced POPs

### For DDT (Annex B):

- **all Parties shall:**
  - eliminate production and use except for disease vector control programs:
    - special public DDT register
    - reporting and other obligations
  - promote research and development for alternatives to DDT
- **the COP will:**
  - review at its first meeting and every 3 years thereafter to see when DDT is no longer needed for disease vector control use (*i.e.*, technically and economically feasible alternative products, practices or processes are available)

Stockholm Convention

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## Intentionally Produced POPs

### Trade will be restricted for all POPs in Annexes A & B

- Imports/exports between Parties are limited to shipments:
  - intended for environmentally sound disposal, or
  - to Parties with:
    - “Specific Exemptions” under Annex A or B, or
    - “Acceptable Purposes” under Annex B
- Exports to non-Parties may take place subject to:
  - conditions on both Non-Party and Party, and
  - accountability requirements for the use and disposal of POPs

Stockholm Convention

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## Intentionally Produced POPs

- **Goal = to identify possible POPs as early as possible in assessment programs and take action to reduce or eliminate generation and/or releases**
- Parties with regulatory and assessment schemes for industrial chemicals and/or pesticides, shall, in conducting assessments of:
    - new substances, take “measures to regulate with the aim of preventing the production and use” of new POPs
    - in-use substances, consider the screening criteria for candidates for addition to Convention (Annex D)
  - Convention does not require establishment of such programs

Stockholm Convention

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## Unintentionally Produced POPs

- **Goal = continuing minimization and, where feasible, *ultimate elimination of total releases of chemicals in Annex C derived from anthropogenic sources* [dioxins, furans, HCB, PCBs]**

**Parties shall:**

- develop action plans within 2 years of entry into force
  - and implement their plans
- promote application of available, feasible and practical measures to achieve realistic and meaningful levels of release reduction or source elimination
- promote development and, where appropriate, require use of substitute or modified materials, products and processes to prevent formation and release of POPs

Stockholm Convention

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## Unintentionally Produced POPs

- **Convention lists 20 source types that have potential for formation and release of unintentionally produced POPs to environment [Annex C Parts II (7 high potential) & III]:**
  - combustion sources (incinerators, boilers, motor vehicles)
  - thermal sources in metallurgical industry
  - pulp production with elemental chlorine
  - some chemical production processes
  - textile and leather dyeing and finishing
  - several waste recovery and disposal practices
  - destruction of animal carcasses
  - crematoria

Stockholm Convention

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## Unintentionally Produced POPs

- For source categories with potential for comparatively high formation & release of POPs to environment, **Parties shall:**
  - for new sources,
    - promote and, as provided for in an action plan, require use of best available techniques (BAT), and
    - phase in BAT requirements as soon as practicable but no later than 4 years after Convention enters into force
    - promote use of best environmental practices (BEP)
  - for existing sources, promote use of BAT and BEP
- For other source categories (Annex C Part III), **Parties shall:**
  - for new and existing sources, promote use of BAT & BEP

Stockholm Convention

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## POPs in Stockpiles & Wastes

⊕ **Goal = environmentally sound management (ESM) of stockpiles, wastes, and products and articles upon becoming wastes that consist of, contain or are contaminated by POPs**

**Parties must:**

- develop and implement strategies to identify stockpiles
- manage stockpiles in a safe, efficient and ESM until they are deemed to be wastes
- develop strategies to identify products & articles in use and wastes consisting of, containing or contaminated with a POP
- take measures to
  - handle, collect, transport and store wastes in ESM, and
  - dispose of wastes by destroying POP content or otherwise in ESM taking into account international rules

Stockholm Convention

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## POPs in Stockpiles & Wastes

**Parties must (continued):**

- not allow recovery, recycle, reclamation, direct reuse or alternative uses of POPs
- not transport these materials across international boundaries without taking into account international rules (e.g., Basel Convention)
- develop strategies for identifying contaminated sites
  - remediation is not required by the Convention
  - if remediation is attempted, it must be done in an environmentally sound manner

Stockholm Convention

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## General Obligations

- Designate a National Focal Point
- Develop, implement and update an implementation plan
- Promote and facilitate a wide range of public information, awareness and education measures for policy makers and all stakeholders
- Encourage and, as resources permit, undertake research, development, monitoring and cooperation on all aspects of POPs and their alternatives
- Report to the COP on:
  - measures taken by Party to implement the Convention
  - effectiveness of the measures taken
  - data concerning trade in intentionally produced POPs

Stockholm Convention

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## Addition of New POPs

- **Agreed process** will be used to evaluate candidates nominated by Parties.
- **Scientific criteria** are specified (Annex D):
  - persistence, bio-accumulation, potential for long range transport, and adverse effects.
- **Precaution** will be incorporated in a number of ways to ensure that all proposed candidates are thoroughly considered on the basis of available data to see if they possess POPs properties.
- **POPs Review Committee** will be set up at the first COP to advise on proposals submitted by Parties.
- **Safeguards** will ensure that process is transparent and all Parties get a full hearing on any nominated candidate.

Stockholm Convention

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## Financial & Technical Assistance

### **Convention specifications:**

- Developing countries and countries with economies in transition will need technical and financial assistance.
- Regional and subregional centres will be established for capacity building and transfer of technology to assist countries in need.
- Developed countries will provide technical assistance and new and additional financial resources to meet agreed full incremental implementation costs.
- Global Environment Facility (GEF) is named as the principle entity of the interim financial mechanism to handle funding of capacity building and other related activities.

Stockholm Convention

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## Implementation Aspects

- Convention will enter into force 90 days after 50th ratification
- COP will be established to oversee implementation:
  - must meet within 1 year of entry into force
    - thereafter at regular intervals
  - must review effectiveness of convention commencing four years after entry into force, and periodically thereafter:
    - COP1 will arrange for comparable monitoring data on presence of POPs and regional/global environmental transport, and for reports on monitoring on regional and global basis
  - COP1 to establish POPs Review Committee
- UNEP will provide secretariat

Stockholm Convention

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## Convention Status

- Opened for signature on May 23, 2001 (in Stockholm)
  - 150 countries + EU have signed
    - period ended May 22, 2002
  - 10 Parties have ratified
- INC-6 will be held June 17-21, 2002 (Geneva)
  - preparations for COP1
  - implement Stockholm resolutions
  - priority focus on NIPs & financial & technical assistance
- COP1 changes?
- Convention text & information are on UNEP POPs home page:

[www.chem.unep.ch](http://www.chem.unep.ch)

Stockholm Convention

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## Overview of the Rotterdam Convention *by Ms. Fatoumata Ouane*



### This presentation will cover:

- Background
- Objective and scope
- How the convention works
- Party responsibilities
- Key players
- Supporting documentation
- Technical assistance
- Other information

## Origins

- **1985 - FAO International Code of Conduct on the Distribution and Use of Pesticides**
- **1987 - UNEP London Guidelines for the Exchange of Information on Chemicals in International Trade**
- **1989 - FAO/UNEP Joint Program on the Prior Informed Consent procedure**
- **1992 - UNCED calls for adoption of a legally binding instrument by 2000**
- **1996-1998 - Negotiations take place (5 sessions)**
- **1998 - Convention adopted in Rotterdam**

## Rotterdam Conference

- **Adoption of the Convention and start of signature process (73 signatories)**
- **Adoption and signature of the Final Act**
  - **Resolution on interim arrangements**
  - **Voluntary PIC procedure brought in line with Convention**



## Objective of the Convention

- **How?**
  - by facilitating information exchange about chemicals and their characteristics, and
  - by providing for a national decision-making process on their import and export.

## What the Convention Achieves

- **Early warning system**
- **Keeps chemicals-related problems from getting worse**
- **Empowers developing countries**
- **Ensures labeling and hazard communication**
- **Promotes communication and information exchange among countries**

## Scope of the Convention

- **Applies to**
  - Banned or severely restricted chemicals, and
  - Severely hazardous pesticide formulations
- **Does not apply to:**
  - Narcotic drugs and psychotropic substances
  - Radioactive materials
  - Wastes
  - Chemical weapons
  - Chemicals used as food additives
  - Food
  - Chemicals in small quantities for research and analysis

## How It Works – Key Elements

- **PIC Procedure:**
  - mechanism for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive future shipments of those chemicals specifically subject to the Convention and for ensuring compliance with these decisions by exporting countries

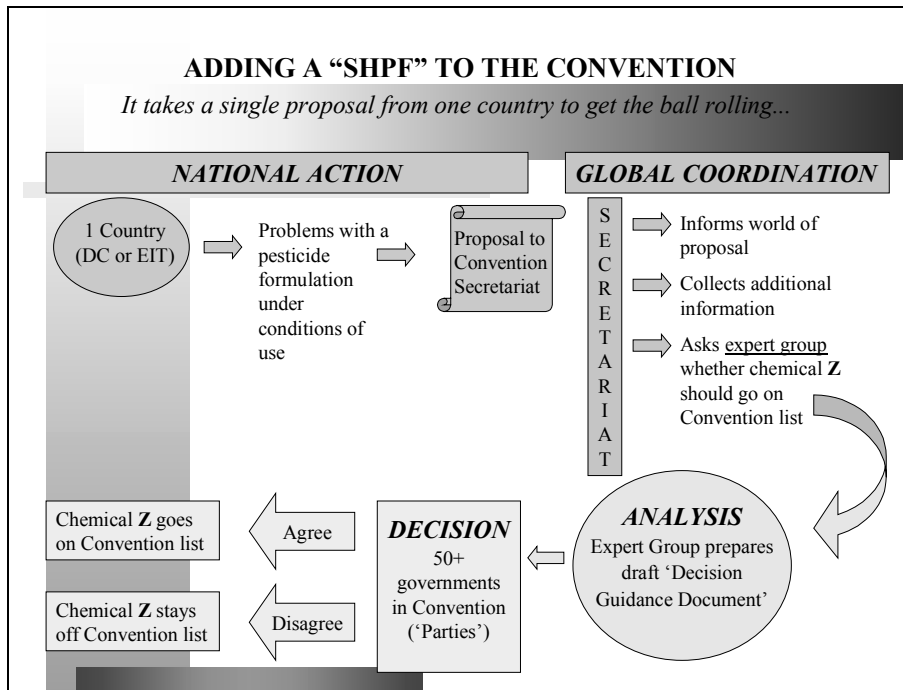
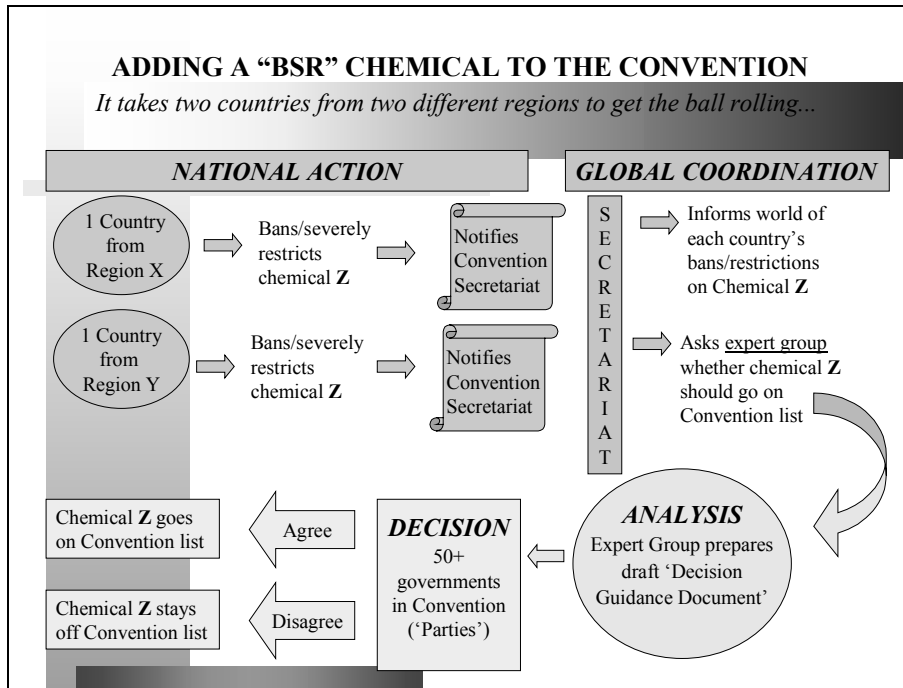
## How It Works – Key Elements

- **Information Exchange**
  - provisions for the *exchange of information* among Parties about a very broad range of potentially hazardous chemicals that may be exported and imported
- **The provisions include:**
  - parties must inform other Parties of each national control action to ban or severely restrict a chemical and
  - a Party that plans to export a chemical that is banned or severely restricted for use within its territory must inform the importing Party that such export will take place before the first shipment and annually thereafter;

## How It Works – Key Elements

- **Information Exchange provisions also include:**
  - exporting Parties, when exporting chemicals to be used for occupational purposes, must ensure that a safety data sheet following an internationally recognized format is sent to the importer;
  - opportunities for developing country Parties to inform others that they are experiencing problems caused by a severely hazardous pesticide formulation under conditions of use in their territory; and
  - that exports of chemicals included in the PIC procedure, and other chemicals banned or severely restricted by the exporter, are subject to labelling requirements that ensure adequate availability of information on risks and/or hazards to human health or the environment.





## Country Responsibilities

- **Exporting Countries:**
  - **Not export the chemical without the consent of the importer**
    - Unless there have been previous shipments or the chemical is approved in that country
  - **Communicate import decisions to exporters, industry and other relevant authorities**
  - **Ensure that exports do not occur contrary to the decisions of importing countries**
  - **Provide Export Notifications to importing countries**

## Obligations in relation to exports of chemicals

- **Implement legislative and administrative measures to communicate import decisions within its jurisdiction**
- **Take appropriate measures to ensure that its exporters comply with import decisions**
- **Advise and assist importing Parties**
  - **To obtain further information to help them make import decisions**
  - **To strengthen their capacities and capabilities to manage chemicals safely**

## Country Responsibilities

### ● **Importing Countries:**

- **Nominate a DNA**
- **Provide notifications of final regulatory actions to ban or severely restrict a chemical**
- **Submit proposals of severely hazardous pesticide formulations**
- **Provide import responses**
- **Acknowledge receipt of Export Notifications**

## Country Responsibilities

### ● **Importing Countries:**

- **Ensure that importers, relevant authorities and, where possible, users are informed of notifications received, and**
- **Ensure that import decisions apply uniformly:**
  - **To imports from ALL exporting countries, and**
  - **To any domestic manufacture of the chemical**

## Obligations in relation to imports of chemicals

- **Response shall consist of either a**
  - **final decision**
    - to consent to import
    - not to consent to import
    - to consent subject to specified conditions
  - **interim response, including**
    - an interim decision to import or not to import
    - a statement that a final decision is under consideration
    - a request for further information/assistance
- **Implement measures to ensure timely decisions regarding import of chemicals**
- **Respond regarding future import of chemicals within 9 months after circulation of DGD**

## Key Players

- **Designated National Authorities**
- **Conference of the Parties**
- **Chemical Review Committee**
- **Secretariat**

## Designated National Authorities (DNAs)

- **Focal Point for operation of the PIC procedure**
  - **Responsible for the administrative functions required by the Convention**
- **May cover pesticides, or chemicals, or both**
- **As of 1 September 253 DNAs from 165 states**

## Conference of the Parties (COP)

- **Highest Authority of the Convention**
- **Countries that have become Parties oversee implementation**
  - **Interim procedure – Intergovernmental Negotiating Committee (INC)**
  - **Just over 100 countries now participate**
- **Decides on inclusion of chemicals, establishes subsidiary bodies, defines PIC Regions, etc.**

## Chemical Review Committee (CRC)

- **Expert Committee**
- **Review notifications and proposals from Parties**
- **Make recommendations to COP/INC on chemicals to be added to the Convention**
- **29 Members from 7 “PIC Regions”**
  - Africa, Asia, Europe, Near East, Latin America, North America, Southwest Pacific
- **Interim procedure – interim Chemical Review Committee (iCRC)**

## Secretariat

- **Provided by UNEP and FAO jointly**
- **Service Parties, eg, convene COP/INC and CRC/iCRC meetings**
- **Facilitate some aspects of procedures**
  - Collect and review notifications
  - Maintain registers, eg, DNA lists
  - Communicate to Parties
- **Assist Parties in the implementation of the Convention**
- **Coordinate with other secretariats**
- **Other functions as specified in the Convention**

## Supporting Documentation

- **PIC Circular**
- **Notification of Control Action form**
- **Severely Hazardous Pesticide Formulation Report form**
- **Decision Guidance Document (DGD)**
- **Import Response form**

## Interim Arrangements

- **The resolution on interim arrangements:**
  - Brings the voluntary PIC procedure in line with the Convention (interim procedure)
  - Asks the INC to oversee the implementation of the interim procedure and prepare for the Conference of the Parties;
  - All chemicals in Annex III of the convention are subject to the interim procedure;
  - Chemicals identified for inclusion under the original PIC procedure will be subject to the interim procedure as soon as the relevant DGD has been adopted;
  - The INC can add new chemicals to the interim procure in accordance with the provisions of the Convention
  - Establishes an interim Secretariat (UNEP/FAO).

## Technical Assistance

- **Parties shall cooperate in promoting technical assistance for the development of the infrastructure and the capacity necessary to manage chemicals to enable implementation of the Convention;**
- **Parties with more advanced programs for regulating chemicals should provide technical assistance to other Parties in developing their infrastructure and capacity to manage chemicals.**

## Current Status

- **20 Parties to the Convention**
- **27 chemicals listed in Convention:**
  - 17 pesticides
  - 5 severely hazardous pesticide formulations
  - 5 industrial chemicals
- **Four new pesticides added to the interim PIC procedure**
- **Regional support for implementation workshops being held**
- **INC-8 held 8-12 October 2001 in Rome**
- **INC-9 scheduled 30 September – 4 October 2002 in Bonn**



AVAILABILITY OF  
DOCUMENTATION

**Rotterdam Convention Website:**


**WWW.PIC.INT**

**Overview of the Basel Convention by Mr Ibrahima Sow**



**The Basel Convention  
an overview**

UNEP/GEF  
Subregional Workshop on Support for the  
Implementation of the Stockholm  
Convention



**The Problem:**

**Large movements of hazardous  
wastes from *developed*  
countries to *developing*  
countries.**

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## The Response: The Basel Convention

- 1989 Adopted
- 1992 Entered Into Force
- 2001 148 States and the EU are Parties to the Convention

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## Goals of Basel Convention

- **Protect human health and the environment against hazardous wastes**
- **Safeguard the environment in the developing countries**

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## Key Objectives of Basel Convention

- **Reduce transboundary movements of hazardous wastes to a minimum consistent with their environmentally sound management;**
- **Dispose of hazardous wastes as close as possible to their source of generation;**
- **Minimize generation of hazardous wastes in terms of quantity and hazardousness.**

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## Pillars of Basel Convention

- I. **Regulation of all Transboundary Movements of Hazardous Wastes**
- II. **Environmentally Sound Management of Hazardous Wastes and Other Wastes and of Their Disposal**

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## Regulation of Transboundary Movements

- **1989 - Control System**: Requiring written notification from State of export to State(s) of import/transit.
- **1995 - Ban Amendment**: Banning export of hazardous wastes from developed countries (OECD members) to developing ones.
- **1999 - Protocol on Liability and Compensation**: Establishing rules on liability and compensation for damages caused by accidental spills of hazardous wastes during export or import.

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## Waste Controlled Under the Convention

- Transboundary movements
- Which wastes are covered by the Convention
  - Hazardous waste
    - Basel waste (Article 1(1) a)
    - Nationally defined hazardous wastes (Article 1(1)b)
  - Other waste

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## Waste Controlled (continued)

### «Hazardous Wastes» are

- *wastes that belong to any category contained in Annex I of the Convention (Y1 – 18 or Y19-45), unless they do not possess any of the characteristics contained in Annex III of the Convention;*

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## Waste Controlled (continued)

- Y10 Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)
- Y43 Any congener of polychlorinated dibenzo-furan
- Y44 Any congener of polychlorinated dibenzo-p-dioxin

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## The Control System

- A procedure for the **notification** of transboundary movements of hazardous wastes or other wastes, based upon the **prior written consent** procedure.
- Each shipment of hazardous waste or other waste shall be accompanied by a movement document from the point at which a transboundary movement begins to the point of disposal.

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## The Basel Ban Amendment

A new Article 4A:

- Immediate export ban from Annex VII to non-Annex VII countries for disposal
- Phase in export ban for recycling and recovery from 1998
- Ratified by 24 countries so far

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## Other Restrictions on Transboundary Movements

- Transboundary movements only among parties
- The state of export shall prohibit export if
  - the state of import has an import ban,OR
  - the state of import has not given its consent to the shipment.


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## Other Restrictions (continued)

- Non – environmentally sound management
- Exports for disposal to the area of 60° South latitude

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## Focus

- **First Decade:** Develop global environmental regime for controlling transboundary movements of hazardous wastes.
- **Second Decade:** Strengthen existing political, legal, technical, and institutional efforts while taking on six major challenges:

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## Six Challenges for the Next Decade

- 1. Environmentally sound management and minimization**
- 2. Effective implementation and enforcement**
- 3. Capacity building**
- 4. Partnership building**
- 5. Greater efficiency through economic incentives**
- 6. Enhanced collaboration**

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## Supporting tools for implementation

- Manuals and guidelines
  - Model legislation on control and management of hazardous wastes
  - Implementation Manual
  - Instruction Manual on the Control system
  - Technical Guidelines
- The Basel Convention Regional Centres
- The Basel Secretariat Web Site

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## A POPs Focus

- Guidelines for the environmentally sound management of persistent organic pollutant wastes;
- PCB guidelines
- Stockpiles of obsolete pesticides

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## Stockholm Convention Provision for Intentionally Produced POPs *by Dr. John Buccini*

### Stockholm Convention Provisions for Intentionally Produced POPs

John Buccini  
Chairman  
UNEP POPs Intergovernmental Negotiating Committee  
Ottawa, Canada

## OUTLINE

### **Measures to reduce or eliminate releases from intentional production and use:**

- Articles 3, 4 and 15(2)
- Annexes A and B
- Specific exemptions, and the Register
- Acceptable purposes
- General exemptions
- Trade restrictions
- Assessment of new and existing chemicals
- Summary

## Elimination & Restriction

**Convention Goal = elimination of production and use of all intentionally produced POPs**

- *i.e.*, industrial chemicals and pesticides

**Parties shall:** [Article 3, para. 1]

(a) “prohibit and/or take the legal and administrative measures necessary to eliminate”:

- (i) production and use of chemicals in Annex A, and
- (ii) import and export of chemicals in Annex A

- *i.e.*, trade is restricted [see paragraph (2)]

(b) “restrict its production & use” of chemicals in Annex B

- “acceptable purposes” specified for these chemicals

Intentionally Produced POPs

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## Elimination & Restriction

### Annex A (elimination)

- aldrin
- chlordane
- dieldrin
- endrin
- heptachlor
- hexachlorobenzene
- mirex
- polychlorinated biphenyls
- toxaphene

### Annex B (restriction)

- DDT

Intentionally Produced POPs

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## Specific Exemptions

- “Specific exemptions” are identified with regard to production and/or use of the chemicals in Annexes A and B
  - during the negotiations, several countries indicated the need for these
  - Note: none are specified for endrin or toxaphene
- A State, on becoming a Party, may register for one or more of the *specific exemptions* listed in Annexes A and B
- Parties register by informing the Secretariat
- Secretariat will maintain a publicly available Register identifying Parties that have registered for *specific exemptions* [Article 4]
- The Register will not include the names of Parties for those *specific exemptions* that are available to all Parties (*e.g.*, PCBs)

Intentionally Produced POPs

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## Specific Exemptions

### Duration:

- period of 5 years after Convention enters into force for a particular chemical, unless a Party specifies an earlier date
- may be withdrawn by a Party at any time
- may be extended for 5 years, based on request from a Party
  - COP will review each request and any information submitted by requesting Party justifying continued need for exemption

### Condition:

- Parties intentionally producing or using POPs under the “specific exemptions” or “acceptable purposes” provisions must take measures to prevent or minimize human exposure and releases to the environment [Article 3, para. 6]

Intentionally Produced POPs

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<b>Annex A</b>		
<b>Chemical</b>	<b>Activity</b>	<b>Specific Exemption</b>
Aldrin	Production	None
	Use	Local ectoparasiticide Insecticide
Chlordane	Production	As allowed for the Parties listed in the Register
	Use	Local ectoparasiticide Insecticide Termiticide Termiticide in buildings and dams Termiticide in roads Additive in plywood adhesives

Intentionally Produced POPs 7

<b>Annex A</b>		
<b>Chemical</b>	<b>Activity</b>	<b>Specific Exemption</b>
Dieldrin	Production	None
	Use	In agricultural operations
Endrin	Production	None
	Use	None

Intentionally Produced POPs 8

## Annex A

Chemical	Activity	Specific Exemption
Heptachlor	Production	None
	Use	Termiticide Termiticide in structures of houses Termiticide (subterranean) Wood treatment In use in underground cable boxes
Hexachloro benzene	Production	As allowed for the Parties listed in the Register
	Use	Intermediate Solvent in pesticide Closed system site-limited intermediate

Intentionally Produced POPs

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## Annex A

Chemical	Activity	Specific Exemption
Mirex	Production	As allowed for the Parties listed in the Register
	Use	Termiticide
Toxaphene	Production	None
	Use	None

Intentionally Produced POPs

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## Annex A

Chemical	Activity	Specific Exemption
PCBs	Production	None
	Use	Articles in use in accordance with the provisions of Part II of Annex A

**Note (iv):** All Parties are entitled to the PCB specific exemption

**N.B.** Parties using the PCB specific exemption will not be listed in the register [Article 4, para. 1]

Intentionally Produced POPs

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## Annex A, Part II (PCBs)

**Annex A requires all Parties to cease production of new PCBs immediately (i.e., entry into force)**

**All Parties using the (Part II) PCB specific exemption shall:**

- eliminate use of in-place equipment containing PCBs **by 2025:**
  - make determined efforts to identify, label & remove from use equipment with >10% or >0.05% and >5 litres of PCB
  - endeavour to identify & remove from use equipment with >0.005% (50ppm) and >0.05 litres of PCB
  - give higher priority to equipment with higher PCB levels

Intentionally Produced POPs

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## Annex A, Part II (PCBs)

### All Parties using the PCB specific exemption shall:

- promote measures to reduce exposures and risk:
  - use PCBs only in intact and non-leaking equipment and only in areas where risk of environmental release can be minimized and quickly remedied
  - forbid use in food and feed production and processing areas
  - when used in populated areas (schools, hospitals, etc.)
    - take all reasonable measures to protect from electrical failure which could result in a fire
    - inspect regularly for leaks in equipment

Intentionally Produced POPs

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## Annex A, Part II (PCBs)

### All Parties using the PCB specific exemption shall:

- not export or import PCB equipment, except for the purpose of environmentally sound management (ESM) of waste
- not recover liquids with more than 0.005% PCBs for reuse in other equipment, except for maintenance and servicing
- make determined efforts to achieve ESM of wastes containing >0.005% PCBs ASAP, and **by 2028**
- endeavour to identify articles with >0.005% PCB for ESM
- report to the COP every five years on their progress in eliminating PCBs [per Article 15]

**COP will review progress toward the 2025 and 2028 targets at 5 year intervals, taking into account reports from Parties**

Intentionally Produced POPs

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## Annex B

Chemical	Activity	Acceptable Purpose or Specific Exemption
DDT	Production	<u>Acceptable purpose:</u> Disease vector control use in accordance with Part II of this Annex <u>Specific exemption:</u> Intermediate in production of dicofol Intermediate
	Use	<u>Acceptable purpose:</u> Disease vector control in accordance with Part II of this Annex <u>Specific exemption:</u> Production of dicofol Intermediate

Intentionally Produced POPs

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## Annex B, Part II (DDT)

- **All Parties shall eliminate DDT production and use except** Parties that notify the Secretariat of their intention to produce and/or use DDT in disease vector control programs (an “acceptable purpose” in Annex B):
  - these Parties will be included in a special publicly available DDT Register maintained by the Secretariat
    - a Party may withdraw from the DDT Register at any time
  - production and/or use must be in accordance with WHO recommendations and guidelines on use of DDT, and only when locally safe, effective and affordable alternatives are not available to the Party
- **Two “specific exemptions” are allowed for DDT**, related to its use as an intermediate in the manufacture of other chemicals

Intentionally Produced POPs

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## Annex B, Part II (DDT)

### Each Party in the DDT Register shall:

- report every 3 years [per Article 15] on:
  - quantities used
  - conditions of use, and
  - relevance of DDT to the Party's disease control strategy
- develop national action plan [per Article 7] to:
  - confine use of DDT to disease vector control
  - explore alternatives to DDT, and
  - take measures to strengthen health care and reduce incidence of disease

Intentionally Produced POPs

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## Annex B, Part II (DDT)

- **All Parties**, within their capabilities, are encouraged to promote research and development to seek alternatives to DDT
- DDT use will be allowed until technically and economically feasible alternative products, practices or processes are available to countries that are currently reliant on DDT
- **COP** will review at its first meeting and every 3 years thereafter to see whether DDT continues to be needed for disease vector control

Intentionally Produced POPs

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## Exemptions

### Chemicals in Annex A or B, are exempt in quantities:

- used for laboratory-scale research [Article 3, para. 5]
- used as a reference standard [Article 3, para. 5]
- occurring as unintentional trace contaminants in products and articles [Annexes A & B, Note (i)]
- occurring as constituents of articles manufactured or already in use before or on date of entry into force of an obligation concerning that chemical [Annexes A & B, Note (ii)]
  - provided Party notifies Secretariat that a particular type of product remains in use within that Party
  - Secretariat will make notification publicly available

Intentionally Produced POPs

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## Exemptions

- HCB or DDT may be produced or used as closed-system site-limited intermediates that are chemically transformed in manufacture of other chemicals that do not exhibit POPs properties [Annexes A and B, Note (iii)]
- Party shall notify Secretariat of:
  - total amounts produced or used
  - nature of site-limited process, and
  - amount of HCB or DDT present in final product
- These notifications will be made publicly available
- Such production or use is not considered a *specific exemption*
- Production/use will cease after 10 years unless Party submits a new notification to Secretariat, in which case period will be extended for another 10 years, subject to COP approval

Intentionally Produced POPs

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## Trade Restrictions

**Convention imposes trade restrictions for all POPs  
in  
Annexes A and B [Article 3, para. 2]**

**Imports and exports between Parties are limited to  
shipments:**

- intended for environmentally sound disposal [per Article 6, paragraph 1(d)], or
- to Parties with:
  - “specific exemptions” under Annex A or B, or
  - “acceptable purposes” under Annex B

Intentionally Produced POPs

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## Trade Restrictions

**Exports to non-Parties may take place but there are conditions  
on both Non-Party and Party**

- **Non-Party shall** provide annual certification to exporting Party
  - specifying the intended use of the chemical
  - expressing commitment to:
    - protect health and environment by minimizing or preventing releases
    - comply with the requirements of Article 6, paragraph 1 concerning POPs stockpiles and wastes
    - comply with Annex B, Part II, paragraph 2 (DDT production and/or use in accordance with WHO recommendations, etc.)
  - supplying information on domestic legislation, regulation, etc.
- **Exporting Party shall** send certification to secretariat within 60 days

Intentionally Produced POPs

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## Trade Restrictions

**Parties shall provide the following information:** [Article 15, para. 2]

- data on, or estimates of, total quantities of POPs in Annexes A and B that were produced, imported and exported, and
- a list of States from which it has imported or to which it has exported POPs in Annexes A and B

**COP will specify the frequency & format of such reports**

Intentionally Produced POPs

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## Assessment of Chemicals

**Parties with regulatory and assessment schemes for industrial chemicals and pesticides shall, in conducting assessments of:** [Article 3, para. 3 and 4]

- **new substances**, take “measures to regulate with the aim of preventing the production and use of” new POPs
- **in-use substances**, consider the screening criteria for candidates for addition to Convention (Annex D)

**Note: These provisions**

- will allow the identification of possible POPs as soon as possible in these assessment programs, but
- do not require Parties to set up schemes for assessment and regulation of industrial chemicals or pesticides

Intentionally Produced POPs

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## Summary

<b>Chemical</b>	<b>Production</b>	<b>Use</b>
Endrin	No	No
Toxaphene	No	No
Aldrin	No	2 Specific Exemptions
Dieldrin	No	1 Specific Exemption
Heptachlor	No	5 Specific Exemptions
PCBs	No	All Party Specific Exemption

Intentionally Produced POPs

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## Summary

<b>Chemical</b>	<b>Production</b>	<b>Use</b>
Chlordane	Restricted	6 Specific Exemptions
HCB	Restricted	3 Specific Exemptions Site-limited Intermediate
Mirex	Restricted	1 Specific Exemption
DDT	Restricted	Specific Exemptions Acceptable Purposes Site-limited Intermediate

Intentionally Produced POPs

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## Summary

**Considerations for ratification include:**

- take legal and administrative measures to eliminate and/or restrict production and/or use of POPs in Annexes A and B
- determine need for specific exemptions
  - inform Secretariat at time of ratification and get into the Register
  - take measures to prevent/minimize human exposure and environmental releases
- needs for site-limited intermediate and other exemptions
- measures to comply with trade restrictions
- reporting requirements

Intentionally Produced POPs

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## Summary

**Considerations for ratification include:**

- special regimes for PCBs and DDT require detailed examination of national circumstances
- if Party has assessment program(s) for new and/or existing chemicals or pesticides, must evaluate substances for POPs properties using criteria in Annex D

Intentionally Produced POPs

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## Stockholm Convention Provision for Unintentionally Produced POPs *by Dr. John Buiccini*

### Stockholm Convention Provisions for Unintentionally Produced POPs

John Buccini  
Chairman  
UNEP POPs Intergovernmental Negotiating Committee  
Ottawa, Canada

## OUTLINE

### **Measures to reduce or eliminate releases of unintentionally produced POPs:**

- Article 5
  - action plan
  - release reduction or source elimination
  - substitute materials, products, processes
  - source categories (new and existing):
    - best available techniques (BAT)
    - best environmental practices (BEP)
- Annex C
- Summary

## Unintentionally Produced POPs

**Convention Goal** = “continuing minimization and, where feasible, ultimate elimination” of the total releases of chemicals in Annex C derived from anthropogenic sources

### Annex C, Part I

Chemical
Dioxins and furans (PCDD/PCDF)
Hexachlorobenzene (HCB)
Polychlorinated biphenyls (PCB)

Unintentionally Produced POPs

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## Article 5

**Parties shall, at a minimum, take measures to address the following:**

- action plan
- release reduction or source elimination
- substitute materials, products, processes
- new and existing sources
  - best available techniques (BAT)
  - best environmental practices (BEP)

Unintentionally Produced POPs

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## Action Plan

**An action plan shall:** [Article 5, para. (a)]

- be developed within 2 years of entry into force
  - may be national, regional, or subregional
  - constitutes part of the overall implementation plan in Article 7
- identify, characterize and address release of chemicals in Annex C
- facilitate implementation of other requirements in Article 5
- be implemented!

Unintentionally Produced POPs

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## Action Plan

**The action plan shall:** [Article 5, para. (a)]

- evaluate current and projected releases, including development & maintenance of source inventories and release estimates, noting source categories in Annex C
- evaluate efficacy of Party's laws and policies to manage such releases
- develop strategies to reduce releases
- promote education and training on strategies
- review success of strategies every 5 years
  - include this in reports to COP [Article 15]
- include a schedule for implementation of action plan

Unintentionally Produced POPs

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## Other Measures

### Parties must:

- promote application of available, feasible and practical measures to achieve *expeditiously* realistic and meaningful levels of release reduction or source elimination [Article 5, para. (b)]
- promote development and, where appropriate, require use of substitute or modified materials, products and processes to prevent formation and release of POPs in Annex C [Article 5, para. (c)]
  - note the general guidance in Annex C
  - guidelines will be adopted by COP

Unintentionally Produced POPs

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## Source Categories

**The following industrial source categories have the potential for comparatively high formation and release of POPs to the environment:** [Annex C, Part II]

- waste incinerators
  - municipal, hazardous or medical wastes
  - sewage sludge
- cement kilns firing hazardous wastes
- pulp production involving elemental chlorine
- thermal processes used in metallurgical industry
  - secondary production of aluminum, copper or zinc
  - sinter plants in iron and steel industry

Unintentionally Produced POPs

8

## Source Categories

**For industrial sources that Party identifies as having potential for comparatively high formation & release of POPs to environment (*including those in categories in Annex C Part II*), Party must:**

- for new sources warranting such action:
  - promote, and as provided for in an action plan, require use of best available techniques (BAT) [Article 5, para. (d)]
    - phase in any BAT requirements for new sources in categories in Annex C Part II as soon as practicable but *no later than 4 years after entry into force*
  - promote use of best environmental practices (BEP) [Article 5, para. (d)]
- for existing sources, promote use of BAT & BEP [Article 5 (e)]

Unintentionally Produced POPs

9

## Source Categories

**The following industrial source categories have the potential for formation and release of POPs to the environment:** [Annex C, Part III]

- open burning of wastes (including landfill sites)
- thermal processes in the metallurgical industry not specified in Part II
- residential combustion sources
- fossil-fuel fired utility and industrial boilers
- firing installations for wood and other biomass fuels
- motor vehicles, especially those burning leaded gasoline

Unintentionally Produced POPs

10

## Source Categories

**The following industrial source categories have the potential for formation and release of POPs to the environment (continued):** [Annex C, Part III]

- chemical production processes releasing unintentionally produced POPs (e.g. production of chlorophenols and chloranil)
- textile and leather dyeing and finishing
- shredder plants for the treatment of end-of life vehicles
- destruction of animal carcasses
- smouldering of copper cables
- waste oil refineries
- crematoria

Unintentionally Produced POPs

11

## Source Categories

- **For both new and existing industrial sources in categories in Annex C Part III, Parties must promote use of BAT & BEP** [Article 5, para. (e)]
- **Parties should** take into consideration the guidance on BAT and BEP in Annex C, guidelines that will be adopted by the COP, and definitions in Article 5, para. (f)
- **Note:** Convention defines new sources [Article 5, para. (f)]
  - = construction or substantial modification of source commences >1 year after
    - convention enters into force for Party, or
    - entry into force for Party of amendment to Annex C

Unintentionally Produced POPs

12

## Annex C

### **Part IV: Definitions of chemicals**

### **Part V (A): General preventive measures (BAT & BEP)**

- use of low-waste technology
- use of less hazardous substances
- promote recovery & recycling of materials and wastes
- replacement of feedstocks that are POPs or give rise to POPs releases
- good housekeeping and preventive maintenance
- improvements in waste management practices
- minimize presence of POPs contaminants in products
- avoid using elemental chlorine in bleaching operations

Unintentionally Produced POPs

13

## Annex C

### **Part V (B): BAT**

- general considerations
- general release reduction measures

### **Part V (C): BEP**

- COP may develop guidance

Unintentionally Produced POPs

14



## Summary

**Considerations for ratification include:**

- measures to reduce and/or eliminate releases of POPs in Annex C (dioxins, furans, HCB, PCB)
- action plan to be developed within 2 years of entry into force
  - part of Article 7 implementation plan
- action plan to be implemented
  - progress reports provided to COP (per Article 15)
- inventories or estimates of current and projected releases

Unintentionally Produced POPs

15

## Summary

**Considerations for ratification include:**

- for new sources in Annex C:
  - Part II, promote and require BAT (within 4 years)
  - Part III, promote BAT
- for existing sources in Annex C:
  - Parts II and III, promote BAT
- for all types of new and existing sources
  - promote BEP

Unintentionally Produced POPs

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## **Stockholm Convention Provision for Stockpiles and Wastes**

*by Dr John Buccini*

### Stockholm Convention Provisions for Stockpiles and Wastes

John Buccini  
Chairman  
UNEP POPs Intergovernmental Negotiating Committee  
Ottawa, Canada

## OUTLINE

### **Measures to reduce or eliminate releases from stockpiles and wastes:**

- Article 6
- Related Issues
  - Trade [Article 3]
  - Unintentionally produced POPs [Annex C]
  - PCB Issues [Annex A, Part II]
  - Adding new POPs [Annex F]
- Summary

## Stockpiles & Wastes

**Convention Goal** = to ensure that:

- stockpiles that consist of or contain a POP in Annex A or B, and
- wastes, including products and articles upon becoming wastes, that consist of, contain or are contaminated with a POP in Annex A, B or C

are managed in a manner protective of human health and the environment

**Note:** 2 differences between “stockpiles” and “wastes”

Stockpiles and Wastes

3

## Article 6: Stockpiles

**Parties shall:**

- develop and implement strategies to identify stockpiles [para. 1 (a)(i) and 1 (b)]
- manage stockpiles in a safe, efficient and environmentally sound manner (ESM) until they are deemed to be wastes [paragraph 1 (c)]
  - *i.e.*, no remaining uses by Party
    - no *specific exemption* or *acceptable purpose*
  - does not apply to stockpiles that may be exported
    - per Article 3, para. 2

Stockpiles and Wastes

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## Article 6: Wastes

**Parties shall:** [para. 1 (a)(ii)]

- develop strategies to identify
  - products and articles in use, and
  - wastesthat consist of, contain or are contaminated with a POP in Annex A, B or C

Stockpiles and Wastes

5

## Article 6: Wastes

**Parties shall:** [para. 1 (d)]

- handle, collect, transport and store wastes in an ESM
- dispose of wastes
  - in such a way that POP content is destroyed or irreversibly transformed, or
  - otherwise in an ESM when
    - destruction or irreversible transformation is not the environmentally preferred option, or
    - POP content is “low”,taking into account international rules, standards, etc.

Stockpiles and Wastes

6

## Article 6: Wastes

**Parties shall:** [para. 1 (d)]

- not allow disposal operations leading to recovery, recycle, reclamation, direct reuse or alternative uses of POPs
- not transport wastes across international boundaries without taking into account international rules, standards and guidelines (e.g., Basel Convention)

Stockpiles and Wastes

7

## Article 6: Contaminated Sites

**Parties shall:** [para. 1 (e)]

- endeavour to develop strategies for identifying sites contaminated by POPs in Annex A, B or C and,
- if remediation is attempted, do it in an ESM

**Note:** Remediation is not required by the Convention

Stockpiles and Wastes

8

## Article 6: COP Activities

**COP shall cooperate with appropriate bodies of Basel Convention to establish:** [para. 1 (e)]

- levels of destruction and irreversible transformation for purposes of paragraph 1 (d)
- methods that constitute ESM
- levels of POPs in Annexes A, B and C that are considered “low” for the purposes of paragraph 1 (d)

Stockpiles and Wastes

9

## Related Issues: Trade

**Convention imposes trade restrictions for all POPs in Annexes A and B:** [Article 3, para. 2]

Imports & exports between Parties are limited to shipments:

- intended for environmentally sound disposal [per Article 6, paragraph 1(d)], or
- to Parties with:
  - “specific exemptions” under Annex A or B, or
  - “acceptable purposes” under Annex B

Stockpiles and Wastes

10

## Related Issues: Trade

### **Exports to non-Parties may take place but there are conditions on both Non-Party and Party**

- Non-Party shall provide annual certification to exporting Party:
  - expressing commitment to *inter alia*:
    - protect health and environment by minimizing or preventing releases
    - comply with the requirements of Article 6, paragraph 1 concerning stockpiles and wastes
- Exporting Party shall transmit certification to Secretariat within 60 days of its receipt

Stockpiles and Wastes

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## Related Issues: Trade

### **Parties shall provide the following information:** [Article 15, para. 2]

- data on, or estimates of, total quantities of POPs in Annexes A and B that were produced, imported and exported, and
- a list of States from which it has imported or to which it has exported POPs in Annexes A and B

**Note:** COP will specify frequency & format of such reports

Stockpiles and Wastes

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## Related Issues: PCB

**Parties using PCB specific exemption shall:** [Annex A Part II]

- eliminate use of in-place PCB equipment PCBs **by 2025**
- not export or import PCB equipment, except for the purpose of ESM of waste
- not recover liquids with more than 0.005% PCB for reuse in other equipment, except for maintenance and servicing
- make determined efforts to achieve ESM of wastes containing >0.005% PCB ASAP, and **by 2028**
- endeavour to identify articles with >0.005% PCB for ESM
- report to the COP every 5 years on their progress in eliminating PCB [per Article 15]

Stockpiles and Wastes

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## Related Issues: Unintentional POPs

**Annex C, Part II identifies the following among the industrial source categories having the potential for comparatively high formation and release of POPs to the environment:**

- waste incinerators
  - municipal, hazardous or medical wastes
  - sewage sludge
- cement kilns firing hazardous wastes

Stockpiles and Wastes

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## Related Issues: Unintentional POPs

**Annex C, Part III identifies the following among the industrial source categories having the potential for formation and release of POPs to the environment:**

- open burning of wastes (including landfill sites)
- shredder plants for the treatment of end-of-life vehicles
- smouldering of copper cables
- waste oil refineries

Stockpiles and Wastes

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## Related Issues: Unintentional POPs

**Annex C, Part V (A) identifies the following among general preventive measures to minimize production of POPs (BAT & BEP):**

- use of low-waste technology
- promote recovery & recycling of materials and wastes
- improvements in waste management practices

Stockpiles and Wastes

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## Related Issues: Adding New POPs

- **Annex F requests information** on waste disposal implications in evaluating socio-economic information prior to deciding whether a chemical should be added to Annex A, B or C

Stockpiles and Wastes

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## Summary

### Considerations for ratification include:

- **Stockpiles containing POPs in Annex A or B:**
  - develop and implement strategies for identification
  - manage in ESM until they become wastes
- **Wastes containing POPs in Annex A, B or C:**
  - develop strategies for identification
  - handle, collect, transport and store in ESM
  - disposal such that POP content is destroyed or irreversibly transformed, or otherwise in an ESM, taking into account international rules, standards, etc.

Stockpiles and Wastes

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## Summary

### Considerations for ratification include:

- **Wastes containing POPs in Annex A, B or C:**
  - prevent recovery, recycle, reclamation, direct reuse or alternative uses of POPs
  - transport across international boundaries must take into account international rules, standards and guidelines (e.g., Basel Convention)
- **Sites contaminated by POPs in Annex A,B or C:**
  - endeavour to develop strategies for identifying sites
  - if remediation is attempted, do it in an ESM

Stockpiles and Wastes

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## Summary

### Considerations for ratification include:

- **Trade restrictions:**
  - must implement measures in Article 3, para (2) and reporting requirements in Article 15, para. (2)
- **PCB measures:**
  - must implement measures in Annex A Part II
- **Unintentionally produced POPs**
  - address source categories in Annex C, Parts II and III
  - implement BAT and BEP using guidance in Annex C Part V

Stockpiles and Wastes

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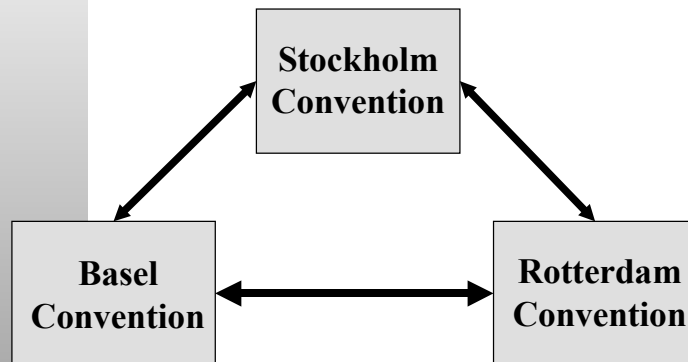
## **Relationship of the Stockholm Convention to the Basel and Rotterdam Convention** by *Ms. Fatoumata Ouane*

### Relationship of the Stockholm Convention to the Basel and Rotterdam Conventions

#### Overview

- **Life Cycle Management**
  - The 3 treaties together cover elements of “cradle-to-grave” management
  - Common thread = POPs
- **Interlocking scope and coverage**
- **“Bridging” elements**
- **“Clustering” and governance issues**

## Overview



## Scope and Coverage

- Evaluating/regulating new chemicals (PIC and POPs)
- Evaluating/regulating existing chemicals (PIC and POPs)
- Import/export controls (PIC, POPs and Basel)
- Disposal (POPs and Basel)
- Hazard communication (PIC, POPs and Basel)
- Environmental releases (POPs)
- Other links, eg, regional treaties

## New and Existing Chemicals

- **New Chemicals**
  - “regulate with the aim of preventing the production and use of new pesticides or new industrial chemicals which... exhibit the characteristics of persistent organic pollutants”
- **Existing Chemicals**
  - “take into consideration within these schemes the criteria in paragraph 1 of Annex D when conducting assessments of pesticides or industrial chemicals currently in use”
- **Banned or severely restricted chemicals must be notified under the Rotterdam Convention**

## Import/Export Controls (1)

- **Rotterdam Convention is a first line of defence (keeps POPs problems from spreading or getting worse)**
- **8 POPs are included in both Conventions**
  - Aldrin
  - Chlordane
  - DDT
  - Dieldrin
  - Heptachlor
  - Hexachlorobenzene
  - PCBs
  - Toxaphene\*
- **Possible future POPs are also included (or can be included)**

## Import/Export Controls (2)

- **Stockholm Convention Article 3(2) controls import/export**
- **Rotterdam Convention provides an “extension”**
  - Reporting for trade under Stockholm Convention exemptions
  - Trade with Stockholm Convention non-Parties
  - Period until the Stockholm Convention enters into force
  - Trade in possible future POPs
  - Monitoring trade
  - Harmonized System Custom Codes
- **Should be implemented consistently**

## Import/Export Controls (3)

- **Rotterdam Convention/Basel Convention**
- **Covers trade in toxic chemicals and hazardous wastes**
- **Masquerades (wastes travelling as chemicals)**
- **Stockpiles (eg, prevention)**
- **Illegal traffic**
- **Customs matters**

## Waste Management (1)

- **Destroying POPs wastes**
- **Stockholm Article 6(1)(d)**
  - “Picked up” by Basel
- **Stockholm Article 6(2)**
  - A – irreversible transformation
  - B - Environmentally sound disposal
- **Stockholm Resolution 5**
  - technical guidelines for the environmentally sound management of persistent organic pollutant wastes

## Waste Management (2)

- **Preventing the creation of POPs in waste management practices**
- **Stockholm Article 5**
- **Annex C**
  - **Relevant Part II Source Categories:**
    - Waste incinerators, including co-incinerators of municipal, hazardous or medical waste or of sewage sludge
    - Cement kilns firing hazardous waste
  - **Relevant Part III Source Categories:**
    - Open burning of waste, including burning of landfill sites
    - Waste oil refineries
    - Possibly others???



## Waste Management (3)

- **Basel Technical Guidelines:**

- PCBs
- Dioxins
- Furans
- Others?

## Bridging Elements

- **Technical Assistance**
- **Technology Transfer**
- **Regional Centres**
- **Financial Mechanism**
- **National Implementation Plans**
- **Policy Development (INCs, COPs and subsidiary bodies)**

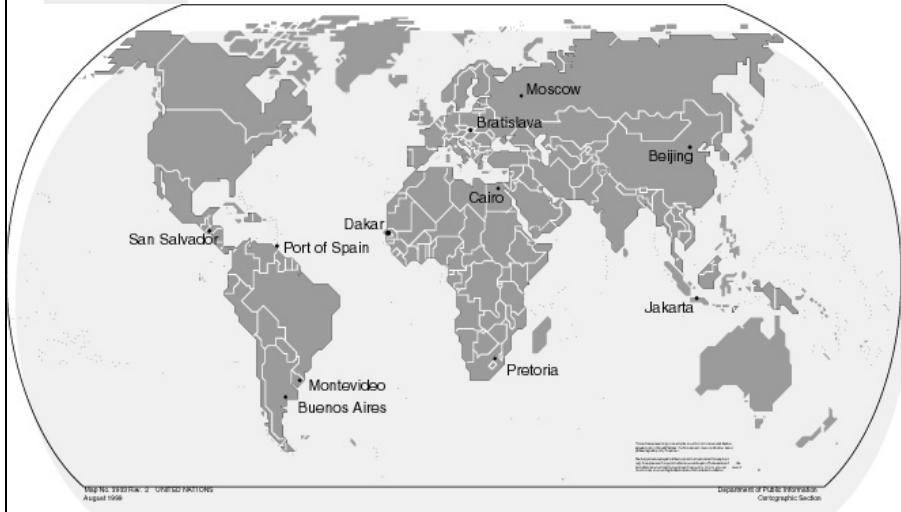
## Technical Assistance/Technology Transfer

- **Article 12, Paragraph 3**
  - **Bilateral technical assistance**
  - **Other technical assistance as agreed by COP**
- **Article 12, Paragraph 4**
  - **Technical assistance**
  - **Technology transfer**
  - **As agreed by COP**
  - **Regional Centres**

## Regional Centres

- **Established by the Basel Convention**
- **Required by the Stockholm Convention**
- **Interim period – use of BRCs for the Stockholm Convention?**

## Basel Regional Centres



## Financial Mechanism

- **Stockholm Convention**
  - **Financial Mechanism**
    - **GEF**
    - **Other sources of funds**
- **Rotterdam Convention**
  - **Informal**
- **Basel Convention**
  - **Technical Cooperation Trust Fund**

## Financial Mechanism

- **Leveraging resources**
- **Control of POPs production, import and use**
- **Disposal of POPs**
- **Waste disposal technologies**
- **Implementation Plans**

## Clustering

- **International Environmental Governance**
- **Process also looking at MEAs**
- **Decision to pilot a Chemicals and Waste Cluster**
- **Agreement on approach to be taken in Montreal on 1 December**
- **First steps – administrative and policy linkages**

## Summary

- **Framework for life cycle management**
- **Leveraged resources**
- **Strengthened programmes**
  - **Infrastructure**
  - **Risk Assessment**
  - **Risk Management**
  - **Public participation**
  - **Customs**
  - **Sustainable development**
- **Global/regional/national levels**

**Stockholm Convention General Obligation Presented by Dr.  
John Buccini**

## Stockholm Convention: General Obligations

John Buccini  
Chairman  
UNEP POPs Intergovernmental Negotiating Committee  
Ottawa, Canada

## OUTLINE

**General obligations include the following Articles:**

- 7 - Implementation plans
- 9 - Information exchange
- 10 - Public information, awareness & education
- 11 - Research, development & monitoring
- 15 - Reporting

**Summary**

## Article 7: Implementation Plans

### Parties shall:

- develop & endeavour to implement an implementation plan [para. 1 (a)]
- submit plan to COP within 2 years of entry into force of Convention for the Party [para. 1 (b)]
- review and update plan on a periodic basis, in a manner to be specified by COP [para. 1 (c)]
- cooperate with other Parties directly, or through intergovernmental organizations, and consult stakeholders in all these actions [para. 2]
- endeavour to utilize and integrate these plans in national sustainable development strategies [para. 3]

General Obligations

3

## Article 7: Implementation Plans

### As part of its implementation plan under Article 7:

- Party in the DDT Register shall develop national DDT action plan to: [Annex B Part II]
  - confine use of DDT to disease vector control
  - explore alternatives to DDT, and
  - take measures to strengthen health care and reduce incidence of disease
- Party shall develop an action plan within 2 years of entry into force to identify, characterize and address releases of unintentionally produced POPs in Annex C and facilitate implementation of the requirements of Article 5

General Obligations

4

## Article 9: Information Exchange

**Parties shall:**

- facilitate or undertake information exchange on the reduction or elimination of the production, use and release of POPs and alternatives to POPs [para. 1]
  - exchange information directly or through secretariat [para. 2]
  - designate a national focal point to facilitate this exchange of information on POPs and their alternatives [para. 3]
  - protect confidential information as mutually agreed [para. 5]
    - health & environmental information are not confidential
- Secretariat serves as clearing house mechanism** [para. 4]

General Obligations

5

## Article 10: Public Information

**Parties shall, within their capabilities, promote and facilitate the following as they relate to POPs and alternatives to POPs:** [para. 1]

- awareness among policy and decision makers
- provision of available up-to-date information to the public
- development and implementation of educational and public awareness programs
- public participation in developing and implementing measures to address POPs
- training and development programs for stakeholders
- development, exchange and implementation of education and training programs at national and international levels

General Obligations

6



## Article 10: Public Information

**Parties shall, within their capabilities:**

- ensure public has access to up-to-date information [para. 2]
- encourage industry and professional users to promote and facilitate provision of information at national & other levels [para. 3]

**Parties may:**

- use range of approaches to provide information, and may establish information centres at national & regional levels [para. 4]
- develop mechanisms (such as PRTRs) to collect and disseminate information on annual amounts of POPs in Annex A, B or C that are released or disposed of [para.5]

General Obligations

7

## Article 11: Research, etc.

**Parties shall, within their capabilities, encourage and/or undertake research, development, monitoring and cooperation on all aspects of POPs, their alternatives and candidate POPs, including on:** [para. 1]

- sources and releases to environment
- trends in levels in the environment and humans
- environmental transport, fate and transformation
- effects on human health and the environment
- socio-economic and cultural impacts
- release reduction and/or elimination
- methods for source inventories & for analysis of POPs

General Obligations

8

## Article 11: Research, etc.

**Parties shall, within their capabilities,** in undertaking the actions in paragraph 1: [para. 2]

- support and further develop international programmes, networks and organizations to define, conduct, assess and finance research, data collection and monitoring
- support national and international efforts to:
  - strengthen national scientific and technical research capabilities, particularly in developing countries and countries with economies in transition, and
  - promote access to and exchange of data & analyses
- undertake research work on alleviating effects of POPs on reproductive health

General Obligations

9

## Article 11: Research, etc.

**Parties shall, within their capabilities,** in undertaking the actions in paragraph 1: [para. 2]

- take into account concerns and needs, particularly financial and technical resources, of developing countries and countries with economies in transition, and cooperate in improving their capability to participate in these efforts
- make the results of these activities accessible to the public on a timely and regular basis
- encourage and/or undertake cooperation with regard to storage and maintenance of pertinent information

General Obligations

10

## Article 15: Reporting

**Parties shall report to the COP on:** [para 1]

- measures taken by Party to implement the Convention
- effectiveness of the measures taken

**Parties shall provide the Secretariat:** [para 2]

- data on, or estimates of, total quantities of POPs in Annexes A and B that were produced, imported and exported
- list of States from which it has imported or to which it has exported POPs in Annexes A and B

**COP will specify frequency, format of such reports** [para 3]

General Obligations

11

## Article 15: Reporting

- Parties that make use of the PCB specific exemptions [Annex A Part II] shall report to the COP every 5 years on their progress in eliminating PCBs
- Parties in the DDT Register [Annex B Part II] shall report to the COP every 3 years on:
  - quantities of DDT used
  - conditions of use, and
  - relevance of DDT to Party's disease control strategy
- Parties shall report to the COP every 5 years on the success of its strategies in reducing releases of unintentionally produced POPs in Annex C

General Obligations

12

## Summary

### Considerations for ratification include:

- Information Exchange [Article 9]
  - establish National Focal Point
  - means to exchange information
    - Parties and Secretariat
    - protection of confidential information
- Public Information [Article 10]
  - raise awareness of stakeholders and policy makers
    - information, education, training & development
  - engage all stakeholders in POPs activities

General Obligations

13

## Summary

### Considerations for ratification include:

- Research, Development and Monitoring [Article 11]
  - information will be needed to:
    - assess status quo (inventories, etc.)
    - set baseline levels for humans and environment
    - monitor effectiveness of actions taken
  - cooperation with other countries and IGOs
  - capacity building in developing countries
- Note: Effectiveness Evaluation provision will require national and regional inputs [Article 16]

General Obligations

14

## Summary

### Considerations for ratification include:

- Reporting [Article 15]
  - reports to COP:
    - implementation measures and their effectiveness
    - success of Party's strategies in reducing releases of unintentionally produced POPs (5 years)
    - elimination of in-use PCB & PCB wastes (5 years)
    - amounts of DDT used, conditions of use, relevance to disease control strategy (3 years)
  - report to Secretariat:
    - trade data for POPs in Annexes A and B

General Obligations

15

## Summary

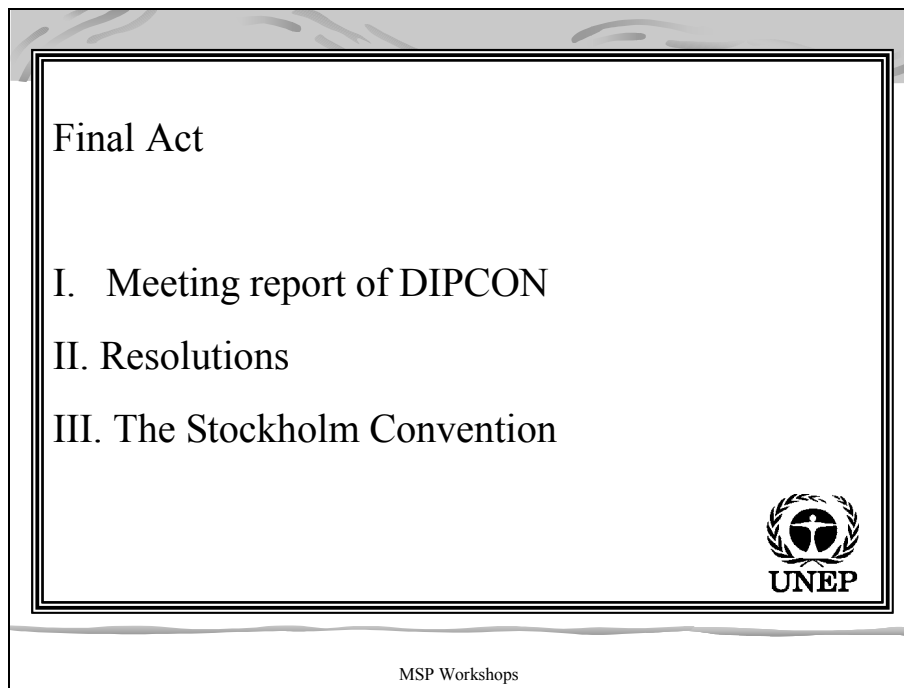
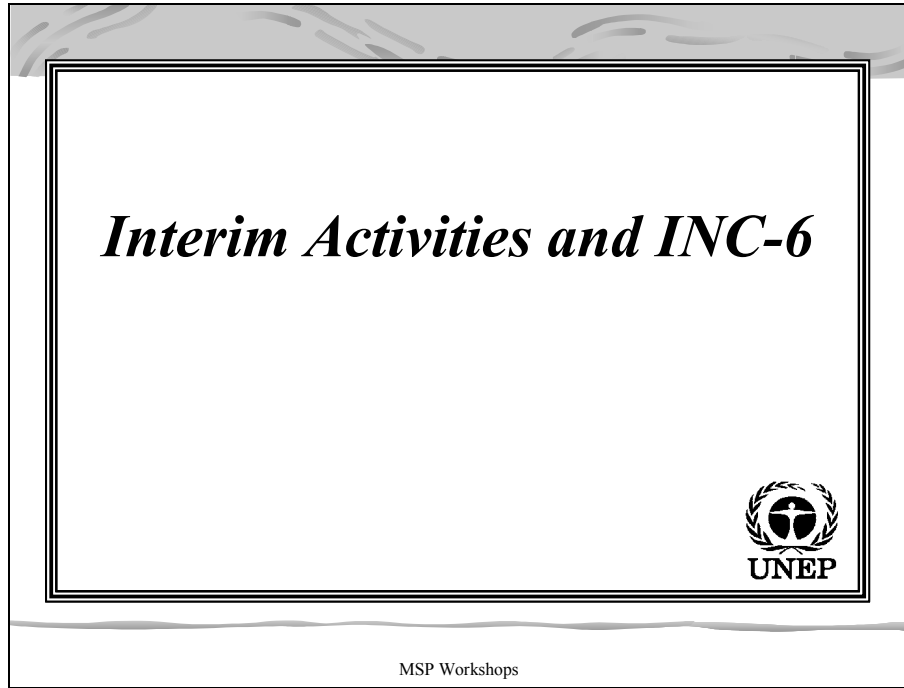
### Considerations for ratification include:

- Implementation Plans [Article 7]
  - required 2 years after entry into force, but needed earlier because:
    - ties together all aspects of Convention
    - will guide early actions and setting of priorities
    - plans for DDT and unintentionally produced POPs to be incorporated
    - stakeholder involvement will be achieved
    - engagement of other countries and IGOs
  - important element of this workshop!

General Obligations

16

**Interim Activities and INC 6** *by Dr. Bo Wahlstrom*



Resolutions

- Interim Arrangements
- Interim financial arrangements
- Capacity building and capacity assistance network
- Liability and redress
- Issues related to the Basel Convention
- Secretariat



MSP Workshops

*Interim arrangements*

- Financial and technical assistance
- UNEP to convene further sessions of INC
- INC to focus on activities that will facilitate a rapid entry into force and effective implementation
- Rules of procedures etc. for the POPs Review Committee
- Guidance on current and projected releases of unintentionally produced POPs
- Guidance on best environmental practices



MSP Workshops

***Interim arrangements, cont.***

- Preparatory work for the listing of new POPs
- Scoping document by secretariat on issues in 1(d) of Article 6
- Establish any subsidiary bodies, as appropriate
- Apply the provisions on a voluntary basis
- UNEP to provide secretariat during the interim period
- Countries to contribute to UNEP trust fund for interim activities



MSP Workshops

***Interim financial arrangements***

- Requests GEF to establish a new focal area to supplement the Convention
- Requests GEF to establish an operational programme on POPs
- GEF to report to COP-1 on measures taken to ensure transparency and simple, flexible and expeditious procedures
- Donors to provide additional financial resources



MSP Workshops



***Interim financial arrangements***

- Interim secretariat to invite funding institutions to provide information on how to support to the Convention
- COP-1 to review availability of financial resources additional to those from GEF and how to channel these into support for the Convention



MSP Workshops

***Capacity building and Capacity assistance network***

- INC invited to focus on arrangements for capacity building in signatory countries
- GEF and UNEP to develop modalities for establishing a capacity assistance network
- Identify and maintain inventory of sources of assistance
- Assist signatories to identify sources
- Provide information to signatories on categories of sources and requirement



MSP Workshops

***Capacity building and Capacity assistance network***

- Encourage involvement of private sector and NGOs**
- Other entities providing assistance urged to contribute to this effort**
- Invites GEF to take into account the needs for the implementation of the Convention in developing countries and to report to IN**



MSP Workshops

***Liability and redress***

- Welcomes Austria's offer to host a workshop**
- Governments and IGOs to provide secretariat with information on measures and agreements on liability and redress**
- Secretariat to organize workshop in 2002**
- COP-1 to consider report and decide on further action**



MSP Workshops

***Resolutions related to the Basel Convention***

- Basel Convention should make work on technical guidelines for managing POPs wastes a priority**
- Basel and Stockholm to co-operate closely on issues related to 1(d) of Article 6**
- INC and secretariat to co-operate with Basel bodies**
- SBC invited to report on managing POPs wastes to POPs INC**



MSP Workshops

***Resolutions related to the secretariat***

- Offers from Switzerland and Germany welcomed**
- Countries to provide full details of offers**
- UNEP to provide secretariat functions of the Convention**
- UNEP to consider offers, including other offers, and prepare a comparative analysis for COP-1 in consultation with the INC**



MSP Workshops

***INC-6***

- Preparations for COP-1 according to the Convention**
- Preparation of interim activities according to resolutions**
- Reports on intersessional work**



MSP Workshops

***Preparations for COP-1 according to convention*****Decisions required on:**

- measures to reduce or eliminate releases from intentional production
- measures to reduce or eliminate releases from unintentional production
- guidelines on best available techniques and best environmental practice



MSP Workshops

***Preparations for COP-1 according to convention***

**Decisions required on:**

- reporting and effectiveness evaluation
- listing of chemicals
- establish the POPs Review Committee
- technical assistance and financial resources



MSP Workshops

***Preparations for COP-1 according to convention***

**Decisions required on:**

- administration of COP
- rules of procedure and financial rules
- further guidance regarding technical assistance and technology transfer to developing country Parties and Parties with economies in transition
- develop and approve procedures and mechanisms for determining non-compliance



MSP Workshops

### ***Implementation of interim activities***

Relating to measure to reduce or eliminate releases from stockpiles and wastes

- Scoping document on Article 6 issues
- Cooperative activities between the Stockholm Convention and the Basel Convention

Implementation plans

- Guidance on preparation of implementation and action plans



MSP Workshops

### ***Implementation of interim activities***

Issues relating to technical assistance and financial resources

- Request for the establishment of a new focal area within the GEF
- Efforts on arrangements for capacity building for the implementation of the Convention in developing countries
- UNEP and GEF in cooperation to develop modalities for a capacity assistance network and report to INC
- Prompt start of the Capacity Assistance Network



MSP Workshops

***Implementation of interim activities***

Relating to liability and redress

- Governments and relevant international organizations provide secretariat on liability and redress
- Workshop on liability and redress in the context of the Stockholm Convention



MSP Workshops

**Chemical Control, Responsibilities, Management, Institutions**  
*by Mr. Bengt Bucht*

**Chemicals Control**

**Responsibilities, management,  
institutions**

**Bengt Bucht**  
**Swedish National Chemicals Inspectorate**

1

**CHEMICALS CONTROL  
SPHERE**

**Health and Environment and Safety**

**Consumers**  
**Workers**  
**Ecosystems**  
**Property**

2



## **PRECAUTIONARY APPROACH**

- **RIO Declaration on The Precautionary Principle**
- **Openness/Information - prerequisites for precaution and for trust**
- **Clean products and Clean production - the first steps to precaution**

3

## **PRECAUTIONARY PRINCIPLE**

### **RIO Declaration**

#### **Principle 15**

**”Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to *prevent* environmental degradation”**

4

## **OPENNESS - INFORMATION**

**The users need more information  
(employers, employees, consumers)**

\*

**Openness - prerequisite for trust**

5

## **Cleaner Products and Production**

**SUBSTITUTION - Avoid hazardous  
chemicals which may be replaced by less  
hazardous ones**

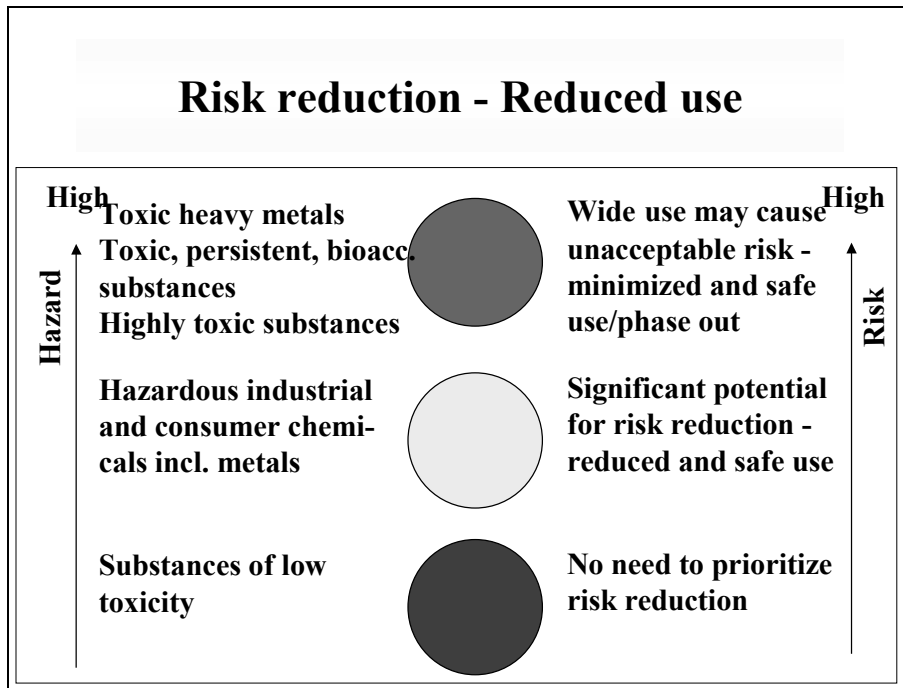
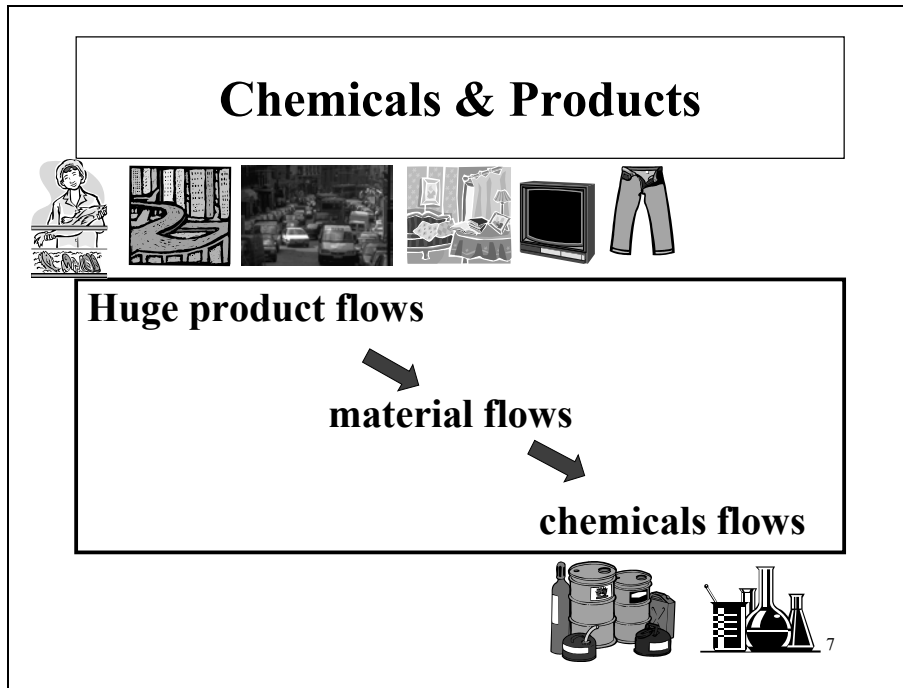
☆

**Use less chemicals with care**

☆

**RESTRICTIONS/BANS -When necessary**

6



## Chemicals control - basic parts

1. **Getting knowledge of hazardous properties of chemicals** (*testing, hazard assessment, classification, ...*)
2. **Disseminating knowledge on chemicals** (*labelling, safety data sheets, ...*)
3. **Choice of chemicals** (*bans, restrictions, voluntary substitution, ...*)  
↓
4. **Assessing risks and taking measures for risk reduction** (*technical measures for pollution and exposure prevention, protective equipment, use instructions etc.*)

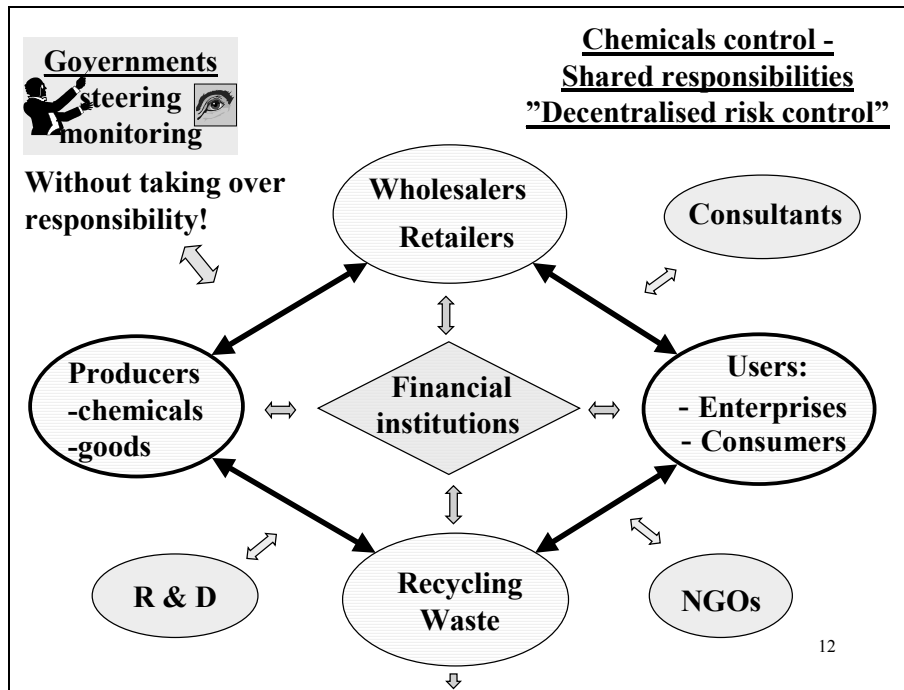
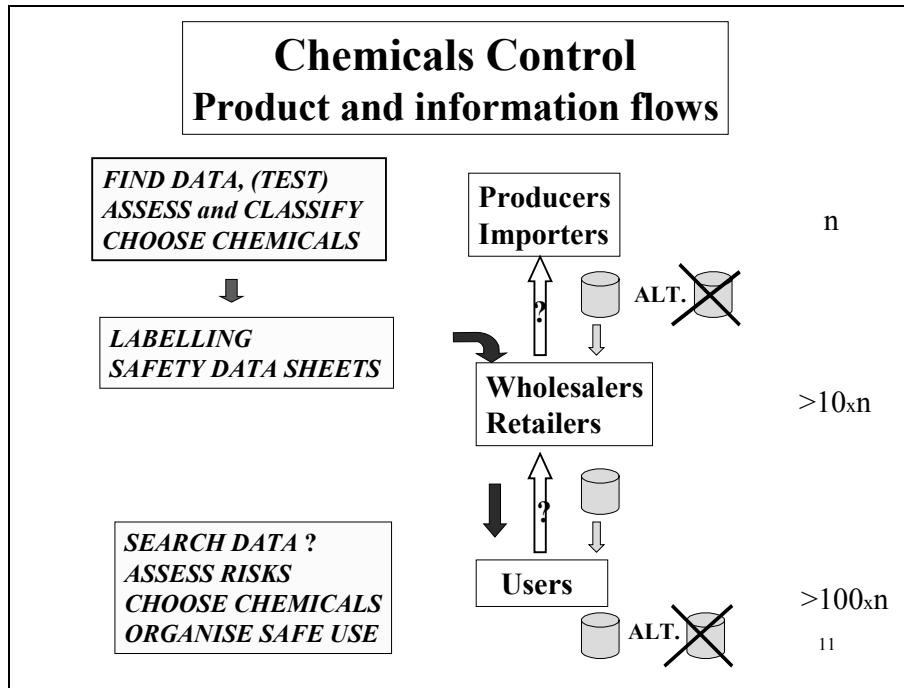
**Producers/importers/users are responsible!**

## Role of Trade and Industry

- **Trade & industry and consumers have the main responsibility for a safe marketing and use of chemicals**
- **Government/agencies steer and supervise**

*Regular dialogue between ministries/agencies and trade&industry is necessary*

- **Recognise the separate roles of public institutions and trade&industry! Do not mix them!!**



**Chemicals Control**  
**National infrastructure needed**

<b><u>Legislation</u></b>	<b><u>Institutional set up</u></b>
<p><i>Primary &amp; Secondary</i></p> <ul style="list-style-type: none"> <li>• Allocation of basic responsibilities</li> <li>• Delegation (!) of responsibilities</li> <li>• Specific regulations</li> </ul>	<p><i>Capability &amp; Capacity</i></p> <ul style="list-style-type: none"> <li>• Organisation</li> <li>• Responsibilities/tasks</li> <li>• Qualifications</li> <li>• Co-operation</li> <li>• Co-ordination</li> </ul>

13

**Institutional set up**

- *Policy level:* main ministry ?  
co-ord./co-op.
- *Management level:* “special management unit”? -  
co-ord./co-op
- *Inspectorates:* designate!  
co-op.
- *Poison Information Centre*

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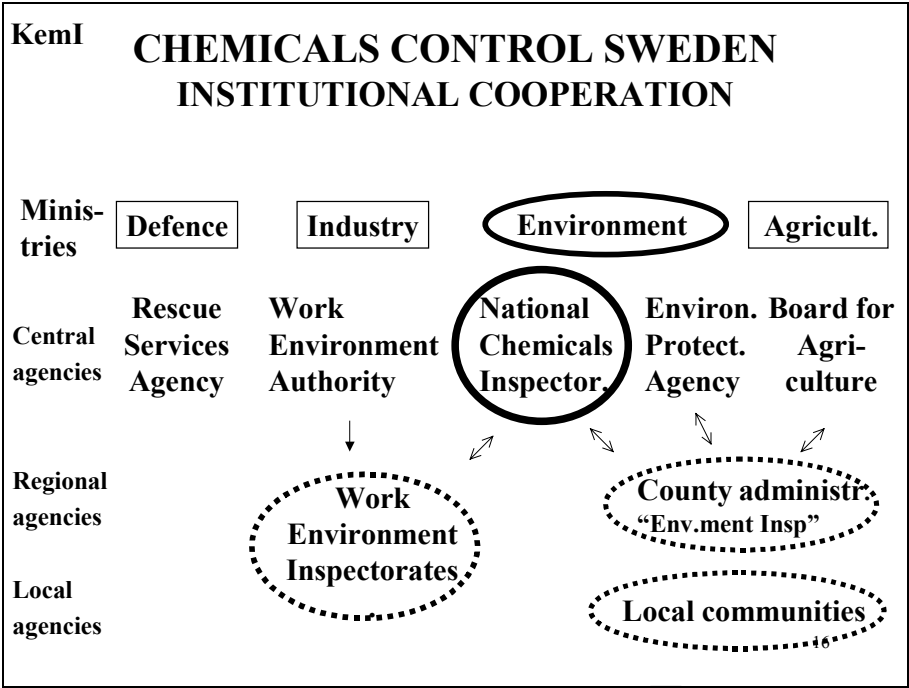
## Organisation of institutions

- Clarify allocation of responsibilities/co-ordination/co-operation - avoid duplication of tasks
- Concentrate responsibility and resources (*PPP's, biocides, other chemicals*)

↓

make a cost-effective use of existing resources

- Additional resources as needed



**COHERENCY**  
**Swedish example**

**One basic legislation**  
**”The Environmental Code”**

**One central agency**  
**”The Chemicals Inspectorate”**

**for chemicals control in the first step of the**  
**product chain = placing on the market**

**[www.kemi.se](http://www.kemi.se)**

17

**Ministries of environment as responsible**  
**bodies for chemicals control?**

**Increasing focus on environmental effects or**  
**environmentally mediated health effects due to use**  
**of chemicals**

**+**

**Min’s of environment are familiar with issues**  
**concerning risk assessment and management.**

**but**

**Other alternatives possible!**



### **Possible policy related tasks for main Ministry**

- **Propose/issue basic legislation (classific./label./SDS, restrictions, new/exist. subst., export/import, biocides, PPPs, ..)**
- **Policy issues as regards control of chemical hazards and risks**
- **Co-ord. between and co-op. with other ministries**
- **International co-operation as regards policy issues**

*!Placing on the market!*

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### **Tasks for a "Chemicals managing unit"**

- **Propose/prepare decisions to be taken at higher level.**
- **Other support to the government in policy issues**
- **Monitor/assess domestic use of chemicals (H&E)**
- **License enterprises placing chemicals on the market**
- **Register pesticides (biocides, PPPs)**
- **Co-operate with other state institutions**
- **Co-operate with trade, industry and other stakeholders**
- **Guide and advice supervision agencies**
- **International activities on expert/management level**

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## ENFORCEMENT - WHAT IS NEEDED?

- **Clear legal responsibilities for enterprises**
- **Sanctions in case of violation of law**
- **Instructions for inspectorates: clear tasks**
- **Legal rights for inspectorates: to get information, to site visits, to issue orders**
- **Knowledge of enterprises to inspect**
- **Resources and qualifications**
- **Guidance/support to inspectorates: methodology, training, ....**

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## Producers/Importers/Exporters

### Responsibilities of Enterprises

#### As regards products placed on the market:

- **Compliance with regulations, conventions, EMS**
  - Classification, Labelling, Safety Data sheets
  - Bans, restrictions (*chemicals, waste, ..*)
  - Licenses/Approvals (*pesticides, ...*)
  - Notification; New substances/At export (PIC)
  - Responsible Care&Product Stewardship!!
- **Demands of customers!!**
- **Organisation, routines**
- **Qualifications** (*own/external expertise*)
- **Documentation on chemicals to be placed on the market** (*test data, literature, from suppliers, ...*)

Inspectorates  
to check

22

## Users and other handlers Responsibilities of enterprises

### As regards handling:

**Compliance with regulations, conventions, EMS/Safe use**

- use instructions, workers informed, labelling, etc. -
- emission/exposure limits, bans/restrictions
- technical measures applied
- personal protective equipment available and used
- waste taken care of properly
- effects (workers health/environment) taken note of

- Organisation, routines – purchasing!
- Qualifications
- Overview of chemicals used
- Hazard and other information from suppliers

Inspectorates  
to check

23

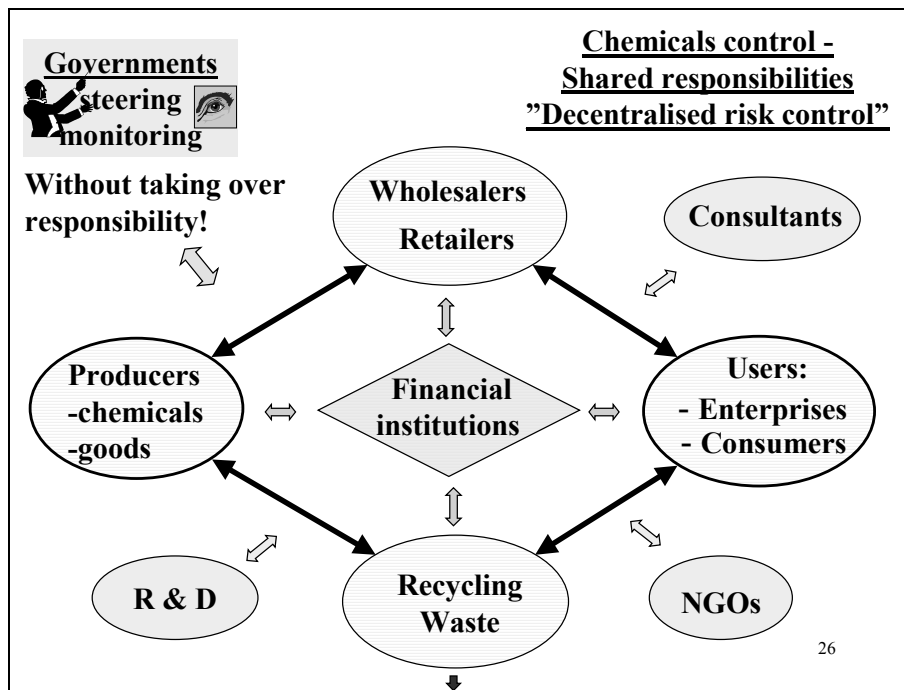
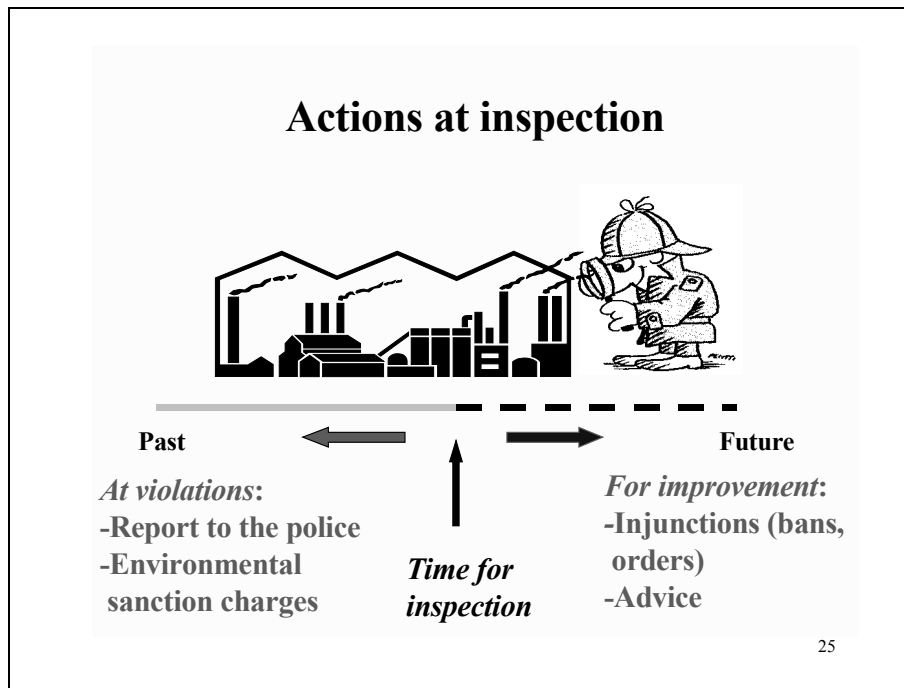
## CHEMICALS CONTROL

### Interdisciplinary area

**Need for different types of qualifications/expertise**

- toxicology and ecotoxicology, chemistry, physical chemistry, engineering, medicine, economy, law, agriculture, ..
- public health, occupational health, ecology
- fire prevention, accident prevention
- Hazard/risk assessors - risk managers

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**UNITAR; Preparation of National Profiles** *by Dr Bo Wahlström*

**Preparation of National Profiles  
to Assess the National Infrastructure  
for the Sound Management of Chemicals**


**UNITAR**

Training and Capacity Building Programmes in  
Chemicals and Waste Management

United Nations Institute for Training and Research (UNITAR)  
Palais des Nations  
1211 Geneva 10

Tel: +41 22 917 1234  
Fax: +41 22 917 8047  
Email: [cwm@unitar.org](mailto:cwm@unitar.org)

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 *National Profiles for the Sound Management of Chemicals*

Z:cwm.08/PTF8/presentations/National Profiles.ppt

**What is a National Profile?**

- A comprehensive and systematic documentation of the national infrastructure for the management of chemicals, including identification of existing gaps and weaknesses.

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 *National Profiles for the Sound Management of Chemicals*

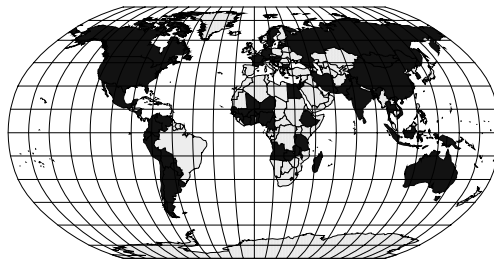
### A National Profile includes Information on...

- Chemical production, import, export and use
- Priority concerns related to chemical production, import, exports and use
- Chemicals legislation and non-regulatory mechanisms
- Responsibilities and activities of governmental and non-governmental bodies
- Existing interministerial bodies and national coordinating mechanisms
- Available data sources
- Technical infrastructure
- Resources available and needed



*National Profiles for the Sound Management of Chemicals*

### National Profile Preparation Worldwide



Legend	
□	National Profile in Preparation (23)
■	National Profile Prepared (67)



*National Profiles for the Sound Management of Chemicals*

### References to National Profiles

- **Priorities for Action, Intergovernmental Forum on Chemical Safety, 1994...**

“National Profiles to indicate the current capabilities and capacities for management of chemicals and the specific needs for improvements should be elaborated as soon as possible and no later than 1997.”

- **Priorities for Action, Intergovernmental Forum on Chemical Safety, 2000...**

“By 2002, most countries, through a multi-stakeholder process, will have developed a National Profile on chemicals management.”

- **May 2001 Global Environment Facility (GEF) Council Meeting...**

Countries recognised the utility of National Profiles with regard to the successful implementation of POPs-related activities and encouraged their development.

*Initial Guidelines for Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants* (GEF/C.17/4) encourages countries that have not prepared a National Profile to do so using UNITAR/IOMC guidance.



*National Profiles for the Sound Management of Chemicals*

### Key Principles for Preparing a National Profile

- Involvement of all concerned parties (multi-stakeholder approach)
- Country-driven process (*by countries for countries*)
- Ongoing process (living document – should be updated on a regular basis)
- Presentation in a standard but flexible reporting format



*National Profiles for the Sound Management of Chemicals*

### **Possible Benefits of Preparing a National Profile**

- Integration of scattered information into one single national document
- Initiation of a comprehensive and transparent process to define national priorities
- Enhanced co-operation of all interested parties within and outside of government
- Broadened network of contacts
- Increased mutual awareness and promotion of information exchange among concerned parties



*National Profiles for the Sound Management of Chemicals*

### **Possible Benefits of Preparing a National Profile**

- Support reporting under international reporting schemes, including the Stockholm Convention on Persistent Organic Pollutants
- Important component of an Integrated National Programme for the Sound Management of Chemicals



*National Profiles for the Sound Management of Chemicals*



**UNITAR Programme to Assist Countries  
in Preparing National Profiles  
to Assess their National Infrastructure  
for the Sound Management of Chemicals**

- Conducted under the umbrella of the IOMC
- Guidance Document published in English, French, Spanish
- Support programmes in place for developing countries



*National Profiles for the Sound Management of Chemicals*

**UNITAR/IOMC National Profile Programme Support**

- Assistance for countries to translate the Guidance Document into the local language
- Grants for a national university, research institute, or ministry to assist in collecting the relevant national and local information
- Support of the organisation of national and local meetings
- Consultancy support to facilitate a participatory process in preparing the National Profile



*National Profiles for the Sound Management of Chemicals*

### **UNITAR/IOMC National Profile Programme Support**

- Support for publication, both hard copy and electronic, of the National Profile
- With country permission, National Profiles are added in the UNITAR/ECB National Profiles Homepage
- Eventual addition of future editions of UNITAR National Profiles CD ROM



*National Profiles for the Sound Management of Chemicals*

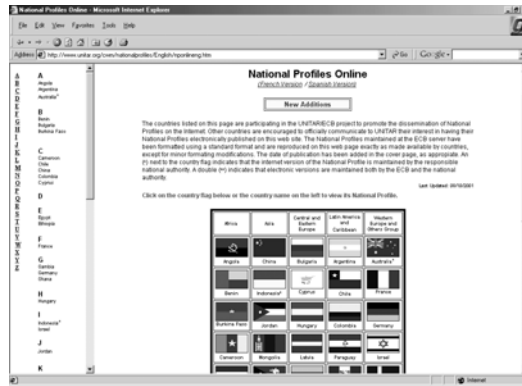
### **Preparing a National Profile to Assess the National Infrastructure for Management of Chemicals: A Guidance Document**

- PART A: The international and National Policy Frameworks for the Sound Management of Chemicals and for the Preparation of National Profiles
- PART B: Organising the Preparation of a National Profile
- PART C: Suggested Structure and Contents of a National Profile



*National Profiles for the Sound Management of Chemicals*

## National Profiles Homepage



National Profiles for the Sound Management of Chemicals

## How to Apply for Support through National Profile Programme

- Application form available from UNITAR
- One application per country
- At least two co-sponsoring Ministries
- Can also be undertaken as part of the preparation process for a POPs National Implementation Plan




National Profiles for the Sound Management of Chemicals

**Legislating Chemicals** *by Mr Masa Nagai*

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•

**LEGISLATING CHEMICALS**



Masa Nagai  
Environmental Law Branch  
UNEP

• • • • • • • •

•  
•  
•

**Setting objective**

To reduce risks to human health and the environment by:

- Regulating certain chemicals
- Regulating certain human activities causing the release of certain chemicals into the environment or introduction of such risks

• • • • • • • •

⋮

## Linkage to sectoral laws

Relevant sectoral laws may cover:

- Water pollution (surface and ground water)
- Marine environmental pollution
- Air pollution
- Soil contamination
- Harm to wild fauna and flora
- Development or land use planning

⋮

⋮

## Lifecycle approach

Target regulatory actions at:

- Research, Development & Testing
- Manufacture
- Transport, Storage
- Distribution, Trade
- Use
- Disposal
- Unintentional generation

⋮

⋮

## Socio-Economic Consideration

- Ensure that regulatory measures on certain chemicals are identified taking fully into account development needs and the need to protect human health and the environment.

⋮

⋮

## Responsibility

- Identify persons who are responsible for risks associated with certain chemicals
- Make such persons accountable in taking actions required to achieve the legislative objectives
- Make such persons bear administrative costs for implementing legislation

⋮

⋮

## Institutional arrangements

- Identify an authority or authorities responsible for implementing legislation
- Identify the relationship with other existing laws, and define jurisdiction among authorities
- Establish institutional mechanisms for inter-sectoral coordination and review

⋮

⋮

## Manufacture & Use Ban/Restriction

- Prohibition or restriction of chemicals causing unacceptable risks
- Address manufacture, import and use
- Differentiated regulatory actions for different types of chemicals

⋮

⋮

## Emission/Release Control

- Emission/release control of certain chemicals
- Set emission/release standard
- Regulate certain types of activities and facility

⋮

## Wastes Management

- Regulate generation, collection, transport, storage, treatment, recycling and disposal of wastes
- Distinct regulatory measures for municipal wastes and industrial wastes
- Regulate the persons and installations involved, and phases of related activities

⋮



⋮

## Means to Enforce

- Record keeping
- Document to track movement
- Permit & License
- Reporting
- Inspection
- Penalties
- Incentive measures

⋮

## Towards Prevention

- Building knowledge basis
- Health and environmental risk assessment
- Awareness of existing risks
- Planning for the sites of hazardous installations
- Preparedness for accidents
- Funds for pollution prevention

⋮

⋮

## Restoration of Damage

- Compensation schemes for injury
- Procedures and funds for clean-up contaminated sites
- Procedures for settlement of disputes

⋮

## International Issues

Bring national legislation in line with:

- Stockholm Convention (persistent organic pollutants)
- Rotterdam Convention (hazardous chemicals in international trade)
- Basel Conventions (transboundary movements of hazardous wastes)

⋮

**Chemicals Legislation: A Model** *by Mr Masa Nagai*

# Chemicals Legislation: A Model

Masa Nagai  
Environmental Law Branch  
UNEP

## Setting objective

Establish procedures to assess health and environmental impact of certain chemicals

Regulate the chemicals posing unacceptable risks

## Scope

- Define the categories of chemicals to be covered
- Combination of characteristics for the categories:
  - Persistent
  - Bioaccumulative
  - Toxic

## Exemptions

- Exemption may be accorded to:
  - Chemicals already covered by other existing laws (e.g. pharmaceuticals)
  - Chemicals for specific use (e.g. research)
  - Chemicals in the quantity under a given threshold

## Lists

- Lists of categories of chemicals
  - First priority for regulation
  - Second priority for regulation
  - Others
- Inventory of existing chemicals
- Practical means to amend the lists
- New chemicals - Not on the lists

## Authority

- Identify the authority responsible to implement the legislation
  - Minister(s) with executing power to issue and undertake regulatory measures
  - Minister(s) with whom coordination is required (e.g by notifying measures taken)

## Responsibility

- Identify persons who are to be governed by the legislation:
  - Manufacturers
  - Importers or traders
  - Users
- Make them responsible to take measures required under the legislation

## Information Gathering

- Notification to the authority of the intent of manufacture, import or sale, or use
  - Name, address, amount of chemicals, purposes
- Submission of chemicals information by manufacturers or importers

## Assessment

- Assessment by the authority of impact to health and environment, based on the chemicals information submitted and/or its own tests
- Assessment to be done in a given period
- Observe transparent process

## Measures

- Prohibit manufacture, import or sale, or use
- Permit with certain regulatory measures:
  - Licensing
  - Compliance with certain technical standard
  - Bookkeeping and report
- Permit

## Differentiated Measures

- Regulatory measures may be differentiated according to the assessed risks
- Lists of different categories of chemicals, posing different levels of risks, may provide a basis for such differentiated treatment

## Enforcement

- Recommendation
- Administrative order
- Mandatory submission of reports
- Onsite inspection
- Administrative and criminal punishment



## Financial means

- Administrative costs may be partially borne by:
  - those who intend to manufacture, import or sale, or use, upon application
  - those who are permitted, upon, e.g. licensing

## Regulations

- Lists of individual chemicals may be published under regulations issued by the authority, e.g. Minister(s)
- Such lists maybe amended from time to time to keep them updated
- Other matters that require regular update (e.g. technical standard or administrative fees) may be covered by regulations

## Linkage to other laws

- Waste management
- Agricultural chemicals
- Air quality
- Water quality
- Marine and coastal environment
- Soil quality
- Environmental impact assessment

**Introduction to the Global Environment Facility** *by Mr. Stefano Bologna*

**Introduction to the GEF  
Subregional Workshop to support  
the POPs Convention  
Ouagadougou, 25 Feb - 1 March 2002**

**The Global Environmental  
Focal Areas of the GEF**

- ❖ Biodiversity
- ❖ Climate Change
- ❖ International Waters
- ❖ Ozone Depletion (only countries in transition)
- ❖ Cross cutting: Land Degradation as it relates to the above focal areas
- ❖ [Persistent Organic Pollutants – POPs – to be determined]



## The GEF and the Global Environmental Conventions

- ❖ The GEF is the designated “financial mechanism” for the:
  - Convention on Biological Diversity (CBD)
  - Convention on Climate Change (UNFCCC)
  - POPs Convention
- ❖ The GEF collaborates closely with other treaties and agreements to reach common goals (International Waters, CCD, Montreal Protocol)



## Convention on Biological Diversity (CBD)

- ❖ Objectives of the Convention
  - Conservation
  - Sustainable use
  - Fair and equitable sharing of benefits
- ❖ Financial Mechanism
  - GEF is the financial mechanism of the Convention



## UN Framework Convention on Climate Change (UNFCCC)

- ❖ Requires developing country states (non-Annex I Countries) to prepare National Reports on their:
  - greenhouse gas emissions
  - national climate policies
  - vulnerability to climate change
- ❖ Financial Mechanism
  - GEF is the financial mechanism of the Convention and provides funding for preparation of these reports
- ❖ The Convention is also the source of guidance for GEF funding of climate projects.



## International Waters

**The coastal oceans and transboundary fresh water basin are under siege from:**

- ❖ Unsustainable irrigation diversion of fresh water
- ❖ Pollution discharge from industry, sewage, agriculture
- ❖ Over fishing
- ❖ Habitat loss and Wetland conversion
- ❖ Persistent Organic Pollutants (POPs)
  
- ❖ The GEF is not a financial mechanism for International Waters. However it supports Regional Sea Conventions, UNCLOS, and selected maritime conventions



## Land Degradation & GEF's Role

- ❖ Support country driven activities that prevent/ control land degradation through its interface with the GEF's Focal Areas.
- ❖ Addresses LD as part of national sustainable development plan
- ❖ Complements, rather than substitutes other financing available
- ❖ Possible if project design is from the bottom up (local needs as well as conservation)



## Linkages

- ❖ The environment is interconnected through all levels
- ❖ Local, national, regional, global
- ❖ Country projects funded by the GEF need to focus on preserving the integrity of the global environment - improving environmental conditions and ensuring sustainability at all levels



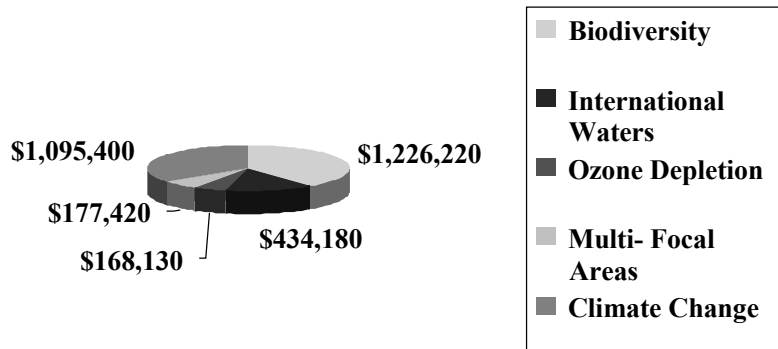
## History of the GEF – A Timeline

- ❖ GEF Pilot Phase
  - 1991 - 1994
  - \$1 Billion US Dollars
  
- ❖ Replenishment:
  - 1995 - 1998
  - \$2.2 Billion US Dollars
  - 1999 - 2001
  - \$2.8 Billion US Dollars
  
- ❖ World Bank is the Trustee of the GEF Trust Fund



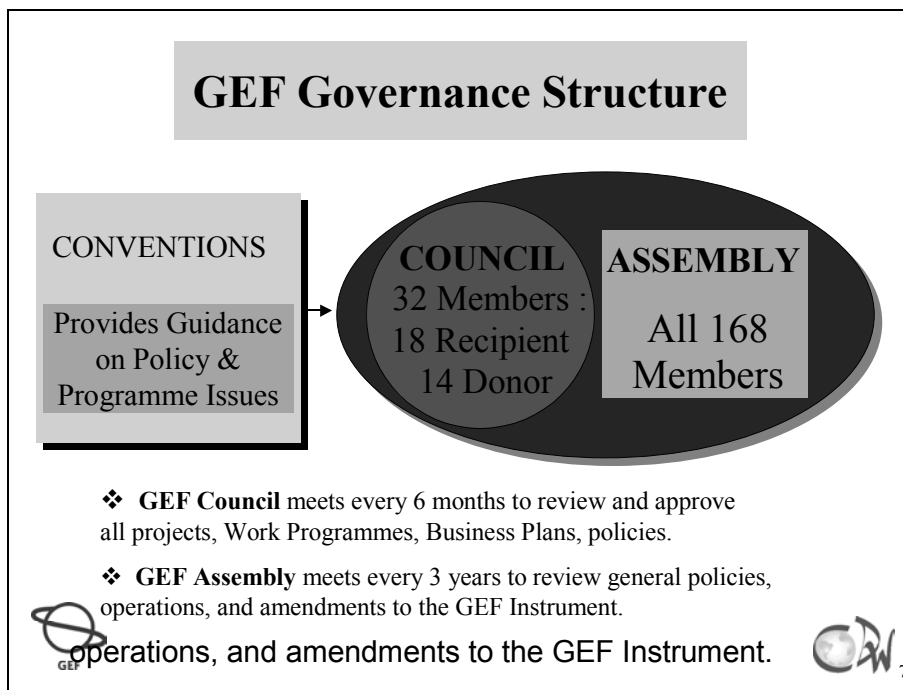
## GEF Portfolio (July 2000)

in millions of US dollars



<b>Total GEF</b>	<b>\$ 3,101.341</b>
<b>Total Co-Financing</b>	<b>\$ 8,443.100</b>
<b>TOTAL</b>	<b>\$11,544.441</b>



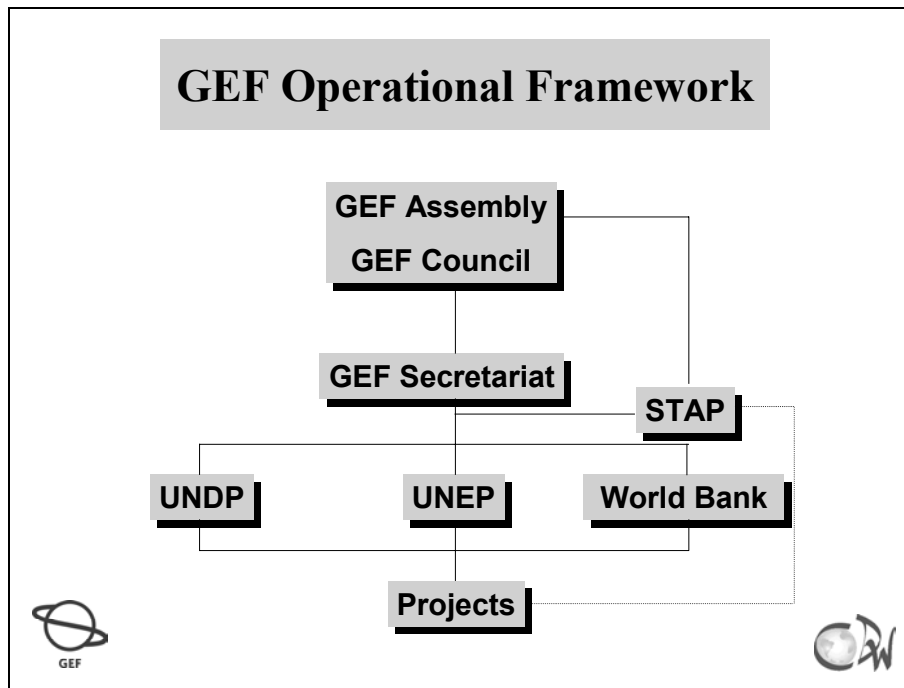


### Overview of member countries of the GEF

**Countries grouped according to their Constituency**

❖ AFRICA	6	Constituencies
❖ ASIA	6	Constituencies
❖ LAT & CARIB	4	Constituencies
❖ EAST EUR	2	Constituencies





- ### Executing Agencies with shared responsibility for GEF Project Cycle Management
- ❖ FAO
  - ❖ UNIDO
  - ❖ African Development Bank
  - ❖ Asian Development Bank
  - ❖ European Bank for Reconstruction and Development
  - ❖ Inter-American Development Bank

### **Projects can also be executed by:**

- ❖ Government Agencies
- ❖ UN Specialized Agencies
- ❖ Non-Governmental Organizations
- ❖ Bilateral Development Cooperation Agencies
- ❖ Others from the private sector/institutes



### **Key National Focal Points**

- ❖ Political Focal Point / Member
- ❖ Operational Focal Point
- ❖ Convention Focal Point



## **Cooperation at National Level**

- ❖ Operational Focal Point
- ❖ Stakeholders
- ❖ NGOs
- ❖ General Public
- ❖ Implementing Agencies



## **Responsibilities GEF Political Focal Point**

- ❖ Ensure overall policy consistency
- ❖ Ensure GEF policies consistent with national policies
- ❖ Communicate Government views
- ❖ Act as in-country Government contact point
- ❖ Report on GEF Council Meetings



## **Responsibilities Operational Focal Point**

- ❖ Ensure GEF-activities consistent with national policies
- ❖ Identify project ideas to meet country priorities
- ❖ Facilitate in-country consultations
- ❖ Provide feedback on projects



## **Responsibilities Convention Focal Points (CBD & FCCC)**

- ❖ Receive and distribute Convention documentation
- ❖ Coordinate national policies consistent with the Conventions
- ❖ Communicate Government views
- ❖ Act as in-country contact point for consultations
- ❖ Report on FCCC and CBD



## **Non-Government Stakeholders**

- ❖ Non-Governmental Organizations
- ❖ Private Sector (business/banks/local and foreign investors)
- ❖ Research and Academic Community
- ❖ Country public involvement



## **Non-Governmental Organizations**

- ❖ Advise on Governmental and GEF decisions
- ❖ Assist in shaping GEF policies
- ❖ Attend GEF council meetings and comment on operational strategies and programs
- ❖ Assist in designing and execute GEF projects and inform on monitoring work



## Private Sector

- ❖ Provides access to private capital
- ❖ Provides access to know how and training
- ❖ Encourages shift from public to private sector investment
- ❖ Provides link with economic activities that effect the global and local environment e.g., energy, transport, agriculture, fisheries



## Research and Academic Community

- ❖ Scientific and Technical Advisory Panel (STAP)
- ❖ Members and Roster of Experts
- ❖ STAP Activities
- ❖ Targeted Research
- ❖ Need to Incorporate and Coordinate Local Scientists



## Why Country public involvement?

- ❖ Country's own priorities are addressed
- ❖ Projects more responsive to local needs
- ❖ Strengthens ownership and accountability
- ❖ Opportunity to build local partnerships
- ❖ Improves awareness and knowledge



## Country Public Involvement

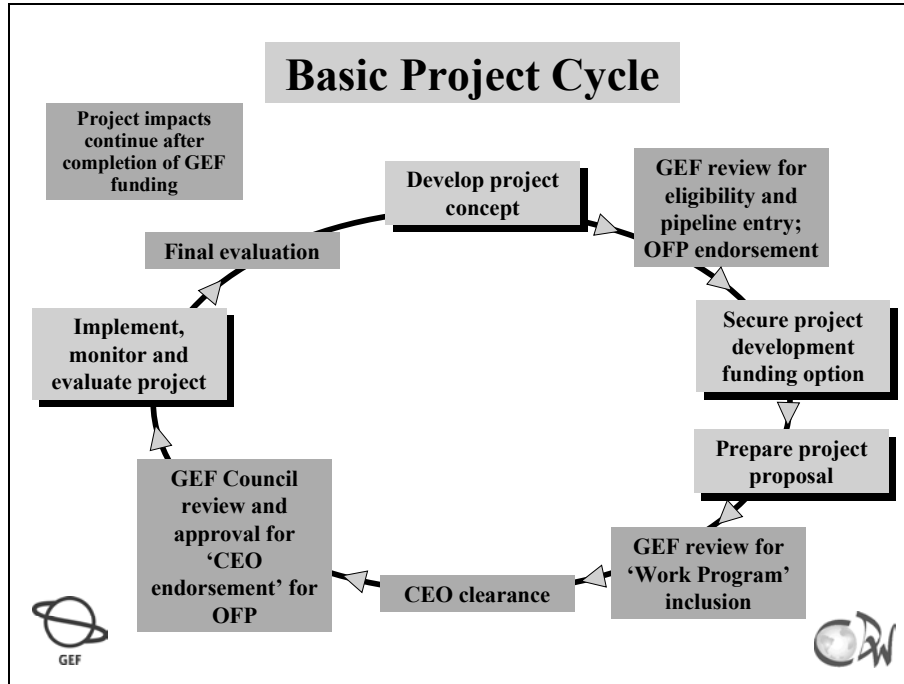
### Constraints:

- ❖ National coordination to include all opinions is not easily established
- ❖ Involvement of many groups could slow down the project development and approval process
- ❖ Increased institutional capacity may be required at government level



## GEF and Strengthening Country Coordination

- ❖ How to improve communication with the GEF Council through the Constituency?
- ❖ How to better link the OFP to stakeholders?
- ❖ How to make effective use of the Internet?
- ❖ How to strengthen a continuing dialogue at National level?
- ❖ How to use the media to improve public awareness and involvement?





## “Coarse Filter” criteria for GEF funding

- ❖ How do I tell whether my project idea meets basic criteria for GEF eligibility?



### 1. The Eligibility Test

- ❖ To be eligible for GEF financing, a country must:
  - have ratified the Convention on Biodiversity or Framework Convention on Climate Change (or, in the interim period, signed the POPs Convention for eligibility for NIPs)
  - be eligible for assistance from the UN system or the World Bank



## 2. The Global Significance Test

- ❖ Does the project idea deal with globally significant biodiversity, transboundary international waters resources, or reduction of greenhouse gas emissions?



## 3. The National Priority Test

- ❖ Does your project concept reflect national environmental priorities and commitments?
  - GEF focal point endorsement is a requirement.



#### 4. Co-funding Test

- ❖ Does your project concept have co-funding from other sources? If not, is there a good potential for creating co-funding partnerships?
- ❖ Remember GEF financing is co-financing.



#### 5. The Portfolio Test

- ❖ Does your idea have the potential to be a catalytic and innovative project in the overall GEF portfolio?
  - Learn about existing or planned GEF projects in your country.



## GEF is a Co-financier

- ❖ GEF encourages partnerships by bringing together multiple sources of funding for projects
- ❖ **Key Concept:** the GEF is not a project financier, but a project Co-financier providing “new and additional” funds to address global environmental issues



## “Incremental Costs”

- ❖ Cost of activities for the global environment beyond what is required for national development
- ❖ GEF projects must complement national programmes and policies to maximize global benefits
  - 1) Establish the baseline
  - 2) Determine cost of GEF alternative
  - 3) Incremental cost (project budget) = GEF alternative -- cost of baseline



## Other Project Eligibility Requirements

- ❖ Country-driven and endorsed by host Government
- ❖ Produce identifiable global benefits
- ❖ Participation of all affected groups and transparency
- ❖ Consistency with the Conventions
- ❖ Possess strong scientific and technical merit
- ❖ Financially sustainable and cost-effective
- ❖ Include processes for monitoring, evaluation, and incorporation of lessons learned
- ❖ Play catalytic role that leverages other financing



## Moving from Concept Paper to Project Proposal

- ❖ Choose a funding pathway that is appropriate for the scope of your project:
  - Full Projects
  - Medium-sized Projects
  - Small Grants Programme



## GEF Funding Categories

- ❖ Full-size projects (\$1 million and up)
- ❖ Medium-sized projects (up to \$1 million)
- ❖ Financing can be available for preparing projects
- ❖ Small Grants Programme (up to \$50,000)
- ❖ Enabling activities
- ❖ Project Development Funds (PDF-A up to \$25,000; PDF-B up to 350,000; PDF-C up to \$1 million)



## GEF funding pathways

Funding Pathway	Funding level	~ Time required	Prep. funding
Full Project	\$1 US million and up	6-24 months	up to \$US 350,000
Medium Project	\$US 50,000 – 1 million	6-12 months	up to \$US 25,000
Small Grant	up to \$US 50,000	3-6 months	up to \$US \$2000



## GEF Medium-Size Projects (MSPs)

- ❖ Meet government/NGO demand for fast, flexible funding
- ❖ Receive expedited funding of up to \$1 million; take 6 months on average
- ❖ Designed in partnership with the NGO community
- ❖ Over US\$ 21 million in MSPs in fiscal 1999 and x in fiscal 2000



## Preparatory funding

- ❖ **PDF A or Block A** - up to \$US 25,000 funding is available for preparing a medium or full project brief.
- ❖ **PDF B or Block B** - up to \$US 350,000 funding is available ONLY for full projects.



### **Use PDF A or Block A to:**

- ❖ assess possible project sites
- ❖ identify threats and root causes or key barriers
- ❖ evaluate institutional frameworks
- ❖ meet and consult stakeholders
- ❖ identify co-funding possibilities



### **Use PDF B or Block B to:**

- ❖ conduct feasibility studies
- ❖ undertake detailed assessments
- ❖ develop institutional and planning frameworks
- ❖ make field visits and full consultations with stakeholders
- ❖ complete co-funding arrangements





**Initial Guidelines for Enabling Activities on POPs** *by Mr. Stefano Bologna*



Global Environment Facility

**INITIAL GUIDELINES FOR ENABLING  
ACTIVITIES ON POPs**

Subregional Workshop to Support  
Implementation of the POPs Convention  
Ouagadougou, Burkina Faso, 25 February-  
1 March 2002

**Outline**

Part I

⌘ Early assistance: criteria and guidelines

⌘ Eligible Activities

⌘ Step-wise framework for NIP

Part II

⌘ Procedure and Format

## **The Guidelines**

- ⌘ Developed by GEF Secretariat in consultation with WB, UNDP, UNEP, FAO, UNIDO and POPs Convention Secretariat;
- ⌘ Approved by Council May 2001;
- ⌘ Represent an "early response";
- ⌘ NIP is main focus of GEF assistance in this first phase of implementation;
- ⌘ Draft Operational Programme on POPs is other component of GEF assistance.

## **Eligibility Criteria**

- ⌘ In the interim period: developing countries and countries with economies in transition.
- ⌘ After entry into force, the COP will provide guidance on criteria.

## **GEF's early assistance**

⌘NIPs

⌘Capacity building for sustained support.

⌘To the extent that capacity building needs of countries to address POPs will address more general chemicals management issues, the GEF, in supporting the POPs Convention, will strengthen Basel, PIC, Bamako etc.

## **Eligible Activities**

⌘Preliminary inventories of sources and emissions of POPs;

⌘Action Plan for the reduction of releases of unintentional by-products;

⌘Action Plan to control the use of DDT for disease vector control;

⌘Build capacity to report every five years on progress in phasing out PCBs;

## **Eligible Activities (Contd)**

- ⌘ Preliminary assessment of stockpiles of POPs and of waste products contaminated with POPs; identification of management options, including opportunities for disposal;
- ⌘ Build capacity to report to the COP on total production, import and export;
- ⌘ Build capacity to identify sites contaminated by POP.

## **Eligible Activities (Contd)**

- ⌘ Build capacity to assess the need of continued specific exemptions and preparation of their reporting/extension;
- ⌘ information exchange, and awareness raising through multi-stakeholder participatory processes.

## **Indicative step-wise process**

### *⌘ Step 1: Determination of coordinating mechanisms and organization of process*

- (i) identification and strengthening of national institution/unit to serve as Focal Point;
- (ii) determination of multi-stakeholder national coordinating committee based on a stakeholder analysis;
- (iii) identifying and assigning responsibilities among government departments and other stakeholders for the various aspects of POPs management.

## **Step-wise process for NIP**

### *⌘ Step 2: Establishment of POPs inventory and assessment of national infrastructure and capacity*

- (i) preparation of a National Profile (or core sections that relate to POPs); establishment of a register, in order to create and maintain a reliable inventory;
- (ii) preliminary inventory of production, distribution, use, import and export;
- (iii) preliminary inventory of stocks and contaminated sites and products; assessment of opportunities for disposal of obsolete stocks;
- (iv) preliminary inventory of releases to the environment;

## **Step-wise process for NIP**

- (v) assessment of infrastructure capacity and institutions to manage POPs, including regulatory controls, needs and options for strengthening them;
- (vi) assessment of enforcement capacity to ensure compliance;
- (vii) assessment of social and economic implications of POPs use and reduction;
- (viii) assessment of monitoring, research and development, and chemical analytical capacity; and
- (ix) identification of POPs-related human health and environmental issues of concern; basic risk assessment as a basis for prioritization of further action taking into account, inter alia, potential releases to the environment and size of exposed population.

## **Step-wise process for NIP**

### *⌘ Step 3: Setting of priorities and determination of objectives*

- (i) development of criteria for prioritisation, taking into account health, environmental, and socio-economic impact and the availability of alternative solutions; and
- (ii) determination of national objectives in relation to priority POPs or issues.

## **Step-wise process for NIP**

### *⌘ Step 4: Formulation of a National Implementation Plan, and specific Action Plans on POPs*

- (i) identification of management options, including phasing out and risk reduction options;
- (ii) determination of the need for the introduction of technologies, including technology transfer and indigenous alternatives;
- (iii) assessment of the costs and benefits of management options;
- (iv) development of a national strategy for information exchange, education, communication and awareness raising;
- (v) preparation of a draft NIP which may include priorities, timetable for implementation, and estimated cost of proposed interventions, including incremental costs where applicable.

## **Step-wise process for NIP**

### *⌘ Step 5: Endorsement of NIP by stakeholders*

- (i) submission of a draft NIP to stakeholders for comments through workshops, dissemination of information, etc., to obtain the commitment of stakeholders, including decision-makers, to implement the NIP;
- (ii) finalization of the NIP.

## **Expedited Procedures**

- ⌘ GEF funds 100% of "agreed costs"; enabling activity costing less than US\$ 500,000 approved under expedited procedures.
- ⌘ Proposals to be endorsed by the GEF Operational Focal Point.
- ⌘ Proposals should build on previous/existing activities/knowledge.
- ⌘ Resources should be used efficiently.
- ⌘ Local and Regional expertise to be used where possible.

## **Steps for expedited procedures**

### STEP 1

Choose a GEF Implementing/ Executing Agency (WB, UNDP, UNEP, FAO, UNIDO, RDBs) that you are comfortable with.

- ⌘ Different Agencies have different "comparative advantages".
- ⌘ The important thing is to develop a NIP. Any of the agencies should be able to assist you.



## **Steps for expedited procedures**

### STEP 2

Finalise the proposal with IA/EA.

⌘ Iterations / e-mails

⌘ IA/EA send staff or consultant

⌘ IA/EA to exercise quality control.

## **Steps for expedited procedures**

### STEP 3: Submission

⌘ Seek Country's Operational Focal Point endorsement.

⌘ Proposal is submitted to the GEF Secretariat by IA/EA on behalf of Country.

## **Steps for expedited procedures**

### STEP 4: Approval

- ⌘ Circulation to IAs/Eas, Convention Secretariat, for comments.
- ⌘ GEF Secretariat may request additional information / clarifications etc.
- ⌘ the GEF CEO and Chairman approves proposals < US\$ 500,000.

## **Steps for expedited procedures**

### STEP 5:

#### Signature of Project Document with IA/EA

- ⌘ Contractual arrangements
- ⌘ Reporting obligations
- ⌘ Country and IA/EA sign project document which is the legal basis for disbursement of funds from the IA/EA.

INDICATIVE FRAMEWORK FOR DEVELOPING NATIONAL IMPLEMENTATION PLANS (FOR FULL DETAILS SEE GUIDELINES)			
Step 1	Determining Co-ordinating Mechanism and Organizing Process		
KEY ACTIVITIES/ ISSUES	Output/Results	Possible Assistance Needs	Indicative Timeframe
<ul style="list-style-type: none"> <li>• Identification and strengthening of national institution/unit to serve as Focal Point;</li> <li>• Identification and sensitization of main stakeholders;</li> <li>• Strengthening government commitment;</li> <li>• Determination of multi-stakeholder national co-ordinating committee;</li> <li>• Identifying and assigning responsibilities amongst government departments and other stakeholders for the various aspects of POPs management;</li> <li>• Obtaining commitment of national stakeholders (for example by means of Memorandum of Understanding);</li> <li>• Assessment of needs of Focal Point to oversee overall execution (technical, human resources, etc.);</li> <li>• Drawing-up overall workplan;</li> <li>• Organisation of inception workshop.</li> </ul>	<ul style="list-style-type: none"> <li>• Focal Point to oversee overall execution;</li> <li>• National co-ordinating mechanism amongst stakeholders is identified / established;</li> <li>• Agreement, including mission statement, amongst national stakeholders is developed;</li> <li>• Agreed Focal Point needs and budget;</li> <li>• Overall workplan and timeframe for country activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation manual and/or guidance for overall implementation, including expected country deliverables/ output;</li> </ul>	2 to 3 months
<b>Comments Step 1</b>	<ul style="list-style-type: none"> <li>• Wherever possible, use should be made of existing committees/structures for overseeing NIP development; the creation of new coordinating structures should be avoided.</li> <li>• External consultants may be recruited to provide technical assistance, if needed. Priority should be given to local and regional consultants.</li> <li>• Awareness raising activities and effective communication at the country level, whether directed to decision-makers or the public at large, should be on-going activities which are important for steps 1 through 5 and further.</li> </ul>		

*(Framework developed in the context of the preparation of the "Development of National Implementation Plans for the management of POPs" GEF funded pilot project implemented by UNEP)*

## Format for proposal

- ⌘ Cover page
- ⌘ Project description: not to be forgotten
- ⌘ Timetable and workplan
- ⌘ Budget
- ⌘ Optional annex: background information on country situation
- ⌘ Endorsement

## **Summary**


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- ⌘ Countries signatory to the Convention are eligible for GEF assistance for NIP development.
- ⌘ The guidelines approved by the GEF describe the eligible activities and recommend a step-wise framework.
- ⌘ Procedure and format are also described in the guidelines.

## 7 THE GEF IMPLEMENTING AND EXECUTING AGENCIES

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### THE WORLD BANK: Activities Related to Persistent Organic Pollutants *by Miss Ellen Tynan*



# The World Bank

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## Activities Related To Persistent Organic Pollutants

Ellen Tynan  
Environment Department  
World Bank  
[ETynan@worldbank.org](mailto:ETynan@worldbank.org)

### Bank's Interest in POPs

- Key partner in sustainable development & protecting the environment with client countries
- Implementing agency for the GEF & MLF
- Global & local environmental problem.
- Largest source of development assistance (Loan Financing)
- Trust Funds (Grant Financing)

## **POPs: A Cross-Sectoral Issue**

- POPs impact on those sectors which are priority in Bank's development assistance program e.g., agriculture, health, water & sanitation, industry, energy, mining & waste disposal;
- Bank safeguard policies are key tools in ensuring that environmental and human health issues are addressed in projects;
- Extensive experience in implementing global environmental programs;

## **World Bank Support Worldwide**

- POPs baseline studies in preparation for development of National Implementation Plans;
- Capacity building for chemical management;
- Guidance on NIPs;
- Study on linkages of POPs and poverty;
- PCBs inventories (planned).

## Possible Funding

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- Trust Funds
- Canadian Trust Fund US\$14 million over 5 years
- Other Bilateral Donors
- GEF
  - Existing funding under OP 10& 12
  - Enabling Guidelines approved in May 2001
  - New OP in to be approved

## Canadian Trust Fund: Objectives

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- Help developing countries and EITs build commitment and capacity to take measures to reduce release of POPs
- Engage the commitment and support of these countries for POPs convention
- Help key source countries in need to address their critical domestic health, environment and sustainable development issues related to POPs

## **The Canadian Fund**

- Support negotiation process by encouraging and helping countries build capacity to reduce releases of POPs by :
  - reducing or eliminating their production of POPs,
  - reducing or eliminating their use of POPs including switching to safer, more sustainable alternatives,
  - safely disposing of stockpiles and wastes, and
  - reducing emissions of POPs.

## **The Canadian Fund**

- Total US\$ 14 million
- Maximum of \$250,000 per activity
- Encourages use with other funding sources, e.g., bilaterals, GEF
- Funds accessed through World Bank review/approval
- Strategic application



## **WB support to POPs – health (1)**

- Roll Back Malaria Partnership (WB, WHO, UNICEF, UNDP) with focus on Africa;
- Malaria control programs often only public health entities that use pesticides;
- WB direct financing for malaria control account more than US\$200 million in 25 countries worldwide;
- Involvement of private sector (IFC);

## **WB support to POPs - health (2)**

- Integration of malaria control efforts in health, nutrition and population sector programs as well in education, infrastructure and sanitation, agriculture and urban development;
- Inclusion of tax, trade and regulation issues to malaria control in policy dialogue;
- Pilot projects related to use of DDT in Eritrea and Madagascar.

## **Bank activities in prevention – agricultural pesticides (1)**

- Overall commitment to integrated pest management (safeguard policy OP 4.09);
- Support of strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides;
- Assessment of the country's regulatory framework and institutional capacity to promote safe, effective and environmentally sound pest management;

## **Bank activities in prevention – agricultural pesticides (2)**

- Borrower specifically addresses pest management within the project's environmental assessment;
- Elements of Bank-supported country-level investment programs:
  - ✓ Policy framework: elimination of pesticide subsidies,

## **Bank activities in prevention – agricultural pesticides (3)**

- ✓ Strengthening regulatory core functions (pesticide registration, control and enforcement of regulations for worker and environmental protection, provisions for pesticide management),
- ✓ Capacity building: training of extension workers and farmers in integrated pest management,
- ✓ Institution building: quality control for residues in food, environmental monitoring,
- ✓ Risk and disaster management.

## **African Stockpiles Program : Objectives**

- Rid all 53 African countries of stockpiled obsolete pesticides;
- Clean-up / render harmless / dispose of associated wastes (i.e. used containers, contaminated soils);
- Establish / augment prevention programs to ensure sustainability of actions.



## **The Problem**

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- Almost all Countries have obsolete pesticides – some dating back 40 years;
- Perhaps 30% are POPs and more can become POPs via inappropriate incineration;
- Most countries lack capacity to remedy the problem (labs, institutional capacity, \$\$) and need/want assistance to remove this serious threat;
- Adverse impacts (economic development; human health, ecosystem health, water quality; biodiversity etc).

## **Background ASP**

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- Multi-stakeholder group to achieve synergies, program integration, streamline project approvals and resource flows;
- Joint development of concept over last 14 months;
- Idea is to integrate with Basel, Rotterdam, Bamako Conventions and Rabat Declaration (January 2001 program of Action).

## Existing Partners

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- FAO, UNEP (POPs & Basel Sect.) , UNIDO,
- OAU, UNECA,
- WWF, PAN (UK and Africa),
- CLI (Crop Life International)
- World Bank (Implementing Agency).

## Program Scope

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- Expected to last ten or more years;
- Estimated cost US\$250 Million USD (US\$50-75 million for prevention and US\$150-175 million for clean-up);
- Several tranches (4 -7 pilot countries first tranche before program expansion to remaining countries);
- Program implementation expected to begin in early 2003.

## **Next Steps/Future consideration**

- Enabling activities
- Integrating POPs issue in more Bank sectors
- Mainstreaming POPs in Bank activities
- Linking toxics & poverty
- Looking at chemicals as a package  
i.e. MP, Basel, PICs (Rotterdam convention), POPs, Heavy Metals

**What FAO can do to Minimise Issues and Problems of stockpiles** by *Dr. Alemayehu Wodageneh*

What FAO [in collaboration with member countries] can do to minimize issues and problems of stockpiles


**UNEP Subregional workshop on support for the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs)**

**Presented by**  
Alemayehu Wodageneh (PhD)  
FAO, AGPP, Rome, Italy

**General matters**

1. Advise governments about short-and-long term problems of POPs, stockpiles and pesticides
3. Raise awareness at all levels
3. Train technical staff, conduct workshops, seminars on stockpiles
4. Assist countries in countrywide surveys and **inventory taking of stockpiles using FAO inventory format**
5. Mobilize countries in signing, ratifying and implementing POPs and other Conventions

## Direct assistance

- 
1. Assist and guide countries in environmental risk assessment
  2. Assist member countries in project formulation and execution under donor support and the FAO Technical Cooperation Programme (TCP) and other sources
  3. Provide assistance and provide information on the FAO International Code of Conduct on the distribution and use of pesticides

## Technical & relevant issues of concern

1. Contaminated soil at affected sites, stores, etc.
2. International tenders and selection of waste management services and commissioning
3. Cleaning up, repackaging and disposal of toxic waste, decontamination and remediation of affected sites



## Technical guidance on matters of relevance

1. Importance of the International Maritime Dangerous Goods Code (IMDG) related to shipment of waste on high seas
2. Importance and relevance of the Basel Conventions to shipment, transport, etc. of waste across country borders
3. Importance of prevention of accumulation of waste
3. Use and implementation of alternative methods of pest control (Integrated Pest Management)

## Technical guidelines

**Develop and provide various FAO guidelines on toxic waste and stockpiles management free to countries:**

1. On prevention of accumulation
2. Pesticide storage and management
3. Disposal of bulk quantities
4. Management of small quantities
5. Assessing of contaminated soil
5. Baseline studies of stocks
6. Countrywide surveys and inventory taking (comprehensive publication)
7. Country guidance

### FAO information sources provided to member countries

1. Video cassettes, CD-ROM's on stockpiles management and pesticide POPs
2. Posters of various affected sites and disposal operations
3. Share compiled inventory data on stocks and information
4. Brochures, on issues and problems of obsolete pesticides

### FAO's training components in relation to obsolete stockpiles

1. Highlight of available technologies on disposal
2. First aid training while handling waste
3. Avoidance of risks while inventory taking
4. POPs GEF concept and guidance where applicable
5. Selection and use of personal protective equipment
6. Protective gloves, masks, boots, etc
7. Risk assessment in store and in disposal Operation
8. Guidance and use of safe working areas
9. Sampling and analysis of toxic substances
10. Site & stock stabilization
11. Turn key disposal project, etc.

## Major interest and salient features of FAO's activities

1. Enhance Prior Informed Consent (PIC) - Information on Certain Hazardous Pesticides and Industrial Chemicals in International Trade
3. Determine Maximum Pesticide Residue Levels (MRLs) in Food and the Environment
4. Engage in Codex Alimentarius procedures through Maximum Limits for Pesticide Residue in Foods

## Major interest and salient features of FAO's activities

6. Provide maximum residue levels for individual pesticide in different foods and feed items, and provides advice on the acceptable levels of pesticide residues in food moving in international trade.
7. Provide Pesticide Specifications and Quality Control Standards
9. Ensure management of risks associated with the use of pesticides.
9. Enhance and maintain International Code of Conduct on the Distribution and Use of Pesticides and
10. Find effective solutions, by following up implementation of the up of the Code:

## The FAO International Code of Conduct (12 articles)

Article 1	Objectives of the Code
Article 2	Definition of the Code
Article 3	Pesticide Management
Article 4	Testing of Pesticides [ <u>Manufacturers to ensure Safety, Efficiency, Fate in the Environment</u> ]
Article 5	Reducing Health Hazards
Article 6	Regulatory & Technical Requirements
Article 7	Restrictions on Availability and Use
Article 8	Distribution and Trade
Article 9	Information Exchange and Prior Informed Consent (PIC)
Article 10	Labeling, Packaging, Storage and Disposal
Article 11	Advertising
Article 12	Implementation and Monitoring of Code

## Major interest Salient features of FAO's activities

- 11. Get involved actively in helping countries establish and strengthen their plant protection capabilities
- 12. Provide operational guidelines and training on scientific and technical personnel.
- 13. Strengthen food control through laboratory assessment, training in laboratory management and residue analysis, and publication of specifications for pesticides and manuals for pesticide analysis and quality assurance in food control chemical laboratories.

## Major interest Salient features of FAO's activities

- 14. Train staff in the safe, efficient and environmentally sound management of pesticides
- 15. Assist in establishing laboratory infrastructures for quality control of pesticides and residues.

## Related websites of interest maintained by FAO

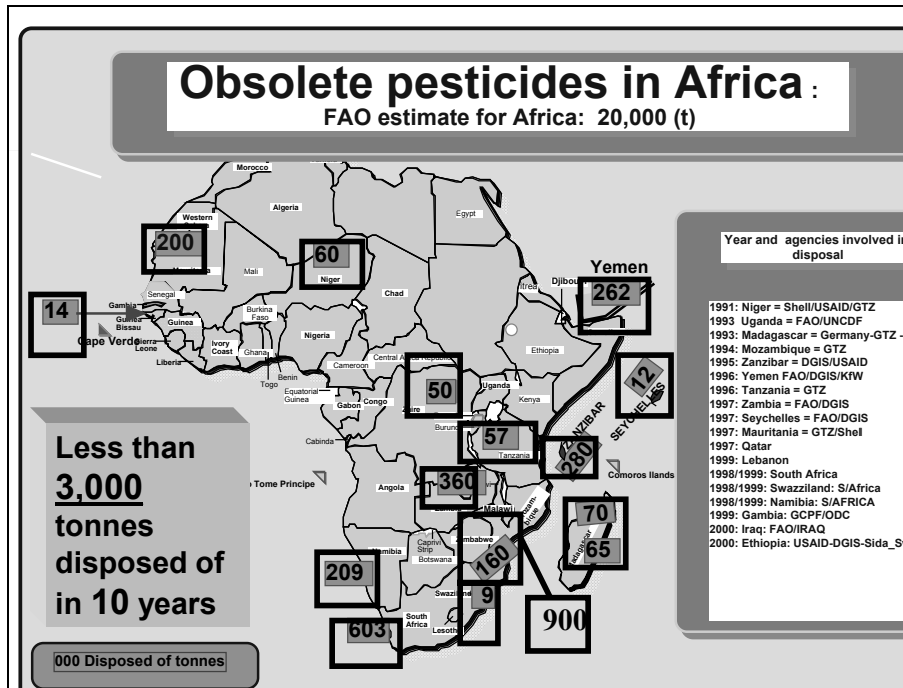
1. International plant protection convention, IPPC Secretariat, hosted by FAO's Plant production and protection division (AGP)
2. Ecoport, a shared, on-line database aimed at integrating inter-disciplinary information on the Earth's biodiversity. Contains AGPP's **Global plant & pest information system.**
4. Insect and pest control Programme of the FAO/IAEA joint division for nuclear techniques in food and agriculture (AGE)
5. Pesticide management aimed at minimizing hazards

## Related websites of interest maintained by FAO

1. FAO specifications for plant protection products - Technical specifications for more than 200 pesticides and related formulations
2. Manual on the development and use of FAO specifications
3. Issues on activities of FAO's Integrated pest Management Programme and its approach and ,
4. Information on briefing on the dangers of indiscriminate pesticide use.

## Related websites of interest maintained by FAO

1. FAO guidelines and standards - technical standards, test procedures, policy guidelines for the introduction of equipment certification and spray operator-training schemes.
2. Information on desert locust situation, updates and forecast, i.e. FAO's watchtower on desert locust movements across Africa and West Asia.
3. Locust publications include bulletins and updates, guidelines, surveys/projects in Iran and Senegal, details of desert locust atlas



## POPs General references



- Stockholm Convention (POPs)
- Rotterdam Convention (PIC)
  - Web site: [www.chem.unep.ch/pops/](http://www.chem.unep.ch/pops/)
- Basel Convention
  - Web site: [www.basel.int/](http://www.basel.int/)

## PCB General references



- Management of PCBs in the United States
- Inventory of Worldwide PCB Destruction Capacity
- Survey of Currently Available Non-incineration PCB Destruction Technologies
- Guidelines for the Identification of PCBs and Materials Containing PCBs
  - Web site: [www.chem.unep.ch/pops/](http://www.chem.unep.ch/pops/)

## PCB General references



- US EPA Regulations on PCB 40 CFR Part 761
  - Web site: [www.epa.gov/pcb/](http://www.epa.gov/pcb/)
- European Council Directive 96/59/EC on PCBs (Document 396L0059)
  - Web site: <http://europa.eu.int/eur-lex/en>
- International Programme on Chemical Safety, Environmental Health Criteria (EHC) 140 (PCBs 1992 Second Edition)
  - Web page: [www.who.int/pcs/pub\\_ehc](http://www.who.int/pcs/pub_ehc)



## Dioxin general references



- Standardised Toolkit for Identification and Quantification of Dioxin and Furan Releases
  - Web page: [www.chem.unep.ch/pops/](http://www.chem.unep.ch/pops/)
- European Community Strategy for Dioxins, Furans and Polychlorinated Biphenyls
  - Web page: <http://europa.eu.int/eur-lex/en>
- International Programme on Chemical Safety, Environmental Health Criteria (EHC) 88 (Dioxins and Furans)
  - Web page: [www.who.int/pes/publications\\_ehc](http://www.who.int/pes/publications_ehc)

## Information source



- FAO Home Page:
  - [www.fao.org/](http://www.fao.org/)
- FAO Obsolete Pesticides Project Website:
  - [www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Disposal/index](http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Disposal/index)

## Information source



- General Sites of interest:
  - US EPA:  
[www.epa.gov/pcb](http://www.epa.gov/pcb)
  - UK Ministry of Environment:  
[www.environment-agency.gov.uk/](http://www.environment-agency.gov.uk/)
  - US Occupational Health and Safety Administration (OSHA):  
[www.osha.gov](http://www.osha.gov)
  - For International Maritime Dangerous Goods Code (IMDG):  
[www.imo.org](http://www.imo.org)

## Information source



- Useful e-mail addresses include:
  - For FAO: [alemayehu.wodageneh@fao.org](mailto:alemayehu.wodageneh@fao.org)
  - For UNIDO: [meisa@unido.org](mailto:meisa@unido.org)
  - For UNEP: [chemicals@unep.ch](mailto:chemicals@unep.ch)
  - For Basel: [sbc@unep.ch](mailto:sbc@unep.ch)

## Information source



- Useful web addresses for equipment suppliers include:
  - For field test kits:
    - [www.dexsil.com](http://www.dexsil.com)
    - [www.ensys.co.uk](http://www.ensys.co.uk)
    - [www.hach.com](http://www.hach.com)
  - For personal protective equipment:

## Information source



- For United Nations Approved packages:
  - [www.vanleer.com](http://www.vanleer.com)
  - [www.skolnik.com](http://www.skolnik.com)
- A more detailed list of suppliers and manufacturers can be obtained from FAO and other relevant organizations

## UNIDO presentation by Dr. Grace Ohayo-Mitoko

1

### Persistent Organic Pollutants (POPs)

#### UNIDO

*Assisting our member countries in the context of international environmental frameworks & development*

2

#### International Environment Frameworks

- Montreal Protocol

(Ozone Depleting Substances)

*End 2000: implementing 654 projects (US\$ 220 Million) in 59 countries worldwide, phasing out > 28 000 ODP\* tons*

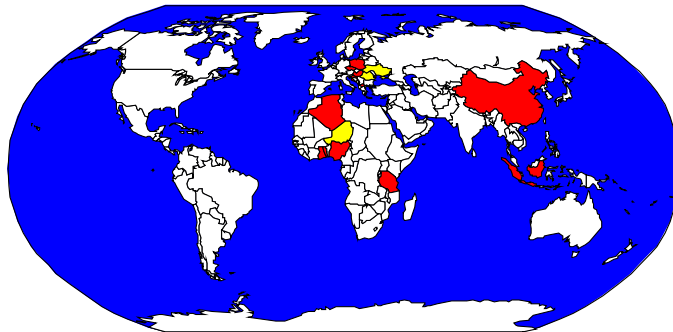
- Kyoto protocol

(Greenhouse Gases)

*Assessing capacity building needs, integrated programme elements, renewable energy*

3

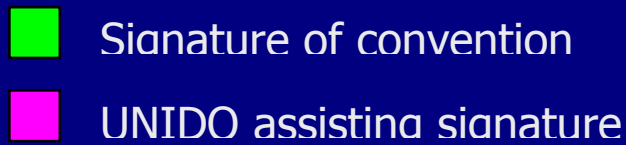
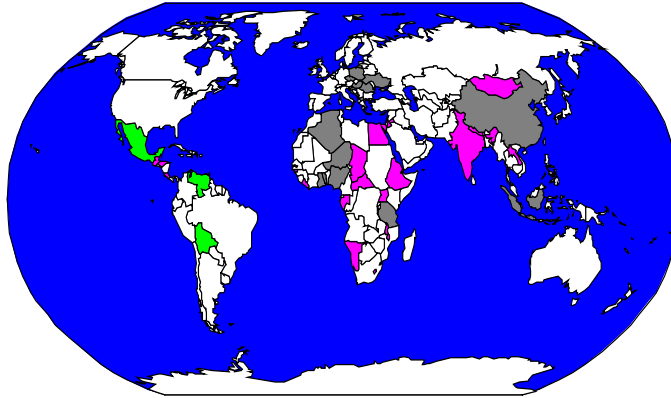
#### First steps: 'Enabling Activities'



 Enabling Activities proposal

 Enabling Activities proposal

4

**Member countries requesting UNIDO assistance**

5

**Next steps**  
– the technical challenges

6

**Africa Stockpile Programme:  
Funding the Prevention & Disposal of Obsolete Pesticides From African  
Countries**

Implementing Agency: •The World Bank

Funding Agencies: •The World Bank, UNDP, WWF, Bilateral Agencies,  
Industry, etc. Executing Agency:

•WWF with UNIDO, FAO, UNEP/ SBC, PAN-UK, PAN-Africa

Project Budget:

•USD 200-250 Mil (1<sup>st</sup> Tranche: USD 45 Mil for 1-4 years) , GEF

Duration:

•10 –15 Years

**7**

**Demonstration projects**

To

- Test the viability & removal of barriers that impede adoption & effective implementation of available non-combustion technologies for destroying POPs
- Identify and evaluate environmentally sound alternatives to POPs

**8**

**Non-combustion technologies**

- POPs elimination via available innovative technologies
- Slovakia, Philippines
- A demonstration in advance of tackling important stockpiles & contaminated soils
- GEF-funded USD 250 000

**9**

**Feeding the world without poisons:**

**Environmentally friendly alternatives to POPs-based pesticides**

- Botanical Pesticides – NEEM
- Biopesticides *Bacillus thuringiensis* (Bt)

**10**

**Supporting the Stockholm Convention**

Sectoral Support and Environmental Sustainability Division  
Cleaner Production & Environmental Management Branch

**UNITAR presentation by Mr Ian Huismans****UNITED NATIONS INSTITUTE  
FOR TRAINING AND  
RESEARCH****Ouagadougou, March 1st 2002**

Training programme on the management of dangerous  
chemicals and wastes

United Nations Institute for Training and Research (UNITAR)  
Palais des Nations  
1211 Genève 10, Suisse

Tel: +41 22 917 1234  
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Email: [cwm@unitar.org](mailto:cwm@unitar.org)



1

**The services of UNITAR and the Multilateral  
Environment Agreements (MEA) related to chemicals**

- **Establishing a base**
  - The philosophy of UNITAR related to the MEAs on chemicals (Basel, Rotterdam, Stockholm) is based on the belief that it is not possible to implement them efficiently without taking into account much broader considerations on the sound management of chemicals
- **Integration and Co-ordination**
  - The joint efforts of ministries and of parties interested and involved in the context of “an inter-sectorial and co-ordinated approach for the sound management of chemicals” – as considered by the Inter-government Forum on the Safety of Chemicals (IFSC) – have a greater chance of success



2

## 1. Preparation of National Profiles on the management of chemicals

- During the meeting of the GEF Council in May 2001, countries recognised the usefulness of national profiles for the successful implementation of activities related to POPs, and their development was encouraged
- The information collected for preparing the National profile constitutes an important first step by providing an overview of the existing infrastructure concerning POPs. The national profile can then be used as the basis for a more specific analysis of the situation which is necessary for preparing concrete actions concerning POPs



3

## 2. Capacity building for the development of an Action plan

- The capacities acquired during this training course are very useful for the development of the National Implementation Plans for the Stockholm Convention (article 7)
- The methodology is presently being evaluated in the framework of a UNITAR project supported by Switzerland in three pilot countries: Ecuador, Senegal and Sri Lanka
- Ecuador is also one of the countries participating in a GEF pilot project, managed by UNEP. This covers the national requirements for POPs management
- UNITAR has harmonised its efforts in Ecuador with those of UNEP. Projects are being prepared with a view to collaboration between UNITAR and UNEP for organising training activities for the development of an Action plan in 11 GEF pilot countries



4



### 3. Development of risk management plans for priority chemicals

- The Stockholm Convention proposes, *inter alia*:
  - action on a single chemical / on groups of chemicals
  - identification and substitution by alternative products which are less harmful
  - relevant capacity building activities
- Basing itself on the 1999 pilot project with Cameroon, Chile, Gambia and Tanzania, UNITAR has developed detailed guidelines in order to assist countries in the development of risk management plans for priority chemicals, with the co-operation of the International Programme on Chemical Safety (IPCS)
- A similar project is underway in Ghana



5

### 3. Development of risk management plans for priority chemicals

- This orientation can help countries to develop and implement activities related to POPs and to other chemicals
- A guideline document will be available for countries in mid-2002:
  - it will give information about the principles and concepts which are indispensable for evaluating and managing risk
  - it will make suggestions for an adaptable and progressive procedure for the development of a risk management plan for priority chemicals
  - it will give practical examples of how to reduce risks



6

#### 4. Develop and support an integrated national plan for the sound management of chemicals

- The national co-ordination platforms --- a key element for a NIP ---- can make an important contribution to the efficiency of activities related to POPs
- Specific guidelines, as well as training material, have been developed for creating and reinforcing mechanisms for:
  - inter-ministerial co-ordination and communication
  - exchange of information
  - accessing of financial resources
  - identification of priorities, through combined efforts of ministries and stake-holders



7

#### How are UNITAR projects implemented?

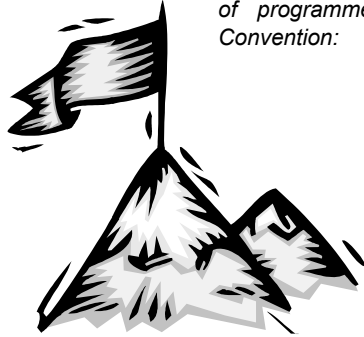
- In addition to its experience, UNITAR can provide numerous contacts in more than 70 countries. These contacts have been developed during national projects over about ten years, through joint efforts for the implementation of the Stockholm Convention and of other international conventions related to chemicals
- Thanks to its simplified administrative structure, national UNITAR projects can be initiated without significant delays, and be made effective on the site of the project quickly after conclusion of an agreement on the subject. These projects are implemented with the administrative support, and in close collaboration with, the national UNDP offices and our partners at IOMC
- At the international level, co-ordination is provided by the UNITAR/IOMC Working group. This is made up of representatives of the 7 organisations which are partners to IOMC, as well as Germany, Denmark, Holland and Switzerland.



8

## Summary

- *UNITAR, in co-operation with agents and implementing agencies of the GEF, can help countries in the development of programmes aimed at implementing the Stockholm Convention:*



1. By the preparation of National profiles for the management of chemicals
2. By capacity building for the development of the Action plan
3. By developing risk management plans for priority chemicals
4. By developing and supporting an integrated national plan for the sound management of chemicals



9



## UNITED NATIONS INSTITUTE FOR TRAINING AND RESEARCH

[www.unitar.org](http://www.unitar.org)

Training programme for the management of dangerous chemicals and wastes

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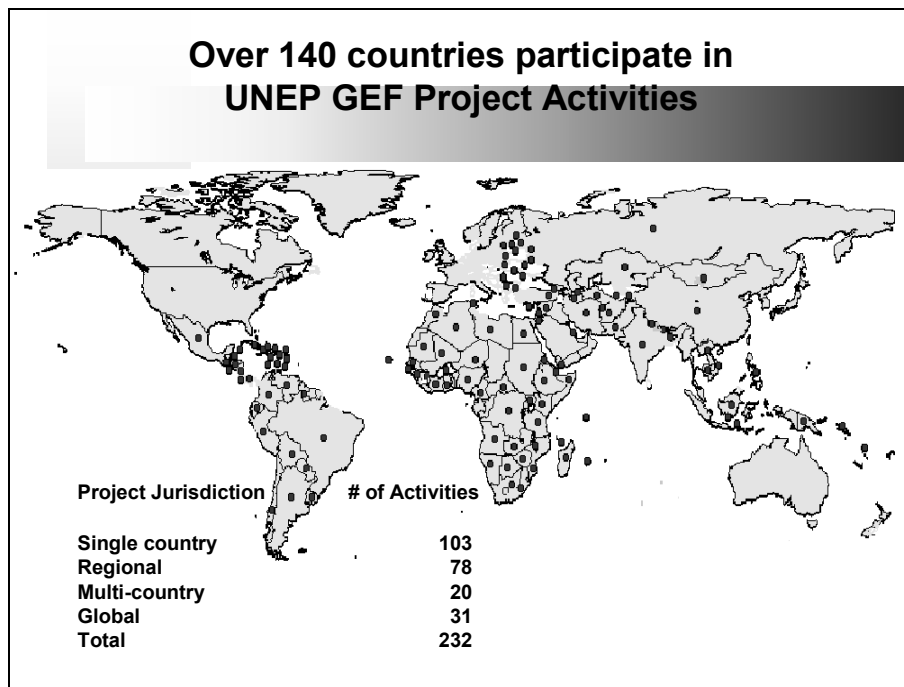


10

**POPs – UNEP and GEF** *presented by Ms. Fatoumata Ouane*

**POPs – UNEP and the GEF**

Jim Willis, Director  
UNEP Chemicals



## **UNEP/GEF POPs and PTS Projects (1)**

- **Regionally-based Assessment of Persistent Toxic Substances**
- **Development of NIPs for POPs: 12-country pilot project**
- **Support for Implementation of the Stockholm Convention (Medium size project)**
- **Persistent toxic substances, food security, and Indigenous Peoples in Arctic Russia (Medium size project)**
- **Demonstration of alternatives to DDT in Mexico and Central America (PDF-B)**
- **Reducing pesticides runoff to the Caribbean Sea (Colombia, Costa Rica, Nicaragua) (PDF-B)**

## **UNEP/GEF POPs and PTS Projects (2)**

- **Reduction of exposure to DDT and strengthening of malaria control - Executed by WHO/AFRO and Ministries of Health in Eritrea, Ethiopia, Madagascar, Namibia, South Africa, and Swaziland (PDF-B)**
- **Support to local communities for the reduction of pesticides use in the Niger and Senegal River basins through Integrated Pest and Production Management - Executed by FAO/Global IPM Facility in Benin, Guinea, Mali, Mauritania, Niger and Senegal (PDF-B)**

## Some Considerations

- The NIP is your plan for implementing the convention; make sure that the plan is designed to meet your needs.
- Different approaches in developing the plan:
  - *Large external consultant component*
  - *Country-driven*
- EAs get a flat fee of ~\$50,000 not included in the project budget.
- Budgets are country-specific; \$500,000 is not automatic.
- Different EAs have different strengths and weaknesses. Compare offers of assistance carefully.
- Partnerships are possible, but should be specified in your proposal.

## Why Consider UNEP? (1)

- **UNEP is the secretariat of the Stockholm Convention and is designated by the Convention to assist parties.**
- **With UNEP supporting its NIP, the entire amount of GEF funding goes to that country.**
- **UNEP has more than \$6 million USD, in addition to what is available through the GEF, for projects and workshops in countries that develop their implementation plans with UNEP's support.**

## Why Consider UNEP? (2)

- **UNEP has extensive experience in all of the twelve POPs listed in the Stockholm Convention; an active POPs programme since 1995.**
- **Governments selected UNEP to convene and support the negotiations of the Convention on the basis of its policy and technical competence on POPs.**
- **UNEP seconded a staff member to write the “Initial guidelines for enabling activities for the POPs Convention” and is the agency most familiar with its requirements.**
- **12-Country GEF project gives UNEP a “head start.”**

## Why Consider UNEP? (3)

- **UNEP is preparing the detailed guidelines for developing NIPs.**
- **UNEP has developed all of the currently available UN guidelines and guidance materials specific to POPs.**
- **UNEP has 40 staff members ready to provide immediate assistance to countries on NIPs.**
- **UNEP has financed and provided technical support for over 60 national projects in developing countries and countries with economies in transition on the major issues addressed by the Stockholm Convention.**

## Why Consider UNEP? (4)

- **Since 1995, UNEP has held over 100 regional, sub-regional and national workshops addressing POPs and the priority issues that are reflected in the Stockholm Convention.**
- **UNEP implements 20-30 regional and sub-regional workshops each year on the Stockholm Convention. These address the key issues of implementation, including PCB and dioxin/furan inventories and action plans, and selecting alternatives to POPs pesticides. Where possible, these will be held in countries selecting UNEP to support their NIP in order to strengthen the plan development process and to build synergies.**

## Why Consider UNEP? (5)

- **UNEP has extensive experience in implementing GEF projects. UNEP is a founding member of the GEF, and has been an Implementing Agency since the GEF's inception in 1991.**
- **UNEP was the first agency with POPs projects approved by the GEF.**
- **UNEP's underlying interest is to ensure that each country has the ability to fulfil its obligations under the Stockholm Convention and thereby to protect health and the environment from POPs. UNEP's approach is designed to ensure that projects are country-driven, country-led and country-implemented.**



## Follow-up

- **UNEP would be pleased to arrange follow-up consultations with countries to:**
  - **Provide in depth briefings on the Convention and its requirements**
  - **Develop proposals for NIPs for GEF funding**
  - **Design other needed actions (e.g., workshops or projects) for chemical safety**
- **Can take place at UNEP or in your country**

## 8 COUNTRY REPORTS

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### ALGERIA

#### Report concerning POPs

Within the framework of the policy and national strategy regarding the preservation of the environment and public health, Algeria has now signed the Stockholm Convention on Persistent Organic Pollutants (POPs), and is embarking on the development of the national plan for the implementation of this convention (in accordance with article 7 of the convention cited above). A budget of US \$ 494,000 has been attributed to our country by the GEF.

As regards Persistent Organic Pollutants, object of the Stockholm Convention, the Algerian legislation and regulations on this subject are as follows:

- Law no. 83-03 of February 5<sup>th</sup> 1983 relating to environmental protection, whose objective is to implement a national policy for the protection of the environment which aims at:
  - the protection, the restructuring and the exploitation of natural resources
  - the prevention of, and fight against, all forms of pollution and nuisances
  - the improvement of the conditions and quality of life.

This law introduced some general principles on chemical substances, whose provisions aim at protecting man and his environment against the risks resulting from the substances which are the subject of this law.

- decree no 87-128 August of 18<sup>th</sup> 1987 relative to PCB-based oils (polychlorobiphenyls), to electrical equipment which contain them, and to materials contaminated by PCBs, has as its objective the regulation of the conditions for the exploitation, use, handling, transport and storage of PCB-based oils, PCB-containing equipment and materials contaminated by this product. This decree bans the importation, manufacture, installation, purchase, sale, transfer, whether free or not, of PCB-based oils, the electrical equipment which contains these and materials contaminated by this product.
- Law 87-17 of 1<sup>st</sup> August 1987 concerning plant protection which contains the following provisions:
  - the implementation of a national policy concerning plant protection aimed at ensuring the controlling plants, since their import and export could lead to the propagation of plant pests.
- Setting up of a fund, within the Ministry of Agriculture, for the promotion of plant protection, aimed at supporting these protection actions and encouraging the development of related activities,
- Establishing periodically, via regulatory means, the list of plant pests to be fought against on the national territory,; this list is to be made known through appropriate information channels,

- This law also stipulates that plants, plant products and plant materials which are have authorisations to imported must be accompanied, when entering the national territory, by a plant protection certificate delivered by the official services of the country of origin, and conforming to the requirements fixed by the provisions of the law in force,
- Prohibition of the use of plant protection products which are not certified
- Setting up under the Minister responsible for Agriculture of a commission for plant protection products for agricultural use,
- Licensing of establishments commercialising plant protection products, and of businesses providing services in the area of plant protection, issued by the Ministry of Agriculture,
- The executive decree no 95-405 of December 2<sup>nd</sup> 1995 concerning the control of plant protection products for agricultural use, defines the conditions for certification, manufacture, commercialisation and use of plant protection products for agricultural use and fixes the powers, composition and functioning of the commission for plant protection products,
- The importation, possession, commercialisation and use of plant protection products for agricultural use, must have a prior authorisation issued by the Ministry of Agriculture,
- Plant protection products intended for agricultural use, which are imported and destined for distribution, are subject to qualitative controls.
- Executive decree no 93-286 of November 23<sup>rd</sup> 1993 regulating the control of plant protection products at the frontiers, specifies the plant protection control regulations

It should be noted that the preliminary inventory carried out in companies belonging to the energy and mining sector brought to light the existence of substantial stocks of PCB oils and PCB-containing equipment.

A detailed inventory of POPs is planned which should be undertaken within the framework of the implementation of the national plan in close collaboration with the national focal point (Ministry of Land Planning and the Environment).

## 1 BENIN

As all other countries of this Globe, Benin is concerned by the question of the environmentally sound management of chemicals, in particular Persistent Organic Pollutants whose high degree of danger and toxicity has been demonstrated and which are used in various sectors of activity by a population which to a large extent is illiterate.

In effect, because of:

- the existence on its territory of fairly numerous industrial plants which daily handle equipment and material containing PCBs ;
- the use in the recent past of pesticides belonging to the group of Persistent Organic Pollutants, in agriculture (small holdings and intensive agriculture), public health (in combating disease carriers), building, forestry, etc.;
- its position as a transit country;
- the permeability of its frontiers which encourages fraudulent imports of certain Persistent Organic Pollutants such as DDT by persons who grow cotton or by resellers of anti-mosquito spirals which contain POPs, commonly known by the name "COQ BRAND" ;
- the existence in all cotton-growing regions of the country of almost 331 tonnes of obsolete pesticides which were inventoried in 1997 by the plant protection service, with the help of financial assistance received from the FAO; these stocks are awaiting environmentally sound destruction;
- the poor level of understanding of the vast majority of the population about the dangers associated to the use of these products ;
- insufficient concerted actions by the Institutions responsible for managing chemicals ;

Our country is exposed to the negative effects of Persistent Organic Pollutants on human health and the environment.

Unfortunately the legislative and institutional mechanism guaranteeing an environmentally sound use of these products is still being developed. In effect, although Benin disposes of a relatively abundant legislation related to the management of chemicals, these laws are implemented to only a very small extent, and often badly so.

The legal system exists therefore but should be revised so as to improve and strengthen it. An effort should also be made to exploit it in a harmonised way and to strictly enforce the text of the laws and the application texts of this legislation on chemicals. In effect, the practical application of these texts shows up deficiencies, which should be noted:

Shortcomings of the existing legislative system: It can be noted that for texts, which are already applied, it is rare to find a chapter or an article, which deals with the elimination of chemicals. There is a gap in the area of the management of industrial chemicals and fertilisers;

- Efficiency of legislative measures: These measures are efficient at the level of airports and of seaports; on the other hand, many banned chemicals enter the country by land frontiers. This is the case of pesticides, which cause serious problems to agricultural workers who use them. This inefficiency is due to the lack of human and financial resources and to the non-enforcement of coercive measures;
- The efficiency of non-regulatory measures: Non-regulatory measures make it possible to draw attention of decision-makers to the risks presented by chemicals, in

order to help them make the right decisions, which are necessary to avoid all negative effects. No voluntary industrial programmes exist. The Ministry of the Environment, Housing and Planning (MEHU) has just started raising awareness among industrialists along these lines;

- Compatibility of laws with national priorities: The existing laws are compatible with the national priorities shown in Chapter 3. There is however a loophole in the area of industrial chemicals;
- There exists a law on the sound management of dangerous wastes, which is the direct result of international conventions. These conventions are those of Basel and Bamako;
- Existing regulatory measures are appropriate but inefficient. In effect, accidents due to pesticides have been recorded. Similarly one finds on all our markets pharmaceutical products, which have been imported fraudulently.

Apart from the measures mentioned above, the management of chemicals in Benin is also covered by non-regulatory measures, which contribute markedly to limiting the impact of these products on the environment and on human health. Amongst these can be cited:

- The action of NGOs which consist in alerting public opinion about the importation, the storage, the distribution, the transport and even the land-filling of all suspect products;
- The work of informing public opinion *via* the press, radio and television about the risks, which the existence of certain products on the market can represent for them. The chemicals in question are chemical consumer products, pharmaceuticals, and phyto-pharmaceuticals. These actions allow the State to make decisions regarding the dangers related to the use of chemicals;
- The setting up of a framework allowing concerted actions between industry and the Minister of the Environment, Housing and Planning. This action covers industrial chemicals. The objective is make industrialists adopt a programme which obliges them to great prudence;
- The implementation of programmes covering biological culture and integrated plant health protection measures using plants with insecticidal effects (neem leaves and seeds) or bio-pesticides based on entomo-pathogen fungi for controlling pests:
  - Biological combating of the fruit-tree flour cochineal (*Rastroccus invadens*) directed by the International Tropical Agriculture Institute (IITA).
  - The biological cotton project managed by the Benin Organisation for the Promotion of Biological Agriculture (OBEPAB) and the Dutch Volunteer Service in the north of the country.
  - The integrated project for fighting against niébé pests in fields and during storage designed and executed by the Benin Centre for Sustainable Development (CBDD) in the framework of Benin-Holland co-operation. This is a community programme, which has made it possible to train about a hundred producers of niébé.
  - The Environmentally Sustainable Niébé Protection project (PEDUNE) of the International Tropical Agriculture Institute is also a community programme.

### 1/ Overview of the legal instruments which deal with the management of chemicals

This subject provides a list of laws, regulations, norms, decrees, orders which are in relation with chemicals management, in table A.

***Table A : Reference to existing legal instruments which deal with the management of chemicals.***

Type of legal instrument, reference, year	Responsible Ministries or Organism	Categories of chemicals	Object of the legislation	Important articles and provisions	Resources allocated	Estimation of coercive measures
Law on plant health protection regulations in the Benin Republic n°91-004 of February 11th 1991	M D R	All phyto-pharmaceutical products	To assure efficient and safe use, for the user and for the environment	15 to 23	Insufficient	Low
Decree relating to labelling, packaging, and to the technical properties of the phyto-pharmaceutical products, certification no. 186 MDR 1993	M D R	Phyto-pharmaceutical products	To allow safe use of phyto-pharmaceutical Products	All articles	Insufficient	Low
Interministerial decree relating to the banning of the agricultural use of active substances incorporated into the composition of phyto-pharmaceutical products n°255 MDR 1993	M D R M F M C A T	Active substances in phyto-pharmaceutical products whose use agricultural use is banned in Benin	To assure the safety of the population	1 and 2	Insufficient	Low
Decree relating to the conditions of attribution and of use in agriculture of phyto-pharmaceutical products containing certain dangerous substances n°188 – 1993	M D R	Products intended for combating rodents, insects, adventices etc.	To ensure good use of these products	1 to 7	Insufficient	Low

Type of legal instrument, reference, year	Responsible ministries or organisms	Categories of chemicals	Object of the legislation	Important articles, provisions	Resources allocated	Estimation of coercive measures
Decree relating to the professional certification required for putting phyto-pharmaceutical products on the market, and to their use by service companies n°591/MDR/ 1995	M D R	Phyto-pharmaceutical products	To control the ownership, importation, manufacture, formulation and re-packaging of phyto-pharmaceutical products	1 to 9	Low	Low
Decree relating to the general conditions of use of certain fumigants in agriculture and specific provisions aimed at methyl bromide and hydrogen phosphide n° 592 de 1995	M D R	Any gas or substance giving rise to a gas in the atmosphere of an enclosure with a view to destroy living pests (methyl bromide and hydrogen phosphide)	To fix the conditions for the safe use of fumigants	All articles	Low	Low
Decree covering the methods for importing and distributing oil products and their derivatives n°95-139 du 03 Mai 1995	M M E H M C A T	Oil products and derivatives	To fix the conditions of importation, storage and distribution of petroleum products	4 to 12	Low	Low
Decree regulating authorisations for opening and operating stocks of oil derivatives and residues; May 10 <sup>th</sup> 1933 (JOAOF 1933)	M M E H	Oil products				
General decree regulating the fitting out of bulk hydrocarbon denots	M M E H	Hydro-carbons	To set up safety measures for the storage of inflammable liquids	1	Low	Low

n°5926 TP of October 28 <sup>th</sup> 1950						
Type of legal instrument , reference, year	Responsible ministry or organism	Category of chemicals	Object of legislation	Important articles, provisions	Resources allocated	Estimation on coercive measures
Law on fraud and the falsification of products or services; August 1 <sup>st</sup> 1905	MDR	Falsified or fraudulent products	Consumer protection	All articles	Low	Low
Law on the control of foodstuffs n°84-009 of March 15 <sup>th</sup> 1984	MDR	Food additives (Foodstuff chemicals) and colouring agents	Ensure protection of the consumer and of his environment	12 to 16	Insufficient	Low
Decree relating to food additives; level of contaminants and of undesirable substances in these foodstuffs, and to cleaning products for these materials n°85-241 of June 14 <sup>th</sup> 1985	MDR	Food additives, contaminants, cleaning products	To protect human health and the environment	Practically all the articles	Low	Low
Decree relating to the labelling and presentation of foodstuffs n° 85-243 of June 14 <sup>th</sup> 1985	MDR	Foodstuffs	The control of foodstuffs	All articles	Low	Low
Law relating to the repression of infringements concerning the use, trading, possession, and employment of poisonous substances n°87-009 of September 21 <sup>st</sup> 1987	M J L D H M D R M S P S C F M I S A T	All products classified as dangerous, toxic or as drugs by the regulations	To stress in particular the repression of infringements concerning the usage, trading, the holding and the use of poisonous substances	Practically all articles	Low	Low
Law covering the Hygiene code N°87-015 of September 21 <sup>st</sup> 1987	M S P S C F	Stresses hygiene and cleansing of the environment	To promote mental and social health of each citizen	Practically all articles	Lacks an application decree	
Law relating to the Water code n°87-016		Stresses in a general way	To use water resources in a		Lacks an	



of September 21 <sup>st</sup> 1987	M P R E P E	the qualitative and quantitative protection of water	sustainable manner	36 to 52	application decree	
<b>Type of legal instrument, reference, year</b>	<b>Responsible ministry or organism</b>	<b>Categories of chemicals</b>	<b>Object of the legislation</b>	<b>Important articles, provisions</b>	<b>Resources allocated</b>	<b>Estimation of coercive measures</b>
Law on the protection of public health of November 15 <sup>th</sup> 1902 (JOAOF 1902)	M S P S C F					
Frame-work law on the environment in the Republic of Benin N°98-030 of February 12 <sup>th</sup> 1999	MEHU	Harmful or dangerous chemical substances	To control, and supervise the manufacture, importation, exportation commercialisation, transit, transport, and movements on the Benin territory of harmful or dangerous chemical substances	83, 84 and 85	Low	Low
Decree relating to regulations on the importing of products presenting a danger to human health and to State security n°91-13 of 24/1/91	M S P S C F M C A T	Dangerous products such as drugs and psychotropic substances, explosives, corrosive and radioactive substances	To control and supervise the importation of dangerous products to health and to State security	1 to 7	Low	Low
Order relating to regulations for pharmaceutical products in Dahomey N°75-7 of January 1975	MSPSCF	Pharmaceutical products	To regulate the introduction of pharmaceutical products in Benin	All articles	Low	Low
- Decree for regulations on the importation, holding, and sale of laboratory	MSPSCF M C A T	Pharmaceutical products	To regulate the possession and sale of laboratory			Low

chemicals and reagents n°89-370 of October 10 <sup>th</sup> 1989		and laboratory reagents	chemicals and reagents	1 to 18	Low	
Order covering regulations for explosive substances n°73-65 of September 24 <sup>th</sup> 1973 (JORD 1973)	M M E H M J L D H M T P T M I S A T	Mining explosives, detonators and ignition devices.	To regulate the manufacture, holding, importation, transport, sale and purchasing of explosive substances	Practically all articles	Average	Low
Order covering adhesion of Dahomey to the Convention on the pollution of the sea resulting from immersion of wastes, signed in London on December 29 <sup>th</sup> 1972 n° 75-13 of February 25 <sup>th</sup> 1975 (JORD 1975)	M T P T	Organo-halogen compounds toxic products, pesticides, radioactive pollutants, hydrocarbons, etc.	To prevent pollution of the sea by immersion of products	Practically all articles	Insufficient	Low

## 2- Brief description of the key legal instruments related to chemicals

Decree N° 0255 of 1993 concerns the products of table C.

Decree N° 188 of 1993 concerning methyl bromide and hydrogen phosphide.

Order N° 75-13 of February 25<sup>th</sup> 1975 stresses:

- 1°) Wastes containing significant amounts of the following materials: arsenic, lead, copper, zinc and their compounds
- 2°) Organo-silicon compounds, cyanides, fluorides, metallic wastes and other voluminous wastes.
- 3°) Substances such as beryllium, chromium, nickel, vanadium and their compounds.
- 4°) Radioactive wastes
- 5°) Organo-halogen compounds, mercury and its compounds, cadmium and its compounds, non-destructible plastics and other synthetic materials, hydrocarbons.

Order N°73-68 of September 27<sup>th</sup> 1973 deals with pharmaceutical products

Order N° 75-7 of January 27<sup>th</sup> 1975 deals mainly with pharmaceutical products.

Decree N° 91-13 of January 24<sup>th</sup> 1991 covers drugs, psychotropic substances, explosives, corrosive products, materials liable to ignite spontaneously, inflammable products, fuels, infected products.

The means of making known the law in our country are:

The Official Journal, popularisation done in national languages, debates on television and on the radio, handbills, information

bulletins, awareness-raising sessions, drawing up of brochures for targeted groups.

Brief description of administrative procedures:

In this framework, legislation puts the accent on:

- The structures responsible for informing the population and for evaluating the risks arising from chemicals. These are: CNAC SPVCP, DANA, CNAN, DPQC, PHARNAVET, DPHL, the Environmental Police, etc.
- The regulations on the importation of products presenting a danger to human health and to the security of the State (Decree 92-258 of September 27th 1992, Decree n° 89-370 of 10/10/89, Decree N° 93-35 of February 24th 1993).
- The fixing of the conditions for exercising the activities of importing pharmaceutical or phyto-pharmaceutical products (Decree N°185; 1993, Decree N° 0310 ; 1995)
  - The setting up of a base for discussion between the M E H U and industry.
  - Labelling of chemicals.

The mechanisms set up for controlling the application:

- Making aware importers, distributors, users, consumers and manufacturers
- Control of labels and packaging
  - Control of the formulation
  - Control of residues
- Sanctions.

The structures responsible for controlling the various chemicals are:

- The Plant Protection and Phyto-sanitary Control Service (SPVCP) for the control of pesticides,
- The Food and Applied Nutrition Directorate (DANA) and the Measuring Instruments Quality Directorate (DQIM) for the control of foodstuffs.
- The Pharmacy and Laboratories Directorate (DPHL) for the control of pharmaceuticals and laboratory products
- The Police for drugs.

There is presently no centralised database but the importance of such an instrument is making itself felt more and more.

Provisions are non-existent concerning the protection of proprietary rights on information.

**3- Existing legislation by category of use according to the different steps for chemicals, from manufacture/importation to elimination**

***Table B: Overview of the legal instruments for the management of chemicals by category of use.***

<b>Chemical product category</b>	<b>Importation</b>	<b>Production</b>	<b>Storage</b>	<b>Transport</b>	<b>Distribution Marketing</b>	<b>Utilisation Handling</b>	<b>Elimination</b>
Pesticides (agricultural, public health and consumption)	X		X	X	X	X	
Industrial chemicals (used in manufacturing and transformation establishments)	X		X		X	X	
Chemicals intended for consumption		X			X		
Chemical wastes		X	X	X			

#### **4- Brief description of approaches and procedures for the regulation of chemicals**

The main key approaches and procedures relating to the management of chemicals, in particular pesticides, oil products and consumable chemical products are :

##### **Pesticides**

Law n°91-004 of February 11th 1991 regulating plant protection in the Republic of Benin : "In order to be imported, manufactured, packaged for commercialisation and use, phyto-pharmaceutical products must be licensed. The testing of phyto-pharmaceutical products which are not yet licensed can only be carried out with a testing license. The procedures for obtaining a license and an authorisation for experimentation, the data required and the conditions they impose, are fixed by decrees".

The Ministry in charge of Agriculture is responsible for the implementation of the regulations concerning phyto-pharmaceutical products.

##### **Oil products**

Decree N° 95-139 of May 3<sup>rd</sup> 1995 relating to the means of importing and distributing oil products puts the accent on safety measures for the importing, storage and distribution of oil products and their derivatives. Only the State has authority over this activity. The authorities of Benin have just authorised the installation of private companies.

The Mining, Energy and Hydraulic Power Ministry and the Ministry in charge of Commerce are responsible for its implementation.

##### **Chemicals intended for consumption**

Decree n°85-243 of June 14th 1985 relating to the labelling and presentation of foodstuffs aims at informing consumers about the composition and mode of use of these foodstuffs. The enforcement of the text is the responsibility of the DANA. This text has limitations related to its effective application. Coercive measures remain weak.

Concerning controlled substances Benin adheres to the conventions of :

- 1961, on the control of drugs,
- 1971, on the control of psychotropic substances
- 1988, on substances used in the preparation of drugs and psychotropic products.

NGOs work on the education and awareness-raising of consumers. This role is however still insufficient.

The education and awareness-raising of agricultural workers is the responsibility of the plant protection service and its departmental offices.

These workers are educated and made aware by the SPV with the help of agents from the Regional Action for Rural Development Centre (CARDER). The SPV is responsible for the control and introduction to the market, packaging, labelling, use, transport, storage and elimination of phyto-pharmaceutical products.

The Work Health Service controls, informs, and sensitises workers and employers in the area of professional risk prevention related to the use of chemicals. However its action is still irregular due to lack of adequate financial and human resources.

The DANA ensures the education and sensitisation of the population about the use of chemicals for consumption, and fills the role, in collaboration with the Promotion, Quality and Packaging Directorate (DPQC), of the organism which controls the quality of foodstuffs intended for the national market.

The DPHL ensures the control of the quality of local and imported raw materials and pharmaceuticals in order to guarantee their harmlessness, therapeutic efficiency, and the quantitative control of the consumption of pharmaceuticals in the country. It also ensures the control of supplies and distribution of pharmaceuticals, chemicals and laboratory reagents.

Table 4C shows appropriate information related to national decisions for importation in the framework of the PIC procedure.

***Table C : Banned or severely restricted chemicals***

<b>Name of chemical</b>	<b>Level of restriction</b>	<b>Details of restriction</b>
1. 2 – Dibromomethane 2, 4, 5.T	Banned	High toxicity
Dinoseb acetate	Banned	High toxicity
Aldicarbe	Banned	High toxicity
Aldrin	Banned	High toxicity
Aminotriazole	Banned	High toxicity
Arsenic	Banned	High toxicity
Binapacryl	Banned	High toxicity
Bromadiolone	Banned	High toxicity
Calciferal	Banned	High toxicity
Camphechlore	Banned	High toxicity
Chlorbenzilate	Banned	High toxicity

Chlordane	Banned	High toxicity
Chordecone	Banned	High toxicity
Perchlordecone	Banned	High toxicity
Chlorodimeforme	Banned	High toxicity
Chloropicrine	Banned	High toxicity
Choline	Banned	High toxicity
Colecalciferol	Banned	High toxicity
Coumachlore	Banned	High toxicity
Crimidine	Banned	High toxicity
Crocidolite	Banned	High toxicity
Cyhexatine	Banned	High toxicity
<b>Name of chemical</b>	<b>Level of restriction</b>	<b>Details of restriction</b>
D B C P	Banned	High toxicity
DDD (T D E)	Banned	High toxicity
D D T	Banned	High toxicity
Demeton	Banned	High toxicity
Dicofol	Banned	High toxicity
Dieldrine	Banned	High toxicity
Dinosebe	Banned	High toxicity
Diquat	Banned	High toxicity
Endrin	Banned	High toxicity
Fluoro-acetamide	Banned	High toxicity
H C H	Banned	High toxicity
Heptachlor	Banned	High toxicity
Hexachlorophene	Banned	High toxicity
Maleic hydrazide	Banned	High toxicity
Kelevane	Banned	High toxicity

Leptophos	Banned	High toxicity
Inorganic mercury	Banned	High toxicity
Organic mercury	Banned	High toxicity
Methamidophos	Banned	High toxicity
Methomyl	Banned	High toxicity
Methoxychlore	Banned	High toxicity
Mirex	Banned	High toxicity
<b>Name of chemical</b>	<b>Level of restriction</b>	<b>Details of restriction</b>
Nirofene	Banned	High toxicity
Ethylene oxide	Banned	High toxicity
Ethyl parathion	Banned	High toxicity
Methyl parathion	Banned	High toxicity
P B B	Banned	High toxicity
P C T	Banned	High toxicity
Pentachlorophenol (P C P)	Banned	High toxicity
Phosphamidon	Banned	High toxicity
Piclorame	Banned	High toxicity
Quintozene	Banned	High toxicity
Schradane	Banned	High toxicity
Sodium fluoro acetate	Banned	High toxicity
Strobane	Banned	High toxicity
Strychnine	Banned	High toxicity
T C A	Banned	High toxicity
Telodrine	Banned	High toxicity
Tetraethyle-pyrophosphate	Banned	High toxicity
Thallium sulfate	Banned	High toxicity
Tris – Phosphate	Banned	High toxicity
Tris – Phosphinoside	Banned	High toxicity



Chlorophacinone	Severely restricted	Dangerous and limited to professionals
Caumafene	Severely restricted	Dangerous and limited to professionals
Caumafuryl	Severely restricted	Dangerous and limited to professionals
<b>Name of chemical</b>	<b>Level of restriction</b>	<b>Details of restriction</b>
Coumatetralyl	Severely restricted	Dangerous and limited to professionals
Difénacoum	Severely restricted	Dangerous and limited to professionals
Scilliroside	Severely restricted	Dangerous and limited to professionals
Alachlore	Severely restricted	Only for cleaning of maize and soya crops
Cyanazine	Severely restricted	Only for cleaning of ground-nut and soya crops
Simazine	Severely restricted	Only for cleaning of maize and of nursery plants
Terbutylazine	Severely restricted	Only for cleaning of uncultivated areas or of fields after cultivation
Paraquat	Severely restricted	For the cleaning of oil palm, pineapple, coffee shrub, cocoa trees
<b>Name of chemical</b>	<b>Level of restriction</b>	<b>Details of restriction</b>
Dichlorvos	Severely restricted	Forbidden 2 weeks before harvesting; applied by licensed professionals
Endosulfan	Severely restricted	Forbidden 2 weeks before harvesting
Lindane	Severely restricted	Use authorised only for the treatment of soils, and on condition that dosage is limited to 1,350g/ha

Lead (compounds of)	Severely restricted	Use strictly limited to commercial specialities
Methyl bromide	Severely restricted	Use restricted to holders of a professional license delivered by the MDR-SPV and only for uses for which the commercial specialities are certified
Magnesium or hydrogen phosphide	Severely restricted	Use limited to holders of a professional license delivered by the MDR-SPV and only for uses for which the commercial specialities are certified

## **BURKINA FASO**

### **INTRODUCTION**

It is clear that industrial chemistry has enabled various sectors of human activity (Agriculture, Health, Industry) to make prodigious advances and, therefore, to contribute to the improvement of the quality of life on earth. In concrete terms this is seen in the increases in agricultural yields, the decreases of certain illnesses in the area of health, and in the improvement of certain industrial processes.

All countries of the world have benefited from these advances in chemistry, in particular the developing countries including our own. If chemistry has revolutionized life, one must however recognize that some problems have been caused by the use of some of these products whose repercussions on health and the environment are more than terrifying. Clear scientific proof has established that the effects of certain of these substances, notably POPs, go beyond national frontiers and are, consequently, a planetary problem.

Also, to counteract even to a small extent, the ills that chemicals in general and POPs in particular can give rise to, countries have initiated, here and there, measures to manage the use of these latter products. Burkina Faso, as other countries in the world, has developed initiatives to participate with the rest of the international community in the preservation of health and of the Environment.

At the legal and institutional levels, this group dynamism has resulted, on the one hand in the setting up legal instruments for the management of chemicals and, on the other hand in the creation of structures able to convert these noble ideals into practical actions.

This shows the will of the government to subscribe to the philosophy according to which "one must act locally and think globally". In effect, the globalization of the phenomenon requires a global solution.

### **LEGAL INSTRUMENTS AND NON-STATUTORY MECHANISMS FOR THE MANAGEMENT OF CHEMICALS**

In order to reduce to practice the desire shown to manage chemicals as well as possible, the Burkina government, through the actions of the ministerial departments has adopted a whole range of laws and decrees.

The objective, which is aimed at, is the rational and efficient use of these substances with the aim of preserving health and the environment. The purpose of the present chapter is to make a synthesis of all the major legal acts established, and of the non-statutory measures used up till now for the optimal management of chemicals. It is also aiming to take stock, objectively, of the real limits of these measures.

**A) Legal instruments**

Legal instruments (Type, reference, year)	Responsible ministries or organisms	Categories of chemicals	Object of legislation	Important articles or provisions	Resources allocated	Estimation of coercive measures
Law N°41-96 of Nov. 8 <sup>th</sup> 1996	Ministry in charge of agriculture	Pesticides	Control of pesticides	The whole text		Application of the sanctions fixed by the penal code
Law N°005/97 of Jan. 30 <sup>th</sup> 1997	Ministry of the Environment and Water	All chemicals, pesticides and oil products	Environment Code	Articles 5,8 and 10, 11 para. II :ch 1, 2 and sections 1 and 2 of ch 3	Institution of an intervention investment fund for the environment	Coercive measures sufficient
Law N°006/97 of 31 Jan. 1997	Ministry of the Environment and Water		Forestry code	Articles 231,232 ch 2 of para. IV	Benefits from the fund cited above	Measures are sufficient
Kiti N°AN IV-181 of Dec. 5 <sup>th</sup> 1996	Ministry in charge of Agriculture	Pharmaceutical specialties	Study commission and committee responsible for their homologation	The whole text	-----	----- ----
Zatu AN IV-014 of Dec. 5 <sup>th</sup> 1996			Organisation of the control		Service costs covered by the those requesting	The sanctions fixed are not dissuasive
Raabo N° B 004 AN IV of May 6 <sup>th</sup> 1989	Ministry in charge of water	All chemicals, pesticides and oil products	Definition of water management system	Article 6	Costs covered by users	----- ---
Decision N° 348 PRES of 16.08.61	Ministry in charge of trade	Insecticides	Means of controlling insecticide aerosols by sampling	The whole text	Tax paid by importers and national manufactur	See penal code

					ers	
Decree N°349 PRES of 16.08.61	Ministry in charge of the economy	Pesticides	Plant health control and regulations for the import and export of pesticides	The whole text	-----	Coercive measures dissuasive
Common plant health protection regulation	CILSS member States	Pesticides	Plant health protection regulations	The whole text	-----	Type of application not yet taken (art 14)
Common regulation on pesticide homologation	CILSS member States	Pesticides	Common regulations for pesticide homologation	The whole text	-----	----- ----
Decree N°349 PRES of 16.08.61	Ministry of the Economy	Pesticides	Compulsory measures against animal and plant parasites	The whole text	-----	----- ----
Law N°014-96/ADP of May 26 <sup>th</sup> 96	Ministry of the Environment	All chemicals, pesticides and oil products	Land and Real Estate Reform (RAF)	Article 33 Para. 2 Article 117	----- -	Coercive measures dissuasive
Decree N°97-054/PRES of Feb. 6 <sup>th</sup> 97	Ministry in charge of Finances	All chemicals, pesticides, and petroleum products	Application of the RAF law	Articles 250,255,274 and 275	-----	----- ----
Decree N°98-481/PRES/PM/MCIA/Agri of Dec. 9 <sup>th</sup> 98	Ministry of Agriculture	Pesticides	Certification for the sale, free distribution, supply of services and use of pesticides	The whole text	-----	----- --
Decree N°98-472/PRES/PM/AGRI	Ministry in charge of Agriculture	Pesticides	Creation, attributions, composition and	The whole text	-----	-----

			functioning of a national commission on pesticides			----
Order N° 81-0026/PRES of 26.08.81	Ministry in charge of trade	All chemicals, pesticides	Regulations concerning the trade profession	-----	-----	----- -----
Law N°11-92/ADP of Dec. 22 <sup>nd</sup> 1992	Ministry in charge of labour	All chemicals, pesticides	Assure the safety of workers and reduce risks in the working environment	Article 138 to 142	None	Coercive measures not dissuasive, not applied
Decree N°5223 IGTLS/Aof of 19.07.54	Ministry in charge of labour	All chemicals, pesticides	Duties of employers in matters of hygiene and safety	The whole text	-----	Coercive measures not dissuasive, and not applied
Decree N°5223 IGTLS/Aof of 19.07.54	Ministry in charge of labour	All chemicals, pesticides	General measures for hygiene and safety applicable to workers in establishments of all types	The whole text	-----	Coercive measures not dissuasive and not applied
Decree B°96-017/PRES of Jan. 30 <sup>th</sup> 96	Ministry in charge of labour	All chemicals, pesticides	Composition and functioning of the national consultative committee on hygiene and safety	Article 2	-----	Coercive measures not dissuasive, not applied

### Banned or severely restricted chemicals

Chemical name	Level of restriction (banned or severely restricted)	Details of the restriction
<b>1)</b> Chemicals or associations of chemicals intended to repel, master, or control harmful		

organisms, including carriers of human or animal diseases, and undesirable species of plants or animals, causing damage or showing themselves to be otherwise harmful during the production, transformation, storage or commercialisation of foodstuffs, ligneous products or animal feeds.	Banned	See name of chemical
<b>2) Bio-pesticides</b>	Banned	See name of chemical
<b>3) Pesticides</b>	<b>Severely restricted</b>	Licensing necessary for the sale, free distribution, servicing, and use of the pesticides
<b>4) Insecticides for domestic use and aerosols</b>	<b>Severely restricted</b>	Prior obtaining of a national certificate of conformity

<p><b>5) Pesticides and industrial chemicals, POPs</b></p> <ul style="list-style-type: none"> <li>- Aldrin</li> <li>- Dieldrin</li> <li>- DDT</li> <li>- Chlordane</li> <li>- Endrin</li> <li>- Heptachlor</li> <li>- Mirex</li> <li>- Toxaphene</li> <li>- Hexachlorobenzene</li> <li>- PCB</li> </ul>	<p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Severely restricted</p>	<p>Use in electrical equipment in conformity with Part 2 of Annex A of the Stockholm Convention.</p>
<p><b>6) Other pesticides</b></p> <ul style="list-style-type: none"> <li>- Dinosebexsels</li> <li>- Fluoroacétamine</li> <li>- HCH</li> <li>- Cyhrxatin</li> <li>- 1,2 Dibromoethane</li> <li>- chlorodimeforme</li> <li>- captafol</li> <li>- chlorodenzilate</li> <li>- Lindane</li> <li>- Pentachlorophénol 2-4</li> </ul>	<p>No reply</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Banned</p> <p>Awaiting banning</p> <p>Awaiting banning</p> <p>Awaiting banning</p> <p>Awaiting banning</p>	

**Note** : It should be noted here that no legislation exists which is specific to POPs, given the fact that this is a relatively new area. With the Convention of Stockholm, which the country has recently signed, new legal instruments will certainly be established in this area in the future.

### **Non-statutory mechanisms**

- 1) Between 1970 and 1980 a list of prohibited products was published by the Ministry of Agriculture at the beginning of each agricultural season. This list covered all chemicals and aimed at preventing their importation and use, thus facilitating supervision. Its application concerned all institutions involved in the management of chemicals at the national level.
- 2) Radio bulletins requesting that certain products be not used
- 3) Notices to the importers
- 4) Notification of the tender proposals (specifications for large-size imports)
- 5) The procedure of Prior Informed Consent (PIC) which enabled the exchange of information amongst the countries of west and central Africa.
- 6) The prior declaration of any imports each time required.
- 7) Etc.

### **Comments/Analysis**

In the light of the foregoing, one should note that many legal texts exist on the management of chemicals, although it must be recognised that these do not cover the different practical aspects of management (supervision, elimination, information etc).

Gaps do exist in the legislative system which affect all chemicals and which are related to several aspects, including those cited above. The efficiency of the implementation of the different measures leaves something to be desired for several reasons, notably:

- the exact identification of the different parties involved needs to be carried out again
- the lack of a real plan and of efficient co-ordination at the national level
- the insufficiency and lack of information exchange spontaneous and isolated actions and activities which are not followed up (dispersion of efforts)
- the insufficient control of all chemical imports
- the permeability of frontiers

The non-statutory mechanisms used with the aim of reducing the risks due to chemicals are proving to be inefficient because the vast majority of the population has no access to the information.

In any case, the setbacks observed in this area are due mainly either to a lack of knowledge or to insufficient understanding of the implications or of the negative effects of chemicals on health and the environment. There is also the fact that the statutory texts coming from the different Ministries do not agree on the exact role and



function of each partner, this making collaboration difficult at the moment of application.

#### **I) Some notes of hope**

The application of Law no. 41/96/ADP of 8<sup>th</sup> November 1996 on the control of pesticides will enable a start to be made to finding solutions to certain problems mentioned above. It should also be pointed out that the National Commission for the Control of Pesticides (NCCP) was created and officially installed in August 2000. This inter-ministerial commission deals with all matters related to pesticides. Another important point at the institutional level is the creation of the Ministry of the Environment and Water, which will from now on integrate an environmental dimension into its strategic policies.

This Ministry is responsible for ensuring the quality of the Environment, the protection of natural resources, and the reduction or elimination of all forms of pollution and damage, which human activities may cause to the environment.

It also has the mission to promote actions for the initiation, training and information of citizens as regards the environment, in liaison with the public interest groups concerned.

It intervenes in the management of chemicals via the Directorate for the Prevention of Pollution and Sanitation by the bringing into effect the environment code/law no. 002/94/ADP of January 19<sup>th</sup> 1994.

#### **The missions of this Directorate are:**

- to define the appropriate measures for reducing pollution and for anticipating the risks, and to define also the conditions for putting these measures into effect.
- to promote actions for encouraging the taking into account of the Environment in the industrial and commercial strategies of companies, and for developing less-polluting technologies.

It should also be noted that the signature and ratification by Burkina Faso of certain international conventions (Basel, Rotterdam, Stockholm, Montreal...) would certainly contribute to the strengthening of the national legislative framework.

#### **Conclusions**

What emerges from the foregoing is that in Burkina Faso some commendable initiatives have taken concerning the management of chemicals in general and POPs in particular.

These efforts need to be consolidated by encouraging a synergy in the actions to be undertaken, and by a sustained political willingness by decision-makers.

The Stockholm Convention, which the country, has signed opens up optimistic prospects for the strengthening of the management of POPs by the financing of enabling activities.

## **BURUNDI**

### **1. Brief presentation of Burundi**

Burundi is one of the smallest countries of central Africa in the Great Lake region. With a surface area of 27,800 km<sup>2</sup>, it has about 6 millions inhabitants. It is an enclave bordered by the Democratic Republic of Congo, Rwanda and Tanzania. It has one of the richest fresh-water lakes in the world from the biodiversity point of view: Lake Tanganyika.

Burundi is a country, which is essentially agricultural, given that about 90 % of the population is engaged in agriculture, tea and coffee being exported whilst cotton is completely absorbed by the local textile activities. Food crops are varied: rice, beans, bananas, manioc, etc.

Up till today therefore, the country's economy has been based mainly on agriculture, Burundi being only slightly industrialised. It is for this reason that national legislation related to chemicals is concerned more particularly with products used in agriculture. The legislation can be considered at two levels, i.e. "generalities" and "specifics". The generalities are contained in the Environment Code, whereas the specifics are covered in the Plant Protection legislation of Burundi.

### **2. GENERAL LEGISLATION ACCORDING TO THE ENVIRONMENT CODE OF BURUNDI**

The Environment Code of Burundi was promulgated on June 30<sup>th</sup> 2000 by Law n°1/010 of June 30<sup>th</sup> relating to the Environment Code of the Republic of Burundi. This code contains provisions of a general nature concerning persistent organic pollutants and other similar substances. To illustrate this we can consider some of the articles of the Code.

#### **- Article 1 of the Code makes all those involved in environmental matters responsible, in the following terms:**

« The present code fixes the basic rules aimed at making possible the management of the Environment, and also its protection against all forms of degradation, in order to safeguard natural resources and to benefit from them in a rational way, and to combat all forms of pollution thus allowing improvement of the living conditions of the people, whilst respecting the equilibrium of ecosystems »

#### **Article 28 deals more particularly with the protection of the soil and subsoil:**

« The soil, the subsoil and the wealth they contain are protected as limited resources, whether they be renewable or not, against all forms of degradation, and are managed in a sound manner ».

#### **- Article 32 relates to fertilisers, pesticides and other chemical substances.**

It stipulates « in concert with the Minister in charge of the Environment, the Minister having Agriculture under his responsibility draws up the list of fertilisers, pesticides and other chemical substances whose use is authorised for agricultural activities work.

In the same way, he determines the amounts authorised and the modalities of use so that the said substances do not adversely affect the quality of the soil or of other receptive media, the ecological equilibrium, and the health of man ».

Article 126 deals with liquid wastes:

« Waste waters, waste oils and other liquid wastes coming from industrial, commercial, artisan, agricultural or animal breeding activities must be treated by a physical, biological or chemical method before their elimination... »

Article 127 deals with harmful and dangerous substances;

« Harmful and dangerous substances which present or are liable to present a danger to man or to his environment are subject to control and to supervision by the administration of the Environment and other services which may be concerned, in particular the administrations in charge of Public Health, Agriculture, and of Animal breeding ».

These generalities expressed in articles 1, 28, 32, 126 and 127 of the Environment Code are defined and detailed in the legislation dealing with pesticides.

### 3. BURUNDI LEGISLATION WHICH IS SPECIFIC TO PESTICIDES

As Burundi is an essentially agricultural country, its legislation regarding chemicals is primarily concerned with the area of agriculture. Burundi has equipped itself with a national plant protection legislation, which includes a Decree-Law as well as a whole series of orders.

#### 3.1. About the decree-law on plant protection

The Decree-Law n°1/033 of June 30<sup>th</sup> 1993 regulating the protection of plants in Burundi gives in its Article 3 the definition of « pesticide » as being « any substance or association of substances intended for repelling, destroying, or combating pests and undesirable species causing damage or showing other negative effects during the production, transformation, storage, transport, or commercialisation of foodstuffs, agricultural products, wood, or ligneous products.

The term pesticide includes also substances intended to be used as plant growth regulators, as defoliant, as drying agents, as fruit-tree thinning agents or to prevent premature falling of fruit, as well as substances applied to crops either before or after harvesting to protect the products from deterioration during storage and transport. ».

Articles 23, 24 and 25 of the Decree-Law related to the certification of pesticides in Burundi:

Article 23 stipulates, « It is forbidden to import, to manufacture, to formulate, to package or repackage, to store, to experiment on, or to commercialise any non-certified or non-authorised pesticide... »

- According to Article 24, « the Minister having Agriculture amongst his attributions sets up a committee responsible for the certification and the control of pesticides. The composition of the committee as well as its attributions and functions are fixed by an Order ».

- And according to Article 25, « The certification is granted by an Order from the Minister having Agriculture amongst his attributions, following a decision of the Committee ».

Articles 40 and 41 specify aspects of pesticide control:

- Article 40 stipulates “ the Minister having Agriculture amongst his attributions designates inspectors especially nominated to ensure that the present Decree-Law is respected »

And according to Article 41, « The inspectors have the status of Officers of the Judicial Police with powers limited to the search for, and recording of, any infringements of the present decree-law and its application provisions. For this, they are given a service card whose format is determined by an Order jointly issued by the Minister of Justice and the Minister of Agriculture and Animal breeding »

Overall, the Decree-Law of June 30<sup>th</sup> 1993 is made up of six chapters:

- General provisions,
- On plant protection in the Territory,
- On frontier control,

- On pesticide control,
- On interventions of the police force and control agents, and on their powers,
- Sanctions.

The enforcement of the Decree-Law of June 30th 1993 has been put into concrete form by application texts.

### **3.2. Ministerial Orders covering application measures of the decree-Law 1/033 of June 30<sup>th</sup> 1993 related to plant protection in Burundi.**

For the implementation of the Decree-Law, the Minister of Agriculture and Animal breeding have signed 7 ministerial Orders and the Ministers responsible respectively for Agriculture and Justice have signed one Order jointly.

**1° The Ministerial Order n°710/954/94 of 29/12/1998 covering application measures for the decree-Law n°1/033 of 30/06/1993 on plant protection.** This order specifies the composition and the mission of the Committee responsible for the certification and of the control of pesticides, which committee is presided by the Director General for Agriculture.

**2° Ministerial Order n° 710/241 of 26/04/1999 on the nomination of a national committee in charge of the certification and control of pesticides.**

This committee is made up of 9 members in all of which 5 are from the Ministry of Agriculture and Animal breeding, the other members coming from University of Burundi, the Ministry of Commerce and Industry, the Ministry of Public Health, the Ministry of Town and Country Planning, and of the Environment and Tourism.

**3° The Ministerial Order n° 710/550/309/99 of 21/05/1999 on the creation of the service card for the Judicial Police Officer for Plant Protection Inspectors.**

This Order has been signed jointly by the Minister of Justice (and *Garde des Sceaux*) and the Minister of Agriculture and Animal breeding.

This service card, or badge, is delivered annually by the Public Attorney of the Republic on request from the Ministry of Agriculture and Animal breeding.

**4° The Ministerial Order n° 710/837 of 29/10/2001 on the register for agricultural pesticides certified in Burundi.**

The list of pesticides, which are certified, includes insecticides, fungicides, nematocides, herbicides, rodent killers, chemical mediation products.

**5° The Ministerial Order n° 710/838 of 29/10/2001 on agricultural pesticides banned in Burundi.**

This register includes insecticides, fungicides, herbicides, nematocides, acaricides, rodent killers and compounds of other groups.

**6° The Ministerial Order n°710/839 of 29/10/2001 on the importation, commercialisation and use of silver nitrate as agricultural pesticide in Burundi.** The use of silver nitrate as an agricultural pesticide is limited to use on tobacco exclusively.

**7° The Ministerial Order n°710/840 of 29/10/2001 on the importation, commercialisation and use of phostoxin and of fumicel in Burundi.**

Use of these products is limited to stored agricultural products.

**8° The Ministerial Order n°710/841 of 29/10/2001 on the importation, commercialisation and use of temik in Burundi.**

Use of this product is limited exclusively to tobacco and to palm trees in nursery gardens. This presentation of plant protection legislation in Burundi shows the priority accorded by Burundi to agriculture. However other domains have not been forgotten.

As far as dangerous wastes are concerned for example, Burundi has signed the Basel Convention on the Trans frontier movement of dangerous wastes, and ratified it in July 1996. Burundi regularly takes part in international forums organised on this subject. Burundi is also signatory to the Bamako Convention on Trans frontier movements of dangerous wastes in Africa. And although the country does not yet dispose of national legislation which is specific to dangerous wastes, the Ministry for the Environment already has a « Dossier » for each industrial company containing information on the amounts and the nature of wastes produced and on the type of treatment planned for these wastes-----treatments which are still fairly simple and rudimentary. Working and inspection visits are regularly organised by the National Institute for the Environment and Nature Conservation (INECN) in order to raise awareness in industry on the necessity, and economic advantage, of treating wastes.

Unfortunately up till now, no major programme or project has been initiated for totally controlling industrial wastes, since even the waste water treatment plant of the capital of Burundi is not yet operational, this being due to the political crisis which the country has been going through since 1993, which crisis has led to a freezing of financing for projects.

As far as Persistent Organic Pollutants are concerned. Burundi does not yet have any strategy or action plan in this matter.

**4. CONCLUSION**

Concerning persistent organic pollutants and other chemicals threatening the environment, there is still much to be done in Burundi.

The needs and insufficiencies can be summarised in five points:

- Make applicable the legislation already in place;
- Develop application texts in the Environment Code;
- Train and equip human resources so as to be capable of controlling all aspects of dangerous chemicals;
- Develop an Action plan and a National strategy for the management of chemicals and other substances threatening the national environment;
- Set up a national reference Laboratory for the control and the management of substances, which threaten the Environment, and in particular persistent organic pollutants and dangerous wastes.

Burundi is hoping that the Stockholm Convention on Persistent Organic Pollutants and the Global Environment Fund will help it to put in place appropriate structures and equipment for the management and efficient control of these products, which threaten the environment.

## CAMEROON

### INTRODUCTION

The Environment constitutes a common national heritage and a part of the world's heritage. In effect, it was in 1992 that Cameroon adopted a National Plan for Management of the Environment (PNGE). This plan was intended to be a guiding instrument both for preparing the policies and strategies aiming at protecting the environment and for the development of the country at the national, regional and international levels. Also in 1992, a decree by the President of the Republic created the Ministry of the Environment and Forestry.

Today the policy of Cameroon with regard to the Environment is that resulting from the Constitution and defined by the President of the Republic. The legal framework of this policy is fixed by law No 96/12 of August 5<sup>th</sup>, 1996 defining the framework-law for the management of the environment.

According to this framework-law, all public and private institutions are expected to contribute to increasing awareness in the population to problems of the environment by integrating into their activities programmes aiming at ensuring better knowledge of the environment:

- the National Assembly passes the laws related to environmental management,
- the Government develops policies and co-ordinates their implementation; it is helped in its missions by an Inter-ministerial Environment Committee (CIE) and by a National Consultative Commission for the Environment and Sustainable Development (CNCEDD),
- the Administration responsible for the Environment is charged with putting into effect the appropriate emergency procedures making it possible to suspend work, either envisaged or already started, for which the procedure for an environmental impact study has not been respected.

It is in this context that an assessment of the present status of procedures for our EIE (Etudes d'Impact Environnementales or Environmental *Impact Studies*) procedures has been written. This document restates the main lines of our policy; this latter is however not perfect, having encountered institutional problems, but it is improved daily with the establishment of an arsenal of enforcement texts written into the framework-law.

### I- THE INSTITUTIONAL ARRANGEMENTS

The policy of the Cameroon government with regard to EIEs is expressed in the PNGE adopted by the Government in 1966. The constitution of Cameroon recognises the right of the population to a healthy environment; it considers that the protection of the environment is a responsibility, which must be shared. The EIE is prescribed by article 16 of law No 94/01 of February 20<sup>th</sup>, 1994 setting down the regulations for forests, fauna and fishing for any project liable to disturb forest and aquatic environments. More generally, law No 96/12 of August 5<sup>th</sup>, 1996 sets up the framework-law concerning the management of the environment which is prescribed in

its article 17. A concerted process, bringing together all the players concerned at the national level, was pursued from July 1994 to March 1996 to develop a national plan for environmental management which gives the directions to be followed in order to ensure sustainable growth in Cameroon.

The PNGE establishes a consensus on the country's environmental issues and on the challenges to be met in relation to the economic and social development policy. It makes reference to the EIE as being the decision-making tool for environmental management. At the institutional level, a Ministry of the Environment and Forestry was created in April 1992, its mandate being to develop, implement and oversee the national policy for environmental management. In 1998, a Presidential decree reorganising the MINEF created a Permanent Secretariat for the Environment (SPE) to ensure, amongst other objectives, the effectiveness of impact studies across the country. The SPE, which is responsible for drafting the texts of application of the framework-law and for developing the national guidelines for conducting the EIE, should work in collaboration with the technical Ministries concerned.

The institutional set-up for the management of the environment includes consultative structures at the national, central and provincial levels, with the SPE as the decision-making structure.

## **1- CONSULTATIVE STRUCTURES**

These have been established by the framework-law and comprise:

- the National Consultative Commission for the Environment and Development (CNCEDD), represented at the provincial level by the Provincial Commission for the Environment and Sustainable Development;
- the Inter-ministerial Committee for the Environment (CIE) and the Specialised Ministerial Branches.

Their role is to provide opinions and to make pertinent recommendations to the decision-making structures.

### **1.1 The National Consultative Commission**

The CNCEDD was established by the decrees of the Prime Minister (Republic of Cameroon 1994, 1999a, 1999b, 1999c). This commission helps the Government in:

- the development of the national policy on the environment and sustainable development,
- the co-ordination and follow-up of the implementation of this policy, notably the activities of Agenda 21, assessment of the progress achieved, analysis of the follow-up reports and Government control at the United Nations Commission on Sustainable Development,
- the participation of all the representatives concerned by the decision-making process; this includes NGOs, the civil community, professional associations and other local representatives; they have available a permanent secretariat provided by the SPE and also five specialised committees.

### **1.2 The Inter-Ministerial Committee for the Environment**

The CIE is, in principle, entrusted with the drawing up of the main lines of national policy; it assures collaboration of all the ministerial departments with regard to the environment, and plays the main role in the management of certain national environmental documents, which involve one or several ministerial departments. In effect, **it is the CIE, which validates the preliminary environmental appraisals for implementing projects**, or initiatives, which may cause damage to the environment. There is thus a co-operation between ministries on environmental questions. This committee has just been re-defined by the decree No 2001/718/PM of September 3<sup>rd</sup>, 2001 relative to the organisation and operation of the Inter-Ministerial Environment Committee. This committee:

- pronounces judgement on environmental impact studies,
- publishes its opinion or carries out studies on all other questions related to the missions referred to in paragraph 1. above, and is consulted by the Ministry of the Environment,
- is placed in the Minister of the Environment, who assumes the presidency role, and has as representatives one member from each of the following:

* MINEF	* MINAT
* MINAGRI	* MINDIC
* MINEPIA	* MINPAT
* MINMEE	* MINREST
* MINTOUR	* MINTP
* MINTRANSP	* MINSANTE
* MINVILLE	* MINDEF

The Secretariat of this Committee is assured by the SPE and the members are designated by the administrations to which they belong; the composition of the committee is recognised by an order from the Minister responsible for the Environment.

### 1.3 The Specialised Branches (AMS)

Certain technical ministries already have within their structure environmental cells, which carry out the function of Specialised Branches (AMS) responsible for environmental questions. This is the case for the Ministry of Public Works (MINTP), which has an environmental cell responsible for the evaluation of environmental impact studies concerning road works. This cell is operational, even though the link with the SPE is not yet a direct one. This is also the case for the Ministry of Mining (MINMEE) and the Ministry of Transport (MINTRANSP), etc.

## 2. DECISION-MAKING STRUCTURES

The institutional set-up for the management of the environment puts the SPE in the upper hierarchy; it remains attached to the MINEF and benefits from the conventional structure of the technical ministries. It has both centralised and decentralised structures.

### 2.1 Central structure

At the central level, the Permanent Secretariat for the Environment comprises:

- a Division for Programmes and Sustainable Development (DPDD);



- a Division for Standards and Environmental Inspection (DNIE)
- an Information and Environmental Documentation Centre (CIDE).

## **2.2 The Environmental Network**

At the external level, the SPE is represented in each administrative province by a provincial service, departmental sections and a few stations for control and protection of the environment in the main localities of the districts or other places liable to encounter environmental problems.

## **3- The National Fund**

Finally, the institutional set-up includes a financing mechanism, the National Fund for the Environment and Sustainable Development (FNEDD), having the aims:

- to finance environmental audits and support local initiatives
- to support environmental research and education;
- to support projects on sustainable development and also approved associations;
- to support the promotion of clean technologies and certain ministerial departments.

## **II- OVERVIEW OF THE PROCEDURES**

Co-ordination is a management function, which makes possible the optimisation of the work and services of the environmental structures. An examination of the institutional structure shows that institutional co-ordination within MINEF takes place in two directions: horizontal and vertical.

### **II.a Horizontal co-ordination**

This illustrates the transverse nature of environmental management and is carried out through the institutional consultative set-up. This co-ordination involves the intervention of the Prime Minister in his role as president of the CNCEDD, the Minister of the Environment and Forests as president of the CIE, other technical ministers via the AMS and also provincial Governors via the CPEDD.

The consultative structures give opinions and recommendations, and the role of MINEF, in particular the SPE, is to provide the permanent secretariat of the national commission. It is therefore the SPE, which keeps the minutes of the CNCEDD and CIE meetings and supervises, through the vertical co-ordination, the implementation, or even better the taking the responsibility for, the resolutions of the consultative organs in the pursuance of environmental activities.

### **II.b Vertical co-ordination**

This enables decisions to be made and also the supervision of the decisions, which have been taken. This is a sectoral co-ordination which, in most of our state services, is done by meetings being held at all levels, by service notes and updates, by information notes or specific instructions. In this vertical co-ordination the SPE is at the head of the organisation and is thus the decision-maker.

### **III - PERFORMANCE INDICES OF THE EIE SYSTEM**

Several EIEs have been carried out in Cameroon, despite the fact that the institutional framework was not yet perfect; at least, however, the structures were already identified, and an application of the texts and a normative framework of the government were expected shortly. Now that the head of Government on September 3rd, 2001, has signed a decree about the organisation and functioning of the Inter-ministerial Environmental Committee it is the CIE, which gives a final opinion on all the EIEs. All that remains to be done is to nominate the members of this committee and that to make it operational. With regard to the EIEs carried out, of which there are many, mention can be made of:

- the EIE on the AMBAM-EKING project financed by the French Development Agency (August 2001), carried out by SODETEG France and DESIGN TOPO Cameroon:
- the EIE on the PERFED II road servicing project financed by the European Union and carried out by BUURSINK Europe (January 2001):
- the EIE on the CHAD-CAMEROON pipeline project financed by the World Bank;
- the EIE on the exploitation of a UFA 09-024 financed by the World Bank and carried out by TECSULT.

In order to enable a large number of the MINEF officers to familiarise themselves with this tool, several training courses, on EIEs and on the accelerated method of participative research and planning (MARPP), have been held in Cameroon for the officers of the central administration and outside services, in a facility called the Centre for Development and Environmental Studies (CEDEC). The CEDEC carries out its activities in the field of education, training and research on EIEs in Cameroon. Finally, there are also a significant number of environmental organisations (NGOs, groups of young people, associations, etc.) that work in the field of EIEs; we can cite also the Cameroon Association of EIEs, which is affiliated, to the International Association for Impact Assessment (IAIA).

### **IV- CAPACITY BUILDING**

EIEs constitute an aspect of the environment, which is completely new for developing countries, there therefore exists:

- the necessity to make better known this decision-making tool;
- the necessity to train the human resources that will play the role of teachers of teachers;
- the necessity:
  - o to increase the number of regional workshops (because information exchange between the different approaches is always beneficial),
  - to organising meetings for information dissemination and for making the concept better known, exchange seminars, brainstorming days,
  - to increase the number of programmes in the field of EIEs as these are presently insufficient; also to identify and encourage the bringing together of EIE experts.

## **THE STATE OF THE CAMEROON LEGISLATION RELATED TO CHEMICAL PRODUCTS AND/OR SUBSTANCES WITH THE ACCENT ON POPs**

We have been requested to prepare, on the occasion of the sub-regional workshop supporting the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), from February 25<sup>th</sup> to March 1<sup>st</sup> 2002, in Ouagadougou in Burkina Faso, a report which will give a general overview of the situation of the Cameroon legislation concerning toxic chemicals/substances, with the emphasis on POPs.

### **1- GENERAL CONSIDERATIONS**

Questions related to toxic chemical substances are dealt with in Cameroon by several ministerial departments: MINEF, MINSANTE, MINAGRI primarily, and MINDIC, MINMEE and MINREST secondarily.

The problems today, in Cameroon in particular, and in the rest of the world in general, caused by industrial chemicals, toxic substances and pesticides with regard to human health do not need to be demonstrated.

Normally, all types of substances / products or wastes produced by the activities of various production, trading, consumer activities are included in this category.

Of less danger when they are well managed, these substances can become very dangerous for the well-being of the populations, on the one hand by causing damage to the environment, affecting the harmony and the functionality of the ecosystem, and on the other hand by hampering the sustainable development of the entire community.

In effect, the management of all these substances, which are toxic for the urban and rural environment, requires strict regulations. The jurisdiction thus uses a certain number of tools that the legislator has made available to the institutions, which are involved in order to regulate activities in a given field. These are the laws, application decrees, directives, norms, etc. There are nevertheless a series of texts, of diverse nature, which contribute directly or indirectly to the control of toxic chemical substances or products affecting the environment; one can cite:

#### **A - At the national level**

**1-** The framework-law concerning environmental management, law no. 96/12 of August 5<sup>th</sup>, 1966 in its chapter IV, sections 1,2 and 3; this law puts forward about forty specific laws and application decrees, but the difficulty of these is the non-existence of any application decrees; these laws are:

- . the law on water administration
- . the law on mining
- . the law on radio-protection
- . the law on standardisation
- . the law on oil statutes
- . the decree banning the importation of dangerous/toxic wastes etc...

- 2- law no. 64/LF/23 of November 24<sup>th</sup>, 1964 on the protection of public health
- 3- the decree no. 76/372 of September 2<sup>nd</sup>, 1976 concerning the regulation of dangerous, unhealthy or non-adapted establishments
- 4- law no. 96/03 of January 4<sup>th</sup>, 1966 defining the framework-law in the health sector
- 5- law no. 98/015 of July 14<sup>th</sup>, 1988 related to establishments classified as dangerous, unhealthy or non-adapted
- 6- the ruling no. 0064/MINDIC of May 12<sup>th</sup>, 1995 applying the international legal instruments related to the Vienna Convention for the Protection of the Ozone Layer, and to the Montreal protocol and its amendments
- 7- the ruling no. 985/MINDIC/CAB of October 15<sup>th</sup>, 1995 banning the importation of equipment and apparatus using substances which can deplete the ozone layer
- 8- law no. 89/027 of December 27<sup>th</sup>, 1989 on toxic and dangerous wastes
- 9- and several others

#### **B - At the international level**

- 1- the adoption and signature in 1991 of the Bamako Convention, on the banning of dangerous wastes in Africa and the control of their trans-frontier movements
- 2- the adoption in 1989 and signature in 1993 of the Basel Convention, relating to controlling trans-frontier movements of dangerous wastes and of their destruction
- 3- the adoption in May 2001 of the Stockholm Convention, concerning the destruction of obsolete pesticides and the research for alternatives to POPs as pesticides
- 4- the adoption in September 1998 of the Rotterdam Convention concerning Prior Informed Consent, applicable to certain chemical products and dangerous pesticides which are traded internationally.

If the existence of a legal and regulatory framework is undeniable, one can see that these texts are not numerous, and thus they do not address all the problems; in many cases, are characterised by the lack of any application texts.

In effect, although the Cameroon legislation offers a theoretical basis for risk prevention (toxic wastes and other forms of pollution), it is lacking as far as the mechanisms for treating polluted areas, and the repair of damages thus caused are concerned; finally, is characterised by a total absence of any norms.

## **2- APPLICABILITY OF THE LEGISLATION**

In Cameroon there are 28 police stations for plant health protection and 58 brigades of plant health police. These units are mainly located in the ports, airports and at nearly all frontier posts; their role is prevention – controlling the importation of non-authorized chemicals and, inside the country; their role is to search out, identify and remove obsolete and banned products from economic circuits. Within the Ministry of the Environment and Forestry, there is also an inspection and

investigation brigade responsible for the control of pollution and norms, as well as for the control and supervision of cross-frontier pollution and follow-up regarding the application of national and international regulations. These activities are also pursued by other ministerial departments, which are involved with these problems.

Concerning the repressive actions to be carried out in agro-industries and others, Cameroon, via the ministerial departments concerned, is still in the preparatory phase for developing norms and a strategy for product certification. In any case, before this mechanism can be put into place, supervisory and control activities with regard to these structures are carried out and some economic operators who discharge toxic substances into water courses, rivers etc... without respecting the elementary rules of environmental control, are punished with fines.

Finally, environmental audits are also carried out in the field, and recommendations formulated with regard to the economic operators to enable them to rehabilitate the damaged environment.

### **3-PROBLEMS IN THE APPLICABILITY OF THE LEGISLATION**

For our legislation to lead to positive effects, it would be desirable if:

- an inventory of the toxic chemicals and POPs could be carried out, as well as an inventory of the main sources and an evaluation of the wastes, in collaboration with the economic operators, NGOs and others involved in the area concerned,
- a campaign for raising the awareness of the population, and improving its education with respect to the importance of negative effects of these products on health should also be effected,
- support could be given to Cameroon in the framework of the development of environmental norms and certification,
- ways and means could be identified in order that the application decrees of certain laws, still in administrative drawers, could see the light of day,
- an environmental police could be created, with well specified objectives,
- a greater synergy between the various actions of the different ministerial departments on the terrain could become a reality, leading to a greater efficiency.

## CENTRAL AFRICAN REPUBLIC

### INTRODUCTION

The Central African Republic, like other countries of the world, uses chemicals in the fields of agriculture, health, etc... Unfortunately the persons who use them only see the advantages that can be gained whilst being unaware of the dangers they may present.

To counteract any possible accidents that they could cause, the government of the Central African Republic has taken statutory dispositions to prevent such unpleasant incidents. It is fitting to underline that the legal arsenal on this subject is comprised of texts dating from the 1970s. Although they would seem to be obsolete when looking at the provisions of the London Resolution, the Stockholm Convention on persistent organic pollutants (POPs) and the Rotterdam Convention on Prior Informed Consent, they do have the merit of showing the will of the country to take precautions aimed at protecting human life from the dangers which improper or unskilful use of such chemicals could cause. The following communication presents the legislation of the Central African Republic with regard to chemicals, and in particular certain pesticides and other products used in the area of crop treatment.

### DEFINITION

According to Article 2 of the *FAO's International Code of Conduct for the distribution and use of pesticides*, **“The legislation on pesticides is any legislative or statutory text adopted to regulate the production, commercialisation, storage, labelling, packing and use of pesticides from the quantitative, qualitative and environmental points of view”**.

On the basis of this definition the Central African Republic disposes of legislation, which takes into account these recommendations, despite the fact that they seem out-of-date with respect to the Stockholm Convention.

In effect, the legislation of the Central African Republic is composed essentially of texts, which date, for the most part, from the 1970s. They consist of:

- **Decree No 59/81 of February 4<sup>th</sup> 1959**, regulating the sale and use of toxic chemical substances in agriculture.
- **Law No 62/350 of January 4<sup>th</sup> 1963**, relating to the organization of the crop protection in the Central African Republic and of:
- **Order No 136 of July 8<sup>th</sup> 1970**, giving the power to certain officers of the Agricultural Service to carry out plant health controls, in addition to their usual functions as heads of Agricultural Sectors. These officers must have received training

as Engineers or as **Leader of Agricultural Works**  
(Agricultural Technicians, new formula).

From this arsenal, only the dispositions of the **Decree No 59/81** of February 4<sup>th</sup> 1959 are more explicit with regard to the code mentioned above because the Articles of Chapter 1 fix the conditions of sale of toxic substances such as anti-parasite specialties for agricultural use. These conditions concern the **trading houses** as well as the necessity of formulating a request in order to be able to exercise the activity covered in Article 1. Article 3 itself expressly specifies the information which must appear on the request for approval, in particular:

- the commercial name of the specialty
- the percentage of toxic active ingredient
- the packaging
- the list of resellers / stockholders if any, as well as their respective addresses in the national territory.

The conditions for using pesticides, from the qualitative and environmental points of view, are defined in Articles 6, 7, 8 and 14 of the same Decree. However nothing is specified with regard to the amount to be imported. In any case, the amount to be imported depends on the surface area to be treated.

From the Institutional viewpoint, the country has been divided into 5 plant health inspection posts conforming to the dispositions of the **Order No 136 of July 7<sup>th</sup> 1970**. These are the posts of:

**Bangui**  
**Berbérati**  
**Bangassou and**  
**Bambari**

At the present time this task is the responsibility of the agricultural delegations. From what can be seen it appears that the legislation on pesticides in the CAR appears to be obsolete with respect to the code, since it dates from 1959. In consequence it is worthwhile updating it, taking into account the public health and commercial sectors.

Even though the CAR has not yet ratified the Stockholm Convention, the proposed law, which is an outline of the environmental management framework whose application is expected to start during the current year, contains provisions, in its **Articles 38, 39, 40 and 41**, relating to dangerous substances in general and POPs in particular.

Paragraph **6 of Article 40** lays down the basis of the concept of information and prior informed consent for dangerous substances.

## **DEVELOPMENT PROSPECTS FOR THE POPs PROGRAMMES IN THE CAR**

### **Ratification process**

The Central African Republic has not yet ratified the Stockholm Convention on Persistent Organic Pollutants (POPs). Nevertheless, an urgent procedure has been initiated for the ratification. This procedure consists of giving full power to the Senior Ambassador representing the Central African Republic at the United Nations in New York, to do this in the name of the country. The dossier, which should now be on the Council of Minister's table, will first receive the approval of the Government.

### **Preliminary provisions**

Whilst waiting for the ratification, the Order No\_017\_MEFCPET/CAB/SG/DGE/PFPOPs was signed on December 10<sup>th</sup>, 2001 by the Minister for Water, Forests, Hunting, Fishing, the Environment and Tourism in order to set up the national committee charged with the task of piloting the activities leading up to the implementation of the convention. The second text, No\_018\_MEFCPET/CAB/SG/DGE/PFPOPs of 10/12/2001, names the members of this committee.

With regard to the Basel and Rotterdam Conventions, their focal points have been designated and the ratification process is underway.

## **IMPLEMENTATION STRATEGY**

Whilst waiting to obtain the financing necessary for implementing the convention, a programme of radio broadcasts has been prepared to inform and make the interested parties aware of the objectives and relevance of the convention, as well as the role each player is expected to play in his field. In addition, the profile of the National Steering Committee has taken into account the multidisciplinary aspects of the management of POPs, for an effective implementation of the convention. This committee includes representatives of the public sector, the private sector and NGOs, it being understood that the NGO representative also serves as the spokesman of the people.

## **THE MAIN ASSETS AND CONSTRAINTS AT THE PRESENT TIME**

The principal asset at the present time remains the Government's will to use all of its resources available to urgently ratify the Stockholm Convention. The establishment of the National Steering Committee, and the nomination of its members show this political will.

The Department of Commerce and the Ministry of Defence have initiated a project for a decree on the situation and the movements of POPs and certain dangerous wastes jointly. Unfortunately this initiative has not yet been completed.



The constraint comes from the fact that many of the stakeholders are completely ignorant about persistent organic pollutants. They cannot make any distinction between these products and “dangerous wastes” that most of them know as “toxic wastes”. It is a new concept, which is basically chemistry, a science that has no equivalence in ancestral practices nor in traditions. Furthermore, the population cannot understand that the fertilisers, which help them to increase their agricultural production, are or may be dangerous products if they are incorrectly handled.

## **6. CONCLUSION**

Even though the Central African Republic’s legislation appears to be out-of-date with regard to the Stockholm Convention, steps are presently being taken to correct these shortcomings. A major asset remains the establishment of the National Steering Committee.

Finally, the granting of financing in the framework of enabling activities for the implementation of the Stockholm Convention will enable the constraints to be minimised or removed, constraints which appear to be major obstacles to the application of the Convention.

## **CHAD**

### **1. BACKGROUND**

Chad has a surface area of 1,284,000 km<sup>2</sup> with a Saharan desert area in the north, a Sahel area in the center characterized by agriculture and stock-breeding, and finally an area in the south, called Sudan-type, where the main activity is agriculture with strong sedentary breeding and also flock-moving activities. According to the results of the general census of the population and the habitat in 1993, the population is estimated to be 6,300,000 inhabitants of whom 80% are rural dwellers (farmers, farming shepherds, shepherds and fishermen).

Chad, one of the poorest countries in the world with a GDP of \$ 250 in 1999, has an economy based on agriculture and stockbreeding. The country exports livestock, gum Arabic, cotton products (fibre, oil, soap, oil-cake. In order to improve the quality and to increase the quantities of certain agricultural products, Chad relies on the use of chemicals. In this regard pesticides are extensively used. Since the 1970s, the Directorate for the Protection and Conditioning of Plant Life (ex OCLALAV: the Common Organization against Locusts and Bird Parasites) uses large quantities of pesticides in combating locusts and bird pests. Considerable stocks are registered in the target zones, where contamination of both the ground and surface waters has been observed.

Today, more and more proof is available indicating that chemicals can cause problems for the environment and for human health. Their harmfulness is characterized by cases of cancer, effects on the nervous system and on metabolism, changes in production, pollution of the groundwater and this is caused, in most cases, by poor handling, use or storage of these products.

It is now recognized that chemicals must be correctly managed in order to attain a sustainable level of development and a high level of environmental and health protection. In this respect, several statutory and legal instruments coming from different departments have been produced with the aim of maintaining an environment, which is ecologically sound.

### **2. Existing statutory texts**

#### **2.1. At the national level**

##### **a) In the Ministry of the Environment**

1. The law 14/PR/98 of 17<sup>th</sup> August 1998 defining the general principles for environmental protection, for which the application texts are being drawn up.
2. The law 16/PR/99 called the Water code, defines ways of managing river water, lakes and hydraulic works, and regulates the disposal of wastes in watercourses.

3. The decree 036/MEE/DG/2000 of 19<sup>th</sup> October 2000 concerning the creation of a National Technical Committee (CNT/POPs), responsible for the evaluation of the International Conventions on persistent organic pollutants, pesticides, chemicals and wastes which are dangerous for human health and the environment.
4. The decree 343/PR/MEE/97 of 13<sup>th</sup> August 1997 concerning the creation of the Ministry of the Environment and Water, which is responsible for the development and implementation of the government policy on the protection of the environment.
5. The decree 822/PR/ME/92 establishing the High National Council for the Environment (HCNE). The role of the HCNE is to stimulate, harmonize and supervise the implementation of policies and strategies concerning the environment and development.

**b) In the Ministry of Agriculture**

1. The law no. 14/PR/95 of 13<sup>th</sup> July 1995 concerning the protection of plant life.
2. The decree no 10/PR/MA/99 of 7<sup>th</sup> January 1999 fixing the means of applying law no. 14/PR/95.
3. The decree no 11/PR/MA/99 of 7<sup>th</sup> January 1999 concerning the creation of a National Committee on Pesticides for Agricultural Use. This convention has been able to establish a list of pesticides whose use is either prohibited or limited in agriculture and also a list of recommended pesticides.

**c) In the Ministry of Mines, Energy and Petroleum**

1. The decree of 10<sup>th</sup> May 1993 regulating the permits for the opening and exploitation of oil deposits, derivatives and residues.
2. The decree no 0456/MMPE/DG/DPENR/89 of 2<sup>nd</sup> October 1989 fixing the conditions for oil transport and storage facilities.
3. The decree no 016/MMEP/DG/DP/SRTSD/98 of 17<sup>th</sup> August 1998 on the regulations for storage of oil products.
4. The oil code no 07/PR/62.
5. The mining code.

**d) In the Ministry of Public Health**

1. The decree 087/PR/85 on environmental health.
2. The decree no 859/MSP/DG/DACS/96 of 21<sup>st</sup> February 1996 regulating the importation, distribution and use of pesticides which can be used for public health.
3. The law 24/PR/2000 concerning pharmacy.

**e) In the Ministry of Trade and Industry**

1. The decree no 10 fixing the terms for the granting of special authorizations for the importation of certain products and/or materials containing or functioning with substances, which deplete the ozone, layer.
2. The decree no 006/2000 regulating the importation of certain products and/or materials containing or functioning with substances, which deplete the ozone, layer.
3. The decree no 054/95 abolishing the import and export license and establishing the negative list of products requiring a special import authorization.
4. The decree concerning the prohibition of the importation of the “ledas” brand polyethylene bags. In the other Ministries such as: Transport, Social and Family Affairs, there are statutory texts concerning the management of chemicals.

**2.2. At the international level:****a) Conventions signed and ratified by Chad**

- The Convention of Bamako on the banning of importation of dangerous wastes and control of their trans-frontier movements in Africa.
- The Convention on plant protection in Africa (ratification underway).
- The Convention of Basel concerning the control of trans-frontier movements and destruction of dangerous wastes.

**b) International non-constraining texts:**

- The London directives applicable to chemicals, which are subject to international trade.
- The international code of conduct for the distribution and use of pesticides.

**c) Conventions not ratified by Chad**

- The Convention of the World Labour Organization (WLO) concerning safety at work in the use of chemicals (no 170 of the WLO, 1990).
- The Rotterdam Convention on the application of Prior Informed Consent which is applicable to certain chemicals and dangerous pesticides which are the subject of international trade (1998).
- The Stockholm Convention on persistent organic pollutants.
- Regulation of the certification of pesticides which are common to the member States of the CI.

Despite the existence of these different legislative and statutory texts concerning the management and control of chemicals in Chad, their application is still weak. This weakness is perceptible at five levels :

1. The lack of means (financial, material...) to make the legislation known : the Official Journal, circulation of texts, training, sensitization of the partners, decision makers and target groups.
2. The weakness of the administrative procedures : licensing, approval, request for certification or authorization for sale, authorization for possession of sales points.
3. The lack of control mechanisms for applications : control mechanism for importation and distribution, respect of different sanctions.
4. The weakness of technical controls : analysis of the formulation quality, analysis of residues.

The constraints can be summarized as follows :

- Insufficiency or lack of adequate statutory texts
- Lack of qualified personnel;
- Lack of adequate infrastructures and personnel;
- Lack or insufficiency of training of personnel in charge of the regulation and control;
- Despite the motivation of the personnel in charge of regulation and control, there is a great lack of means;
- The weakness of the campaign to inform and sensitize decision-makers and the public.

## COMOROS

### GEOGRAPHIC INTRODUCTION

The Comoros Islands are a small archipelago comprising 4 volcanic islands with a surface area of some 2236 km<sup>2</sup> in the southwest of the Indian Ocean, at the entrance of the Mozambique Channel. According to current estimates the population of the country is 632 000 inhabitants. The country has a Gross Domestic Product of US \$ 371 per head. The Comoros Islands are composed of volcanic islands that have had a unique geological and biological development. The islands constitute a sort of Filter Bridge between Africa and Madagascar and are geologically independent of these two regions.

However, each island in the archipelago has its own physical and human personality even though there are several similar factors, notably the volcanic origin, the tropical maritime climate, and a common ancient culture and civilization. All these aspects, showing both the homogeneity and the diversity of the islands, constitute the greatest charm and the greatest richness of the archipelago.

### ECONOMIC INTRODUCTION

The process of economic and social development is evolving very slowly under the conjugated effect of various crises that have marked the country during the last 25 years. This situation is also explained by the inefficiency of the institutional framework and the important failings seen in the implementation of macro-economic policies.

#### 1) Acquaintance with the Convention and Organisation of Personnel Resources

The government of Comoros became acquainted with the Stockholm convention on persistent organic pollutants during the plenipotentiary conference in May 2001. This convention is placed under the responsibility of the Ministry of Production and the Environment of the Comoros.

Given that the certificates of signature to the convention may be deposited within one year, and it being understood that the convention is in the safe custody of the Secretary General of the United Nations, the government of the Comoros has committed itself to the provisions required for the signature and ratification of this convention.

The government of Comoros has proposed the United Nations Development Programme (UNDP) as being the preferred agency for helping Comoros to gain access to finance from the Global Environment Fund in order to be able to take measures against persistent organic pollutants.

However, at the national level, persons have been designated to play the role of intermediates: the GEF operational focal point, the POPs national focal point, and the country's technical person responsible for assisting the POPs national focal point. In conformity with the directives of the Convention these persons collaborate with the existing structures in order to successfully conduct the activities of communications, and of awareness raising on

recognised issues related to persistent organic pollutants and also to data collection and evaluation of POP sources.

## 2) National Situation Regarding Chemical Products

The conclusions of several evaluations made at the national level on chemical products and their stocks, have always stress the need for Comoros to endow itself with legislation to protect the country against the improper importation, manufacture and commercialisation of chemical products notably persistent organic pollutants. Existing warehouse stocks show an important difference between the quantity, the nature and the packing of these products:

The available tonnage is, overall, much too large in relation to the current consumption, thus the unused stock will age; certain products are intended for users who do not exist in Comoros, and at the same time we deplore the absence of specialists who would be useful with regard to the management of chemicals, and more particularly persistent organic pollutants.

The packaging used for imported products is not always adapted to the local climate and logistics needs. Certain labels are printed in foreign languages which are little known in Comoros, for example JAPANESE, and do not include any indications on their safe use. The packaging is always too large in comparison with the average quantities needed by the users.

## **CURRENT REGULATIONS (legislation)**

In Comoros the legislation related to chemicals and more particularly to persistent organic pollutants is not completely defined, nor applied. However, regulatory texts relating to the environment already exist, and they are strictly applied, with a strong enforcement, in order to limit and to protect unjustified acquisitions of products, whether they are free or paid for.

The legislation in force has been developed to limit abuse, to improve the quality of storage, and to re-absorb the superfluous reserves either by recycling or by destroying them, but also to improve the understanding of the real need for chemicals supplies which should be programmed as a function of the norms adapted to the country's requirements.

The chemicals or combinations of chemicals which are targeted by the terms of these regulatory texts are naturally occurring or manufactured chemicals which because of their toxic, radioactive or corrosive nature, constitute a danger for public health, and for the conservation of the soil and sub-soil, of water, of fauna, of flora and of the environment in general when they are used or discharged in the natural environment.

We can cite the list at the national level of all dangerous substances whose importation, exportation, transit, production, sale, and distribution, even free of charge, are forbidden. For use in moderation, they are subject to prior authorisation from the competent authorities.

## CONGO REPUBLIC

The Congo Republic, in common with most developing countries of West Africa, is a large consumer of chemicals, which it does not produce itself. Its low level of industrialisation does not allow it to manufacture such products in sufficiently large quantities to satisfy its own national requirements. Also, the presence on its territory of large stocks of pesticides belonging to the class of persistent organic pollutant is the result of a large amount of imports, often made fraudulently by companies for their own use, and this in spite of bans which apply to the majority of these products.

Although it is true that the Congo has signed most conventions related to toxic chemicals, the country does not yet have an arsenal of legal texts aiming at controlling the use of chemicals and more particularly persistent organic pollutants. The law no. 003/91 of April 23rd 1991 on the protection of the environment is still the main text dealing with questions related to chemicals from the legal point of view. This is the case of the provisions concerning the protection of the atmosphere (articles 21 to 27 of the law) which deal with the prohibition on emissions of pollutants of all kinds, in particular toxic smokes, dust, mists and gases liable to be prejudicial to health and to the environment.

Apart from these provisions, three articles of the law of April 23rd 1991 give some general indications on potentially toxic chemicals and on drugs. These are articles 57 to 59, which simply put forward the principle of a prior authorisation from the Ministry in charge of the Environment for anything relating to the import, production, commercialisation and use of potentially toxic chemicals. In addition, the law considers also the damage which may result from the use of these substances, and which may involve compensation having to be paid to victims, and anticipates damages which may be have to be paid by any persons infringing these regulations.

It should however be noted that the Congo developed a National Environmental Action Plan as from October 1991. This plan, which became operational in 1994, represents a strategic approach to the environmental problems now facing the Congo. Major parts of the NEAP are devoted to pollution problems in the various industries of the Congo. These cover in particular agro-food, and the wood, chemical, building and public works industries. It is to be hoped that with the signing of the Stockholm Convention on persistent organic pollutants, the Congo will now do its best to strengthen existing legislation on chemicals. Already, the government of the Congo has concluded, through the Ministry for Mining and the Environment, a partnership agreement with UNIDO.

This agreement aims at helping the Congo with its project to strengthen sustainable capabilities in order to respect its obligations with respect to the Stockholm Convention, in particular concerning the preparation of an implementation plan for POPs and for chemical safety and the management of chemicals such as those listed in chapter 19 of Agenda 21.



## DEMOCRATIC REPUBLIC OF CONGO

### 1. INTRODUCTION

The Democratic Republic of Congo, straddling the Equator, has a surface area of 2,345,000 km<sup>2</sup> with varied climates (hot, humid, mild) and an important hydrographic network. The Congo river basin has several tributaries. The population of the DRC is estimated at approximately 60 million inhabitants (2001) with an average growth rate of 3.3%. Some 75% of this population is rural.

The climatic, relief and ground conditions all favour the development of agriculture. Given the government's priority to increase food production, an increase in the use of pesticides and fertilisers is inevitable. Apart from agriculture, the industrial sector is developing fast and is at the base of the use of various chemical products.

### II. USES

Apart from dioxins and furans, POPs are used in industry, agriculture and health care.

Amongst pesticides, it is the organo-chlorine products, which are the most widely used, the most polluting for the environment, and most harmful to human health due to their high stability and their ability to bio-accumulate. The case, which is best known to the general public, and the most criticised, is that of DDT and its metabolites.

In 1983, it was clearly shown that bioaccumulation had occurred following an important exposure of the population of Kinshasa to three POPs, namely HCH, HCB and DDT.

In industry, certain POPs are used as solvents. Some general precautions must be taken, particularly when solvents, which are difficult to biodegrade, are concerned (toxic or inflammable halogenated products which are not harmful). However it must be pointed out that PCBs are used in transformers and capacitors, and also as heat exchange fluids, and as additives in paints, in copying papers and in plastics.

### III. PRODUCTION

No POPs are produced in the country. However there are some companies who make up formulations and re-package them.

### IV. IMPORTS

All POPs found in the DRC are imported. As in the case of other chemicals, their chemical or commercial names are never reported by the services responsible for the importation. All the chemicals are registered under the heading "chemical products". Statistics can thus yield no useful information.

- There are three entry points for pesticides:
- Kinshasa area: Kinshasa, Lower-Congo, Bandundu, and South Equator.
  - Katanga (KASUMBALESA) area: Katanga, Eastern Kasai, and Western Kasai.

➤ Eastern area: Eastern Province, North and South Kivu, Maniema.  
However, the North of the Equator is supplied by the Central African Republic.

## **V. POP STOCKS**

It has been reported that an important amount of DDT exists in several provinces, notably the Lower-Congo. It has not yet been possible to determine the amounts of these products.

## **VI. LEGISLATION**

Up to the present time there is no legislation to regulate the different aspects of the management of chemicals. Some actions started at the level of the inter-ministerial commission for the development of a project on legislation have been curtailed because of financial problems.

In the meantime, the international code of conduct for the distribution and use of pesticides is the only reference on this subject.

## **VII. PLANNED ACTIONS**

- Inventory of stocks across the country
- Establishment of a system for the collection of adequate data and the constitution of a database
- Putting into place of a system of supervision and control for chemical products in general and POPs in particular
- Popularisation of scientific and regulatory data
- Information, education and awareness raising in the public and in industry on the risks related to chemicals and POPs.

## **VIII. COMMITMENT OF THE DRC TO THE INTERNATIONAL CONVENTIONS RELATED TO THIS SUBJECT**

In the DRC there is a serious problem regarding the management of chemicals in general, and POPs in particular. Like other States, the DRC is very concerned with the protection of the environment and public health, and adheres to the following conventions:

- by signature of the Rotterdam Convention in 1998
- by the ratification of the Basel Convention in 1994
- by initiating the process for the ratification of the Stockholm Convention, in depositing the ratification documents with the Ministry of Foreign Affairs and International Co-operation, by the Ministry of Land, Environment and Tourism Affairs.

## **CONCLUSION**

Conscious of the dangers inherent in the circulation and use of POPs and chemicals, the DRC is ready to participate in all actions that will be undertaken, at the national, regional and international levels, for the reduction and destruction of chemical substances, in order to protect the environment and safeguard the health of the population.

## DJIBOUTI

### INTRODUCTION

Djibouti is situated on the oriental coast of Africa (longitude 39 –41° East, Latitude 11–12°40'), the surface area of Djibouti is 23.200 km<sup>2</sup>. The republic of Djibouti shares its terrestrial borders with Eritrea, Ethiopia and Somalia. Its coastline of 375 km gives a strategic position and a direct access to the straits of Bab-el-mendeb and gulf of Aden.

The climate of Djibouti tropical (hot & arid) with a irregular rainfall pattern of 150mm-200m depending on the season & the location. The average temperature exceeds 30°c with an average humidity of 40 –80% depending on the season. The average wind velocity is 4m/s.

The republic of Djibouti is a member of least developed countries (LDC). The national economy depends essentially on services, the tertiary sector covers 82% of the Gross Domestic Product (GDP) corresponding mainly the port, transport, commerce and services, which is explained by the national limited resources. The primary sector is reduced to 3% of the GDP and concerns an agricultural production insuring only 11% of the necessary vegetables and fruits. By considering the water and energy, the secondary sector represents 16% of the GDP whereby the manufacturing sector is negligible.

The Djiboutian population is estimated around 650.000 whereby 2/3 lives in the capital. Actually the country hosts about 120.000 refugees. The rate of natural population increase of 3% is particularly high while the immigration increases 3.1%. The rate of global population increase is 6% fold.

As compared to its neighbouring countries, Djibouti seems to be very small, But its location gives an important comparable advantage, particularly in the Banking, telecommunication and transport sectors resulting a highly attracted & well advanced. Djibouti adopts a free market system whereby only quality and competition counts. Djibouti's modern port facilities serve all the neighbouring countries, particularly Ethiopia.

Most of the agricultural activities started recently after independence (1997) along the wadi (intermittent rivers) banks. Of a cultivable area of 10.000 ha, only 1.000 are cultivated. With a total production of 4.200 tones (1999-2000). All the crops are irrigated and are predominantly vegetables mainly Tomatoes, Pepper, Onions etc, with a very limited fruit growing. The growing season starts from September to May.

#### **More than 99% of stable cereal consumption is met from imports of**

Approximately around 650.000 tones annually, whereas the vegetable local Production covers not more than 10% only.

### **Production, distribution, use, export, import procedures of Toxic pesticides**

Djibouti does not produce pesticides or PCBs; therefore, the source of such compounds is importation. Also, there is very limited industrial activity in the country and little farming activity. Pesticides are in the following five main areas:

- Agriculture;
- Animal Health;
- Leather Processing;
- Malaria Control, and;
- Building Timber Treatment.

Though the agricultural activities are very limited, we are usually resorted to **pesticides**, i.e. insecticides, herbicides, fungicides, rodenticides, etc to protect people and domestic animals against diseases, protect their crops from insects rodents & plant diseases (prophylactically & therapeutically). The mostly utilised chemicals for the last 50 years were mainly **chlorinated hydrocarbon group** mainly **DDT, aldrin, dieldrin**. In recent years the farmers are shifting to the use synthetic **pyrethroids** like **decis**. The use of herbicides in Djibouti is almost negligible although the private sector especially the private residence, the hotels, the football & golf ground use a small amounts of **2,4-D** and **2,4,5-T** for the control of the annual weeds and are of course the source of **dioxins & furans**.

For locust invasion control, the Desert Locust Control Organisation (DLCO) which operates in several East African countries import pesticides through Djibouti commercial port mainly **organophosphates** like **malathion, parathion, dimethoate** etc. The pesticides are stocked in Djibouti before they are transported to other countries.

The electric power in Djibouti depends on power generators (**fossil fuel**) mainly diesel which is a major source of **air and soil pollution**.

For PCBs, the sole user was the state owned EED (Electricity of Djibouti). Since the international ban on PCB use, they have progressively replaced their old transformers by PCB free ones. Although there are great chances that the disposed ones were kept on the company's premises, no precise information is available.

**Petroleum by products** are some of the major sources of pollution in Djibouti, i.e. all types of polymers, e.g. plastic bags of all types, whether those used in the markets & shops, or those used inside the sugar sacs and the likes, in addition to the plastic-made hospital materials, e.g. disposable syringes, blood bags, saline bags etc. By igniting those plastics will generate fumes, which are probably major sources of **dioxins & furans**.

Domestic wastes are collected and land filled 5km from Djibouti City in an unguarded overfilled site. By-products surely emit **dioxins & furans** as well as **aflatoxins** from uncontrolled combustion in this site.

### **Detailed information on stocks, contaminated sites and disposal opportunities**

The Government has very limited resources to allocate to properly address the TPS situation. However, a preliminary survey on the easily locatable stock of obsolete pesticides was undertaken in 1998, thanks to international assistance.

#### **Stocks**

There is little information concerning the stocks of pesticides. Some of them are located on DLCO premises in Djibouti City but precise information on the products and quantity is unavailable. The only identified PCBs stock is the old transformers stocked by EDD on its premises. A more detailed survey in the country is regarded as necessary since the Government cannot be certain of the inexistence of obsolete pesticide stockpiles.

#### **Contaminated sites**

The Government has no information concerning contaminated sites and most of the analyses have to be processed abroad.

### **Assessment of disposal opportunities**

#### **Land filling**

Land filling commonly widely used for waste disposal, especially at Douada, close to Djibouti City. This problem must be addressed to avoid ground water contamination and to avoid uncontrolled wastes combustion.

#### **Incineration**

No large-scale incineration plant exists in Djibouti although villagers locally burn their wastes in open drums.

#### **Hazardous waste management**

Usually, the management of hazardous waste is left to the person who uses it.

The only proper way for EDD to dispose of their old transformers would be to send them back to Europe. However, this solution is not economical so they are kept on the company's premises.

#### **Alternative technologies**

Presently no alternative non-combustion technologies for TPS management can be found in the country.

### **Detailed information on releases to the environment**

The law is weak on this point and no information is available concerning releases to the environment.

### **Detailed information on regulatory control**

#### Testing laboratories

The few laboratories of the country do not have the possibility to proceed to very fine testing. Analysis of the TPS contamination would have to be done abroad.

#### Legislation

The legislation is very weak concerning the handling of TPS and the regulatory system needs assistance to develop fully and efficiently.

#### Pollutant Release and Transfer Register (PRTR)

At the moment, there is no pollutant release or transfer register.

#### **Monitoring of POP's**

The monitoring system is still to be put in place and assistance is also needed on this point.

#### **Human Health assessments**

There has been no human health assessment undertaken in Djibouti.

#### **Conclusion**

Djibouti has signed recently the POP's convention & other relevant conventions like Basel convention. The Ministry of the Environment is in its final stage of submitting a proposal for enabling activities with a short period of time.

It should be understood that Djibouti port facilities serves the Horn of African Countries like Ethiopia, Somalia & Eritrea. That means all the commodities to & from those countries passes Djibouti. So by reinforcing the capacity of Djibouti to deal with Persistent Organic Pollutants means that all the countries in the region will benefit.

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## **GABON**

### **INTRODUCTION**

Gabon is situated in Central Africa. It is bordered to the north by Cameroon and Equatorial Guinea, to the southeast by the republic of Congo Brazzaville and to the west by the Atlantic Ocean. Its surface area is 267,000 km<sup>2</sup> for a population of 1,500,000 inhabitants. Forests cover Seventy-five percent of the country's area.

### **ECONOMIC SITUATION**

The principal resources of Gabon are oil, wood, manganese, uranium (mining has ceased), gold and bauxite etc. Agriculture is not sufficiently developed; the industrial sector on the other hand is developing and is responsible for the use of various chemicals.

### **USE**

Despite the small size of the agricultural sector certain chemical substances such as pesticides, organo-chlorine compounds, DDT, are used, to name just these. The most significant uses occur in industrial plants and for health applications.

### **IMPORTS**

All chemicals found in Gabon are imported, and in an improper way. The Customs Services do not pay any particular attention to the characteristics of these substances. The ports of OWENDO in Libreville and Port Gentil are the main points of entry for these substances, without forgetting the unauthorised persons who come along rivers and smuggle products which are obsolete and sold in a disorderly way.

### **STORAGE OF POPs**

According to an inventory, which I have tried to carry out on site, there exists a substantial quantity of PCBs, principally in Port Gentil (an oil town), Libreville and Mounana.

For example, in the town of Mounana, 200 drums with a capacity of 200 litres each containing PCB wastes were found buried underground. This represents a danger for the environment.

### **LEGISLATION**

As in other developing countries, there are very numerous laws and decrees, but the application of these remains a subject, which is not talked about.

An Environment Code (law 16/93), developed by the Ministry of the Environment, exists, the application orders are being developed and all problems related to chemicals are considered.

A National Anti-pollution Centre does exist which, despite its having to work in a very irregular fashion, carries out analyses of air and water. The results obtained



clearly show that considerable pollution exists. If this centre were well equipped, it would become an indispensable tool for helping with environmental problems.

### **GABON'S COMMITMENTS TO INTERNATIONAL CONVENTIONS**

Like other States, Gabon is very concerned about protecting the environment and human health. Thus we have:

- Signed the convention on biodiversity,
- Signed the Bamako convention,
- Signed the Montreal protocol on the ozone layer,
- Started the process to sign the Stockholm Convention on POPs.

On this subject I would like to state that we are behind schedule with the signature of the Stockholm Convention due to the fact that no one was dealing with this matter. Since May 2000, however, when a POPs focal point was named by ministerial decree, the follow-up of this project has been proceeding normally. The dossier has already been transferred to our Ambassador at the United Nations for the convention to be signed.

### **CONCLUSION**

Gabon is conscious of the dangers inherent in the movement and use of POPs. This is why it has undertaken to sign all the conventions, and in particular that of Stockholm, in order to be able to benefit from financial support from the International Organizations, so that the Gabonese population may live in a healthy environment.

## GUINEA-BISSAU

### INTRODUCTION

Guinea-Bissau is a small country in West Africa bordered to the north by the republic of Senegal, to the east and to the south by the Republic of Guinea-Conakry, and to the west by the Atlantic Ocean. It covers 36,125 km<sup>2</sup>. The population density is 28 inhabitants/km<sup>2</sup> for a population of 1,200,000 persons. The annual growth rate is 3%. Women make up 51.6% of the population and men 48.4%.

The territory making up the country is divided into 2 large parts:

- Continental territory
- Insular territory made up of about 40 islands called Bijagos Archipelago, with the exception of the southeastern part of the country (Boé), which has a flat topography.

\* The climate varies from the Guinean maritime type on the coast, to a Sudanese type in the interior of the country, which is tropical and hot.

\* The average annual rainfall varies from 2600mm in the south of the country to 1200mm in the north; 70% of the annual rainfall happens during the months of June, July, August and September.

\* Average annual temperatures vary from 24°C to 30°C.

\* The climate is relatively uniform over the whole country and the length of the period of plant growth is sufficient for the majority of the crops harvested.

Agriculture continues to be the mainstay of the country's economy, contributing, together with the fishing sector, more than 50% of the GDP (the BCEAO estimate for 1995 is 52.5%, which corresponds to about 80% of the active population).

### POVERTY INDEX

Estimate of population considered as poor (1994) .....	88%
Population disposing of less than 1USD per day UNDP/97 .....	99%

### NUTRITION INDEX

- Consumption of calories/day (1997) .....	2,430
- Proteins per inhabitant/day (1997) .....	9 g
- Variation .....	19.1%
- Infant malnutrition (under 5 years of age) .....	25%
- Weighted insufficiency .....	30.4%
- Decrease in weight/age .....	10.3%

Sources: (INEC, BCEAO, MICS, UNICEF, UNDP, World Bank report /2000)

**PRODUCTION****TABLE 1: Figures of cereal production 97-98-2000/2001 (tonnes)**

Year/crop	1997/1998	1998/1999	1999/2000	2000/2001
Rain rice /plateau	38,759	28,100	42,635	40,769
Fresh water rice /low ground	36,658	42,500	23,828	34,825
Salt water rice / mangroves	24,523	16,600	9,810	24,523
<b>Rice / Independent Bissau sector</b>			4,000	4,000
Total Rice	99,940	87,200	80,273	104,111
Maize	20,646	9,600	24,775	25,673
Small millet	10,350	21,500	12,425	21,096
Sorghum	12,384	11,300	14,869	11,294
Fonio	3,838	1,600	4,332	3,938
<b>Cereals S. A.Bissau</b>			2,000	2,000
Other cereals	47,322	44,100	58,393	64,001
Total Cereals	147,271	131,300	138,666	168,111

Sources – FAO mission report – CILSS preliminary estimate for the 1999-2000 agricultural season in Guinea – Bissau (1999).

**TABLE 2 – Root crops and tubers (tonnes)**

	1994-	1995-	1996-	1997-	1995	1996	1997
	Other food products				variation rate		
Manioc	15,725	16,244	21,117	31,676	3.30%	30.00%	50.00%
Sweet potatoes	18,298	18,773	22,927	26,285	260%	20.00%	30.00%

Sources: National Institute of Statistics and censo (INEC)

Stock farming (in thousands of heads) Table N° 3

Species	1996	1997	1998	1999	2000
Cattle	463.88	475.48	484.36	499.55	512.04
Sheep	539.06	555.23	571.89	589.05	606.72
Goats		555.23	571.89	589.05	606.72
Pigs	81.52	84.78	66.17	91.69	95.36
Fowl	869.59	812.70	759.53	812.70	869.59

Source: projections using Diaper/CILSS 1991 data

**Table N° 4 Fishing (tonnes)**

Fishing	Fishing				Variation		
	1994	1995	1996	1997	1995	1996	1997
Total Tonnes	23,165.6	24,532.0	25,482.4	31,057.7	5.7%	5.5%	20.0%
Artisan fishing	18,916.6	20,088.3	21,250.3	25,500.3	6.2%	5.8%	20.0%
Industrial fishing	4,249.0	4,434.8	4,631.1	5,557.4	4.4%	4.4%	20.0%

**Pesticides used in Guinea Bissau**

## a) – Pesticides existing in the plant protection sector

Pesticides	Company	Quantity (L),(kg)	Toxicology class	Remarks
Sumithion L-50 ULV	Sumitomo Chemical	75	II	Dossier not studied by the CSP(Insecticide)
Sumithion 90 EC	Sumitomo	550	II	APV by the CSP(Dec.2000) (Insecticide)
Malathion 300 EC	Senchim	360	III	Dossiers not studied by the CSP(Insecticide)
Tracker 16 EC	Du Pont	75	II	Dossier not studied by the CSP(Insecticide)

**Bissau”– Pesticides existing in the company “Société Cotonnière de la Guinée-**

Pesticides	Company	Quantity (L), (kg)	Toxicological class	
Cypercal P 720 EC	Calliope	9,000	II	ME by the CSP (Acaricide)
Cypercal MM 336 WSC	Calliope	26,350	I(b)	Dossiers not studied by the CSP(Insecticide)
Callifor G	Calliope	12,750	III	Dossiers not Studied by the CSP (Herbicide)
Cyflutram P 375/375 EC	Calliope	8,537	I(b)	ME by the CSP (Dec. 2000 and June 2001)(Insecticide)
Rocky 500 EC	Calliope	23,999	I(b)	

**Exportation de cashew nuts**

Year	Tonnes
1997	57,870
1998	24,818
1999	62,224
2000	72,000
2001	75,000

## GUINEA CONAKRY

### GENERAL INFORMATION

The Republic of Guinea is situated in the south west of West Africa with a surface area of 245,857 km<sup>2</sup>; it is a coastal country with 483 km of coastline on the Atlantic. It is bordered to the west by the Atlantic, to the northwest by Guinea Bissau, by Senegal and Mali to the north and northeast, by the Ivory Coast to the east and by Sierra Leone and Liberia to the south and southeast. Its population is approximately 7 millions. Of this population some 30% live in towns against 70% in rural areas. The working population amounts to 53%.

Guinea is known for the importance and variety of its resources. Economic growth is dependent on two fundamental components: **mining and agriculture**.

- The mining sector constitutes the driving force of the national economy and plays an important role in both the development of infrastructures and in the socio-economic life of the country. This sector contributes more than 20% to the GDP and more than 80% of export earnings. The mineral riches comprise bauxite deposits, iron ore, diamonds and gold. The mining industry consumes relatively large amounts of chemicals, notably in the production of alumina by the Bayer process and the extraction of gold via the cyanide process.
- Agriculture is the second largest natural wealth of Guinea. The country has includes more than seven million hectares of good arable land and huge pastures, in addition to the relatively rich hydrographic network with more than 1,162 inventoried water courses, divided among some 19 water basins, of which 13 are international, draining downstream most of the territories of West Africa.

Guinea has prepared and brought up to date, in 1995 and 1997 respectively, its national profile on the management of chemicals, from which the following conclusions emerge:

- Guinea imports almost all of the chemicals used in the country (pesticides, fertilisers, oil and industrial products, chemicals for consumption and for various uses), with more than 50% originating in Europe.
- Guinea has a legal, structural and institutional basis in the field of the management of chemicals. This base, when developed and improved, will enable the country to face up to the risks of chemicals and to establish the elements for a rational environmental management of these substances, conforming to the international, regional and sub-regional conventions.  
On the basis of the national profile, a national workshop for the identification of national priorities for the management of chemical substances was organised in 1998.

The workshop retained four priority areas, which are:

**Area A:** strengthening the institutional and legal framework for the management and safety of chemicals.

**Area B:** Awareness rising of the public and of workers about the management and safety problems of chemicals.

**Area C:** Capacity building to be able to respond to emergencies and poisonings due to chemicals (creation of an anti-poison centre).

**Area D:** Persistent Organic Pollutants.

It should be noted that the preparation and bringing up to date of the national profile on the management of chemicals, as well as the organisation of the national workshop for identifying national priorities, have been made possible with the technical and financial support of the United Nations Institute for Training and Research, the Commission of the European Union, the Regional Office for the World Health Organisation for Africa, the United Nations Development Programme and the United Nations Environment Programme.

## LEGAL INSTRUMENTS FOR THE MANAGEMENT OF CHEMICALS

Over and above the international, regional and sub-regional conventions on chemical substances, in which Guinea take part, a series of laws, decrees and orders have been adopted to protect human life and the environment in accordance with its constitution, notably in articles 5, 6, 15 and 19 which take into account the right to life, to health and to environmental protection. These laws, decrees and orders are as follows:

- **Order No. 045/PRG/87** on the code for the protection and development of the environment. The objective of this code is to establish the fundamental principles aimed at managing and protecting the environment against all forms of degradation, in order to protect and allow the exploitation of natural resources, to fight against the various forms of pollution and nuisances and to improve the living conditions of the citizens, whilst respecting the equilibrium of his relationship to the surroundings.  
**In effect, the provisions of Articles 75, 76, 77 and 78** and Order no. 045/PRG/87 regulating harmful or dangerous substances;
- **Law no. L/96/C10** of 22<sup>nd</sup> July concerning the regulation of pollution taxes applicable to classified establishments, which release chemical substances into the environment. This law is in the spirit of the “polluter – payer” principle.
- **Decree no. 199/PRG/SGG/89** codifying environmental impact studies. The buildings a class 1 installation can only be take place after an environmental impact study has been carried out.
- **Decree no. 200/PRG/SGG/89** concerning the legal regime of classified installations for the protection of the environment.  
The classified installation are the factories, plants, workshops, warehouses, building sites, quarries and, in general, any establishment owned or operated by any physical or moral person, public or private, which may present a danger or a

significant risk for health, safety, public health, agriculture, fishing, conservation of sites and monuments, the convenience of the neighbourhood or for the preservation of the environment of Guinea in general.

These classified installations or establishments are split into two classes according to the dangers or severity of the dangers liable to result from their operation.

- **Decree no. 201/PRG/SGG/89, which regulates the discharge, spilling, or immersion of contaminants (persistent organic pollutants, heavy metals, etc) resulting from industrial and mining activities.**

\* **Decree D/97/286/PRG/SGG** concerning the organisation and functioning of the fund for protecting the environment. This fund is a specially earmarked account at the treasury.

These receipts are built up by contributions from the State, by taxes, royalties, fines and seizures, by the financial assistance of international organisations and foreign co-operation organisations, gifts and legacies.

The expenditures from the environmental protection fund are exclusively devoted to the financing of operations falling within the framework of the national policy for the preservation and development of the environment.

In its functioning, the fund will be able to give loans or subsidies to the State's public services, to local authorities, associations and individuals, when they make investments or initiate actions or campaigns aimed at preventing pollution, or at modifying existing installations to meet the environmental quality norms decreed by the public powers.

- **Decree D/97/287/PRG/SGG** regulating the management and control of dangerous and harmful chemicals in the Republic of Guinea. This Decree regulates the dangerous and harmful chemicals in four classes:

Class 1 : extremely dangerous chemical substances;

Class 2 : very dangerous chemical substances;

Class 3 : moderately dangerous chemical substances;

Class 4 : slightly dangerous chemical substances.

- **Decree A/2001/478/MMGE/SGG** concerning the list of chemical substances, which are banned, severely controlled or controlled, the national classification of chemical substances and their distribution between the different classes.

The polychlorinated biphenyls (Aroclor 1254, 1260, 5442, 5460) are in class 2, substances that are severely regulated.

- **The related decree no. 6758/ME/MEF/98** regarding methods of taxation of chemicals.

This taxation is applied to imported chemicals and dangerous products belonging to classes 2, 3 and 4 as well as on radioactive sources and radioactive elements.

The amount of the tax within one class is determined by the product of the base rate for the class and the amount of chemicals imported in tonnes. The revenues from this tax are deposited in the environmental fund.



- **Law L/92/027/CTRN** concerning plant protection control.
- **Law L/92/028/CTRN** concerning pesticides legislation
- **Decree no. 2395/MAE/SGG/2001** of June 6<sup>th</sup> 2001.

This decree establishes the list of banned and restricted use pesticides in agriculture for the entire national territory. Amongst the banned pesticides one should mention organo-chlorinated pesticides.

The State services responsible for the management of pesticides are presently carrying out a campaign to make the Decree better known to the public, and to increase public awareness about the risks and consequences related to their use.

- **The public health code, section 8, 19<sup>th</sup> June 1997 article 62** : in the Republic of Guinea all pesticides are banned when all their certified uses are prohibited by the health services, and/or the requests for certification and other equivalent actions for all uses have been turned down for reasons pertaining to public health or environmental protection.
- **Law no. L/94/003/CTRN** concerning the control of products for consumption;
- **Order no. 003/PRG/SGG/88** regarding the labour code concerning the protection of workers;
- **Law L/95/036/CTRN** regarding the mining code concerning the regulation of mining activities.
- **Law L/95/23/CTRN** of June 12<sup>th</sup> 1995 regarding the merchant navy code on the regulation of the ocean transport of dangerous goods.

As a reminder, Guinea is a party to the Stockholm, Rotterdam, Basel and Bamako Conventions.

### Questionnaire

- 1- What are the relevant difficulties related to the application of the legal instruments concerning the management of chemicals?
- 2- What are the gaps and weaknesses noted in the application of the legal instruments concerning chemicals?
- 3- How can non-statutory measures contribute to the application of the legal instruments on chemical substances?
- 4- How can one facilitate the integration of the Stockholm, Rotterdam and Basel Conventions into the national legal instruments on chemicals?
- 5- How can the signature and ratification of the convention of Stockholm on POPs by African countries be progressed?

## IVORY COAST

### I/ General information on the country

The Ivory Coast is located in West Africa and covers an area of **322,462 km<sup>2</sup>**. It is a heavily drained country with four large rivers and about ten small coastal rivers. One can distinguish four types of ground (ferralitic soils, soils over basalt rock, ferruginous soil, hydromorphic soils). The Ivory Coast has a hot climate, which is a transition between a humid equatorial climate and a dry tropical climate.

The forest is without doubt the dominant element of the Ivory Coast territory. In the Ivory Coast one finds more than six hundred species of birds, more than a hundred species of mammals, thousands of species of insects and fish etc.

The population of the Ivory Coast is estimated at more than **15,000,000 inhabitants**. The Ivory Coast is an area, which receives West African immigrants, and even African immigrants in general. The majority of the population is illiterate. 44% of the population live in urban zones.

The Ivory Coast is ruled politically on the principles of **democracy and separation of powers**. The economy of the Ivory Coast is based essentially on **agriculture and industry**. It is one of the industrialized countries in the West African sub-region.

The agricultural, industrial and tourist activities are backed up by an important network of roads and telecommunications.

The level of pollution produced by agriculture and industry has passed the level of self-purification in certain watercourses and this is having a bad effect on Health and the Environment.

The pollution and eutrophication levels are high in the zones where crops systematically use agricultural aids (for example in the cotton-growing area in the North and the banana and pineapple plantations in the South). The Ivory Coast is simultaneously a producer, importer, exporter and user of numerous chemical products, which have been, and are now, causing concern in the world community (UNEP, FAO, WHO, UNIDO, UNITAR, GEF etc.).

### II/ The Ivory Coast facing worldwide issues related to the environmentally sound management of chemicals

Since the **United Nations Conference on Environment and Development**, adopting a general document giving the plan of the responsibilities of States for attaining sustainable development, notably as regards “**the environmentally sound management of toxic chemical substances**”, the Ivory Coast has taken part in all the worldwide and regional actions aiming at sound management of the Environment, of our environment.

Conventions, which have been ratified or are in the course of being ratified

**1) Ratified conventions**

- The Basel Convention on the control of trans-frontier shipments of dangerous wastes and their destruction:
- The Vienna Convention on the ozone layer
- The Montreal Protocol relating to substances which deplete the ozone layer;
- The Convention on Biodiversity;
- The Convention on Climate Change
- The Convention to Combat Desertification

**2) Undergoing ratification (procedure started)**

- The Stockholm Convention on persistent organic pollutants (POPs);
- The Rotterdam Convention on Prior Informed Assent, applicable to certain dangerous chemical products and pesticides, which are traded internationally.

B- The activities undertaken in the Ivory Coast aiming at an environmentally sound management of chemicals

**The development of its national profile for the environmentally sound management of chemicals (UNITAR financing) in March 1997.**

The government of the Ivory Coast benefited from technical and financial assistance for the development of its national profile for the management of chemicals.

*This document has been available at UNITAR since 1997.*

*In this document some recommendations were made:*

- The development of texts specific to each chemical product;
- The creation of a Chemical Information Centre (obtained last year thanks to the technical and financial assistance of UNEP Chemicals);
- The strengthening of the technical capabilities of the laboratories and of the research existing in analytical laboratories;
- Developing effective partnerships between industrial and commercial enterprises for the management of chemicals.

Execution of the pilot project on PCBs and PCB-containing equipment in 2000. (financed by the Secretariat of the Basel Convention/UNEP Chemicals)

Case study on DDT (financed by UNEP Chemicals) in September 2001.

DDT is no longer used in the Ivory Coast; however substitute products are very expensive.

- 1) Chemical information access system (UNEP Chemicals) in 2000/2001.
- 2) Member of the Management Committee of the Sub-Regional Centre for Training and Technology Transfer in Dakar (Senegal, financed by the Secretariat of the Basel Convention)
- 3) Member of the Inter-governmental Forum on Chemical Safety

### III Outlook

The government of the Ivory Coast, which is very concerned with the protection of the Environment and health, is endeavouring to take many steps at the national and international levels aiming at the sound environmental management of chemical products; however the technical, technological and financial resources to do this are lacking.

The Ivory Coast's current concern is to share with the other countries of the sub-region, via the Centre for Training and Technology Transfer in Dakar (Senegal), its experience with regard to the carrying out of the pilot project on PCBs and PCB-containing equipment aimed at applying the Basel Convention on dangerous wastes. We have also noted that the financial means allocated to us (US \$ 500,000) were reduced to US \$ 282,000 whereas the budget presented by our government took into account the whole amount (US \$ 500,000) allocated to countries signing the Stockholm Convention.

The government of the Ivory Coast wishes, amongst other things:

- Finance for the PCB and PCB-containing equipment storage centre, planned in partnership with the company APROCHIM, a French company specialized in the treatment of dangerous wastes in the Ivory Coast and in the sub-region;
- Technical and financial assistance for the operation of the Focal Point of the Rotterdam Convention (travel, computers etc);
- Strengthening of the sub-regional and legal character of the Centre for Training and Technology Transfer in Dakar (Senegal);
- Ratification of the Stockholm and Rotterdam Conventions in the next few months;
- Putting into place, from March 2002, of enabling activities for implementation of the Stockholm Convention, by bringing together all the institutional and private partners, and the community (putting into place a structure for coordinating inventories etc.)

## MADAGASCAR

### State of legislation with respect to chemicals

- Madagascar has about sixty legal texts relating to chemicals. The categories which are most covered are:
  - Pesticides used in agriculture and for public health
  - Pharmaceutical and veterinary products
  - Oil products and
  - Radioactive elements
    - Decree n° 99-954 of 15/12/99 concerning the necessity of making compatible with the Environment any planned investment (an Environmental Impact Study being compulsory before any investment); it is stipulated in this decree that it is necessary to reinforce the study of possible impacts on the environment in the case of sites where chemicals are stored with a lower storage limit on amounts.
- However the legal texts in force in Madagascar are not applied in an effective way because of the lack of any application text, and also because of a lack of cohesion between different regulations and the administrations, which are responsible for them.
- As far as Persistent Organic Pollutants in particular are concerned, Madagascar has only one text, and this covers the agricultural sector: Decree 93-6225 of 30/11/93 relative to the banning of pesticides containing: dieldrin, chlordane, endrin, aldrin, DDT, toxaphene, and also restrictions on the use of heptachlor.
- Concerning industrial POPs such as PCBs, there is no text covering these products.

## MALI

### I- GENERAL INFORMATION

Mali is a country, which is an enclave with a surface area of 1,241,238 km<sup>2</sup>, representing 4.2% of the total surface area of Africa. Two-thirds of the country is made up of regions which are arid or semi-arid between latitudes 10° S and 20° N, and longitudes 102° W and 4.5° E. Mali which has 7000 km of frontier, has frontiers to the north with Mauritania and Algeria, to the east and the south with Niger, to the south with Burkina Faso, the Ivory Coast and Guinea, and to the west with Senegal.

Mali has a warm and dry climate, with average temperatures of between 35°C (May-June) and 22°C (December-January). The average annual rainfall varies from 100 to 1300 mm according to the ecological areas. The country is mainly flat being an extensive plain. The rare heights are the Fouta Djallon *conforts* in the southwest and in the west, the Hombori and Bandiagara cliffs to the east, the Adrar des Iforas in the north.

Mali is watered by two large rivers: the Senegal which is 1800 km long and the Niger with a length of 4200 km.

From the administrative point of view, Mali is divided into eight regions and one district, in turn sub-divided into 47 circles (*cercles*) and 701 communes (19 urban and 682 rural).

The political regime in Mali since 1992 is of the presidential parliamentary type, with a single chamber.

Mali has 9,790,492 inhabitants (1998 census); the annual growth rate is 2.2% ; the distribution by sex is 51% women and 49% men ; 18% of this population lives in urban areas compared to 82% in rural areas ; also, 91% of the population of Mali lives in 30% of the territory.

Generally speaking, Mali's population is very young; 49% are younger than 15 years of age; lifetime expectancy at birth is 58.5 years; the birth rate is 35% and the basic mortality rate is 13 per 1000; women of childbearing age (15-49 years) represent 21% of the total population.

Mali, with a gross national income of about \$ 273 per head, is classified amongst the less advanced countries. The health coverage is estimated to be 59% in a radius of 15km; access to potable water is available to 51% of the population. The basic rate of schooling is 56.8% and that of illiteracy is about 31% (1999 annual report of the Ministry of Education).

The economic activity is dominated by the primary sector, which occupies 82.21% of the active population compared to 5.98% for the secondary sector and 11.81% for the tertiary sector.

The population of working age amounts to 48.3%. Almost 47% of women able to have children do not work; the proportion of women working is higher in rural areas: 55% compared to 50% in urban areas.

## **II- ENVIRONMENTAL POLICY AND CHEMICALS MANAGEMENT.**

The Mali government, with the support of its partners, adopted in 1998 its National Environmental Action Plan (PNAE) made up of a document, National Policy for the Protection of the Environment, together with National Action Programmes. These reference documents are the result of a long exercise which lasted three years and which made it possible to set up consultations and concerted actions between the governmental services, the community and the co-operation partners, the whole process ending up with a national validation forum.

The National Policy for the Protection of the Environment represents an orientation framework for efficient and sustainable management and environmental planning. This policy is based on the following principles:

**Fairness and Equality:** this principle makes compulsory the duty of all those who undertake activities liable to have an impact on the environment, to respect the environmental laws and regulations of the country.

**Involvement, Accountability and Participation of all stakeholders** in the actions undertaken for protecting, restoring and conserving natural resources;

**Prevention and Precaution,** by facilitating in particular the implementation of control and preservation/protection measures for ecosystems and the environment, aiming at the prevention of problems which could have negative consequences for the environment, through the development of environmental information and education, the definition of authorised reject norms, and by making environmental impact studies systematic;

**Internalisation of environmental protection costs,** which should lead to the incorporation of cost for repairing damages caused to the environment into the production costs or into the activity, which could be at the origin of any degradation, including environmental impact studies. This is the “polluter pays” principle, which makes the person who pollutes or degrades the environment responsible for the rehabilitation of the degraded resources.

The implementation of the PNAE has led to the creation of a Ministry responsible for the environment, endowed with three central structures:

The National Nature Conservation Directorate, responsible for implementing the policy for the management of natural resources;

The National Sanitation and Pollution Control Directorate, responsible for implementing national policy concerning the clean-up and control of all pollution; this second directorate is thus in charge of co-ordinating the sound management of chemical substances with a view to protecting the population and the environment. It is for this reason that this structure has co-ordinated the development and the validation of the National Profile for the Management of Chemicals;

The Permanent Technical Secretariat of the Institutional Framework for the Management of Environmental Questions is responsible for following international Agreements, Treaties and Conventions to which Mali has adhered; it is also in charge of bringing together the resources necessary for financing the National Environmental Policy.

The putting into place of these structures has allowed Mali to catch up, at least partially, with the delays accumulated in the matter of the management of the environment, because, as must be noted, our country is one of the last in the sub-region to create a department responsible for the environment. Up till today, Mali has adhered to the main international conventions, agreements and treaties dealing with the management of chemicals for which focal points have been designated (Ozone, Climate change, Intergovernmental Forum on Chemical Safety, PIC, the Basel Convention, etc....)

With financial help from UNITAR, Mali has developed its National Profile for the Management of Chemicals; this document has been validated during a National Workshop bringing together all stakeholders (government agencies, NGOs, private sector, the community and other partners for development) thanks to the financial support of UNEP. Chosen as pilot country for the setting up of a chemical information system, Mali has created a national network for the management of chemical information, grouping together all the participants in the Workshop on the validation of the National Profile for the Management of Chemicals. With the financial assistance of the American EPA and of UNEP, a team of 15 members of this network was able to benefit from an Internet training course on research and dissemination of chemical information; measures have been taken to equip the Focal Point of the network (National Sanitation and Pollution Control Directorate) with PCs with a 2-year subscription to Internet. The Focal point will constitute a base for animation and co-ordination of the network.

In 1996 Mali set up a survey study for evaluating obsolete pesticides and sites across the whole country; this study was carried out by the GTZ with finance from Norway (Stromme Fondation). After a period of uncertainty lasting 2 years, due to security problems in northern zones of the country, which have the largest number of contaminated sites, a new study financed by USAID was carried out by the National Sanitation and Pollution Control Directorate (DNACPN). Data collected during this last study made it possible for the Mali government, with the technical help of the FAO, to develop an Action Plan for the elimination of obsolete pesticides and for the decontamination of sites at a cost of \$ 2.5 million; a meeting with the financial partners was organised in October 2000. The Mali government took the responsibility of financing itself the first urgent measures (closure of contaminated sites, replacement of damaged packaging, creation of new water supply points following the closure of the contaminated wells). The GTZ provided financial aid for putting into place of these urgent measures.

### **III- PROBLEMS OF PERSISTENT ORGANIC POLLUTANTS IN MALI.**

#### 1- Vulnerability of water ways :

The two big rivers, the Senegal and the Niger, which are amongst the largest in Africa, have a large part of their flood zones in Mali.

The Niger, 4200 km long of which 1780 km are in Mali (42% of the total length), rises in Guinea Conakry and, apart from Mali, passes through, Niger, Benin and



Nigeria; this river forms a delta in Mali which is 400 km long, classified as a Biosphere reserve and Ramsar site.

Unfortunately this river is strongly threatened by man-made pollution, especially chemical pollution; in effect, the main towns and industrial centres of the countries through which the river passes are located on the borders of the Niger; in the case of Mali, which possesses the major part of this waterway, the capital Bamako with its industrial zone (about 160 factories), and five regional capitals are situated on the borders of the river. The position of Niger can be considered as that of the rice bowl of West Africa, and the Mali Textile Development Company (CMDT), the second largest African producer of cotton, exploits thousands of hectares around the river and uses large amounts of agricultural products, insecticides and fungicides.

A study carried out by this enterprise over two (2) years of agricultural seasons (1992-1993 and 1993-1994) in the catchment area of the Banifing river (an affluent of the Niger) in the heart of the Mali cotton basin, showed that pollution caused by pesticides had occurred in the waterway and at certain water supply points (wells and drillings).

Two large hydro-agricultural dams have been built on the Niger River in Mali.

The Senegal River is 1800 km long, rises in Mali and flows there for more than 900 km; this river, apart from this country, crosses also Mauritania and Senegal. The Senegal River, in the framework of the Organisation for the Exploitation of Senegal (OMVS), is exploited at several places by large dams (Manantali in Mali, Sandaga in Senegal) for agricultural use and electricity production.

The supply of potable water for all towns bordering these two rivers, in almost all the countries through which they pass, is obtained by taking water from the rivers and treating it in a very simply manner.

A no less important role of these rivers is the transport of persons and of goods (including chemicals) on the sections, which are navigable; thus a great part of exchanges, in particular of clandestine immigrants between Mali and Guinea, occurs across the Niger River.

An accidental pollution of the Niger by lindane (a POP) and by diazinon (carbamate) occurred in June 1993 (at the start of the rainy season) and contaminated the potable water treatment plant of Bamako, affecting the whole network. As a result, general panic occurred; the pollution reached the next day the town of Koulikoro, 60 km downstream.

Although it has never been possible to determine the source of this pollution, the main danger comes from the numerous stocks of pesticide (see map) used for combating pests, which attack crops.

The development of mining, gold in particular, using large amounts of cyanide and mercury (traditional gold-washing), represents a new threat for these waterways.

Finally, water and forest agents sometimes use pesticides for fishing; this constitutes a serious threat to the quality of the water of these rivers which have multiple functions.

## 2- Consequences on the health of the population:

From April 1<sup>st</sup> 1986 to August 31<sup>st</sup> 1997, 2031 patients i.e. 3.36% of persons entering the three national hospitals suffered from intoxication due to chemicals; 43.69% of patients admitted as emergencies for this reason, died.

The analysis of a milk sample from the north of the country showed the presence of dieldrin (a POP); this result, which warrants confirmation by further sampling, promises to unveil a very real public health problem for the population of this region who live essentially on milk. It can be noted that measures are being taken to carry out an epidemiological study in the sector concerned.

## 3- Contaminated sites in northern Mali :

The northern part of Mali is a vast territory which is sparsely inhabited and which adjoins Niger, Mauritania and Algeria. The nomad population, which live their move continuously with their flocks, across both sides of the frontiers. This immense zone is also where pilgrim locusts reproduce, who then invade all the Sudano-Sahel part of West Africa. In order to avoid the effects of these locusts, Mali like other countries, built up large stocks of pesticides in the 70's and 80's, in particular of organo-chlorinated products such as dieldrin and lindane; for more than ten years now no notable pest invasion has occurred: At the present, about one hundred (100) tonnes of POPs (dieldrin and lindane in particular) are stored in very bad conditions on four (4) sites. One of these sites is situated right in the middle of the main town of the North: Gao, opposite the regional hospital. Another is 2km away from this same town, next to a wadi used by vegetable growers; 15,285 litres of pesticides of which 14,750 litres are POPs (dieldrin) were spilt, contaminating over 1,120 m<sup>3</sup> of ground. In yet other place situated further north at Anéfis and at Tin-Essako, 40,000 litres of products were spilt contaminating the two (2) wells, which supply the localities (one well each); at Tin-Essako, 4125 m<sup>3</sup> of soil are strongly contaminated.

According to non-exhaustive figures used for estimating the costs of the project for eliminating obsolete pesticides and for decontamination, mentioned above, in addition to existing stocks in the zones of the Mali Textile Development Company (CMDT) and in those of the Niger Upper Valleys Office (OHVN), the total amount of obsolete/out-of-date chemicals stocks (pesticides, of which POPs, and also veterinary products) are estimated at the date of August 14<sup>th</sup> 2001 at about:

267.233 tonnes of pesticides;

13,761 tonnes of contaminated soils;

1,617 contaminated items of packaging :

4,580 flasks of veterinary products.

This estimate is still provisional and will be completed by a complete inventory which is planned with the financial help of the United States (USAID have already given US\$125,000) and the FAO, for which an international tender has already been launched; the planned date for sending offers is fixed as November 14<sup>th</sup> 2001.

In view of the importance and the diversity of environmental pollution problems and of the threat to the health of the population arising in Mali because of chemical substances in general and persistent organic pollutants in particular, the government has made big efforts in the area of the management of pollution especially in the field of legislation.

#### **IV- LEGISLATIVE AND REGULATORY DOMAIN FOR THE MANAGEMENT OF PERSISTENT ORGANIC POLLUTANTS.**

##### The National Chemical Information Management Network :

In the framework of the implementation of the recommendations of the Inter-governmental Forum on Chemical Safety (IFCS), Mali has been chosen as a pilot country for testing a Chemical Information Management System; the project is supported by the American EPA and UNEP in Geneva.

On the occasion of the workshop held on the validation of the National Profile of Mali for the Management of Chemicals held in April 2000, which brought together all the stakeholders (government agencies, private sector, the community, NGOs and intergovernmental co-ordination organisations), the question was raised of the management of chemical information, recognised by all as a major concern.

At the end of the workshop, a network was put into place; it brings together designated members chosen by the participants; two weeks later a smaller group prepared a document on the objectives and missions of this network. Centred on the Focal Point, the National Sanitary and Pollution Control Directorate, this network aims at being a place for discussions and exchange of information on chemicals management, taking as a basis the collection, diffusion and treatment of information as a support for decision making.

Thanks to technical and financial support from the EPA and UNEP, 15 members of the network have been trained on Internet; the EPA has also financed the purchase of two computers and a subscription to Internet. This equipment can be used by all members of the network; furthermore, this trained core of persons has the task of initiating the other members.

Even though it is too early to evaluate achievements, we can note the enthusiasm which the project has aroused amongst its participants; the major constraint up till now has been the insufficiency of the computer equipment; in effect members are obliged to go to the Focal Point offices in order to get the information. It would be ideal if each corporation co-ordination point (co-ordination of the NGOs, of associations of women's groups, etc...), of which there are six, could have equipment; also, if all computers could be net-worked to a central unit of the Focal Point.

It must be noted that in order to formalise the network, a ministerial decree has already been developed and will soon be validated by a general assembly of its members.

##### Legislative and regulatory framework accompanying the implementation of country's obligations with respect to international conventions, protocols, and agreements:

The legal instruments dealing with the general management of chemicals include: Law n°01-020 of May 2001 relating to pollution and ill-effects, and its 4 application decrees, including Decree n° 01-397/P-RM of September 2001 fixing the modalities for the management of pollutants in the atmosphere;

Law n°89-61/AN-RM dealing with the repression of the importation and transit of toxic products, and decree no °90-355/PRM fixing the list of toxic products ;  
Law no°92-013/AN-RM covering the setting up of a National Normalisation and Quality Control System, and the decree n°92-235/PRM covering the organisation and operational mode of a National Normalisation System;  
Law n° 94-046/AN-RM authorising the modification of the framework convention on climate change;  
Law n°95 061/AN of November 10<sup>th</sup> 1995 on the repression of infringements to regulations on the homologation and control of agro-pharmaceutical products ;  
The regulations common to the CILSS member states on the homologation of pesticides signed by Mali in 1992.  
The legal instruments dealing with the management of persistent organic pollutants are:

- Inter-ministerial Order n°01-2708/MEATEU-MEF-MICT covering the regulation of imports and use of substances which deplete the ozone layer, as well as products and equipment containing these substances;  
Order n°01-2699/MICT-SG fixing the list of products whose importation and exportation is banned.

It should be noted that law n° 95-061/AN-RM of November 10<sup>th</sup> 1995 cited above and its application decree is now at their second reading under the title: « law instituting the homologation and the control of pesticides in the Republic of Mali ».

#### **V- MAIN DIFFICULTIES RELATED TO THE MANAGEMENT OF PERSISTENT ORGANIC POLLUTANTS IN MALI.**

Amongst these difficulties can be cited:

The very high cost of elimination procedures for POP stocks, and for the decontamination of sites across the country; in effect, because of a lack of infrastructures in the sub-region these wastes must be transported and eliminated elsewhere, usually in Europe. In the case of Mali, the cost of the operation has been provisionally estimated at \$ 2.5 million;  
The porosity of the frontiers which facilitates trafficking in chemicals, and pesticides in particular, including POPs ( DDT for example) ;  
The weakness of the legal and regulatory framework, and the lack of resources in the organisms responsible for the controls.  
Insufficient modern equipment and qualified personnel for the laboratories;  
Insufficient personnel for the controls, and insufficient logistic and financial means given to the work teams; and sometimes the weakness in the authority of the State.

#### **VI CONCLUSIONS:**

This analysis shows clearly the importance of:  
the loss of human life following intoxication by chemicals in general and by POPs in particular ;  
the pollution suffered by the three components of the environment (water, soil and air) ;  
the threats to the health of humans and animals, across the whole national territory ;  
the economic consequences to which all this could lead for a poor country like Mali.

In order to face up to this worrying situation some important actions have been undertaken, or are in the process of being undertaken, in particular:

The politic desire shown by the government by the development of a national policy for the protection of the environment, paying particular attention to the management of chemicals;

The creation of a Ministry responsible for the Environment, and of a technical directorate charged with combating all forms of pollution which represent today the focal point of international Conventions, Agreements and Treaties (CAT) related to the management of chemicals; these have been signed or ratified by Mali, in particular the Intergovernmental Forum on Chemical Safety (IFCS), the conventions of Basel, Rotterdam and Stockholm, and the Montreal protocol ;

The gradual putting into place of regulatory texts on the management of pollution;

The development of a legal and regulatory framework for the management of all forms of pollution:

Finally, the availability of a first document of the National Profile for the Management of Chemicals.

However many things have not yet been done, because of the lack of resources, of expertise and of equipment. The signature of the Stockholm and Rotterdam Conventions will result in obligations, which will also require resources to be respected.

#### **VI. RECOMMENDATIONS:**

1) The urgent start up of the following projects:

Development of a national plan for the management of persistent organic pollutants

Project for compiling an inventory of PCBs;

The project for equipping the National Chemical Information Network with computer hardware;

2) The implementation of the project for eliminating out-of-date and obsolete stocks, and for dealing with contaminated sites, which exist over the whole national territory;

The putting into place of an operational financial mechanism for the Basel, Stockholm and Rotterdam Conventions;

4) The financing of a three-yearly programme for revising the National Profile for Chemicals Management which will make it possible on the one hand to obtain reliable information on the existence of chemicals in general and POPs in particular over the whole territory, and on the other hand to facilitate the implementation of the Stockholm and Rotterdam Conventions.

The diligent implementation of these recommendations will strengthen the position of Mali, not only for the ratification of the Stockholm and Rotterdam Conventions, but also for their rapid implementation.

## MAURITANIA

### National

- Law no. 04/2000 concerning plant protection.
  - The certification of pesticides; submissions for obtaining licensing by establishments carrying out experiments, for importation and manufacture, for packaging, or for the sale of products; also for service companies.
  - Non-certified products intended to be used for experiments, requires prior authorization from the Ministry responsible for Agriculture.
  - Banning of commercial publicity for non-certified products.
  - Seizure of products, which do not conform to the certification procedure, by inspection officers.
- Law 200-45 concerning a framework law on the environment.
  - The objective of the law is to establish the general principles, which are the basis of the national policy as regards environmental protection.

Amongst others:

- Combating all forms of pollution and pests.
- Conservation of biological diversity.
- Rational use of natural resources.
- \* Public Hygiene Code (1984)

### Regional

Common regulations for CILSS member States for the homologation of pesticides (revised version, December 1999).

The OUA Inter-African Plant Protection Council OUA of 29<sup>th</sup> July 1954.

### International

- The Stockholm Convention on POPs signed in 2001.
- The Rotterdam Convention on the Prior Informed Consent procedure, applicable to certain chemicals and dangerous pesticides, which are traded internationally.

The Basel Convention ratified by the government of Mauritania in August 1996.

The international code of conduct for the distribution and use of pesticides. The OMC, agreement on the application of health and plant protection measures.

## MORROCO

### Summary

Introduction

Institutional context

Legal framework

Technical aspects

### Status of signatures and ratification of international conventions (PIC; POPs; Basel).

Introduction

Pesticide consumption in Morocco:

Increase in the volumes of pesticides used:

Year	Amount of pesticide formulations in tonnes	Amount of pesticides imported in tonnes
1993	1105	6928
1992	953	6655
1991	1087	6943
1990	965	7171
1989	940	5972
1988	1012	16 894
1987	760	5205
1986	689	5604

➤ Distribution by group of pesticide:

- ✓ Insecticides: 35 to 40%
- ✓ Fungicides: 35 to 40%
- ✓ Herbicides: 10 to 15%
- ✓ Others: 10%

➤ Distribution by size of crops:

The consumption of plant protection products is distributed by decreasing order of importance according to the following crops:

- ✓ Market garden crops
  - ✓ Citrus fruits
  - ✓ Annual crops
  - ✓ Fruit trees
- Industrial activities :
    - Distribution of industrial activities :

Industrial sector	Number	Percentage
T.L.I	1737	26
C.P.I	2012	31
A.F.I	1658	26
<i>a. M.M.E.I</i>	1107	17

T.L.I = textile and leather industries ;

C.P.I = chemical and paracheical industries

A.F.I = agro-food industries ;

M.M.E.I = mechanical, metallurgical and electrical industries.

- Geographical distribution of industries in Morocco:

Region	Total	Pourcentage
Casablanca agglomeration	2675	43
Rabat – Salé – Zemmour – Zaer	511	8
Fès – Boulmane	454	7
Tanger – Tétouan	591	9
Sous-Massa – Daraa	307	5
Marrakech – Tensift – El Haouz	324	5.6
Oriental	286	4.5
Doukala – Abda	249	4
Chaouia – Ouardighra	238	3.7
Méknès – Tafilalet	203	3.2
Chrb – Chrarda – Beni Hssen	201	3.1
Taza – Al Hoceima – Taounate	150	2.3
Guelmim – Es – Smara	15	0.2
Tadla – Azilal	14	0.2
Lâyoune – Boujdour – S EL Hamra	7	0.1
Oued Ed Dahab – Laguirra	7	0.1
Total	6282	100



**The amounts of gaseous emissions produced by industry is increasing:**

Year	Pollutants			
	SO2	NOx	SP	Pb
1982	129	5	7	Nd
1992	180	7	10	Nd
2005	301	12	17	Nd
2010	540	21	30	Nd

**Institutional framework**

- Setting up of a committee for supervising chemicals.
- Creation of the Agricultural Pesticides Commission.

**Legal framework**

- Draft Bill on measures against atmospheric pollution:

Article 4 of this draft Bill states that the emission, deposition, the release or the rejection into the atmosphere of pollutants such as toxic or corrosive gases, smoke, vapours, dusts, and odours are forbidden above levels and quantities defined in the norms fixed by statutory means.

Specific legal, duly justified limits can be fixed for certain sectors of activity. When these specific norms are more restrictive, the operators concerned are associated in their preparation.

- Decree no. 466-84 of 19-03-1984 related to the regulation of organo-chlorinated pesticides (Table).

Name	Level of restriction (Banned (B), Severely Restricted (SR))	Timing of the restriction
Aldrin	B	1984
Chlordane	B	1984
Dieldrin	B	1984
Endrin	B	1984
Heptachlor	B	1984
Hexachlorobenzene	B	1984
Toxaphene	B	1984
DDT	SR	1984

- Law no. 42 95 relating to the control and the organisation of trade in agricultural pesticides :

This law stipulates in article 2 that the importing, the manufacture, the possession with a view to selling, or the distribution of agricultural pesticides, are forbidden if they have not been the object of certification.

- Decree no. 2-99-105 relating to the certification of agricultural pesticides.
- Decree no. 2-99-106 relating to the carrying out of activities of importation, manufacture and commercialisation of pesticide products intended for use in agriculture.
- Project for norms.
- Partnership Conventions.

### Technical aspects

- Study of air quality.
- FODEP (pollution control fund)
- Project for a PCB inventory.
- Studies on the relationship between the level of pollutants and diseases linked to that pollution in the most highly affected agglomerations (Casa-Airpol study).

### Status of signatures and ratification of international conventions (PIC; POP; Basel)

International conventions	Signature	Ratification
Basel Convention on the control of trans-frontier movement of dangerous wastes and their elimination	Signed in 1989	December 1995
Rotterdam Convention on prior informed consent PIC	Not signed	Procedure under way
Stockholm Convention on persistent organic pollutants	Signed on May 23 <sup>rd</sup> 2001	

## **NIGER**

### **Introduction**

Niger is a country of the Sahel situated in West Africa, with an area of 1,170,000 km<sup>2</sup> for a population of 10 million people. The population of Niger is essentially rural to about 90%. Agricultural production suffers from daily climate changes and the constant daily threat of enemies of crops, this leading to the excessive use of chemicals to protect these crops. However Niger neither produces nor exports POPs. Concerning the management of these latter, Niger has taken a certain number of measures both at national and at international levels.

### **I/OVERVIEW OF THE PRESENT SITUATION:**

#### **1.1 Concerning regulations**

##### i-International legal framework

Niger is an active participant in several international, regional and national agreements; programmes aimed at the implementation of these agreements are presently being pursued.

-The Stockholm Convention on persistent organic pollutants (POPs), signed in October 2001. The National Focal Point (at the level of the Plant Protection Administration - DPV) takes part regularly in the sessions.

-The Rotterdam Convention on the prior informed consent procedure applicable to certain dangerous chemicals and pesticides, which are the object of international trade. A ministerial letter has been proposed for the adoption of this convention.

- The Basel Convention has been signed and ratified by our country.

- The International Conduct Code for the distribution and use of pesticides, 1985, revised in November 2001.

##### ii- Regional legal framework

- The regulations, which are common to, the member states of the CILSS related to the certification of pesticides, in the revised version of December 1999, are in the process of being signed.

##### iii- National legal framework

At the national level, the measures are based on three key laws:

- the framework law on the environment ;
- the public health code and
- the law relative to plant protection instituted in 1996.

- Some texts pertaining to the application of the regulations, amongst which the most important are:

+ Decree No. 335/MAG/EL/DPV of December 16<sup>th</sup> 1996 fixing the conditions of attribution, and of use in agriculture, of dangerous plant protection products;

+ Decree No. 336/MAG/EL/DPV of December 16<sup>th</sup> 1996 fixing the conditions for labelling, for packaging, and for technical documents related to plant protection products, as well as temporary sales or certification authorisations;

+ Decree No. 338/MAG/EL/DPV of December 16<sup>th</sup> 1996 fixing the conditions of use of fumigants in agriculture;

+ The decree No. 28 of March 2<sup>nd</sup> 1998 fixing the conditions under which are granted:

. the professional license required for the importation, manufacture, formulation and the packaging of pesticides with a view to their commercialisation ;

. The authorisation required for the use and application of dangerous plant protection products.

In parallel to this decree, more than a hundred commercial agents are involved in the importation and sale of pesticides in Niger, under the control of the Plant Protection Department.

+ Decree No. 092/MAG/EL/DPV of July 8<sup>th</sup> 1999 giving the list of phyto-pharmaceutical products which are banned in Niger. It is in this framework that the transport or use on the Republic of Niger territory of nine (9) pesticides defined as POPs (aldrin, chlordane, dieldrin, DDT, endrin, heptachlor, hexachlorobenzene, Mirex, Toxaphene) are forbidden; these products are at the same time subject to the prior informed consent and information procedures (PIC).

+ Decree No. 007/MAG/EL of 14-01-97 setting up an inter-ministerial commission responsible for the development and supervision of a NATIONAL PROFILE for the management of chemicals in Niger. This latter has been developed but has not yet started being put into action; it is worthwhile therefore to update it;

+ Decree No. 10/MDR/DPV of July 10<sup>th</sup> 2000 relative to the creation of the National Pesticide Management Committee (CNGP) of Niger;

+ Decree No. No. 97/MDR/DPV of July 13<sup>th</sup> 2001 fixing the costs and the conditions of introduction of pesticides by licensed distributors.

## **1.2 Concerning authorizations for the importation and selling of pesticides:**

Authorisations for the importation and commercialisation of pesticides were introduced in 1990 but the procedures have only been covered by regulations since 1998. Thus out of 150 requests for certification received by the DPV, 108 have been

granted. One can note very great variations of licensed distributors at the level of the regions:

Furthermore, it should be noted that the association of licensed distributors is presently going through a crisis, this making the control of pesticides at their level quite difficult.

### **1.3 Concerning the control of chemicals:**

A network for the control of pesticides and chemicals was set up at the frontiers. This involves 15 control posts, a control of formulations at the Niamey central laboratory, and control missions on markets inside the territory.

- Control inside the territory: Control missions for pesticides on the markets and at authorised distributors are programmed, but rarely executed because of a lack of physical and financial resources. The only control carried out in 2001 at authorised distributors showed us that very few of these distributors exercise this activity regularly, and that they do not have storage areas since they only import on the basis of orders which go directly to the customers.

- Frontier control: 250,409 litres of pesticides in transit were controlled in 2001. Dealers in Niger from the Gold Coast imported this quantity. All these imported products were present on the list of pesticides authorised by the Sahel Pesticide Committee (CSP).

### **1.4- Concerning certification:**

Certification of pesticides was instituted in 1994 by CILSS member states within the Sahel Pesticide Committee (CSP). Two experts from each country take part twice a year in the sessions devoted to the examination of certification dossiers at Bamako in Mali.

From 1994 to 2001, nearly 150 pesticides were certified or attributed provisional sales authorisations. These sessions are organised jointly by the Sahel institute and the pesticides management project (FAO).

This project is planned to end in April 2002; it has been suggested to each member state that they become responsible for this question of pesticide management at the national level through National Pesticide Management Committees (CNGP).

Although this committee is not yet operational in Niger, its members have been identified and named.

### **1.5- Concerning the protection of humans and of the environment:**

Amongst the tasks undertaken to protect humans and the environment from the dangers presented by pesticides we can cite:

- Use of the media to increase population awareness about the risks of intoxication by pesticides both to the environment and to the health of humans (television and radio) ;

- Training of chauffeurs, storekeepers, pilots, manual workers; licensed distributors and plant protection officers on the use of pesticides without danger;

- Training of persons responsible for the repair of refrigerators and air-conditioning equipment, on the dangers of PCBs;

- The cholinesterase test: This test is intended for persons who are regularly in contact with pesticides, and is carried out before and after the plant protection campaign. This year, a first test was made in August; the second one, which should have been carried out in December, did not take place because of problems related to the fund-raising for that operation.

At the same time, the same test is carried out on household animals (sheep and camels) in the pasture areas.

- Environmental monitoring

This concerned in a first step the study of the effects of anti-acarid treatments on ancillary crops and other fauna not initially targeted. The work consists in the preparation of an inventory of these ancillaries and other fauna before and after the plant protection treatment against acarids. In a second step, samples of plants, vegetable products, soil and water are taken in the plant protection treatment areas in order to carry out analyses of pesticide residues. These analyses are carried out at the CERES/LOCUSTOX laboratory in Dakar using funding from project AFR/014.

Pollution control and decontamination of pesticide storehouses and depots. At this level it is the work of store cleaning, pesticide re-packaging, destruction of empty pesticide packaging and the repatriation of all obsolete pesticide stocks at the central DPV store 15 km from Niamey with a view to their destruction, which is carried out during missions in the various regions.

### **1.6 Concerning pesticide inventories and their destruction:**

At the present time there are 39,803 kilograms and 1490 litres of out-of-date products, which have been inventoried in the central store 15 km from Niamey (see annex).

Only one product is on the list of pesticides subjected to the prior informed consent and information procedure (PIC). This is Hexachlorocyclohexane (HCH) for an amount estimated at 2312 kilograms. We are in the process of exploring ways and means of destroying all these obsolete products.

Concerning the elimination of POPs, an operation was undertaken in 1991 in Niger for the repatriation of 60,000 litres to their country of origin (Holland), as well as for the decontamination of the storage sites.

## **II/Constraints and prospects**

Although it is the administration which is responsible under present regulations for missions related to the control of pesticides, in particular their importation, storage and licensing for commercialisation and use, and for the elimination of obsolete stocks with a view to protecting the health of man and the environment, it must be realised that the application of these regulations is not an easy task in the majority of developing countries, and particularly so in Niger, for several reasons:

- Slowness in the process of signing and ratifying conventions;

- Insufficiency of the resources available for implementation of international and regional conventions and regulations (POPs, PIC, CNGP/CSP, FAO Code of Conduct);
- Insufficient understanding of regulations by all stakeholders because of insufficient material and financial resources to make these texts better known;
- Impossibility of being able to control all plant protection products entering the country because of the porosity and length of the frontiers.
- The poor distribution of licensed distributors on the territory and the irregularity in the exercise of their functions do not allow the agricultural community to obtain the right qualities and quantities of pesticides at the place where they are required, this forcing them to find supplies on the black market; such products are of dubious quality thus opening up the possibility of exposing the population to risks of intoxication.
- The insufficiency of technical resources for sampling and for controlling pesticide quality (reagents, sampling equipment, etc.) does not make it possible to effectively control all the pesticides, which are imported.

Taking into account the constraints described above, a big multidisciplinary effort must be made to improve the pesticide management system. It should cover the following points in particular:

- The support of organisations providing funds for the implementation of international conventions, in particular those of POPs and PIC.
- The reinforcement of technical and scientific capabilities in the structures responsible for the control of the quality and analysis of pesticide residues;
- The training of agents involved in the implementation of pesticide regulations in Niger;
- The supervision and training of licensed distributors for the importation and selling of pesticides;
- The search for solutions to the crisis in the licensed distributors association in order not only to better defend their interests, but also to help the DPV in its fight against fraud.
- The control of donations and orders for pesticides so that the creation of obsolete stocks can be avoided.

**Conclusion:**

It is clear that in view of the problems resulting from the use of pesticides in general and the management of dangerous and chemical wastes in particular, Niger, with only its own resources, cannot face up to the financial problem of the elimination of POPs with a view to a sustainable development. That is why our country is in favour of a large manifestation of international solidarity, and of the setting up of national committees for the management of pesticides and dangerous chemicals with a view to implementing these conventions.



## RWANDA

### INTRODUCTION

- **Surface Area** : 26,368 km<sup>2</sup>, 8 million inhabitants, 90% of the population in agricultural activities
- **The industrial sector** is little developed (few chemical industries)
- Imports of chemical substances (agriculture, health...)
- The improper use of these products remains a problem
- **Needs** : regulations adapted to the management of chemical substances

### MANAGEMENT OF TOXIC CHEMICALS

- Represents a serious problem
- The existence of prohibited pesticides (provisional statistics of MINAGRI : 20 tonnes)
- Most wastes are not declared
- Lack of a study to identify and make an inventory
- Lack of regulations adapted to the problem

### ACTIONS UNDERWAY

- Development of legislation on plant health protection
- The existence of a project for a law on the Environment (in the course of being issued)
- Promulgation of the pharmaceuticals law (1999)

### POLLUTION BY CHEMICALS

#### a) Problems

- No planned industrial zones exist
- Insufficient human, material and financial resources
- Lack of any appropriate study and a system of regular follow-up
- Lack of sufficient information

#### b) Means of resolving the problems

- Establishment of the Rwanda National Bureau of Standards (for quality control and the establishment of national norms aimed at protecting the Environment)
- Development of laws (Environment, Health, Agriculture, Commerce)

### ENVIRONMENTAL IMPACT OF CHEMICALS

#### Problems

- Lack of any environmental impact studies for chemicals
- The existence of a range of wastes (pesticides, caustic soda, pharmaceutical products, and foodstuffs suspected of being contaminated by dioxin...), most of which are badly stored.

- Damaged products are not declared
- Accidents linked to the improper use of these products have not been identified.
- Lack of awareness of the population
- Lack of qualitative analyses
- No appropriate incinerators
- Continued risk of intoxication for human and environmental health

#### **FOLLOW UP OF THE STOCKHOLM CONVENTION ON POPs**

- Designation of a focal point
- Creation of a secretariat of State responsible for the protection of the Environment
- Regular follow up of the dossier concerning Rwanda's membership of the various conventions related to chemicals (Stockholm, Rotterdam and Basel Conventions).

#### **CONCLUSIONS AND RECOMMENDATIONS**

- Sound management of POPs
- Environmental law, as planned measures

##### **It is recommended:**

- to put into place an environmental law
- to carry out an inventory of all POPs at the national level (as well as of other chemical products)
- put into place mechanisms for the management of POPs (identification of existing sources of pollution, establishment of a control mechanism, establishment of adequate means for eliminating existing toxic wastes at the local level)

## **SAO TOME & PRINCIPE**

### **INTRODUCTION**

A Convention on Persistent Organic Pollutants was concluded in Stockholm, Sweden on May 23<sup>rd</sup> 2001. After having received the document and studied it closely, S Tomé & Principe approved it totally but partially??? (NB, in French: “*a approuvée et en tout et en partie*”: *totally and in parts*).

The provisions of the Convention are in the process of being approved in order for a formal adoption of it to be made; we promise to respect it completely. The Ministry of Public Works, Infrastructures and of Natural Resources has been designated as responsible for the management of this convention. The Environment Cabinet of the Ministry of public works, Infrastructures and Natural Resources has been designated as the competent scientific authority.

The government as the agency, which should work with the national authorities in order to implement this convention, has selected UNIDO. For its ratification, it will be necessary to receive a translation into Portuguese so that it can be submitted to the national assembly.

### **THE PHYSICAL AND GEOGRAPHICAL CONTEXT**

The Republic of Sao Tome and Principe is made up of two islands situated to the west of the African continent in the Gulf of Guinea. The two islands are separated by a distance of 160 km, whereas they are 360 km from the African coast.

The islands are of volcanic origin, having a rugged surface with very irregular shapes, and are a combination of mountains and plains, this giving rise to areas with very variable micro-climates.

### **SOCIO—ECONOMIC SITUATION**

#### **II.1. Population**

In an analysis of the variable population, it has been noticed that demography has had a strong effect on the environment. During the last ten years, there has been a big population increase, much larger than that of the economic growth. An increase in movements away from rural areas has been noticed with a concentration around urban and suburban areas where the facilities for receiving persons are quite insufficient. The population density is 135 inhabitants per km<sup>2</sup> and the age distribution shows that half the population can be considered as young.

The problem of the population and its rapid growth is causing more and more constraints and also worries related to the needs of Sustainable Development because of this demographic pressure on environmental, social and economic areas of the country's activities.

## II.2. Poverty

Sao Tome and Principe was placed in 1997 in 121st position in the classification of countries by HDI (Human Development Index) thanks to progress made in the fields of literacy, schooling, and life expectancy. It appears from studies carried out that 40% of the population lived in conditions of poverty in 1997 and 30% were in extreme poverty.

There is a whole range of factors which can explain the increase of poverty in Sao Tome and Principe, amongst which can be mentioned: The continual fall in the GDP *per capita* during the period 1987 to 1996, with the effective economic sector undergoing an average annual growth of about 1.5%, which is not sufficient for an economy whose population increases at a rate of 2.5% per year; The inflation rate measured as the change in consumer prices was 36.9% in 1995, 51.7% in 1996 and 81.1% in 1997, i.e. about a four-times increase for a period of 3 years. Nevertheless, a budgetary and monetary policy was applied with much more rigour as from 1998, this having a positive effect which made it possible to reduce the inflation rate to 20% in 1998, 12.6% in 1999, 9% in 2000 and 7% in 2001.

## II.3. Health

In Sao Tome and Principe, both in rural and suburban areas, first aid is not yet available for the majority of the population, who in many cases do not have access to health aid-posts within a reasonable distance. When they do exist, these posts are not sufficiently equipped nor do they have sufficient supplies of pharmaceutical products, or even personnel in sufficient amounts to satisfy the health demands of the population. In fact, the percentage of the general state budget devoted to health has decreased from year to year, having gone from 17.6% in 1990 to 4.2% in 1997 (figures provided by the Finance Administration). However, with the introduction of the HIPC initiative in the country, in co-operation with the World Bank, there has been an increase of the health budget in 2001.

As for HIV/AIDS in the country, figures from the Health Ministry show that there is a certain progression in the population. A national programme exists, in co-operation with the WHO, whose aim is to take measures to reduce transmission at the national level.

## II.4. Education

The constitution of the Democratic Republic of Sao Tome and Principe considers education to be a fundamental right of all citizens whose aim is the complete training of men and women, and their active participation in the community. In its programme, the Government attributes particular importance to the equality of rights to access and to opportunities for the success for all citizens and at all levels of the educational system.

However there are still a large number of illiterate persons, mainly amongst women; in fact in 1991 the level of literacy was 73%: 62.1% for women and 98.2% for men. In 1991, 71.3% of children between 6 and 14 years of age were registered in the educational system: 72.3% for males and 71.3% for females. The age group from 8 to 11 years is the one where the level of schooling is the highest with 89% of children attending school.

## **II.5. Economic aspects**

The Sao Tome and Principe economy started to be liberalised in 1985 with the first Structural Adjustment Programme (PAS). The PAS formally started up in 1987 with the financial support of the World Bank and the African Development Bank. One of the sectors favoured by this liberalisation was agriculture, through a process of the distribution of land enabling the creation of average-size agricultural units and of small family holdings. A programme for the privatisation of public agricultural enterprises was also started.

Other measures were adopted aiming at bringing the country towards a free market economy such as:

- Gradual limitation of price controls
- Flexibility in the system for the transfer of import licenses to the chamber of commerce,
- Simplification of exports procedures
- Adoption of a new code for investments.

## **External Debt**

The debt of the country underwent a significant increase during the 1980's and even doubled from 1984 to 1989. The cost of servicing this external debt amounts to 60% of the annual receipts from exports and is a considerable burden on the country's budget (40% of the receipts for the financial year 1999). The structure of Sao Tome and Principe's debt is dominated by the debt to multilateral institutions; the ADB accounts for 57% of this, and the World Bank 23%.

## **II.6. Petroleum sector**

SAO TOME and PRINCIPE is situated in the Gulf of Guinea where the large oil fields are found. However this valuable natural resource can only be exploited in very deep waters of the country's ZEE. In order to do this, studies are being undertaken by experienced international companies with the aim of developing the exploitation of these fields.

The country will have to adhere to international conventions allowing it to avoid hydrocarbon pollution of the ocean and of coastal regions. The preparation of a national legislation will allow the country to ensure effective management of the funds, which will be generated by the exploitation of this resource.

## **II. 7. Environmental aspects**

On the basis of concerns expressed by different target groups contributing to the development of the national environment plan for sustainable development, it has been possible to identify the main environmental problems of Sao Tome and Principe.

A series of questions which are considered as first priority from the environmental point of view has thus been identified, these resulting from the economic development of the country.

The questions have been classified according to their type: physical, socio-economic, and legal/institutional problems, but no order of priority has been attributed to them. The physical problems are the result of the physical degradation of the environment and the negative effects are felt at the social, environmental and economic levels.

The socio-economic and legal/institutional problems have been considered as questions whose negative effects are felt at the level of the environment, leading thus to a disorderly exploitation of resources.

The table below summarises the environmental problems encountered by Sao Tome and Principe

### Identification of the main environmental problems

Problem	Description
Lack of sanitary resources	<p><b>Cause :</b></p> <ul style="list-style-type: none"> <li>▪ Existence of marshy zones in urban areas</li> <li>▪ Insufficient equipment for collecting and transporting wastes</li> <li>▪ Unhealthiness and lack of hygiene</li> </ul> <p><b>Effects :</b></p> <ul style="list-style-type: none"> <li>▪ Development of disease carriers</li> <li>▪ Increase in the number of cases of malaria</li> <li>▪ Pollution of the environment by wastes and other residues</li> </ul>
Stocks of chemicals used in the fight against malaria	<p><b>Cause :</b> Importation of large amounts of chemicals</p> <p><b>Effects :</b> Contamination of the environment</p>
Difficult access and poor water quality	<p><b>Causes :</b> Bad water supply system Unprotected water harnessing areas</p> <p><b>Effect :</b> Consumption of water of bad quality Increase of illnesses related to contaminated water consumption</p>
Pollution of rivers and of water sources by chemicals	<p><b>Causes :</b> Incorrect use of chemicals in agriculture Dumping by the electricity utility company of hydrocarbon residues into rivers</p> <p><b>Effects :</b> Pollution of rivers and groundwater Loss of aquatic ecosystems</p>
Increase of erosion in coastal areas	<p><b>Cause :</b> Uncontrolled extraction of sand Uncontrolled extraction of gravel for the building industry</p> <p><b>Effects :</b> Strong erosion of the coast</p>

	<ul style="list-style-type: none"> <li>• Destruction of beaches</li> <li>• Destruction of sea-turtle breeding areas</li> </ul>
<b>ECONOMIC PROBLEMS</b>	
Lack of financial resources in the manufacturing sector	<b>Causes :</b> <ul style="list-style-type: none"> <li>• Non-existence of a financial system for the manufacturing sector</li> <li>• Unclear investment policy</li> </ul> <b>Effects :</b> <ul style="list-style-type: none"> <li>• Disorderly use of natural resources</li> <li>• Lowering of production</li> </ul>
Low development of tourism	<b>Causes :</b> <ul style="list-style-type: none"> <li>• Very high cost of air transport</li> <li>• High hotel costs</li> <li>• No publicity outside the country</li> </ul> <b>Effects</b> <ul style="list-style-type: none"> <li>• Very small number of tourists</li> <li>• Low occupation rates in hotels</li> <li>• Natural tourist resources not exploited</li> </ul>
<b>Legal/institutional Problems</b>	
Political instability and lack of state authority	<b>Causes :</b> <ul style="list-style-type: none"> <li>• Poor functioning of the institutions</li> <li>• Fragility of the legal systems</li> </ul> <b>Effects :</b> <ul style="list-style-type: none"> <li>• Mistrust shown by investors</li> <li>• Low level of investment</li> </ul>
Lack of environmental legislation	<b>Causes :</b> <ul style="list-style-type: none"> <li>• Insufficient human, material and financial resources for the drawing up of legislation</li> <li>• No supervisory structure to co-ordinate the environmental actions</li> </ul> <b>Effects :</b> <ul style="list-style-type: none"> <li>• Disorderly use of natural resources</li> <li>• Degradation of the environment</li> </ul>

As can be seen from the above table, one of the main problems, which Sao Tome and Principe has to face concerns pollution due to chemicals, both those used in agriculture and also those used to combat malaria. These products, in addition to polluting rivers, destroy also our biodiversity, in particular aquatic and bird species. A law to regulate the importation and use of chemicals at the national level has already been developed and is only waiting for its approval by the National Assembly.

Mechanisms have already been put in place to ratify the Stockholm Convention on persistent organic pollutants. It is necessary to develop an action plan in order to





creating the conditions required for setting up control mechanisms proposed in the adopted texts. It can be concluded that in the ten years since the Rio de Janeiro earth summit took place, the legal framework covering the environment in Sao Tome and Principe is in a continuing build-up phase; however, it still requires some vital components which will guarantee a better interaction and harmonisation for its implementation in the various sectors of Human and Sustainable Development.

It is for that reason that the International Community should continue to bring its help to the national units, not only in the sense of having a greater commitment in the production, approval and publication of standards, but also in the improvement of norms already in force.

## **A2. International Conventions**

In June 1992 in Rio de Janeiro, Sao Tome and Principe signed the United Nations Convention on Biological Diversity and the United Nations Framework Convention on Climate Change.

Because of institutional problems encountered, the Nation Assembly of Sao Tomé and Principe only ratified these Conventions in 1998, at the same time as the Convention to Combat Desertification.

We have also signed the Vienna Convention, the Montreal Protocol, and all its amendments.

Apart from these conventions, the country is already member of other international conventions such as The UN Convention on Rights at Sea – Montego Bay/1982 ; the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) –Washington/1973 ; the Convention for the Protection of the Ozone Layer, the Montreal Protocol and its amendments – VIENNA 1985 ; the International Convention on Civil Liability for Oil Pollution Damage – Brussels /1969

### **Actions under way in the field of Conventions, and difficulties encountered**

Although the country has become a member and has already ratified or adopted the above conventions, it is necessary to underline the absence of any translation of these international instruments into national law system, and consequently their adoption into a tangible law, as well as the creation of corresponding mechanisms for their execution at the national level. However, despite these difficulties, a certain number of actions are under way with the financial support of the Global Environment Fund. (GEF); amongst these can be cited the setting up of the first National Communication for the Climate Change Convention and also the development of the strategic action plan, and of the National Report on biodiversity.

## **SENEGAL**

### **INTRODUCTION**

Senegal, part of the Sahel, is essentially an agricultural country and is an important consumer of chemicals for improvement of soil or for plant protection.

These products, used also in the area of health protection in order to eradicate certain disease vectors, present dangers for most of the time to man and his environment.

Certain industrial chemicals are also found (such as PCBs) as well as some POP by-products (dioxins) but the amounts of these are less compared to agricultural chemicals. This situation incited Senegal to develop regulations for these substances relatively early.

### **CONSIDERING THE ROTTERDAM CONVENTION DURING THE DEVELOPMENT OF A NATIONAL LAW REGULATING PESTICIDES AND DANGEROUS CHEMICALS.**

It is to be remarked that SENEGAL did not wait for the Rotterdam Convention in order to set up regulations for substances used in the country, but we can say that since 1996 Senegal has always wanted to place itself within the framework of that Convention by the setting up of a national commission charged with the task of thinking about the management of dangerous pesticides and chemicals. The principal members of this commission are technicians of the environment, health and agriculture. The presence should also be noted of representatives from the chemical industries. The particular task of these members is the development of a new law for the control of dangerous pesticides and chemicals. This law should abrogate that of 1984 (loi 84-14), which only applied to pesticides.

### **CONSIDERING THE MANAGEMENT OF TOXIC AND DANGEROUS CHEMICALS IN THE ENVIRONMENTAL CODE**

The new Environmental Code (law N°2001-01 of January 15<sup>th</sup> 2001) which abrogates the law 83-05 of January 28<sup>th</sup> 1983 covering the Environmental Code, deals with toxic and dangerous chemicals in the section title II «Prevention and measures to be taken against pollution and harmful products», chapter IV, management of toxic and dangerous chemicals.

That is the reason why article L 44 of the Environmental Code states: «Dangerous and toxic substances which because of their toxicity, their radioactivity, their ability to destroy the environment, or their concentrations in biological pathways, present or are liable to present, a danger for man, his natural habitat or his environment when they are imported into the country or rejected into the environment, are subjected to a control and supervision by the competent authorities».

Furthermore, article L 45 of the Code of the Environment defines the tasks of the National Chemicals Management Committee, stipulating: «A National Chemicals Management Committee whose composition is fixed by a decree of the Minister of the Environment has the task of controlling, and of overseeing the importation, use and movements of dangerous and toxic chemicals».

An inter-ministerial decree regulates and stipulates: information which must be provided by manufacturers and importers of chemicals intended to be commercialised, relative to the composition of formulations put on the market, their actual volumes commercialised and their possible effects with respect to man and his environment.

The list of substances whose manufacture, importation, transit and movement on the national territory are forbidden or subject to prior authorisation from the committee responsible for following and controlling dangerous and toxic substances;

The conditions, mode, itinerary, and timing of the transport, as well as any provisions related to the packaging and to the commercialisation of the aforementioned substances;  
the conditions of the attribution of prior authorisation;

### **ADHERING TO THE INTERNATIONAL CONVENTIONS REGULATING THE USE OF CHEMICAL SUBSTANCES AND THE ELIMINATION OF DANGEROUS WASTES**

Senegal has signed the plant protection regulations, which are common to all the CILSS countries, and is a member of the Sahel committee on pesticides.

Senegal has also signed the Rotterdam and Stockholm Conventions. That of Basel has been ratified. It can be noted that Senegal had introduced a notification during the 3<sup>rd</sup> session of the interim committee for the re-examination of PIC chemicals, for the possible registration of a chemical on the PIC list.

The Committee accepted this request and will recommend at the INC.9 meeting that this is included on the PIC list.

We can say that Senegal respects very closely the majority of International Conventions related to chemicals and is in the process of setting up the conditions under which they may be implemented at the national level, with the help of certain international partners.

### **CONCLUSION**

I would say that the putting into place of laws and regulations for the management of dangerous and toxic chemicals is one thing, but that actually implementing them is a quite different matter.

Senegal, aware of this situation, is in the process of pursuing actions aiming at the implementation of these legal tools at the national level. These actions range from increasing awareness and information dissemination, to the training of all the stakeholders involved in the management of chemicals. The UNITAR programme on the environmentally sound management of chemicals, the UNEP programme on information exchange networks and inventories on obsolete pesticides with a view to their elimination, all go in this direction. Also, the recent creation of regional environment divisions and of classified establishments in certain regions of Senegal, make it possible to ensure a better dissemination of information about these legal texts related to chemicals, and to therefore make easier their implementation at the local level.

## **TOGO**

### **GENERAL INFORMATION ON TOGO**

Togo is a West African country, situated between Ghana, Benin and Burkina Faso. It has a coastline of some 50 km on the Gulf of Guinea. It has a surface area of 56,600 km<sup>2</sup> and a population of approximately 4.5 million.

Its economy is based on agriculture, which employs some 70% of the active population, and a mining industry, which is mainly related to phosphates.

As cash crops mention may be made of coffee, cocoa and cotton, crops whose protection requires the use of substantial amounts of chemical.

### **II INSTITUTIONAL FRAMEWORK**

Togo has a certain number of structures responsible for overseeing management of the environment management in general, and of chemicals in particular. Amongst them may be cited:

- the Ministry of the Environment and Forestry Resources,
- the Ministry of Agriculture, Farming and Fisheries,
- the Ministry of Industry, Commerce and Transport,
- the National Environment Committee,
- the Inter-ministerial Commission of the Environment,
- the Certification Committee for phyto-pharmaceutical products,
- the National Committee for Chemical Safety.

### **POLICIES – PLANS- PROGRAMMES**

Togo is endowed with:

- an environmental policy since December 1998 which marks out the actions and strategies in each sector related to the environment, including that concerning the sound environmental management of all kinds of chemicals.
- a National Environmental Action Plan (NEAP) since June 1999 which details the policy and defines the actions to be undertaken up to 2015. The NEAP is linked to a National Programme for Environmental Management (NMEM) which has three components:
  - o Instrument for environmental management
    - institutional framework
    - legal and statutory framework
    - sub-regional, regional and international cooperation
  - o Improvement of the environment and living the living conditions of the population
  - o Management of the coastline

## **LEGAL AND STATUTORY FRAMEWORK**

Togo can be said to have a legal arsenal without ammunition. Concerning texts of application, we can mention at the national level:

- the Constitution, article 42
- law 88-14 of 3/11/1998 instituting the Environmental Code; chapter V, articles 51, 52, 53 and certain dispositions of chapter IV concerning wastes in water, air and the ground;
- the law of July 1996 on the protection of plant life which has two parts: one on plant life and plant products and one on phyto-pharmaceutical products;
- the law on medicines which only recognizes persons having had suitable training as sales persons for medicines. Bringing this law into force will enable action to be taken against the phenomenon of street pharmacy, and possibly to eliminate it altogether.

### **At the international level**

Togo is a party to:

- the Vienna Convention and the Montreal Protocol on the ozone layer,
- the Convention on Biodiversity,
- the Convention on Climate Changes
- the Convention on Desertification,
- the Bamako Convention on dangerous wastes,
- the Convention on chemical and bacteriological weapons and
- the Conventions of Montgobay, London and Abidjan concerning protection of the seas.

It is a signatory of the Conventions of Rotterdam and Stockholm, for which the ratification procedure is underway.

It is also in the process of adhering to the Basel Convention.

## **OUTLOOK**

### **Regarding legislation**

Within the framework of implementing the NEAP, a major revision of the Environment Code is envisaged in order to be able to integrate into it the provisions of future Conventions after its adoption.

To this effect, the World Bank and the WHO have recently provided financial assistance to Togo and the consultants have already started work.

In the framework of this activity it is envisaged that all the texts having an incidence on environmental management will have to be re-drafted, with a view to their harmonization. Togo will be able to benefit from the support of UNEP, one of whose officers from the Legal Affairs Directorate was recently in Togo.

**Regarding the implementation of the Conventions**

Togo has undertaken to develop plans and strategies to implement several Conventions, in particular:

- the Convention on Biological Diversity (monograph currently being finalized),
- the Convention to Combat Desertification (PAN),
- the Convention on Climate Change (First National Communication presented at the last COP in Marrakech/Morocco in November 2001),
- the Montreal Protocol,
- the Stockholm Convention, for which the drawing up of the PNM/NIP will start in a few days with the support of UNIDO.

As well as these activities aiming at the implementation of the Conventions, two other actions may be mentioned:

- the management of the Large Marine Ecosystem of the Gulf of Guinea (LME) supported by UNIDO, the 2<sup>nd</sup> phase of which will start imminently. The 1<sup>st</sup> phase consisted of assessing the present state of the environment in the Gulf of Guinea.
- the Project for a network for the exchange of chemical information via Internet, this representing important help for carrying out all activities aimed towards the environmental management of chemical products.