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**Intergovernmental Negotiating Committee for an
International Legally Binding Instrument for
the Application of the Prior Informed Consent
Procedure for Certain Hazardous Chemicals and
Pesticides in International Trade
Eleventh session**

Geneva, 18 September 2004

Item 6 of the provisional agenda*

**Presentation of the study on
technical assistance needs**

Study on technical assistance needs

Note by the secretariat

1. At its tenth session, the Intergovernmental Negotiating Committee requested the secretariat to conduct a study on the capacity-building and technical assistance needs of countries in relation to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, on the basis of a questionnaire sent to all countries, regional economic integration organizations and participating observers. The Committee also requested the secretariat to provide the results of that study to the Intergovernmental Negotiating Committee at its eleventh session.
2. The questionnaire was drafted, translated into all six official languages of the United Nations, and circulated to all countries, regional economic integration organizations and participating observers on 10 April 2004 for their response. Responses were received from a total of 71 countries, two intergovernmental organizations and two non-governmental organizations. The respondents are listed in annex I to the present note under the seven Rotterdam Convention interim regions, with a separate listing for the intergovernmental and non-governmental organizations. Information contained in the individual questionnaires was analysed, edited and compiled into tabular form for all those groups. Using the information in the tables, a summary of the responses was prepared for each region (except for North America where there was only one response). Given the small number of intergovernmental and non-governmental organizations responses, a summary was not prepared for that group. The six regional reports and all of the tabular summaries have been posted on the Convention web site for information purposes. A global summary of the information contained in the 71 country responses is set out in the annex to the present note.

* UNEP/FAO/PIC/INC.11/1.

Annex I

Comprehensive summary of responses by countries to the questionnaire on capacity-building and technical assistance needs in relation to the Rotterdam Convention

1. The present document provides a comprehensive summary of the responses submitted by 71 countries (listed below) to a questionnaire distributed by the secretariat on 10 April 2004. It was prepared by entering the information from individual country responses into tabular regional summaries, then using the tables to prepare reports for each region (except North America, where there was only one country response), and finally integrating the information from the regional reports and from North America to produce this report. The regional reports and tabular summaries are available on the Convention web site and those may serve to inform parties interested in more detail of the many views, issues and needs that were identified during the survey process. Given the small number of responses received from intergovernmental and non-governmental organizations, a summary was not prepared for that group.

List of countries (organized by Rotterdam Convention interim regions) and intergovernmental and non-governmental organizations that submitted responses to the questionnaire			
Africa (19)	Algeria Benin Botswana Burundi Cape Verde Central African Republic Côte d'Ivoire	Gambia Ghana Guinea Guinea-Bissau Kenya Lesotho Madagascar	Malawi United Republic of Tanzania Togo Uganda Zimbabwe
Asia (12)	Bangladesh China Indonesia Japan	Malaysia Mongolia Philippines Republic of Korea	Singapore Sri Lanka Thailand Viet Nam
Europe (18)	Armenia Bulgaria Cyprus Czech Republic Germany Greece	Hungary Ireland Italy Latvia Lithuania Netherlands	Norway Poland Romania Russian Federation Slovenia Spain
Latin America and Caribbean (nine)	Bolivia Brazil Chile	Cuba Dominican Republic Ecuador	Grenada Jamaica Peru
Near East (seven)	Egypt Islamic Republic of Iran Jordan	Kyrgyzstan Lebanon Syrian Arab Republic	United Arab Emirates
North America (one)	Canada		
Southwest Pacific (five)	Australia Cook Islands	New Zealand Papua New Guinea	Solomon Islands
Intergovernmental and non-governmental organizations (four)	Asian Development Bank European Commission	Environment Watch (Botswana) FBOMS (Brazilian Forum of Non-governmental Organizations and Social Movements for Environment and Development)	

2. The survey questionnaire addressed six areas related to implementation of the Rotterdam Convention, and this report presents the survey results under the following headings:

- (a) National plans and strategies;
- (b) Communication and information management;
- (c) Risk assessment and risk evaluation;

- (d) Bilateral technical assistance;
- (e) Regional cooperation; and
- (f) Training.

3. The numbering in each section of this report corresponds to the numbering of questions in section B of the questionnaire. The final section of this report is titled “Other relevant information” and corresponds to Section D of the questionnaire, where countries were invited to add any additional information on technical assistance needs or capacity-building activities that would be useful to implement the Convention, or any other comments regarding technical assistance or capacity-building. Throughout this report, the term “Convention” refers to the Rotterdam Convention.

4. Information in the country responses was of two types: matters of fact or opinion (for example, in response to yes or no questions) and narrative input, including country requests for assistance and responses to questions relating to barriers to be overcome by, or requirements that are needed for, countries to implement the Convention. A large amount of narrative input was received in response to several questions and upon examination, it became apparent that almost all of it addressed the following seven themes: national priorities; legislation; national coordination; information and communication; risk assessment and risk evaluation; laboratory and technical support; and resources and assistance. Furthermore, in many cases several countries submitted very similar responses. In presenting the following global overview of the survey results, where a large number of narrative responses were received to questions, a representative number of the responses has been listed under the seven headings.

I. National plans and strategies

5. Forty-two of 71 countries have already developed a national chemicals profile, although one country noted that the profile only addresses pesticides. Twenty-four countries have not developed such a profile and five did not respond to this question. Thirty-seven of the 42 countries that have national profiles found them useful in developing and maintaining chemical management structures within the country, 36 used them to set priority in addressing chemical management needs, and 23 have updated their profiles. Of the 24 countries that have not developed a national chemicals profile, 19 intend to do so, two do not intend to do so, and three did not respond.

6. Forty-nine of 71 countries have an existing mechanism to promote national cooperation between ministries, departments or agencies in taking decisions on chemicals management, although one country noted that the mechanism only addresses pesticides. Seventeen countries do not have such a mechanism and five did not respond to this question. Sixteen of the 17 countries without a mechanism to promote national cooperation agreed that it would likely facilitate work on chemicals management and one country did not reply. Fifteen countries without an existing mechanism to promote national cooperation and one country with such a mechanism identified the following main barriers to establishing cooperation.

- **National priorities:** chemical management issues are not considered a priority area in many countries and resources are not, therefore, made available to address them.
- **Legislation:** absent or inadequate.
- **National coordination:**
 - o Management of chemicals is fragmented among government agencies and different levels of government, resulting in gaps and overlapping functions;
 - o Interagency cooperation on industrial chemicals is not a legal requirement;
 - o Different government organizations participate in different phases of a chemical’s life cycle;
 - o There is lack of coordination on chemical management activities by government agencies and industrial stakeholders;
 - o There is lack of an organized system or structure;

- o There is a lack of an identified role for each organization involved in the management of chemicals through a comprehensive strategy.
- **Information and communication:**
 - o National systems and mechanisms for the acquisition, storage and distribution of information are inadequate or absent;
 - o Means of communicating pertinent information to relevant players are inadequate or absent.
- **Resources and assistance:** resources to support national institutional frameworks for effective chemical management are lacking.

7. Thirteen countries without an existing mechanism to promote national cooperation and two countries with such a mechanism identified the following assistance that would be useful in setting up such a mechanism.

- **Legislation:** develop or update legislation concerning chemicals based on effective models.
- **National coordination:**
 - o Conduct stakeholder consultations on options for institutional mechanisms for chemicals management, indicating models from different countries where this has been undertaken successfully, to develop a national cooperation mechanism;
 - o Establish of a national coordinating body, comprising all stakeholders in chemical management, to coordinate a national strategy and technical activities of government agencies and stakeholders;
 - o Define the competencies of each ministry and improve cooperation between them;
 - o Include chemicals programmes in major objectives of relevant stakeholders, especially government departments and ministries;
 - o Involve regional and local authorities in the development and supervision of management and contingency plans (for example, to develop projects and training programmes to reinforce municipal capacity on the management of dangerous chemicals and their wastes);
 - o Strengthen and support institution-building in the official bodies concerned with chemical management.
- **Information and communication:**
 - o Establish an overall communications strategy;
 - o Create an information centre, national register or database on chemical substances;
 - o Conduct awareness-raising for relevant parties.
- **Resources and assistance:**
 - o Provide human and financial resources, computers and internet access;
 - o Provide technical assistance and capacity-building through conventions on dangerous chemicals;
 - o Develop a model for small island states with limited human resources;
 - o Conduct an institution-strengthening project with appropriate technical assistance;
 - o Provide financial support, infrastructure, expertise and capacity-building.

8. Sixty-three of 71 countries are developing, or intend to develop, a national implementation plan for the Stockholm Convention on Persistent Organic Pollutants, three do not intend to do so, and five

did not respond to this question. Fifty-eight of the 63 countries plan to consider elements of the Rotterdam Convention that would assist in implementing the Stockholm Convention.

9. Eighteen countries are participating in the Chemical Information Exchange Network programme, 47 are not participating, and six countries did not respond to this question. The network was initiated in Africa and 13 of the participating countries are located in this region. The 18 countries offered the following comments on the utility of the network in developing the sound management of chemicals:

- o Key institutions involved in chemicals management have been provided with computers, networking has improved among stakeholders, and staff members have received training on internet access to information related to the management of chemicals such as decision documents, contacts, web sites, conventions, international organizations;
- o There have been improvements in pesticide registration, in sending and receiving chemical information, including from the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO), and one country indicated that it has been “very useful” in relation to the sound management of existing chemicals, such as agricultural chemicals;
- o Several countries reported little or no results as some are still in the start-up phase; others have acquired informatics equipment but not all have internet access, and in a few cases the programme was interrupted due to lack of finances or failure to follow-up on implementation; and
- o The network is starting to be used for defining objectives and priorities in the area of national implementation plan elaboration.

II. Communication and information management

10. Forty-nine of 71 countries have mechanisms in place to organize information that is received concerning hazardous chemicals and pesticides such as hazard data, risk evaluations, labelling information or information received through the Convention, 19 do not have such mechanisms and three did not respond to this question. Of the 49 countries with such mechanisms, 24 had difficulties in organizing or finding information on hazardous chemicals and pesticides, 20 did not have difficulties and five did not respond. Forty-three of the 49 countries identified methods that were used to identify and gather such information, including:

- o Print media, including articles, books, documents, journals, scientific reviews;
- o Internet searches, involving national and international databases;
- o Updated libraries (classic or online);
- o National programmes, for example, material safety data sheets for imported chemicals, export notifications, registration of pesticides, consultation with agricultural chemicals manufacturers and pesticide registrants, notification of new substances, distribution of questionnaires for chemical substances and preparations, structured literature searches, national products register, issuing permits, permissions, audits, cooperation with inspectors (sanitary, environmental, labour, trade), fire brigades, border guards and customs authorities, poisoning incident reports;
- o Using resources of the national competent authority;
- o International procedures of notification and registration;
- o Direct communication with colleagues, authorities and experts in other countries, agencies, institutions and international bodies;
- o National and regional databases (hardcopy and electronic) in governmental institutions, universities and research institutions;

- o Internationally available data on hazardous chemicals from the Organization of Economic Cooperation and Development (OECD), International Programme on Chemical Safety (IPCS), Intergovernmental Forum on Chemical Safety (IFCS), UNEP, FAO, World Health Organization (WHO), convention secretariats and other international and regional agencies;
- o Information received from the secretariat (letters, PIC circulars, decision guidance documents, CD-ROM), at prior informed consent (PIC) meetings and from other designated national authorities; and
- o Stockholm Convention national implementation plans provide for development of measures relating to information exchange on chemicals.

11. Thirty-five of the 49 countries with mechanisms to organize information requested the following assistance to manage such information. Four countries did not request assistance and ten did not respond.

- **National coordination:**
 - o Establishment of a structure for effective chemical management;
 - o Guidance or listing of sources or working model(s) for dealing with hazardous chemicals;
 - o Update the national chemical profile.
- **Information and communication:**
 - o Creation of national centres for awareness-raising and information exchange on hazardous chemicals and pesticides;
 - Include national electronic database systems for national and international information on chemicals, to serve import and export companies and diverse regional users;
 - National registers of chemicals used in the country and all chemicals related legislation.
 - o Information management systems:
 - Provide or reinforce existing information management tools (e.g., computers, software, internet, e-mail, fax) for efficient data storage and dissemination to all interested sectors;
 - Provide finances for internet access and access to developed country and international databases;
 - Provide access to the CIEN programme;
 - Need a harmonized system for material safety data sheet (MSDS) content.
 - o Awareness-raising and communications:
 - Disseminate information to stakeholders, including translation into local languages;
 - Awareness-raising workshops and field visits to chemical users;
 - Provide more information on industrial chemicals, including their management options;
 - Encourage relevant non-governmental organizations and the creation of pesticides clubs in agricultural cooperatives, universities, chemical industry and the customs service;
 - Create cooperative groups through national workshops and seminars with the participation of the rural media.
 - o Training and capacity-building:

- Training and awareness-raising for national experts, customs agents and personnel in institutions involved in the collection, treatment, storage and distribution of information (statistical services in agriculture, health, industry; customs service; phytosanitary service; environmental services);
- Training on the most efficient methods of information exchange between national and international institutions with responsibilities in the field of hazardous chemicals;
- Staff exchange programmes involving countries with excellent management or similar national conditions;
- Building technical capacity for data management;
- Assessment of the lack of or weaknesses in organizing information and acquainting with best practices in other countries.
- Secretariat should collect and reorganize information on hazardous chemicals and pesticides from all countries and distribute this to each country in a user-friendly form;
 - Set up Intranet and internet networks for concerned institutions, which would be managed by the secretariat;
 - Extract useful information from huge volumes of information.
- **Laboratory and technical support:** equipping national laboratories, strengthening laboratory capacity, including experimental research institutes, and financing research programmes.
- **Resources and assistance: appropriate resources.**

12. Forty-four of 71 countries normally disseminate information on hazardous chemicals and pesticides to all agencies or organizations involved in chemical management activities, although six countries noted that this is not always done or is limited in some way (for instance, to either pesticides or industrial chemicals). Twenty-three countries do not normally disseminate such information and four did not respond to this question.

13. Forty-seven of 71 countries seek the views of stakeholders on information on hazardous chemicals and pesticides, although five indicated that this is not always done or is limited in some way (for example, to either pesticides or industrial chemicals). Eighteen countries do not seek the views of stakeholders on these matters and six did not respond to this question.

14. Thirty-seven of 71 countries have mechanisms to communicate to potential exporters and other stakeholders the import decisions of other countries concerning hazardous chemicals and pesticides, although three countries noted that this mechanism was limited to pesticides. Thirty countries do not have such mechanisms and four did not respond to this question.

15. Thirty-six of 71 countries have mechanisms to ensure that exporters are aware of their responsibilities under the Convention, 31 countries do not have such mechanisms and four did not respond to this question.

16. Fifty-eight of 71 countries have requirements at national level to improve communication and information management, one country had no requirements and 12 did not respond to this question. The following list is representative of the requirements identified by those countries.

- **Legislation:** ratification of the Convention and its implementation within the legal framework.
- **National coordination:**
 - National system for management of hazardous chemicals and pesticides;
 - Establishment of a national committee or structure, involving concerned stakeholders, to be responsible for issues of chemical management;
 - Reorganization and revitalization of existing national coordination committees;

- o Strengthening capacities of relevant national structures for a better application of current pertinent regulations;
 - o Strengthening of national chemicals management committee and extension of its activities to all districts of the country, paying special attention to customs officials and agriculture extension officers;
 - o Promotion of cooperation among state authorities and various non-governmental organizations;
 - o Identification of common points of the Rotterdam and Stockholm Conventions and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal to develop and unite actions with all ministries, considering the social and economic aspects of banning substances covered by the Conventions.
- **Information and communication:**
 - o Create a chemical information and communication system involving a centre for awareness-raising and information dissemination on hazardous chemicals and pesticides, and a network of links to various stakeholders at the national and international levels;
 - Allocate responsibilities to each link in the network;
 - Identify the actors and encourage joint participation and contributions of all stakeholders;
 - Dissemination of information on chemicals and pesticides in a way that secures participation of stakeholders vis-à-vis this information;
 - Development of a chemical information exchange network;
 - Set up a national web site concerning the Convention;
 - Improve the activity of working groups established between the institutions involved through periodical meetings;
 - More coordination among stakeholders about information exchange;
 - More information about communication and information management is required to improve the national situation;
 - Mechanisms are envisaged under the Stockholm Convention, the implementation of which is in a start-up phase.
 - o Set up a national register and database on chemicals and wastes;
 - Develop a database listing relevant chemicals and export requirements;
 - Install a database with all chemicals, including the PIC and persistent organic pollutants (POPs) lists;
 - Compile of an inventory of all agricultural chemicals in use;
 - Know the volume and location of chemicals and hazardous pesticides;
 - Build data at the national level on hazardous chemicals and pesticides;
 - Construct a database on import decisions and regulatory information of other nations concerning hazardous chemicals and pesticides;
 - Centralize and integrate existing diverse data banks for chemicals, including the main rules and substances under the Convention, to increase efficiency and lower operational costs of communication and information dissemination;
 - Strengthen communication links to disseminate information to institutions and other stakeholders;

- Strengthen information communication centres by providing tools and training to main participating institutions;
- Capacity-building for institutions relevant to the distribution of information;
- Offer the database to relevant industry via the internet;
- National, regional and local operational offices to provide information including, after adequate training, information, education and communication for stakeholders, etc.;
- Information dissemination in regional offices to agencies concerned with pesticides and industrial chemicals;
- Strengthen local governments' understanding of chemicals management because they will disseminate regulations regarding chemicals management and monitor their implementation in their region.
- o Access to intranet and internet facilities: creating an intranet between all interested parties, such as between inspections and involved ministries;
- o Awareness-raising:
 - Awareness-raising workshops and field visits to PIC chemical users;
 - Organize of awareness-raising seminars;
 - Training and awareness-raising for customs agents;
 - Training in the area of chemicals management;
 - Involve the national press and other media;
 - Inform exporters of important decisions taken on chemicals and hazardous pesticides, and raise awareness in this area;
 - Promote public and private sector awareness;
 - Inform all stakeholders of their responsibilities to and benefits of the Convention through awareness-raising workshops and creation of specialized networks for each group (importers, exporters, manufacturers, etc.);
 - Mechanisms for a clearing house arrangement, sensitization and education of stakeholders;
 - Further management training about chemical safety issues;
 - Tripartite cooperation, seminars organized in cooperation with employers and employees organizations, distribution of leaflet and other material to improve public awareness.
- o Designated national authority issues:
 - Adaptation of the obligations and contents of the Convention;
 - More coordination between the different sectors involved in managing notifications;
 - Implement coordination with relevant local authorities;
 - Establish an information system at the customs level to allow better use of the notifications;
 - Improve communication among designated national authorities and lead regulatory and implementing agencies;
 - Greater clarity and precision are required on the part of the secretariat, in terms of the presentation of the notifications;
 - Guidance on how to develop formal mechanisms;

- Ability to use the globally harmonized system customs codes and identification of hazardous chemicals and wastes (no customs codes lists exist that could identify the products' danger).
- **Resources and assistance:**
 - Equipping the designated national authority with financial and technical means for increased effectiveness;
 - Need staff to set up a mechanism;
 - Human, technical and financial resources are required;
 - Provision of financial and technical support for establishing overall mechanisms;
 - The unit responsible for regulating chemicals needs to be better resourced in terms of the tools and equipment needed for better and more effective communication of such information;
 - Need to address poverty problems;
 - Mobilization of resources to allow programmes of chemical management to take place;
 - Assistance needed in capacity-building;
 - Assistance in terms of financial support, infrastructure, expertise and capacity-building in order to implement two national action plans (developed in 2003) to establish an inter-ministerial information exchange mechanism and inter-ministerial coordination;
 - Strengthening of administrative capacity;
 - Strengthening and harmonization of the legal and regulatory cadre;
 - Technical and financial assistance concerning research for alternatives and risk assessment studies;
 - Reinforcement of the existing infrastructure to improve electronic information exchange.

III. Risk assessment and risk evaluation

17. Thirty-seven of 71 countries have sufficient expertise, ability and resources to undertake the assessment of information, such as that provided in decision guidance documents, in order to make import decisions as required under the Convention; 30 countries do not have sufficient expertise, ability and resources to do so; and four did not respond to this question.

18. Fifty-one countries specified requirements for additional material, training or expertise to make decisions on the future import of chemicals notified under the Convention, three countries had no requirements and 17 did not respond to this question. The following list is representative of the requirements identified by those countries.

- **Legislation:**
 - Development of legislative framework for hazardous chemicals and pesticides;
 - Updating the central Africa phytosanitary legislation;
 - Legal and technical materials.
- **National coordination:**
 - Establishment of a structure in the area of chemical management;
 - Establishment of a national committee to be responsible for issues of chemical management;
 - A hazardous and toxic substance committee should be established to decide whether a chemical should be allowed to enter the country;

- o Participation in regional workshops;
- o Conducting of national workshops;
- o Inform all stakeholders of their responsibilities under and benefits of the Convention through awareness-raising workshops and creation of specialized networks for each group (importers, exporters, manufacturers, etc.);
- o National system for management of hazardous chemicals and pesticides.
- **Information and communication:**
 - o The availability of an online database, which can be accessed by other related institutions;
 - Availability of new data on restrictive measures and States that banned import and export and lists of chemicals and pesticides banned for import and export;
 - Access to databases that provide credible information on hazardous chemicals;
 - Continuous renewal of information and provision of new data on levels and character of risk, labelling requirements, and other hazardous chemicals and pesticides regulated by the Convention;
 - Complete information on the real risks of hazardous chemicals and wastes;
 - Results of toxicity and risk level evaluation of new chemicals and pesticides, included in the list of substances regulated by the Convention;
 - Global and regional statistics on environmental and health accidents;
 - Strengthening information networking among institutions;
 - o Need online consultation with experts for additional information in assessing import application and material safety data sheets of chemicals that are subject to PIC procedures.
 - o Internet access and facilities, including computers and informatics materials;
 - o Providing designated national authorities with compact discs including of IPCS, International Agency for Research on Cancer (IARC), IPCS INTOX programme;
 - o A national system of verification of products.
 - o Risk assessment and risk evaluation:
 - o Research on the fate of chemicals in the environment and the risks of chemicals to human health and the environment;
 - o Establish direct links with all national leads for assessment;
 - o Knowledge on responsibility and indemnification for impacts generated or damages caused to the environment;
 - o Better risk assessment means (facilities and expertise);
 - o Monitoring and evaluation.
- **Laboratory and technical support:**
 - o Equipping modern laboratories for the analysis of chemical, physicochemical, toxicological and eco-toxicological properties of chemicals and pesticides;
 - o Reference laboratories;
 - o Laboratory for control of quality of chemicals;
 - o Technical assistance for laboratory infrastructure and logistical support;

- o Testing kits for listed chemicals or modern laboratory equipment for testing;
- o Improvement in field infrastructure of surveillance of health effects due to pesticide exposure;
- o Currently there are not enough highly specialized expert laboratories for determining pesticide residues in products, soils and environment.
- **Resources and assistance:**
 - o Bilateral and multilateral financial support;
 - o Equipment, technology and funds to carry out risk assessments;
 - o To reach a decision on future import under the Convention, developing countries need financial support to undertake surveys on production, use, import and export of relevant chemicals;
 - o Provide, or facilitate the translation of, training materials in Portuguese;
 - o Need staff to set up a mechanism;
 - o Training of individuals and groups on:
 - Convention (filling in response forms from importing countries, notification of final regulatory measures, notifications of export, and incident notification reports) to develop the expertise of relevant officials;
 - For industrial chemicals, all PIC Convention procedures are entirely new and the relevant designated national authority requires training with regard to all aspects;
 - Practical implementation of the Convention (two to four persons);
 - Chemical and physicochemical analysis;
 - Properties of chemical products;
 - Toxicology and eco-toxicology;
 - Risk and hazard evaluation for human health and environment;
 - Assessment of the risks and hazards posed by chemicals;
 - Field of risk assessment, and training of trainers in this field;
 - Use of risk assessment models;
 - Role of the customs service in the detection and control of chemicals;
 - Training of trainers;
 - Sound management of chemicals at the national and local levels;
 - Management of chemical risks in different sectors;
 - Development of legislation and regulation;
 - Control and regulation methods for chemicals and pesticides;
 - Labelling requirements for chemicals and pesticides;
 - Guidance documents on procedures for administrative decisions;
 - Reporting and collection of information on pesticide incident reports;
 - Using information bridge mechanisms to take final necessary regulatory actions.
 - o Expertise:
 - International exchange;
 - Specialized staff;

- In risk analysis;
 - In regulatory matters (conformity of legislation with the Convention);
 - In ecological and human risk assessment of chemicals in chemicals management;
 - In chemical toxicology;
 - In management of highly toxic hazardous chemicals and, in particular, pesticides;
 - Recommendations on toxic hazardous chemicals in general and pesticides in particular;
 - Need for more practical experience;
 - Personnel trained in risk evaluation;
 - Personnel trained in rapid analysis of information;
 - Expertise to guide development of communication mechanisms;
 - Access to countries with experience in the application of the Convention;
 - Manuals of best practices from countries with long experience;
 - Knowledge about the experience of advanced countries in the field of control of export of chemicals to assist development of national mechanisms;
 - Need for a specialist environmental toxicologist or similar expertise to carry out risk assessments for import of chemicals notified under the Convention.
- o Capacity-building:
- To trace and identify chemicals at entry points (links to customs);
 - In packaging, labelling, evaluation of risks and hazards;
 - For databases;
 - On information exchange and evaluation of information;
 - Technical assistance in the management of risks and hazards;
 - For the sound management of chemicals at the national and local levels;
 - On possible impacts generated by chemicals;
 - On the implementation of the Convention instruments for different sectors, mainly those concerned with chemical imports to the country (customs);
 - In environmental and human risk analysis: required support materials are those related to risk models, databases updated with information recognized and validated internationally and fundamentally, databases of exporters and importers of dangerous substances at international level.

19. Sixty-four of 71 countries regulate the manufacture, import, export, sale, use and disposal of pesticides, although four of these noted some limitations in the law (for example, fragmented and weak, poorly implemented, did not address disposal or export), three do not regulate pesticides and four did not respond to this question. Sixty-two of the 64 countries ban and severely restrict pesticides and two did not respond. Fifty-five of the 62 countries base such actions on a form of risk evaluation within the country and an assessment of the exposure likely to occur during use in each country, followed by a conclusion as to whether the risk is acceptable or not, and seven replied in the negative.

20. The three countries that do not regulate pesticides consider it important to do so and two of them identified the following needs:

- o Legislative framework and appropriate expertise to enforce it;

- o Pesticides board of concerned stakeholders.
- o The three countries requested the following assistance to develop a regulatory structure for pesticides:
 - Technical and financial assistance;
 - The provision of related data from other countries.

21. Five of the 64 countries that regulate pesticides identified the need for the following to regulate their sale or use:

- o Improvement and strengthening of legislation and controls;
- o Development of capacity to enable implementation of existing legislation;
- o Uniform laws at the Central African Economic and Monetary Community (CEMAC) level;
- o Reinforcement of the inspectorate of the laboratory;
- o Strengthening capacity of laboratories, research institutions and human resources.

22. Those five countries and one other identified the following requirements for assistance to develop regulatory structures for pesticides:

- o Capacity-building;
- o International expertise (human resources);
- o Financial and technical assistance for:
 - Training inspectors on monitoring techniques;
 - Provision of adequate standards and sampling;
 - Equipment and training for law enforcement officers;
 - Development of a national register of chemicals, including a database on pesticides;
 - Create control mechanisms for all aspects of pesticides;
 - Experience exchange and training, involving countries with a functioning legislative base.

23. Fifty of 71 countries regulate the manufacture, import, export, sale, use and disposal of industrial chemicals, although two noted that existing laws were deficient in some ways, 14 do not regulate industrial chemicals and seven did not respond to this question. Forty-nine of the 50 countries ban and severely restrict industrial chemicals and one does not. Forty-three of the 50 base such actions on a form of risk evaluation within the country and an assessment of the exposure likely to occur during use in each country, followed by a conclusion as to whether the risk is acceptable or not, four replied in the negative and three did not respond.

24. Twelve of the 14 countries that do not regulate industrial chemicals consider it important to do so, and two did not respond. Those 12 countries from four regions (Africa, Asia, Latin America and the Caribbean, Southwest Pacific) identified their main needs to be able to regulate the sale or use of industrial chemicals. The following list is representative of the needs identified by those countries.

- **National priorities:** political support for developing and implementing controls on industrial chemicals.
- **Legislation:** the predominant need, identified by almost all countries in the four regions, involved requests for:
 - o Model regulatory structures;
 - o Technical and financial assistance;
 - o Training in the development of legislation and regulatory schemes;

- o An integrated system of registration and monitoring of chemicals.
- **Information and communication:**
 - o Hazard information on industrial chemicals concerning environment and human health;
 - o Information on the evaluation of dangers performed by other countries;
 - o Establishment of a database;
 - o Updating the national inventory of chemicals and chemical substances.
- **Risk assessment and risk evaluation:** mechanism for evaluating risks related to the use of industrial chemicals.
- **Laboratory and technical support:**
 - o Inspectorate, analytical equipment and procedures to identify the chemicals;
 - o System for analysis (laboratory), control and oversight.
- **Resources and assistance:** specialized staff.

25. Those 12 countries and one other specified requirements for assistance to develop a regulatory structure for industrial chemicals, including:

- **National priorities:** assistance to encourage policy makers to support the need for regulation and to provide the needed resources.
- **Legislation:**
 - o Finances to fund consultations with stakeholders on legislation and regulations;
 - o Model of appropriate draft legislation and regulatory structure;
 - o Development of legislation for the implementation of globally harmonized system (GHS);
 - o Financial support, infrastructure, expertise and capacity-building to implement an effective national industrial chemical management strategy;
 - o Capacity-building for the development of relevant legislation;
 - o A policy specialist or legal draftsman with experience in developing and or drafting industrial chemicals policy.
- **Information and communication.** Establishment of a database:
 - o At local and regional level, including the effective sanctions in regulations;
 - o Provision of related data from other countries;
 - o Diagnostic elaboration of industrial chemicals use;
 - o Support for awareness and chemical inventory;
 - o Technical and financial assistance;
 - o Strengthening of human resources;
 - o Expertise.
- **Laboratory and technical support:**
 - o Installation of a reference laboratory;
 - o Establishment of a monitoring system;
 - o Analytical equipment for PIC chemicals;
 - o Putting together inspectorate;
 - o Computers and software.

26. Seven countries in three regions (Africa, Asia, Near East) that regulate industrial chemicals identified the need for the following to regulate their sale or use:

- **Legislation:** revision of existing legislation and regulations to reflect the Convention obligations or the development of a new law in the area of chemicals management.
- **National coordination:** establishment of a national committee or other structure to be responsible for issues of chemical management.
- **Information and communication:** training and awareness-raising in the area of chemical management.
- **Laboratory and technical support:**
 - o Laboratory to test industrial chemicals;
 - o Training of staff on analysis of chemicals and monitoring hazardous substances.
- **Resources and assistance:**
 - o Mobilization of resources to allow chemical management programmes to take place;
 - o Financial and technical assistance to develop a regulatory structure;
 - o Strengthening capacity of laboratories, research institutions and human resources;
 - o Trained staff;
 - o Make use of international experience in this field.

27. Seven countries in four regions (Africa, Asia, Europe, Near East) that regulate industrial chemicals specified the following needs for assistance to develop a regulatory structure for industrial chemicals:

- **Legislation:** development of adequate laws in the area of industrial chemicals management.
- **National coordination:** establishment of a national committee or other structure in the area of chemicals management.
- **Information and communication:**
 - o Technical and financial assistance in the development of a national register of chemicals, including a database on industrial chemicals;
 - o Training and awareness-raising in the area of chemical management.
- **Laboratory and technical support:** financial and technical assistance to train laboratory staff, monitoring agents and law enforcement officers.
- **Resources:**
 - o Mobilization of resources to allow programmes of chemical management to take place;
 - o Material, technical and financial assistance;
 - o Human expertise;
 - o Training and exchange of experience using the examples of countries with comprehensive structures for control and regulation of the life-cycle of industrial chemicals.

28. Fifty-three of 71 countries access hazard or risk evaluations produced by other countries, although two of the countries noted that this was not the case for both pesticides and industrial chemicals, 12 do not access such evaluations and six did not respond to this question. Fifty-one of the 53 countries use them in making decisions on chemicals and two did not respond. Forty-seven of these countries indicated that the assessments were accessed through:

- o Internet (web sites, databases, etc.);
- o Research;
- o Scientific literature and reviews, publications, chemical news, journals;
- o Evaluation of international literature and scientific data;
- o National institutions and experts, using data available in international literature and information sources;
- o Dossier information submitted for the registration of chemicals and pesticides (pre-manufacturing and pre-importation notification processes);
- o Correspondence with main users, industries or service providers dealing with specific chemicals;
- o Correspondence received in country through embassies abroad;
- o Direct communication with authorities of regional and national organizations;
- o Cooperation and participation in different regional and international programmes;
- o International training courses and workshops, which lead to sharing data, information and knowledge on chemical management;
- o Information distributed under the PIC procedure, by the Convention secretariat (PIC Circular, decision guidance documents) and obtained from the Convention web site;
- o Correspondence received from international conventions (including the Stockholm, Rotterdam and Basel Conventions);
- o Sahelian Committee of Pesticides (Comité Sahélien des Pesticides, or CSP), headquarters in Mali at the Sahel Institute;
- o In the absence of risk evaluation of local environment, evaluations carried out by countries of similar geographical settings are acceptable for national assessments;
- o Documents, guidelines, and other materials from other countries (Canada, European Union or its member States, United States);
- o Accessing public reports on industrial chemicals that are available on national web sites;
- o International organizations and programmes (for example, FAO, IPCS, OECD, UNEP, WHO);
- o Reports pursuant to bilateral or multilateral agreements on technical cooperation.

29. Forty-six of 53 countries used this information to analyse situations in relation to national conditions, to inform users of the hazards presented by chemicals or pesticides, support policy on chemicals and pesticides management, and to provide information to decision makers concerning actions to register, ban, prevent or restrict the use of hazardous chemicals or pesticides.

30. Forty-seven of the 53 countries responded to the question on the utility of such assessments, with one indicating “not useful”, nine “useful”, 24 “very useful”, one “extremely useful”, and 12 noted the general applications for such information.

31. Fifty of 71 countries have accessed hazard or risk evaluations produced by international organizations or programmes, 14 have not done so, and seven did not respond to this question. Of the 50 countries that have accessed such evaluations, 45 have used them to make decisions on chemicals, two have not, and three countries did not respond.

32. Forty-five of 50 countries used this information to: analyse situations in relation to national conditions; make risk evaluations or identify the risks of chemicals; inform users of the hazards presented by chemicals or pesticides; orient detailed studies performed within national research institutions; support policy on chemicals and pesticides management; re-evaluate available data;

propose amendments to legislation and regulations; determine the latest status of pesticides in the world; identify contacts in other organizations; and provide information to decision makers concerning actions to register, ban, prevent or restrict the use of hazardous chemicals or pesticides.

33. Forty-four of the 50 countries responded to the question on the utility of such assessments, with one indicating “not useful”, 11 “useful”, 25 “very useful”, and seven noted the general applications for such information.

34. Forty-four of 71 countries made requests for secretariat assistance related to the assessment of industrial chemicals or pesticides, two did not request assistance and 25 did not respond to this question. The following list is representative of the requests identified by the 44 countries.

- **National coordination:**
 - o Technical and scientific assistance to promote and establish the environmentally sound management of chemicals and pesticides;
 - o Development of regional cooperation;
 - o Permanent regional meeting, exchanging of experiences;
 - o Determine if each country profits effectively from relevant international tools in this area through periodic feedback meetings;
 - o Conduct regional simulation exercises on the implementation of the Convention.
- **Information and communication:**
 - o Databases on chemicals and pesticides:
 - Conduct a national survey of chemicals and pesticides in use and develop and implement a comprehensive database on industrial chemicals and pesticides;
 - Create an information exchange system in the field of chemicals in order to use all information on risk assessment;
 - Need assistance in acquiring and distributing information;
 - Need updated information as most of ours is from 1999 or earlier;
 - Access to hazard or risk assessments produced by other countries;
 - Access to hazard or risk evaluations produced by international organizations or programmes (e.g., International Program on Chemical Safety, OECD high production volume (HPV) screening information data sets (SIDS));
 - Procedures for assessing international hazard and risk evaluation programmes for industrial chemicals;
 - Access to literature and information;
 - Regular receipt of information on chemical risk and hazards;
 - Mechanisms for sharing information locally.
 - o Internet access and facilities:
 - Regularizing access to international data bases and improving capacity to access information through the internet;
 - Infrastructure such as computers with internet connection;
 - Provision of hardware and software for improving information access and networking.
 - o Publishing periodically reviews of toxicity or hazard evaluation of industrial chemicals and pesticides;
 - o Legislative and methodology-control questions;

- o UNEP chemicals should have an extensive database covering all main aspects of chemical safety;
- o Make available the text of national regulations;
- o Detail relevant information sources;
- o Guidelines;
- o Channels for rapid information access.
- **Risk assessment and risk evaluation:**
 - o Modern infrastructure for the evaluation of industrial chemicals and pesticides and training of human resources;
 - o Capacity-building on toxicology, risk evaluations and toxics control;
 - o Financial and technical support of the secretariat as evaluation of industrial chemicals is limited to polychlorinated biphenyls (PCB), asbestos, stocks, etc.;
 - o Training of evaluators on annex III chemicals, and other hazardous industrial and agro-pharmaceutical chemicals;
 - o Training on registration procedures, evaluation of data and assessment when registering both industrial chemicals and pesticides;
 - o Capacity-building for hazard screening and risk assessment of hazardous chemicals;
 - o Training of personnel in risk and hazard evaluation of pesticides;
 - o Establish a mechanism where developing countries can request assistance from international organizations in conducting risk/hazard evaluations;
 - o Assist the national authority with carrying out assessments;
 - o Provide recommendations relating to severely hazardous pesticides, as they will be banned and severely restricted due to long-term effects on users;
 - o Participation in technical meetings concerning risk assessment and risk management;
 - o Enhance risk assessment with more information on methods for risk evaluation;
 - o Harmonization of risk assessment models in terms of human health and environment, to establish comparative or equivalent elements, trying to generate on the basis of similar conditions (climatic conditions, cultural, etc.), to project similar effects in other countries;
 - o Generation of common models to certain realities, in order to facilitate its application in a greater number of countries;
 - o Orientation on other specific sources, to access assessments of risks and hazards that have been developed in humid countries with a tropical climate;
 - o Advice on the sources of data on risk assessment for pesticides and industrial chemicals;
 - o Procedures for conducting national risk assessments;
 - o Capacity-building in the area of risk analysis and risk assessment including:
 - o Training of local cadres for the collection and analysis of data;
 - o Technical capacities such as laboratory equipment for that purpose;
 - o Information exchange network with developed countries; and
 - o Availability of information in Russian on the Convention web site to guide decision-making.

- **Laboratory and technical support:**
 - o Support for the establishment of a laboratory for control of quality of chemicals and to analyse residues in foods and the environment;
 - o Establishment of a national laboratory for the control of the quality of industrial pesticides;
 - o Support designated national authority for pesticides to purchase modern analytical equipment for PIC substances;
 - o Experienced laboratories should train researchers in modern scientific methods;
 - o Development of laboratory and documentation facilities to identify industrial chemicals and pesticides;
 - o Accreditation of national laboratories quality according to international regulation;
 - o Qualification for technicians who work in the laboratory analysis of pesticide residues and formulations of pesticides to be used.

- **Resources and assistance:**
 - o Strengthening of human, financial and material resources (including training, laboratories, database, establish a monitoring system);
 - o Financial and technical assistance for bringing into play the chemicals conventions, in particular for the elaboration of national implementation plans for the Stockholm Convention and a national chemicals profile;
 - o Technical and financial assistance;
 - o Financial and technical support to train various stakeholders on chemical safety;
 - o Support for two years an industrial chemicals unit at the industrial chemicals designated national authority;
 - o Strengthening of capacity in human, technical and material resources;
 - o Institutional strengthening and capacity-building through training of relevant officials;
 - o Training in the practices of other countries that are advanced in this field;
 - o Capacity-building on the safety management of chemicals and their wastes;
 - o Technical assistance on equipment and technology;
 - o Provide project writers, define a project to commence chemicals and pesticides management and control and facilitate acceptance of project by provider;
 - o Secretariat to facilitate requests by taking them to the relevant international organizations or countries with the resources and expertise.

IV. Bilateral technical assistance

35. Sixty of 71 countries were aware of the provisions in article 16 of the Convention for bilateral technical assistance, eight were not aware and three countries did not respond to this question.

36. Twenty-nine of 71 countries have participated in bilateral technical assistance as either a provider or recipient of assistance, although three countries noted that this had been limited to industrial chemicals, 40 have not participated and two did not respond to this question. Forty countries that had not participated in such assistance, the three countries that noted that assistance had been limited to industrial chemicals and one country that had not responded to the original question provided the following responses to the questions concerning possible main reasons for their non-participation:

- o Twenty-one countries did need assistance, four did not, and 19 did not respond;

- o Fourteen were not aware of assistance needs of other countries, 13 were aware, and 17 did not respond;
- o Twenty countries were not aware of providers, ten were aware, and 14 did not respond;
- o Eleven were unable or reluctant to contact providers, 14 were able to do so, and 19 did not respond; and
- o Thirty-nine would consider providing or receiving bilateral technical assistance in the future and five countries did not respond.

37. Fifteen of 71 countries have assisted another country with chemicals management or with implementing the Convention, 55 have not done so and one did not respond to this question. Those 15 countries from six regions provided the following information concerning their assistance activities:

- o All 15 countries said that the other country made the initial approach;
- o Thirteen countries said that they were able to assist in developing solutions for the identified problems, one was unable to do so, and one did not respond;
- o Fourteen said that they were willing to assist in bilateral assistance programmes in the future and one did not respond;
- o Fourteen countries provided the following comments on their success in providing bilateral technical assistance:
 - A national committee for chemicals management was set up as a result;
 - Some results were attained at the national level, but more local information provision is needed;
 - Contributed to the development of chemicals management technology in developing countries;
 - Assistance was provided in the form of information, training and experience;
 - Assisted gradual development of Convention process in recipient country;
 - Supported regional PIC implementation workshops organized by the secretariat by providing technical expertise and direct financial contributions;
 - Hosted training courses on implementing chemicals conventions for experts from developing countries, designated national authorities and other chemicals related institutions;
 - Provided assistance in general chemicals management;
 - Assistance under way in one South American, two African and three Asian countries;
 - Cooperation needs further development and improvement;
 - The recipient country was satisfied with assistance;
 - While the transfer of information and procedures to implement a pesticide management system was successful, the implementation by the receiving country was slower than expected;
 - Awareness was raised about the Convention and advice was given about establishing registration of pesticides in a country;
 - In several cases, clear results were achieved;
 - Led to development of national guides, improved governance for chemicals and follow-on assistance for some issues.

38. Twenty-two of 71 countries have received bilateral assistance in implementing the Convention or in general chemicals management directly from another country or from an organization, 45 have not received such assistance, and four did not respond to this question. Those 22 countries from six regions provided the following responses to questions concerning their experiences with bilateral assistance:

- o Nineteen countries replied that it was easy to obtain;
- o Twenty countries solicited the assistance;
- o Eighteen countries replied that it met the needs as initially defined;
- o Thirteen countries replied that it was directly relevant to the Convention;
- o Twenty countries replied that it was relevant to general chemicals management and one did not respond; and
- o Twenty countries would consider using bilateral assistance in the future and one did not respond.

39. Forty-five of 71 countries made specific requests to the secretariat relating to assistance in establishing a system to receive support in chemicals management from, or to provide support to, another country, four did not request such assistance and 22 did not respond to this question. The following list is representative of the requests identified by the 45 countries:

- **Legislation:**
 - o Assistance in developing a law and regulations in the area of chemical management;
 - o Support implementation of legislation;
 - o Bring regulations into conformity;
 - o Training programmes on legislative and methodology-control basis for the management of chemicals and wastes, as well as for rational use of chemicals through their life-cycle;
 - o Making use of expertise and experience of developed countries in the area of chemicals life-cycle management to enable development of national mechanisms to enhance integrated chemicals management.
- **National coordination**
 - o Technical assistance to develop a national profile;
 - o Establish a national committee or structure responsible for issues of chemical management;
 - o Cooperation with other countries on chemical management;
 - o Participation in national and regional workshops;
 - o Create structures in the region.
- **Information and communication:**
 - o Establish a national database system;
 - Technical and financial assistance in setting up a national register of chemicals, including data on industrial chemicals and pesticides;
 - Strengthen communication links to disseminate information to institutions and other stakeholders.
 - o Improve communication among designated national authorities and lead regulatory and implementing agencies;
 - o Training and awareness-raising in the area of chemical management;
 - o Hold awareness-raising workshops and field visits to PIC chemical users;

- o Resource persons or experts including materials for conducting a national workshop on Convention implementation;
- o Access hazard or risk evaluations produced by other countries;
- o Access hazard or risk evaluations produced by international organizations or programmes such as the International Programme on Chemical Safety, OECD HPV SIDS programme;
- o Sharing information with countries where an efficient and effective system is working.
- **Risk assessment and risk evaluation:**
 - o Establishment of a system for the evaluation of risk and dangers related to the management of chemicals;
 - o Capacity-building or technical assistance for training of personnel in risk and hazard assessments of chemicals;
 - o Provide programmes for benchmarking risk and hazard assessments with a developed country;
 - o Management and risk evaluation;
 - o Conduct non-chemical or biological control in plant protection;
 - o Establishment of a monitoring system;
 - o Establish monitoring programmes that could assist with national risk assessment and that can be extended to the Caribbean region, including:
 - Health and environmental monitoring equipment;
 - Monitoring the distribution of chemicals and pesticides after importation to be able to identify hot spots and target populations;
 - Suitable databases to support collection and sharing of monitoring data;
 - Strengthening the programme for restricting pesticides;
 - Mechanisms for exchange of information on risk assessment.
- **Laboratory and technical support:**
 - o Strengthening the capacities of the analytical laboratory;
 - o Accreditation of national laboratories quality according to international regulation;
 - o Establishment of a reference laboratory;
 - o Laboratories and equipment for controlling hazardous pesticides;
 - o Support designated national authority for pesticides to purchase modern analytical equipment for PIC substances.
- **Resources and assistance:**
 - o Assistance in formulating project proposals in chemicals management;
 - o Assistance in project proposal writing and project management;
 - o Support a unit for two years at the industrial chemical designated national authority;
 - o Facilitate access to potential sponsors and format of their project proposals;
 - o Bilateral or multilateral technical and financial assistance in the management of chemicals;
 - o Training;
 - o Strengthening the capacities of the planning team;

- o Reinforcement of institutional capacity;
- o Support for country's application;
- o Mobilization of resources to allow programmes of chemical management to take place;
- o Technical assistance including training, infrastructure building and capacity-building to manage agricultural chemicals throughout their life-cycle;
- o Training experts who will train other countries;
- o Capacity-building in chemical management by training expertise working in chemical laboratories;
- o Capacity-building in monitoring and data gathering and evaluation on chemical management;
- o Technical and financial assistance in:
 - National capacity-building;
 - Training customs, exporters, importers, merchants and agents working in this field at the local and regional levels;
 - Training the trainers at the local and regional levels;
 - Environmental experts;
 - Customs agents specialized in chemicals;
 - Diplomats.
- o Financial, technology, information and training, etc.;
- o Technical and scientific assistance to promote and establish the environmentally sound management of chemicals and pesticides;
- o Establish a system to receive support in chemicals management from another country or to provide support to another country;
- o Financial support, infrastructure, expertise and capacity-building to implement the following action plans and prioritized activities identified under them:
 - Industrial chemicals management strategy;
 - Strengthening pesticides management capacity;
 - Chemical hazard communication;
 - Financial resources mobilization strategy;
 - Inter-ministerial information exchange;
 - Inter-ministerial coordination; and
 - Updating of national chemical profile.
- o Assistance to identify and communicate to potential providers;
- o A continuously updated summary on all country-related technical assistance activities would be useful to use synergies and avoid duplication and parallel support;
- o Elaborate, develop and implement common projects and programmes with other countries related to exchange of information (how countries manage the substances which have not been regulated), to improve chances to identify and access financial resources for those common projects;
- o The main problem is lack of resources;
- o Organize programmes to assist in implementing national chemicals management programmes for or among the Common Market of the Southern Cone (MERCOSUR) countries;

- o Facilitate access for MERCOSUR members to find out about cooperation programmes of other countries.
- o Generate a format for a diagnostic system where the strengths and weaknesses of the countries in this matter are detected, as well as the updated information that they can offer to other countries in the matter of cooperation and training: this information should be located in a single web site, and the information should be verified by the secretariat prior to its publication;
- o Establish a mechanism for the coordinated implementation of the Rotterdam, Stockholm and Basel Conventions;
- o Specific information about possibilities and assistance alternatives provided by other countries as support to the implementation of the Convention and to chemical management in general;
- o Capacity-building on the safety management of chemicals and their wastes;
- o Technical and economic assistance for chemical management;
- o Technical assistance on equipment and technology;
- o Guidelines for establishing a system to receive support in chemical management;
- o Liaising between donor and recipient countries and making proper connections;
- o Providing propositions for specific needs of each country;
- o Formulating requests for assistance from donor countries;
- o Technical assistance (including training, study tours, international consultants);
- o Financial assistance to conduct pilot projects to promote cleaner production and safe alternative chemicals other than chemicals restricted in the Convention;
- o Setting up regional projects for assistance for countries having similar needs in a region;
- o Provide project writers, define a project to commence chemicals and pesticides management and control and facilitate acceptance of project by provider;
- o An initial consultation to provide guidance and advice on how to obtain support from bilateral donors, as the initial stage of establishing a system to obtain support in chemicals management from another country.

V. Regional cooperation

40. Forty of 71 countries participate in regional programmes in seven regions that assist in implementing national chemicals management, although one indicated that this was limited to pesticides, 24 do not participate in such programmes and seven did not respond to this question. Thirty-four of the 40 countries replied that these were helpful in implementing the Rotterdam Convention, five countries replied that they were not helpful and one did not respond. Thirty-nine countries identified regional programmes, including:

- **Africa:**
 - o Programme for harmonizing pesticides regulation in the middle-East and North Africa;
 - o Through the Phytopharmaceutical Committee of the Humid Zone of East and Central Africa (Comité Phytopharmaceutique de la zone Humide de l'Afrique de l'ouest et du Centre - CPHAOC) and phytosanitary information system (information système phytosanitaire- ISYSPHYT), Benin, Togo, Côte d'Ivoire, Ghana and Guinea harmonize their actions with the product manufacturers;
 - o Phytosanitary information system (Information Système Phytosanitaire);
 - o Southern African Development Community (SADC) obsolete pesticides disposal programme;

- o SADC PCB project;
- o Sahelian Committee on Pesticides (Comité Sahélien des Pesticides);
- o At CENAC level, registration and environmental management of pesticides;
- o Common regulations for pesticide registration in Inter-States Committee on Droughts in the Sahel (CILSS) member States;
- o IFCS Africa Regional Meetings;
- o Africa Phytosanitary Council meetings;
- o Africa Ministerial Conference on the Environment;
- o Inter-African Phytosanitary Homologation (Homologation Phytosanitaire Interafricain - HIP);
- o Inter-African Phytosanitary Council (Conseil Phytosanitaire Interafricain - CPI);
- o Regional projects such as urban and peri-urban horticulture (l'Horticulture Urbaine et Péri-Urbaine – HUP), reduction of the dependence in the use of pesticides in the Niger and Senegal River basins;
- o FAO (Code of conduct on pesticides, and obsolete stocks);
- o Regulation of dichlorodiphenyltrichloroethane (DDT) and similar products and initiation of the reduction of other POPs.
- **Asia:**
 - o Hosting a workshop on environmental monitoring of POPs for East Asian countries;
 - o APEC Chemical Dialogue Steering Group;
 - o Expert Working Group on Harmonization of Maximum Residue Levels in Association of South East Asian Nations (ASEAN);
 - o Harmonization of pesticide registration and residues in ASEAN countries.
- **Europe:**
 - o Exchange of information on ministerial seminars, working meetings;
 - o International workshops and conferences;
 - o Twinning projects (European Union Pre-Accession Assistance for Institution Building);
 - o Multi-beneficiary programmes: technical assistance information exchange office projects in cooperation with European Community and other member States;
 - o In the regional forum of the authorities of Central and Eastern Europe (CEUREG) in Budapest, the Convention was discussed many times and experts from the secretariat and other countries provided information about the procedure;
 - o Central and East European plant protection product (CEUREG);
 - o European Union (EU) scale cooperation;
 - o EU joint registration scheme of active substances and joint review programme of existing active substances, including information sharing tools (e.g., access to data base, joint evaluation meetings);
 - o Baltic Environmental Forum (BEF) Baltic Regional Cooperation on Chemicals Control (BACCON) project;
 - o Close cooperation with the EU on chemicals management through the European Environment Agency (EEA) agreement;
 - o IFCS;

- o Cooperation with Commonwealth of Independent States (CIS) countries.
- **Latin America and the Caribbean:**
 - o Community of the Andes;
 - o MERCOSUR;
 - o Meeting of administrators of Latin American Antarctic Programmes (RAPAL);
 - o International Regional Organization for Plant and Animal Health (OIRSA);
 - o Coordinating group of pesticides control boards of the Caribbean;
 - o Project to improve agro-chemicals management;
 - o Inter-American Institute for Cooperation on Agriculture (IICA), to propose harmonized pesticide registration for the region.
- **Near East:**
 - o Global report for regionally based assessment of Persistent Toxic Substances (PTS) (Egypt);
 - o Global mercury assessment project (Egypt);
 - o Programme for the harmonization of pesticide registration system with North Africa and the Middle East countries (Jordan);
 - o Pesticides are registered after their registration in the Russian Federation and Ukraine (Kyrgyzstan);
 - o Pesticide registration scheme with Lebanon (Syria).
- **North America:** Pesticide re-evaluation programme, North American Free Trade Agreement (NAFTA) Technical Working Group on Pesticides.
- **Southwest Pacific:**
 - o Information sharing;
 - o Liaison with Australia;
 - o POPs disposal (Australian Agency for International Development (AUSAID), UNEP, South Pacific Regional Environment Programme (SPREP)).

41. Twenty-four of 71 countries participate in networks in six regions that assist in implementing national chemicals management, 39 do not participate in such networks, and eight countries did not respond to this question. Twenty-one of the 24 replied that these were helpful in implementing the Convention and three replied in the negative. Twenty-one countries identified the following regional networks:

- **Africa:**
 - o SEARCH;
 - o SADC;
 - o IFCS Africa regional meetings;
 - o Africa Phytosanitary Council meetings;
 - o Africa Ministerial Conference on the Environment;
 - o ISYSPHYT network in Abidjan (Côte d'Ivoire) for pesticides;
 - o Basel Convention regional centre in Dakar (Senegal), for hazardous wastes;
 - o CENAC network;
 - o CEAC network;
 - o Chemicals information centre in Dakar (Senegal).

- **Asia:** network for pesticide regulatory authorities in ASEAN countries.
- **Europe:**
 - Workshop on strengthening of cooperation based on chemicals and hazardous wastes conventions (Prague, March 2004);
 - Regional workshop on the coordinated implementation of the Basel, Rotterdam and Stockholm Conventions (Riga, April 2004);
 - Twinning projects (EU Pre-Accession Assistance for Institution Building);
 - Multi-beneficiary programmes: technical assistance information exchange office projects in cooperation with EC and other Member States;
 - EU scale cooperation;
 - Chemicals Legislation European Enforcement Network (CLEEN);
 - Baltic Environmental Forum;
 - Subregional workshop on the implementation of the Convention (Ukraine 2002);
 - Cooperation with the EU on chemicals management through the EEA agreement.
- **Latin America and the Caribbean:**
 - RAPAL;
 - OIRSA;
 - IFCS.
- **North America:** Commission for Environmental Cooperation.
- **Southwest Pacific:**
 - IFCS;
 - Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region;
 - Secretariat of the Pacific Community;
 - CLEAN (run by Australia's Department of Environment and Heritage).

42. Twenty-six of 71 countries stated that they participate in other networks in all seven regions that assist in implementing national chemicals management, 37 do not do so and eight did not respond to this question. Twenty-two of those 26 countries replied that these were helpful in implementing the Convention, three replied in the negative and one did not respond. Those other networks include:

- **Africa:**
 - Stockholm Convention;
 - United Nations Institute for Training and Research (UNITAR);
 - Inter-African Phytosanitary Council (CPI);
 - IFCS;
 - CIEN;
 - Information exchange network on capacity-building for the sound management of chemicals (INFOCAP);
 - Web sites for the conventions (PIC, POPs, Basel), WHO, FAO.

- **Asia:** OECD Environmental Health and Safety Programme.
- **Europe:**
 - o EU network;
 - o CLEEN network of authorities in Europe concerned with enforcement of chemical legislation;
 - o Pesticide Action Network (PAN) Pesticides Database;
 - o Cooperate with the EU on chemicals management through the EEA agreement.
- **Latin America and the Caribbean:**
 - o IFCS;
 - o SAICM;
 - o PAN;
 - o Subregional centre network of the Basel Convention in Argentina;
 - o Subregional centre network of the Basel Convention in Uruguay.
- **Near East:**
 - o INFOCAP network;
 - o Egyptian Hazardous Substances Information and Management System (EHSIMS) at national level, studies are moving forward to apply such network at the regional level;
 - o UNITAR;
 - o SDC.
- **North America:**
 - o Pan American Health Organization;
 - o IFCS;
 - o Strategic Approach to International Chemicals Management.
- **Southwest Pacific:**
 - o OECD Chemicals Programme;
 - o FAO;
 - o UNEP.

43. Twenty-six of 71 countries participate in shared customs controls with neighbouring countries, 37 do not and eight did not respond to this question. Twenty-two of 26 countries from five regions indicated that this helps by reducing the import of illegal chemicals, screening the entry of new chemicals and regulating the movement of hazardous chemicals. Twenty-eight of the 37 countries that do not participate in shared customs controls with neighbouring countries replied that such controls would assist in the national management of chemicals relating to implementation of the Convention, four replied in the negative and five did not respond.

44. Thirty-five of 71 countries replied that their Convention designated national authority does contact authorities in other countries in their region to discuss chemicals management issues, 28 replied in the negative and eight did not respond to this question.

45. Sixty-three of 71 countries are interested in participating in a network of Convention designated national authorities, one was not interested and seven did not respond to this question. Fifty-four of the 63 felt that this network should be formal, five replied in the negative and four did not respond. Fifty-six countries identified preferred characteristics of such networks, including the following:

- **Format:**
 - o Electronic and computerized networks for information exchange;

- o Internet-based;
- o E-mail group would be enough initially;
- o Database in a regional centre;
- o Periodic workshops or meetings for exchange of experience;
- o Formal training;
- o Implementation of a voluntary scheme, pending ratification;
- o Possibility of providing information CDs, booklets and guides from time to time;
- o Freely available;
- o In national official languages of the countries.
- **Geographic nature:**
 - o Global, regional and subregional network (a wide variety of responses on this point);
 - o Global network:
 - Include developed and developing countries;
 - With developed countries, in order to know the prohibited and restricted chemicals, reasons for their prohibition, conditions and available alternatives to those chemicals;
 - Need strong and direct interaction between the developed and developing countries, to promote equality in opportunities and knowledge and generate a culture of harmonization;
 - But structured regionally;
 - It could begin in the regions;
 - With regional and subregional nodes, which could be located with and administered by regional FAO and UNEP representatives.
 - o Regional network between countries with:
 - Similar levels of industrial development;
 - Common climatic conditions;
 - Agricultural practices and trade issues;
 - Same language of work.
 - o Start at subregional level, then ultimately global, in line with the globally harmonized system;
 - o Regional and subregional nodes should be housed under existing institutions;
 - o Through the Basel Convention Regional Centre in Pretoria;
 - o South America;
 - o MERCOSUR;
 - o Within Carpathian basin;
 - o First provide regional and subregional meetings, workshops, and other forums to improve organization of network members and then establish electronic data sharing.
- **Information exchange on:**
 - o All information on all chemicals (pesticides and industrial chemicals);
 - o Each country with regard to severely restricted and banned industrial chemicals and pesticides;

- o Taking common decisions regarding implementation of the Convention;
- o Country information concerning banned and in-use products, as well as existing Convention activities;
- o Legislation and regulations;
- o Regulatory strategies, mechanisms and actions taken;
- o List of registered and banned chemicals could be shared through web sites;
- o Legal measures taken and penalties;
- o Regulatory and administrative decisions taken;
- o National adopted regulatory measures for chemicals;
- o Regulation, control, mechanisms of private and public institutional participation, and citizen participation;
- o Achievements and success stories;
- o Major problems or disasters and solutions;
- o Accidents related to handling of chemicals and measures taken to limit their consequences;
- o Poisonings;
- o Contaminated sites;
- o Information on country status;
- o Statistics, imports and exports, amounts used and produced;
- o Data on traded chemicals and trade partners, patterns and history;
- o Movement of hazardous chemicals, pesticides and wastes within the region;
- o Transboundary movement of illegal chemicals;
- o Common problems encountered by the designated national authorities in implementing the Convention;
- o Identifying needs of designated national authorities;
- o Use the list of designated national authorities;
- o Share information on the advances of the Convention and about the situation of chemical products in each country;
- o Emphasize accurate and correct translations into different languages when distributing information;
- o Eco-toxicological and hazard data;
- o Share data and reports on risk assessment and risk management;
- o National risk and hazard assessments;
- o Linking databases on chemicals, risk evaluations and analysis;
- o Risk characteristics observed under local conditions that have been used to enforce regulatory decisions;
- o Substitutes and other environmentally safe management alternatives;
- o Methods and alternatives for treatment and final chemical disposal, including pesticide wastes.

46. Forty-five countries identified the assistance required to establish such a network and the following list is representative of these requirements.

- **National coordination:**
 - o Establishment of a national committee for the management of chemicals;
 - o Joint programme for pesticide registration scheme;
 - o Development of national institutional capacity.
- **Information and communication:**
 - o Financing a national centre for information exchange;
 - o Establishment of databases and web sites:
 - National project for compiling resources and establishing a practical system of information exchange;
 - Provide databases where these sources exist or support subscriptions to make access possible;
 - Specification of the type of data;
 - Construct a local database for chemicals and make it available for all stakeholders;
 - Establishment of connections with different research centres.
 - o Development of networks:
 - A chemical information exchange network;
 - CIEN is a good start but need to design a regional tracking system that can be adapted for local use-national level;
 - Identifying the focal points and commitment for such networking;
 - Introduce us to the relevant networks that exist;
 - E-mail group (list of contacts), which may be available from the designated national authorities list;
 - Network establishment supervision;
 - Harmonize the computer systems of the different countries, and provide necessary support to them;
 - Identify the sources of information that would be available to the network and mechanisms for how this information can be shared.
 - o Creation and strengthening of existing national infrastructure to facilitate electronic access and information exchange:
 - Material support to equip the infrastructure for these networks;
 - Informatics and system support for the database system;
 - Provide hardware, software and technical training for users;
 - Internet infrastructure subscription.
 - o Obtaining and exchanging information;
 - o Organization of workshops on the integrated implementation of international environmental agreements bringing together designated national authorities and national focal points;
 - o Regional and subregional workshops for human resources qualification on chemicals management for a network of Convention designated national authorities;
 - o Set up regional office for Africa and East Africa at UNEP (Nairobi);
 - o Support for establishing and developing a shared codification system considering especially PIC and POPs;

- o Provide international coordination by the secretariat.
- **Risk assessment and risk evaluation:** generate risk evaluation models and provide access to relevant and important data bases.
- **Laboratory and technical support:** equipment for field measurement, sampling, extraction and laboratories.
- **Resources and assistance:**
 - o Bilateral or multilateral aid to fund such networks;
 - o Technical, financial and material assistance;
 - o Technical and financial support in:
 - Setting up a database on legislative and methodology-control basis for chemical management;
 - Developing a database on severely restricted and banned industrial chemicals and pesticides.
 - o Technical assistance in organization of negotiations;
 - o Technology assistance;
 - o Training of personnel;
 - o Regional training on networking;
 - o International training to start;
 - o Training the designated national authority concerning the web site;
 - o Capacity-building;
 - o Strengthening of capacities of the designated national authority;
 - o Strengthening of capacities to:
 - Collect data;
 - Develop legislation and regulation;
 - Raise awareness of risks related to the management of chemicals;
 - Evaluate risks and hazards;
 - Control and manage chemicals.
 - o Outfitting country resource persons;
 - o Financing the participation of the designated national authorities at different workshops and seminars;
 - o Financial support for organizing meeting and for participation in meetings;
 - o Infrastructure building and capacity-building to manage agricultural chemicals throughout their life-cycle;
 - o Facilitation of participation in regional meetings;
 - o A facilitator;
 - o Human resources, including capacity-building, study tours, training courses and others.

47. Fifty-seven of 71 countries consult with other stakeholders in taking decisions on chemicals management, six do not consult with such stakeholders and eight did not respond to this question. Fifty-five countries identified the types of stakeholders and the benefits of consulting with such groups. The stakeholder groups included:

- o A wide range of public institutions responsible for environment, public and occupational health, food and drugs, pesticides, agriculture, industry, commerce,

defence, energy, interior, finance, justice, customs, natural resources, standards, labour, standards, economic development and trade, foreign affairs, etc.;

- o National and state or provincial governments;
- o Inter-ministerial and national advisory or coordinating committees on chemicals, pesticides, etc.;
- o National and sectoral focal points;
- o Non-governmental organizations;
- o Environmental non-governmental organizations;
- o University and research institutions;
- o Scientific institutions;
- o Private medical institutes;
- o Public health groups;
- o Industry and industry associations;
- o Chambers of commerce, industry and agriculture;
- o Employers union;
- o Labour unions;
- o Professional groups;
- o National associations of farmers and fishermen;
- o National agrochemicals associations;
- o Main users of agricultural pesticides;
- o Agricultural trading companies;
- o Agricultural groups;
- o Electricity companies;
- o Private firms that commercialize products;
- o Producer, user and consumer groups;
- o Merchants, dealers, exporters and importers;
- o Community in general through different media;
- o Concerned public;
- o Participants in the overall mechanisms of control.

48. The following list is representative of the comments submitted by 55 countries concerning the benefits of using stakeholder consultations in making decisions on chemicals management:

- o Creates awareness among stakeholders;
- o Allows a better understanding by all parties of their responsibilities in dealing with chemical management issues;
- o Consultation provides a more wholesome approach as it includes perspectives from different stakeholders;
- o As much information as possible is taken into account;
- o Consulting allows identification of sector's needs and harmonized, balanced decisions;
- o Stakeholder concerns are taken into account in conducting risk and benefit analysis and making final decisions on chemicals management;

- o The views of affected parties are considered in making fair and objective decisions that are respected by all stakeholders, with ownership of decisions made;
- o Meaningful public consultations help the government make better decisions;
- o Adoption by consensus of chemical management measures;
- o Increased transparency, trust and legitimacy of decisions taken;
- o Benefits are mainly in terms of democratic process;
- o Minimizing risks of error;
- o Minimize conflicts on management of hazardous chemicals;
- o People feel responsible;
- o Harmonizes points of view to achieve collegial management of the decision;
- o Joint action plans are developed and implemented;
- o Timely action on regulation and effective compliance;
- o Dealers and importers cooperate in ensuring compliance;
- o Achieving compliance as a result of consultations with decisions on chemical management.

49. Thirty-eight of 71 countries made requests relating to assistance that would be required and most useful to set up consultations with stakeholder groups, four countries replied that no assistance was required, and 29 countries did not respond to this question. The following list is representative of the requests for assistance identified by the 38 countries.

- **Legislation:** revising policies and legal mechanisms.
- **National coordination:** establish a national committee or structure responsible for issues of chemical management.
- **Information and communication:**
 - o Facilitate dissemination of decisions;
 - o Facilitation of meetings;
 - o Documentary materials (forms, posters, etc.) to convince concerned individuals;
 - o Financial assistance:
 - For information exchange meetings;
 - For a consultation programme with different responsible groups;
 - To facilitate regular meeting of stakeholders.
 - o Financial and technical assistance to:
 - o Hold workshops and meetings;
 - o Reach the basic community of users of chemicals;
 - o Training on sensitization of decision makers;
 - o Training for representatives of such groups and conduct of sensitization seminars for chief executives of such groups;
 - o Make available rapid and efficient means of communication;
 - o Agriculture groups and non-governmental organizations;
 - o Support:
 - Regulation consultative meetings (biennial);
 - Quarterly newsletter to disseminate information;

- Formation of a local access network for key decision making groups;
- A few advocacy programmes.
- o Preparation of awareness-raising material for all stakeholders;
- o Training and awareness-raising in the area of chemical management;
- o Capacity-building for all stakeholders;
- o Research material for the production of viable, unquestionable scientific information;
- o Information sharing mechanisms;
- o Web site and internet subscription;
- o Expert assistance that will share information on chemical management in other countries, covering regulations, systems and technology;
- o Technical assistance to provide communication means for organization and implementation of an active dialogue between different government structures involved in management of chemicals and wastes;
- o Establishing consultation procedures that can be applied for the large number of national stakeholders involved in the field of chemicals;
- o Countries with experience in consulting other stakeholders to share their experience with others;
- o Expert opinion discussions of all sectoral stakeholders on seminar, workshop or conference meetings;
- o Tripartite cooperation;
- o Update the PIC group members whenever changes occur in the field of chemicals management, and to reinforce each member's role and action within each organization;
- o Generate mechanisms to give answers to all who participate in the consultation, mainly to provide technical reasons why some opinions cannot be reflected in decisions and make these public consultations more expeditious and ample;
- o Developing mechanisms in negotiation and consensus building with industry for chemicals management;
- o Workshop on information and coordination of chemicals risk assessments, products management and contingency situations;
- o Workshop on information and measures for chemical emergencies;
- o An expert to facilitate a workshop to bring together the stakeholder groups where the facilitator presents reasons for consultations, mechanisms for maintaining the network, and examples of such consultation systems in other countries: once stakeholders buy-in to the idea or need for regular consultations, it would likely be maintained;
- o Make use of the experiences of developed countries in the field of undertaking consultations with stakeholders and link the relevant conventions on chemicals and free trade agreements;
- o Organization of consultative meetings to identify areas on which remarks of the stakeholders would be taken into consideration upon taking decisions on chemicals;
- o Conduct forums of discussion and workshops periodically;
- o Construct a national electronic network for all involved persons;
- o Establish a network of all stakeholders by holding an awareness workshop to establish the roles and responsibilities of different stakeholders.

- **Risk assessment and risk evaluation:**
 - Assist in evaluating risks related to the management of chemicals;
 - Technical assistance for a risk assessment and a management specialist.
- **Laboratory and technical support:** toxicology laboratories.
- **Resources and assistance:**
 - Financial aid to cover all sites;
 - Financial support for attending meetings;
 - Funds to promote public awareness programmes including health risk assessments for hazardous chemicals;
 - Strengthen capacities in the management of chemicals;
 - Larger staff, more time;
 - Exchanges of technical assistance and technology transfer;
 - Allowing and promoting training programmes;
 - Research and funds for promoting alternatives to banned and restricted chemicals included in PIC Convention.
- **Other:**
 - Alternative products, alternative technologies and funds;
 - International endorsement is usually effective because at the local level, persons often tend to be protective of turf and feel that the proposing agency is attempting to broaden their horizons rather than to help the country address a need.

VI. Training

50. Forty-nine of 71 countries had participated in regional or subregional training workshops that the Convention secretariat had arranged, although two countries noted that this was limited to pesticides staff, 15 had not participated in such workshops and seven did not respond to this question. Countries that attended workshops offered the following comments:

- Of 47 countries, 46 felt that the workshops had addressed needs for implementing the Convention, although one country noted that its needs were only “partly” met, and two did not respond;
- Of 47 countries, 40 felt that the workshops had provided sufficient information to implement practical aspects of the Convention and two did not respond;
- Of 45 countries, 39 felt that, following training, their designated national authority had sufficient information to fulfil the administrative obligations of the Convention and four did not respond;
- Of 48 countries, 33 replied that the workshops provided sufficient training for appropriate individuals, although two countries noted that their needs were only “partly” met and another noted that more people needed to be trained “to ensure sustainability”, and one did not respond;
- Of 43 countries, 34 had taken additional actions to implement the Convention after the workshop and six did not respond. Thirty-two of the 34 countries provided the following information on their additional actions:
 - Steps were initiated (one);
 - Several answers were provided concerning chemical imports under evaluation (one);

- National action plan for chemical safety was organized and implemented (one);
- Information and training sessions or workshops on the Convention (two);
- Making arrangements for designated national authority (three);
- Consult on problems with other country's designated national authority (one);
- Improvement of chemical management systems (one);
- Enhanced existing system to process export applications (one);
- Increase in quantity and reduction in time taken to make import country decisions (one);
- Secretariat was informed of all pesticides prohibited or restricted (one);
- Submission and notification of final regulatory actions (12);
- Submission of importing country responses (ten);
- Progress in ratification of/accession to the Convention (15);
- Ratification of or accession to the Convention (six).

51. Six of the nine countries that had not taken additional actions to implement the Convention following a workshop indicated that mechanisms for training to facilitate additional actions would include:

- o Technical support;
- o Training customs officers;
- o Awareness-raising;
- o Workshop or briefing on the implementation of the Convention to the members of a National Steering Committee on PIC and stakeholders, with the assistance of resource persons from the Convention secretariat;
- o Preparation of technical guidance documents in the national language;
- o Continuous participation in courses presented by persons involved directly with the Convention;
- o Training of a regulatory affairs officer as part of a project to set up the mechanism of control.

52. Seven countries that had not participated in a subregional or regional training workshop arranged by the secretariat indicated that mechanisms for training to facilitate additional actions would include:

- o Web site;
- o Training courses;
- o Training in practical aspects for implementing the Convention;
- o Appropriate workshops, seminars, manuals, guidelines;
- o Workshop or briefing on the implementation of the Convention to the members of its National Steering Committee on PIC and stakeholders, with the assistance of resource persons from the Convention secretariat;
- o Regional training workshop for Arab countries to be held in Egypt.

53. Twenty-eight of 71 countries have participated in subregional or regional training workshops arranged by other groups, 36 have not participated in such workshops and seven did not respond to this question. Twenty-one of the 28 countries felt that they did address needs for implementing the Convention, five replied in the negative and two did not respond. While 24 of the 28 countries from five regions identified the following workshops, few remarks were made concerning the key elements that were well addressed in them.

- **Africa:**
 - o Nairobi 2000;
 - o Windhoek 2003;
 - o Workshop on the Stockholm Convention (elimination of POPs);
 - o Workshop on protection of the ozone layer (elimination of methyl bromide);
 - o Criteria for evaluation and registration of pesticides within the programme of CSP and FAO;
 - o POPs Intergovernmental Negotiating Committee;
 - o Common regulation of pesticides registration in Central Africa;
 - o Conservation of agricultural production and its transformation - pesticides used for conservation of agricultural products;
 - o Subregional workshop on implementing the Convention and awareness-raising of Parties concerning ratification;
 - o Training for custom officers on hazardous chemicals jointly organized by Senegal and the Gambia;
 - o Training workshops on:
 - Access to information from the internet organized under the auspices of the CIEN project;
 - Conduct of inventories under the Stockholm Convention;
 - Project proposal writing organized by the Basel Convention Regional Centre for English-Speaking African Countries.
 - o Regional workshop for coordination of francophone countries on the elaboration of international standards on phytosanitary measures (NIMP) (Ghana, September 2003);
 - o FISC training workshops;
 - o Management of industrial effluents;
 - o Workshop on Basel and Stockholm Conventions;
 - o Status of implementation of Rotterdam Convention;
 - o Chemical management;
 - o Pretoria workshop on the coordinated implementation of multilateral environmental agreements on chemicals and wastes in Africa (September 2003).
- **Asia:**
 - o Capacity-Building International (Internationale Weiterbildung und Entwicklung gemeinnützige GmbH, or InWent), Germany, training course on international conventions on chemical management;
 - o Information session on the Convention organized by CropLife Asia for its members and other interested chemical industry representatives in Asia (5 March 2004, Singapore);
 - o Regional workshop on the Convention (8-12 March 2004, Beijing);
 - o Information about PIC Circular;
 - o Pesticide regulatory harmonization for ASEAN countries;
 - o Conditions and regulations for import and export of pesticides.

- **Europe:**
 - o In cooperation with the Basel Convention Regional Centre (Bratislava) and Basel Convention secretariat (Geneva), held a workshop on strengthening cooperation on chemicals and hazardous wastes conventions for stakeholders involved in implementing the Basel, Stockholm, Rotterdam Conventions and the Protocol in Central Europe (Prague, March 2004);
 - o Strengthening of cooperation based on chemicals and hazardous wastes conventions;
 - o Achieving integrated chemicals management;
 - o Encourage closer cooperation among responsible bodies of MOEs;
 - o European Database on Export and Import of Certain Dangerous Chemicals (EDEXIM) training course organized by the European Chemicals Bureau;
 - o Regional workshop promoting the coordinated implementation of the Basel, Rotterdam and Stockholm Conventions (Riga, 6–8 April 2004): key elements were achievement of mechanisms for coordination of governmental bodies, and experience exchange on informational system and database regarding chemicals subject to the Conventions.
- **Latin America and the Caribbean:**
 - o Workshop on POPs that also highlighted the relationship to PIC;
 - o Workshop on POPs and persistent toxic substances (PTS) (what they are, extent of data available in the region);
 - o Workshop on the need for disposal mechanisms for pesticides, chemicals and related containers.
- **Near East:**
 - o Workshop in Kiev;
 - o Workshop on implementation of PIC Convention;
 - o Workshop on PCBs;
 - o Workshop on dioxin and furans.

54. Forty of 71 countries would prefer training methods other than workshops, 21 preferred workshops and ten did not respond to this question. Thirty-six of the 40 countries specified the following preferences: training manuals (22/36); interactive programmes on CD-ROM (21/36); national workshops, seminars and training courses (six/36); distance learning programmes and internet training (three/36); on-line interactive training (two/36); study tours (two/36); CD-videos, videos (two/36); guidelines (one/36); printed material (one/36); displays (one/36); PowerPoint presentations (one/36); capacity-building in pesticides (one/36); secretariat courses (servicing notifications) in countries where the procedure is well mastered (one/36); hands-on training at relevant institutions (one/36); database on hazardous chemicals and their wastes (one/36); database on contingency measures (chemical emergencies) (one/36); and training documents should be translated into Portuguese, to facilitate their accessibility to all national stakeholders (one/36). Three countries that did not respond to this question observed that another option might be a combination of training methods, for example, workshops where the above-mentioned materials would be distributed, followed by interactive programmes.

55. Sixty-two of 71 countries agreed that it would be useful to have training materials to increase the profile and knowledge of the Convention, two replied in the negative and seven did not respond to this question. Sixty-one of these countries identified their preferences as follows: training manuals (57/61), PowerPoint presentations (53/61), and posters (45/61). Twenty-five of these countries identified other formats, including: interactive programmes on CD-ROM (10/25); CD-videos, videos, cassettes, films (nine/25); printed material, brochures, handouts (six/25); mass media, radio broadcasts, newspaper articles (two/25); workshops, seminars, training courses (one/25); on-line interactive training and information (one/25); simulation software (one/25); displays (one/25); posters adapted to the country (one/25); computer, digital camera (one/25); database on hazardous chemicals and their wastes

(one/25); database on contingency measures for chemical emergencies (one/25); and materials for distribution in Russian (one/25).

56. Countries indicated that the following currently available Convention materials have been available and used as noted: Convention text (66/67); Convention brochure (48/67); poster (20/66); decision guidance documents on all chemicals in annex III and in the interim procedure (54/64); PIC Circular (58/66); and PIC web site (59/66).

VII. Other relevant information

57. Twenty-four countries from all regions except North America submitted additional information on: technical assistance needs or capacity-building activities which would be useful to implement the Rotterdam Convention; or any other comments regarding technical assistance or capacity-building. The following list is representative of the input from these 24 countries. The following list is representative of the input provided by the 24 countries, although some proposals were not included here if they duplicated requests by the same countries that were made in the earlier parts of the questionnaire.

- **Legislation:**
 - o Development of a law in the area of chemical management;
 - o Technical assistance in the establishment and strengthening of a regulatory framework that will:
 - Provide a foundation for effective and coordinated actions to address both the national agrochemicals and waste management priorities as well as the implementation of respective objectives and enabling activities under the Convention;
 - Support specific activities and human resource development to significantly contribute towards the implementation of the Convention.
 - o Development of new regulations and integrate the existing regulations pertaining control of hazardous substances and chemicals.
- **National coordination:**
 - o Establishment of infrastructure for control and oversight;
 - o Strategic management of chemicals is an important approach, which would go a long way towards minimizing duplication of national efforts and is, therefore, worth visiting;
 - o Establishment of a national committee or structure to be responsible for issues of chemical management;
 - o A comprehensive chemical profile should be prepared.
- **Information and communication:**
 - o Make available information on hazardous chemicals and the solutions for replacing them;
 - o Technical and financial assistance to enable national information and awareness-raising seminars for technical staff and the general public;
 - o Capacity-building in information generation and communication relating to chemicals management;
 - o Training and awareness-raising in the area of chemical management;
 - o Access hazard or risk evaluations produced by other countries;
 - o Development and improving chemical hazard communication tools;
 - o Technical assistance in the form of computers and other electronic equipment such as scanners.

- **Risk assessment and risk evaluation:**
 - Strengthen risk assessment capacity;
 - Detailed training on risk assessment covering all aspects, targeting all stakeholders;
 - Assessment of the health and socio-economic effects of chemicals on human health and the environment.
- **Laboratory and technical support:**
 - Technical assistance in the form of analytical equipment, practical analytical methods and training of laboratory personnel for the assessment of levels of chemical contaminants in the environment;
 - Infrastructure enhancement for laboratories to enable monitoring pesticide residues;
 - Laboratory facilities should be developed in Dhaka (capital) and two other port cities Chittagong and Khulna. Laboratory may also cover the largest land port Benapole.
- **Resources and assistance:**
 - Both national designated national authorities are relatively new and require technical assistance and capacity-building, at regional and headquarter regional levels, which should be geared towards start up activities that can be taken up by the respective organizations after suitable grounding;
 - As a newly established designated national authority, it would be very useful to know how work is organized within a designated national authority with a long experience in application of the PIC procedure;
 - Facility building for agency of designated national authority;
 - Capacity-building of designated national authority for implementation of the Convention;
 - Capacity-building on the application of the Convention;
 - Capacity-building at a local and regional level on management of hazardous chemicals and their wastes and response to emergencies;
 - Educational programmes;
 - Training workshops;
 - Training manuals;
 - Training guidelines for sensitizing stakeholders and government personnel;
 - Specialized training in the area of managing chemicals;
 - Training of officials is urgent and guidelines for production, handling and use of the chemicals should also be prepared;
 - Training the trainers in the area of chemical management to advise/train users and general public regarding the health issues and environmental issues related to hazardous substances;
 - Develop training programmes on risk assessment;
 - Make available financial resources, materials and tools for strengthening control of importation and commercial aspects of chemicals;
 - Our country needs products that address: importation, production, commercialization and use of pesticides and other inappropriate chemicals; pollution; intoxication; and the inadequacy of formulators to use pesticides and other chemicals without risks;

- o Technical assistance for the treatment and disposal of obsolete chemicals;
- o Technical assistance and financial support in research and development on chemical management;
- o Set up and maintain proper database;
- o Mobilization of resources to allow programmes of chemical management to take place;
- o Development of the national decision making process;
- o Development of guidelines and procedures on sound management of hazardous substances;
- o Handling, identification, classification, risk assessment and monitoring of hazardous substances and goods in different phases of the life cycle of the chemicals;
- o Establish an information sharing network among the stakeholders who are responsible at the different phases of the life cycle of the chemicals;
- o Need guidelines, training manuals, etc. about good practices in implementing the Convention, in particular:
 - Information exchange;
 - Assessment of hazard data in decision making process;
 - Transit movement of PIC chemicals and pesticides through the territories of neighbouring Parties and third countries.
- o Coordinated implementation of Basel, Stockholm and Rotterdam Conventions;
- o For the short term, provide the necessary contacts for technical expertise or network of technical expertise that we could approach to assist us with risk assessment issues on certain hazardous chemicals when they arise in our country and to at least provide our national focal point with the necessary resources to facilitate communication of information. In the long term, specialist training would be required to build our capacities in the area of chemical risk assessments and this will not only solve our reliance for information problem but will set the pace for our country's active participation in meeting international commitments on chemicals management;
- o Create and strengthen national infrastructure to facilitate access to complementary information and to electronic information exchange between all interested sectors;
- o Improve monitoring mechanisms of an environmental epidemiologist;
- o Knowledge of other specific information sources;
- o Model or documentation from similar small island developing states or countries that have successfully initiated and implemented the Convention;
- o Create cross-sectoral information systems and elaborate technical guidance and procedures;
- o Programme to respond to contingencies due to hazardous chemicals and their wastes;
- o Implementation of internal exchange information networks inside the country;
- o Implementation of a national database inside the toxicology centre;
- o Secretariat to take into account in its programmes and plans the establishment of a customs control with specific codes for PIC chemicals;
- o Study tours;
- o Research for alternatives;

- o Guidelines for illegal traffic of hazardous substances;
 - o Public awareness;
 - o Develop standards and guidance material for recording, collecting and analysing incidents data;
 - o Support technical capacities such as lab equipment for risk assessment purposes;
 - o Best available techniques (BAT) and best environmental practices (BEP) should be freely available and trained in developing countries;
 - o Promote exchange of information on successful experiences related to chemical management;
 - o Transfer appropriate clean and environmentally sound technology;
 - o Establish regional centres for capacity-building;
 - o Request the Convention secretariat to identify sponsors from agencies or developed country Parties of the convention to provide assistance in the implementation of activities indicated in the questionnaire.
- **Other:**
 - o Customs and merchants are in a state of distress due to the flows of chemicals and most of them do not have a strong knowledge of chemicals;
 - o We already have a law to control the import of pesticides and industrial chemicals and do not manufacture on-shore: however, if we were ever in a situation of wanting to export listed chemicals, then we would certainly want to take an active interest in capacity-building.
-