



CONVENTION ON BIOLOGICAL DIVERSITY

Distr.
GENERAL

UNEP/CBD/BS/COP-MOP/1/6
31 October 2003

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY SERVING AS THE MEETING OF THE PARTIES TO THE CARTAGENA PROTOCOL ON BIOSAFETY

First meeting

Kuala Lumpur, 23-27 February 2004

Item 6.3 of the provisional agenda*

CAPACITY-BUILDING FOR IMPLEMENTATION OF THE CARTAGENA PROTOCOL ON BIOSAFETY (ARTICLE 22, ARTICLE 28)

Note by the Executive Secretary

I. INTRODUCTION

1. Article 22 of the Cartagena Protocol on Biosafety requires Parties to cooperate in the development and/or strengthening of human resources and institutional capacities in biosafety, including biotechnology to the extent that it is required for biosafety, for the purpose of the effective implementation of the Protocol through existing institutions and organizations and, as appropriate, through facilitating private sector involvement. The Protocol also requires Parties, in considering the financial resources for its implementation and in providing guidance to the financial mechanism, to take into account the needs of developing country Parties and Parties with economies in transition in their efforts to identify and implement their capacity-building requirements.

2. The Conference of the Parties to the Convention on Biological Diversity, in its decision V/1 on the work plan of the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP), emphasized the need to embark on building capacities for the effective implementation of the Protocol as soon as possible. It identified a number of issues for consideration by the ICCP prior to the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol. These included the following: (i) identification of the capacity needs of Parties; (ii) establishment of the roster of experts; (iii) a review of completed and existing capacity-building activities in the field of biosafety and the possibilities for cooperation; (iv) multilateral, regional and bilateral cooperation and the need for common understanding and harmonization of efforts; (v) involvement of the private sector; (vi) development of elements of capacity-building with respect to risk assessment and risk management; (vii) the role of the Secretariat; and (viii) assessment of the financial and technological resource requirements. The ICCP

* UNEP/CBD/BS/COP-MOP/1/1.

/...

addressed these issues in its work and in the recommendations forwarded to the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol.

3. At its first meeting, held in Montpellier in December 2000, the ICCP considered an indicative framework for capacity-building under the Cartagena Protocol on Biosafety prepared by the Executive Secretary. The document outlined the main types and categories of capacities that will be needed to effectively implement the Protocol, the different approaches and options for developing those capacities, a range of possible sources of financial and technical resources that could be considered to support biosafety capacity-building, and the potential roles of different entities in providing capacity-building support. On the basis of that framework, an Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety, as contained in annex I to the present note, was developed and endorsed by the ICCP at its second meeting.

4. Furthermore, the ICCP outlined the roles of different entities in supporting capacity-building, as contained in annex II to this note, and developed an implementation toolkit, contained in annex III, identifying key requirements in the Protocol for which capacities would be needed.^{1/} In addition, the ICCP considered the establishment of a Coordination Mechanism, which is described in an addendum to the present note (UNEP/CBD/BS/COP-MOP/1/6/Add.2), with a view to promoting partnerships and maximizing complementarities and synergies between various capacity building initiatives. Furthermore, a roster of experts and a trust fund for its use have been developed and are described in another addendum to this note (UNEP/CBD/BS/COP-MOP/1/6/Add.1).

5. The present note provides a summary of the capacity-building needs and priorities submitted by Parties, other Governments and relevant organizations (section II) and a summary report of the progress made in implementing the Action Plan, including an overview of the coverage and gaps of existing capacity-building initiatives in supporting its implementation (section III). The recommendations on capacity building adopted by the ICCP, as well as additional draft decisions prepared by the Executive Secretary on the basis of the experience and issues emerging from the inter-sessional work on capacity-building, are presented for the consideration of the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol. Draft decisions on the Coordination Mechanism and on indicators for monitoring the Action Plan implementation are contained in addenda to the present note (UNEP/CBD/BS/COP-MOP/1/6/Add.2 and UNEP/CBD/BS/COP-MOP/1/6/Add.3, respectively).

II. CAPACITY-BUILDING NEEDS AND PRIORITIES FOR IMPLEMENTATION OF THE CARTAGENA PROTOCOL ON BIOSAFETY

6. The identification of the capacity needs of Parties and other Governments is a critical first step in developing successful capacity-building strategies and programmes for the effective implementation of the Protocol.^{2/} Accordingly, the ICCP at its first meeting invited Parties, other Governments and relevant organizations to submit to the Secretariat information regarding their capacity-building needs, priorities and existing initiatives. The Executive Secretary was requested to develop a questionnaire to facilitate the submission of the information and to compile that information for consideration by the Conference of the Parties serving as the meeting of the Parties to the Protocol. In response to this request, a questionnaire was developed and sent out to all governments and relevant organizations in January 2001.

^{1/} With regard to roles of different entities in capacity-building, it should be noted that the Global Industry Coalition made submissions at the third meeting of the ICCP (see footnote on page 22) relating to additional potential roles of industry, which are incorporated in sub-paragraphs 9 (j)-(w) of annex II.

^{2/} Other critical steps in developing effective capacities include: translating the general needs and priorities into specific targeted actions, coordinating and synergizing efforts, and continuous monitoring and adjustment of strategies and existing initiatives to respond to emerging opportunities and challenges, as appropriate.

7. In May 2003, the Executive Secretary sent to all countries another notification with a more detailed questionnaire structured along the lines of the Action Plan. The questionnaire provided a common format to enable respondents to submit their needs in a consistent manner and to facilitate future searching of the database on country capacity needs in the Biosafety Clearing-House (BCH). A predetermined list of options, prepared by analysing previous capacity needs assessments, other relevant documents and input of experts, was provided under element of the Action Plan in order to make it easier for countries to identify their needs as explicitly as possible and indicate specific rather than generalized needs. The structure of questionnaire allowed countries to select up to three priority needs under each of the Action Plan elements and up to three choices of their desired means to address the identified needs. Countries were also requested to indicate which needs were already being addressed, or those that could be addressed at a national level, using locally available resources.

8. By 22 October 2003, at least 41 countries had completed and returned the questionnaire to the Secretariat, namely: Argentina, Bangladesh, Bhutan, Cambodia, Cameroon, Chad, China, Colombia, Costa Rica, Croatia, Cuba, Ecuador, Egypt, Estonia, Ethiopia, Ghana, Grenada, Haiti, Iran (Islamic Republic of), Jamaica, Laos, Lithuania, Mali, Malta, Mauritania, Myanmar, Namibia, Nepal, Nicaragua, Palau, Paraguay, Republic of Moldova, Rwanda, Slovakia Republic, Slovenia, Sri Lanka, Sudan, Thailand, The former Yugoslav Republic of Macedonia, Uganda, and Viet Nam.

9. A summary list of the main capacity-building priority needs, based on the submissions received, is contained in annex IV. The detailed submissions by each country are registered in the country capacity needs database in the Biosafety Clearing-House, which may be accessed at: <http://bch.biodiv.org/Pilot/CapacityBuilding/SearchCapacityNeeds.aspx>. Additional information can also be drawn from surveys and capacity needs assessment reports compiled by other relevant organizations such as the UNEP/GEF Biosafety Project ^{3/}, the IUCN Biosafety Capacity-Building Initiative ^{4/} and the GEF Capacity Development Initiative (CDI). ^{5/}

10. An analysis of the submissions received reveals that most critical capacity needs expressed by the majority of countries include the following, in the order of priority:

(a) Risk assessment and risk management (including need for risk management frameworks, risk assessment capabilities and the capacity to detect, control and monitor living modified organisms;

(b) Institutional building, including funding, laboratories/equipment for testing living modified organisms, and the development and implementation of regulatory frameworks;

(c) Scientific, technical and institutional collaboration, including mechanisms for regional/international cooperation and sharing of experiences and access to information on available opportunities for collaboration;

(d) Human resources development, including training in scientific skills and regulatory procedures;

^{3/} Phase 1 of the UNEP/GEF biosafety project involves carrying out surveys and preparing inventories of information necessary in facilitating the development and implementation of effective national biosafety frameworks, including the existing legislation, initiatives and resources and the needs and priorities of each country. See: <http://www.unep.ch/biosafety/>

^{4/} See the country status reports of the nine Asian countries participating in the IUCN Initiative at: <http://www.rbpi-icn.lk/biosafety/MainPage.htm>

^{5/} See details, including different reports of country capacity development needs and priorities at: http://www.gefweb.org/Documents/Enabling_Activity_Projects/CDI/cdi.html

(e) Identification of living modified organisms, including identification methods/systems and inspection facilities;

(f) Awareness, education and participation, including seminars, access to awareness materials and communication networks; and

(g) Information exchange and data management, including access to relevant information and participation in the Biosafety Clearing-House.

11. The list of most frequently mentioned specific needs, i.e., those indicated by more than 50 per cent of the countries, are summarized in table 1 below, in order of frequency.

Table 1: Specific priority needs identified by countries that made submissions

Capacity-building identified	Number of countries	Percentage
Funding (e.g. project grants or loans)	33	80.5
LMO inspection procedures and control measures	31	75.6
Risk management frameworks, strategies and mechanisms	29	70.7
Mechanisms for regional/ international cooperation and sharing of experiences	29	70.7
Methods/systems for LMO identification, including unique identification systems	28	68.3
LMO testing laboratories and equipment	27	65.9
Mechanisms for detecting unintentional or illegal LMO movement	27	65.9
Scientific methods and protocols relevant to risk assessment and management	26	63.4
Biosafety awareness activities (e.g. seminars, radio/TV programs)	24	58.5
Institutional networks and means of communication with the public	24	58.5
Access to information on available opportunities for collaboration	23	56.1
National biosafety laws	23	56.1
National frameworks for risk assessment	23	56.1
Capability for detection, management and prevention of unintentional LMO movement	23	56.1
Tools for long-term monitoring and surveillance of LMOs	23	56.1
Border control and LMO inspection facilities	22	53.7
Biosafety awareness materials and equipment	22	53.7
Training in biosafety regulatory procedures	22	53.7
Training of policy-makers and regulators	21	51.2
Capacity for administration of the AIA procedure	21	51.2
Strengthening of administrative and decision-making systems	21	51.2
Public-private sector partnerships	21	51.2

12. Clearly, funding support is the biggest requirement expressed by most countries. This is probably a reflection of the challenge faced by many developing countries and countries with economies in transition in allocating the limited available resources among the many other urgent national priorities such as poverty reduction. In addition to funding, most countries (over 75 per cent) also highlighted the need for capacity-building in area of detection, control and monitoring of living modified organisms. A number of countries also expressed a need for assistance in strengthening their regulatory and institutional frameworks, including implementation of national biosafety frameworks, training of staff and opportunities for scientific, technical and institutional collaboration.

13. With regard to question of the means by which countries would like to be assisted in order to address their capacity needs, the majority indicated the following, in the order of priority, as their preferred means: funding support, training (including access to scholarships and fellowships), technical assistance and access to relevant information, tools and resource materials. A few also mentioned staff

exchange programmes/ temporary secondments, joint scientific and technical collaborative programmes as well as participation in professional forums/ networks as important means that would assist them in building their capacities.

14. The above analysis presents a global picture of the priority capacity-building requirements and challenges that need to be addressed in order to assist countries to effectively implement the Protocol. It provides a basis for developing strategic intervention measures and facilitating systematic targeting of available resources and opportunities towards country-defined priorities. It is important to note, however, that analysis provides only an indicative picture of the general capacity-building requirements. In developing specific intervention measures, it should be recognized that different countries have unique and sometimes evolving needs, which should be reviewed and addressed on a case-by-case basis.

15. The Conference of the Parties serving as the meeting of the Parties to the Protocol may wish to take note of the summary of the identified capacity-building needs and priorities and invite those Parties and other Governments that have not yet done so to assess and submit to the Biosafety Clearing-House their needs as soon as possible. The Conference of the Parties serving as the meeting of the Parties to the Protocol may also wish to invite Parties and other Governments to review their needs periodically and update their records in the Country Capacity Needs database in the BCH accordingly. Furthermore, it may also wish to invite Parties, other Governments and relevant organizations in a position to provide assistance to developing countries and countries with economies in transitions, as an initial step, to review the information submitted to the country capacity needs database in the Biosafety Clearing-House when developing assistance programmes.

III. PROGRESS REPORT ON IMPLEMENTATION OF THE ACTION PLAN AND AN OVERVIEW OF THE COVERAGE AND GAPS IN EXISTING CAPACITY-BUILDING INITIATIVES

16. At its second meeting, the ICCP requested the Executive Secretary to prepare a report on the progress made in the implementation of the capacity-building Action Plan, on the basis of submissions from Parties and Governments and relevant organizations, for consideration by the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol. In addition, section 5 (Monitoring and Coordination) of the Action Plan requires the Secretariat to prepare a report on the steps taken by countries, multilateral/bilateral and other international sources, towards its implementation and submit the report to the Conference of the Parties serving as the meeting of the Parties to the Protocol so that it may identify whether the actions listed in the Action Plan have been carried out successfully and effectively.

17. The present section describes the progress made in implementing the Action Plan, on the basis of the information registered in the project database in the Biosafety Clearing-House and the submissions to the Secretariat as of 22 October 2003. The full submission made by the International Centre for Genetic Engineering and Biotechnology (ICGEB) is available as an information document (UNEP/CBD/BS/COP-MOP/1/INF/2). This section also provides an analysis of the coverage and gaps in implementation of the Action Plan on the basis of the ongoing capacity-building projects currently registered in the projects database in the Biosafety Clearing-House.

18. There are a number of projects and other initiatives supported by international organizations, bilateral development agencies, non-governmental organizations and the private sector have contributed

to the implementation of the Action Plan. ^{6/} The biggest initiatives have been funded by the Global Environment Facility (GEF) through its Implementing Agencies, i.e., the United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP) and the World Bank. Under its Initial Strategy for Assisting Countries to Prepare for the Entry into Force of the Protocol, the GEF is supporting two sets of biosafety capacity-building projects, namely: the UNEP-GEF project on development of national biosafety frameworks (2001-2004), funded to the tune of more than US\$ 38.4 million (including US\$ 26.1 million from GEF and US\$12.3 million in co-financing), and the demonstration projects on implementation of national biosafety frameworks, with a total budget of over US\$ 35.13 million (including US\$ 9.81 million from GEF and US\$ 25.32 million in co-financing). A detailed report about these projects will be presented by GEF during the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol.

19. Examples of other major initiatives described in this section that have contributed to the implementation of the Action Plan include: projects of the International Centre for Genetic Engineering and Biotechnology (ICGEB); the MATRA project on implementation of biosafety frameworks in pre-accession countries of Central and Eastern Europe; the East African regional programme and research network for biotechnology, biosafety and biotechnology policy development (BIO-EARN); the FAO capacity-building project in biosafety of genetically modified crops in Asia; and the IUCN initiative on capacity-building to implement the Biosafety Protocol in Asia^{7/}. Brief descriptions of all existing capacity-building projects and other initiatives currently registered in the Biosafety Clearing-House projects database are being circulated as an information document (UNEP/CBD/BS/COP-MOP/1/INF/2).

20. The UNEP-GEF global project on the development of national biosafety frameworks (NBFs) is helping over 121 countries to develop their frameworks for the management of living modified organisms (LMOs). It is providing technical support and relevant information to participating countries directly and through the project website, newsletters and tool kits. As of 22 October 2003, the project had organized 4 regional workshops to promote understanding of the process and elements of the national biosafety frameworks, six sub-regional training workshops on risk assessment and management and public awareness and participation and the first, in a series of six, subregional training workshops on development of regulatory regime and administrative systems for national biosafety frameworks. The project is also helping to promote regional collaboration and exchange of experience on issues of relevance to national biosafety frameworks.

21. The GEF demonstration projects are designed to support 12 countries to implement their national biosafety frameworks. ^{7/} The projects are carried out in order to gain experience and to develop good practices that may be used in the design of future implementation projects for national biosafety frameworks. The eight projects that are managed by UNEP started in the last quarter of 2002. The project in Mexico started in 2003 while and those for Malaysia India and Colombia are yet to begin. Among other things, the UNEP-GEF projects are assisting participating countries to establish or strengthen their biosafety regulatory regime, their systems for handling requests and notifications, including administrative processing, risk assessment and decision making, enforcement and monitoring

^{6/} The following Governments and regional economic integration organizations, through their relevant bilateral agencies, are currently supporting biosafety capacity-building projects registered in the BCH database: Australia, Canada, Denmark, European Community, Germany, Japan, Norway, Sweden, Switzerland and USA. Other initiatives are implemented by the following international and regional organizations: FAO, UNEP, UNDP, the World Bank, UNIDO, UNCTAD, UNITAR, UNU, CGIAR, ISAAA, ISNAR, ISEES, the African Union and ASEAN. NGOs include: African Agency of Biotechnology (AAB), The Edmonds Institute, IUCN, SOLAGRAL, Third World Network, Rockefeller Foundation and M.S. Swaminathan Research Foundation while private sector organizations include: BIOTECCanada, Global Industry Coalition, EUROPABIO and Japan Bioindustry Association.

^{7/} The GEF demonstration project countries are: Bulgaria, Cameroon, China, Cuba, Kenya, Namibia, Poland and Uganda (supported through UNEP); Malaysia and Mexico (UNDP) and India and Colombia (the World Bank). Details about each project can be obtained from the GEF project database available at: <http://www.gefonline.org/projectList.cfm>

for environmental effects, and public awareness and public participation in biosafety, strengthen information sharing including effective participation in the Biosafety Clearing-House, establish national biosafety facilities and build local human resource capacity in biosafety-related fields. In 2003, start-up workshops on “Implementation of national biosafety frameworks” were organized in all the countries, often preceded by an introductory seminar for Parliamentarians. In addition, a panel of international experts helped to review the draft biosafety laws of Bulgaria, Cameroon, Kenya, Namibia and Uganda. Detailed information about the progress of the UNEP-GEF projects on implementation of national biosafety frameworks can be found on: www.unep.ch/biosafety/implementation.

22. The International Centre for Genetic Engineering and Biotechnology (ICGEB) continued to provide to its 47 member States technical instruments and qualified information required in biosafety and risk assessment. ^{8/} During 2002 and 2003, three training courses and a workshop on biosafety and risk assessment were jointly organized for government officials and designated experts working in risk assessment of genetically modified organisms. ICGEB also established a biosafety out-station for training and research in risk assessment and management of the environmental release of genetically modified organisms, equipped for studies in molecular genetics and with new laboratories and a high-containment greenhouse. Furthermore, a genetically modified organisms-biosafety communication network and a Europe-wide Web-based public-access database of projects and researches active in biosafety research for genetically modified organisms are being created.

23. The MATRA project on implementation of biosafety frameworks in pre-accession countries in Central and Eastern Europe, which ended in November 2002, assisted 10 countries in establishing regulatory frameworks consistent with international obligations, systems to provide information to stakeholders about the NBFs, mechanisms to handle requests for permits for activities such as releases of genetically modified organisms into the environment, and mechanisms for follow up and feed back, including monitoring and inspections for compliance. ^{9/} The project also supported several regional activities including: strengthening of regional collaboration, organization of annual regional meetings, strengthening of a regional Steering Committee and establishment of regional and sub-regional centres and a regional web site. In addition, it enabled participating countries to access up-to-date international knowledge and practice through seeking collaboration with experts from other countries and organisations. Furthermore, the support of the project was broadened to other countries by inviting participants from other Central and Eastern European countries and from other regions to participate in the training workshops and by applying the methodologies of the project to other environmental fields in Central and Eastern Europe.

24. The BIO-EARN programme, which is currently in its phase II (2002-2004) and costing over US\$ 5.4 million, has contributed significantly to the implementation of the Action Plan in Eastern Africa. ^{10/} It has supported six students to undertake MSc. training in ecology and four students to pursue PhDs in ecological risk assessment in Sweden. During 2002-2003, it also supported three regional training workshops, including “hands-on” training for members of national biosafety committees, in biosafety regulations, risk assessment and management of genetically modified organisms. In addition, a biosafety manual to assist regulatory authorities in decision-making and to serve as a research /training tool, has been developed. Furthermore, the BIO-EARN newsletter, workshop reports and other publications were produced and distributed. Finally, an attempt is being made to compile basic biological

^{8/} ICGEB makes available biosafety-related information through its Biosafety Web Page (<http://www.icgeb.org/biosafety>) which comprises four main elements namely: the “Biosafety Bibliographic Database” which is interoperable with the BCH, the “Library”, the “Links” and the “Risk Assessment Searching Mechanism (RASM).

^{9/} The MATRA project covered 10 countries namely: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Details about the project can be accessed at: <http://www.biosafety-cee.org/>

^{10/} BIO-EARN is implemented in four countries namely: Ethiopia, Kenya, Uganda and the United Republic of Tanzania. Details about this programme are available on its website: <http://www.bio-earn.org>

information on the most abundant crops in the region and their wild relatives to assist in current and future risk assessments in the region.

25. The FAO Asian regional project, costing US\$ 1.2 million, has since May 2002 assisted 10 countries to strengthen their capacities in terms of human resources, research and technology development, development and harmonization of regulatory frameworks for addressing biosafety concerns on genetically modified crops and the assessment and management of potential risks associated with such crops. ^{11/} It has also established internet-based national and regional centres and a network known as “the Asian Bio-Net”, involving public and private sector institutions and stakeholders. Furthermore, the project is assisting countries to harmonize biosafety assessment and management standards, guidelines, measures and methodologies as well as in the collection, analysis, dissemination and exchange of information on biotechnology and biosafety standards related to genetically modified organisms, through inventories, databases and decision-support systems.

26. Since January 2002, the “IUCN initiative on capacity building to implement the Biosafety Protocol in Asia” has assisted nine countries to implement their national and international regulations on biosafety and build institutional and human resource capacity to implement the Protocol. It has undertaken a number of activities including: assessment of the status of biosafety and biotechnology, including existing capacities and needs, in nine countries; organization in May 2002 of the Asia Regional Workshop on Risk Assessment and Risk Management, establishment of a project website and an Information Resource Centre, dissemination of information and awareness materials; development of a “resource kit” for implementing the Protocol at the national level and development of ‘media packages’ on biosafety issues. ^{12/}

27. During the period 2002-2003, the Executive Secretary developed a three-year outreach strategy for the Biosafety Protocol (2003-2005) (UNEP/CBD/COP-MOP/1/INF/16), which among other objectives, seeks to engage and encourage a broad range of stakeholders to actively participate in, and support, the implementation of the Protocol, including through undertaking biosafety capacity-building activities, such as awareness-raising, sharing of information, provision of expertise, and provision of publications and other resource materials to Parties and other stakeholders. The strategy initially targets the following key stakeholders: academic and research institutions, relevant organizations and networks, the media and the private sector. Within the framework of the outreach strategy, initial contacts were made with different institutions to explore collaborative opportunities, including linking of websites and databases, exchange of new knowledge and expertise regarding living modified organisms (for example, relevant research data, scientific journal articles or policy studies) and development or sharing of other resource materials through the Biosafety Clearing-House.

28. There are many other projects and initiatives supported by international organizations, bilateral development agencies, non-governmental organizations and the private sector that have also contributed to the implementation of the Action Plan to varying degrees. As of 22 October 2003, at least 67 ongoing capacity-building initiatives, including those mentioned above, were registered in the projects database in the Biosafety Clearing-House. The database also includes at 12 projects, which were completed in the last 2-3 years. The list of all those projects is contained in annex V to the present document. Brief descriptions of each of the projects are contained in the information document on the subject (UNEP/CBD/COP-MOP/1/INF/2). Further information regarding each of the projects, including their

^{11/} The FAO project is implemented in the following 10 Asia countries: Bangladesh, China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand and Viet Nam.

^{12/} The IUCN Biosafety initiative, implemented by the IUCN Regional Biodiversity Programme for Asia (RBP), covers 9 Asian countries namely: Bangladesh, Bhutan, Cambodia, China, Indonesia, Laos, Malaysia, Philippines and Viet Nam. Details can be accessed at: <http://www.rbp-iucn.lk/biosafety/MainPage.htm>

contribution to the different elements of the Action Plan, is available at: <http://bch.biodiv.org/Pilot/CapacityBuilding/GettingStarted.aspx>.

29. In 2003, new major initiatives, which will contribute significantly to the implementation of the Action Plan, were launched. These include:

(a) The programme for biosafety systems (PBS) funded by the United States Agency for International Development and coordinated by International Service for National Agricultural Research (ISNAR). The programme, which will cost US\$ 15 million over five years, is aimed at assisting developing countries to enhance their ability to more effectively address the impacts of modern biotechnology on the environment and human health within a sustainable development strategy anchored by agriculture-led economic growth, trade, and environment objectives.^{13/} Its components include: policy analysis and technical assistance in development of biosafety regulatory systems, training of different actors, building scientific and technical capability in safety assessments of biotechnology products; and establishment of effective regional mechanisms for risk assessment, risk management, and communication; and

(b) The Africa-wide capacity-building programme in biosafety, funded by the Germany Government and implemented by the Commission of the African Union (AU). The Africa-wide programme, which was endorsed by the Executive Council of the African Council in July 2003, will cost US\$ 4.2 million over three years. It will include: assistance in formulation of national biosafety laws; training in risk assessment and risk management; development of technical papers, handbooks and information kits; and establishment/strengthening of analytical laboratories for genetically modified organisms.

30. An analysis of the 67 ongoing initiatives registered in the Biosafety Clearing-House projects database shows that most of them are focused on supporting human-resource development (60 projects), information-sharing (44) and institutional strengthening, including development of regulatory frameworks (44) (see table 2 below). On the other hand, it is clear that the biggest capacity-building gaps are in the areas of identification of living modified organisms, risk management and technology transfer, which currently have the least number of projects contributing to their implementation.

Table 2: Coverage of existing projects in support of different elements of the Action Plan

Main capacity-building areas/ elements	Number of projects	Percentage
(a) Institutional strengthening, including regulatory frameworks	44	65.7
(b) Human-resources development and training	60	89.6
(c) Risk assessment and other scientific and technical expertise	31	47.7
(d) Risk management	10	14.9
(e) Awareness, education and participation	37	55.2
(f) Information exchange & data management, including participation in BCH	44	65.7
(g) Scientific, technical and institutional collaboration	32	44.8
(h) Technology transfer	11	16.4
(i) Identification of living modified organisms	2	3.0

31. In terms of geographic coverage, currently Africa has the largest number of ongoing capacity-building projects (28), followed by the Asia/Pacific region (22), Latin America and the

^{13/} The programme in biosafety, launched in May 2003, will be implemented in Bangladesh, India, Indonesia, Philippines, Eastern Africa and West Africa and is likely to expand to other countries and regions in the future. See details in the Biosafety Clearing-House project database: <http://bch.biodiv.org/Pilot/Record.aspx?RecordID=9863>

Caribbean (17) and Central and Eastern Europe (nine). The number of projects for each region includes projects being implemented at the global level.

32. Overall, there has been considerable progress in implementing the Action Plan, especially with respect to the development of national biosafety frameworks, human resources development and the exchange of biosafety information. More than 120 countries have embarked on developing their national biosafety frameworks and more than a dozen others have started implementing theirs. Several workshops and training seminars have been organized and resource materials produced. In addition, there has been a remarkable increase in the amount of information disseminated through the Websites and databases of various organizations as well as through e-mail listservs, newsletters and other publications. However, major capacity gaps still remain, particularly in the area of identification of living modified organisms, technology transfer and risk assessment and risk management, including a lack of expertise and equipment to detect, monitor and control identification of living modified organisms.

33. The Conference of the Parties serving as the meeting of the Parties may wish to welcome the progress made in implementing the Action Plan and invite Parties, other Governments and relevant organizations to intensify their efforts. It may also wish to take due consideration of the identified critical gaps in implementing the Action Plan and invite Parties, other Governments and relevant organizations to take affirmative collaborative measures to address those gaps. Furthermore, it may wish to call for submission of additional progress reports and request Executive Secretary to prepare, on the basis of those submissions, a report for consideration at its third meeting. Finally, it may wish to decide to review and revise the Action at its third meeting on the basis of progress report and on the evolving capacity needs and priorities submitted by Parties and other Governments.

IV. CONCLUSION

34. The Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety outlined in annex I to the present note, along with its Coordination Mechanism (described in document UNEP/CBD/BS/COP-MOP/1/6/Add.2) and the indicators for monitoring its implementation (described in document UNEP/CBD/BS/COP-MOP/1/6/Add.3) provide the necessary framework to facilitate global, regional and national capacity-building efforts. It is important for all relevant players to work within this framework in order to realize effective collective impact.

35. The progress made so far in implementing the Action Plan, as outlined in section III above, is encouraging. However, there is an urgent need to develop and implement more systematic, focused and coordinated measures to address the major capacity gaps and needs still remain. This calls for a step-by-step, needs-driven approach and collaborative partnerships between Parties, other governments and relevant organizations. No one country or organization can single-handedly address the daunting challenge of building the necessary capacities for the effective implementation of the Protocol. As stated in Article 22 of the Protocol, it is critical for Parties to cooperate and pool resources to develop their capacities in biosafety, including through global, regional, subregional and national organizations and through private sector involvement.

V. DRAFT DECISION

A. Recommendations from the ICCP to the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol

36. The following text consolidates the relevant elements of the recommendations to the Conference of the Parties serving as the meeting of the Parties to the Protocol adopted by ICCP at its three meetings.

The full texts of those recommendation are annexed to the reports of ICCP (UNEP/CBD/BS/COP-MOP/1/3/Add.1-3):

The Conference of the Parties serving as the meeting of the Parties to the Protocol,

Recognizing the critical need to build the capacity of developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition, to enable them access the Biosafety Clearing-House and to ratify and implement the Cartagena Protocol on Biosafety,

Taking note of the initial gap analysis by the Executive Secretary of the capacity-building initiatives as an important step in identifying areas where further efforts would be needed,

Taking note also of the indicative list of the roles of different entities in supporting capacity-building contained in annex II below,

Stressing the need for coordination and cooperation between various capacity-building efforts and funding initiatives at all levels to maximize complementarities and synergies, and promote partnerships,

Noting the varying requirements of countries and the need for capacity-building initiatives to be demand-driven,

1. *Adopts* the Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety endorsed by the ICCP, as contained in annex I below;

2. *Invites* Parties, other Governments, international and regional organizations, non-governmental organizations, private sector and scientific organizations and other relevant bodies that have not yet done so to start implementing the Action Plan, taking into account the roles of different entities in facilitating capacity-building;

3. *Welcomes* the biosafety capacity-building initiatives currently being supported by the Global Environment Facility and its Implementing Agencies and by other donors and organizations;

4. *Invites* Parties, other Governments and relevant organizations to take collaborative actions to address the gaps in implementation of the Action Plan identified in the note prepared by the Executive Secretary;

5. *Urges* Parties, other Governments and relevant organizations to register information on their biosafety capacity-building initiatives in the Biosafety Clearing-House, including reports on the achievements, lessons learned and opportunities for cooperation in the implementation of the Action Plan;

6. *Invites* Parties, other Governments and organizations to use, as appropriate, the implementation tool kit contained in annex III below;

7. *Requests* developed country Parties, Governments, other donors and relevant organisations to provide assistance to developing country Parties, in particular the least developed and the small island developing States among them, and Parties with economies in transition, to organize workshops on capacity-building;

8. *Urges* the Global Environment Facility to ensure a rapid implementation of its initial strategy for assisting countries to prepare for the ratification, entry into force and implementation of the Protocol, and to support capacity-building for the establishment of the Biosafety Clearing-House in a flexible manner, and to provide additional support for the development of regional centres for training, Clearing-House, risk assessment and risk management and legal advice;

9. *Urges* GEF and other donor agencies and governments to support regional and inter-regional capacity building workshops and preparatory meetings, in cooperation with relevant international, regional, sub-regional organizations.

10. *Welcomes* decision VI/17 of the Conference of the Parties, requesting the Global Environment Facility to provide financial resources for national capacity-building in biosafety, in particular for enabling effective participation in the Biosafety Clearing-House and in the implementation of the Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety.

11. *Welcomes also* the support already provided by the Global Environment Facility for demonstration projects on implementation of the national biosafety frameworks and *invites* the Global Environment Facility to extend such support to other eligible countries.

12. *Requests* the Executive Secretary to prepare a progress report on the implementation of the Action Plan, on the basis of the submissions from Parties, other Governments and relevant organizations, for consideration at its third meeting.

B. Additional elements of a draft decision prepared by the Executive Secretary

The Conference of the Parties serving as the meeting of the Parties to the Protocol,

Taking note of recommendations 2/9 and 3/5 of the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP) on capacity-building, and the documents prepared by the Executive Secretary;

Recognizing the need for developing and implementing concrete capacity-building activities that are complementary and mutually supportive;

1. *Decides* to review and revise the Action Plan at its third meeting.
2. *Welcomes* the progress report made in implementing the Action Plan contained in document UNEP/CBD/BS/COP-MOP/1/6 prepared by the Executive Secretary and *invites* Parties, other Governments and relevant organizations to take further measures towards its effective implementation, and submit progress reports to the Executive Secretary no later than three months prior to its third meeting.
3. *Invites* Parties, other Government and relevant organizations to provide additional financial and other forms of assistance to developing country Parties and Parties with economies in transition in the development for their capacity-building projects, training, information and awareness-raising activities.
4. *Takes note of* the capacity-building priority needs submitted by Parties and other Governments and *invites* those Parties and other Governments that have not yet done so to assess and submit to the Biosafety Clearing-House their needs as soon as possible.
5. *Urges* Parties and other governments to review their needs and priorities periodically and update their records in the country capacity needs database in the Biosafety Clearing-House accordingly.
6. *Encourages* Parties and other Governments to develop national strategic plans and programmes to address their identified needs and priorities.

7. *Invites* Parties, other Governments and relevant organizations in a position to provide assistance to developing countries and countries with economies in transitions, as an initial step, to review the information submitted to the Country Capacity Needs database in the BCH when developing assistance programmes.

8. *Invites* Parties, other Governments and relevant organizations to submit to the Biosafety Clearing-House information regarding their on-going capacity-building projects and initiatives as well as suggestions and lessons learned on how to enhance capacity building for the implementation of the Protocol.

9. *Requests* the Executive Secretary to prepare a summary report of the capacity needs and priorities, on the basis of the updated information submitted by Parties and other Governments to the Biosafety Clearing-House, for consideration by the COP-MOP at its regular meetings.

10. *Welcomes* the Outreach Strategy for the Cartagena Protocol on Biosafety developed by the Executive Secretary and *requests* the Executive Secretary to advance its implementation with the view to promoting broader awareness of the Protocol and fostering the active participation and support of a broad range of stakeholders in the implementation of the Protocol.

Annex I

**ACTION PLAN FOR BUILDING CAPACITIES FOR THE
EFFECTIVE IMPLEMENTATION OF THE CARTAGENA
PROTOCOL ON BIOSAFETY**

1. Objective of the Action Plan

1. The objective of this Action Plan is to facilitate and support the development and strengthening of capacities for the ratification and effective implementation of the Cartagena Protocol on Biosafety at the national, sub regional, regional and global levels in a timely manner. In this regard, the provision of financial, technical and technological support to developing countries, in particular the least developed and small island developing states among them, as well as countries with economies in transition, taking into account also countries that are centres of origin and centres of genetic diversity, is essential.

2. To achieve the objective, this action plan aims at identifying country needs, priorities, and mechanisms of implementation and sources of funding.

2. Key elements requiring concrete action

3. The following key elements are meant to be considered in a flexible manner, based on a demand-driven approach, taking into account the different situations, capabilities and stages of development of each country.

- (a) Institutional capacity-building:
 - (i) Legislative and regulatory framework;
 - (ii) Administrative framework;
 - (iii) Technical, scientific and telecommunications infrastructures;
 - (iv) Funding and resource management;
 - (v) Mechanisms for follow-up, monitoring and assessment;
- (b) Human-resources development and training;
- (c) Risk assessment and other scientific and technical expertise;
- (d) Risk management;
- (e) Awareness, participation and education at all levels including for decision makers, stakeholders and general public;
- (f) Information exchange and data management including full participation in the Biosafety Clearing-House;
- (g) Scientific, technical and institutional collaboration at sub regional, regional and international levels;
- (h) Technology transfer;
- (i) Identification.

3. *Processes/steps*

4. The following processes/steps should be undertaken within appropriate timeframes:

- (a) Identification of capacity needs, including the needs that are not covered prior to the second meeting of ICCP;
- (b) Prioritization of the key elements by each country prior to the first meeting of the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol;
- (c) Sequencing of actions, including timelines for the operation of capacity-building prior to first meeting of the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol;
- (d) Identification of the coverage and gaps in capacity-building initiatives and resources that could support the ratification and implementation, prior to first meeting of the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol, from the following:
 - (i) Global Environment Facility (GEF);
 - (ii) Multilateral agencies;
 - (iii) Other international sources;
 - (iv) Bilateral sources;
 - (v) Other stakeholders;
 - (vi) National sources;
- (e) Enhancing the effectiveness and adequacy of financial resources to be provided by multilateral and bilateral donors and other donors to developing countries, in particular the least developed and small island developing States among them, as well as countries with economies in transition taking into account also countries that are centres of origin and centres of genetic diversity;
- (f) Enhancing synergies and coordination of capacity-building initiatives;
- (g) Development of indicators for evaluating capacity-building measures.

4. *Implementation*

5. The activities hereunder are not listed in any order of priority:

4.1 *National level*

- (a) Development of national regulatory frameworks on biosafety;
- (b) Development and/or strengthening of institutional, administrative, financial and technical capacities, including the designation of national focal points and competent national authorities;
- (c) Establishment of a mechanism to inform all stakeholders;
- (d) Appropriate participation of all relevant stakeholders;
- (e) A mechanism for handling requests or notifications, including risk assessment and decision-making, as well as public information and participation;

- (f) Mechanisms for monitoring and compliance;
- (g) A short- and long-term assessment for internal and external funding;

4.2 *Sub-regional and regional levels*

- (a) Regional and sub-regional collaborative arrangements
- (b) Regional and sub-regional advisory mechanisms
- (c) Regional and sub-regional centres of excellence and training
- (d) Regional and sub-regional website and database
- (e) Mechanisms for regional and subregional coordination and harmonization of regulatory frameworks, where appropriate.

4.3 *International level*

- (a) Effective functioning of the Biosafety Clearing-House;
- (b) Development/updating of international guidance (IUCN, UNEP, FAO etc.);
- (c) Strengthening South-South cooperation;
- (d) Development and effective use of the roster of experts
- (e) Regular review and provision of further guidance by the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol.

5. *Monitoring and coordination*

6. Because of the multitude of different actors undertaking different capacity building initiatives, mutual information, coordination and regular monitoring will be promoted in order to avoid duplications and to identify gaps. This exercise will lead to a focus of capacity building on biosafety, ratification, and implementation of the Cartagena Protocol on Biosafety. The Secretariat and the Biosafety Clearing-House will be actively involved in the process.

7. The Secretariat will prepare, on the basis of Governments' submissions, a report on the steps taken by countries, multilateral/bilateral and other international sources, towards implementation of the Action Plan and submit a report to the Conference of the Parties servicing as the meeting of the Parties to the Protocol so that it identifies whether the actions listed under section 4 have been carried out successfully and effectively.

Appendix

POSSIBLE SEQUENCE OF ACTIONS

The Intergovernmental Committee for the Cartagena Protocol on Biosafety,

Recognizing that the sequence of action necessary to ratify and implement the Protocol is to be decided by Parties according to their national needs,

Cognizant of the urgent need to build capacities in developing countries, in particular the least developed and small island developing States among them, as well as countries with economies in transition,

Building on the identified elements in the Action Plan and without prejudice to the timeframes indicated therein,

As an aid to assist countries to establish national priorities and to facilitate regional and sub-regional activities the following sequence of actions based on experience and past practice is proposed for consideration.

POSSIBLE SEQUENCING OF ACTIVITIES IDENTIFIED IN THE ACTION PLAN

Each activity has associated with it specific objectives/tasks identified in the Indicative Framework and associated documents which will facilitate priority setting by countries and enable the establishment of a timetable for capacity development. This sequence does not establish priorities of action to be taken by countries.

A. National level

1. Assessment of effectiveness and adequacy of existing capacity.
2. Assessment of the short- and long-term requirements for internal and external funding.
3. Development of timelines.
4. Development of national regulatory frameworks on biosafety.
5. Development and/or strengthening of institutional, administrative, financial and technical capacities, including the designation of national focal points and competent authorities.
6. A mechanism for handling requests or notifications, including risk assessment and decision-making, as well as public information and participation.
7. Mechanisms for monitoring and compliance.
8. Establishment of a mechanism to inform all stakeholders.
9. Appropriate participation of all relevant stakeholders.

B. Regional and subregional levels

1. Assessment of national, bilateral and multilateral funding.
2. Regional website and database.
3. Mechanisms for regional and sub regional coordination and harmonization of regulatory frameworks, where appropriate.
4. Regional and subregional collaborative arrangements.
5. Regional and subregional advisory mechanisms.

6. Regional and subregional centres of excellence and training.

C. International level

1. Effective functioning of the Biosafety Clearing-House.
2. Enhancing the effectiveness and adequacy and coordination of financial resources to be provided by multilateral and bilateral donors and other donors to developing countries, in particular the least developed and small island developing States among them, as well as countries with economies in transition.
3. Development and effective use of the roster of experts.
4. Enhancing synergies and coordination of capacity-building initiatives.
5. Strengthening South-South cooperation.
6. Development/updating of international guidance (IUCN, UNEP, FAO etc.).
7. Regular review and provision of further guidance by the Conference of the Parties to the Convention serving as the meeting of the Parties to the Protocol.

Annex II

THE ROLE OF DIFFERENT ENTITIES IN SUPPORTING CAPACITY-BUILDING

1. The present annex summarizes, in a point-by-point list form, the views of Parties and governments regarding the roles which different entities could play to facilitate capacity-building to assist countries in preparing for the entry into force of the Protocol received by the Secretariat in response to a questionnaire that was sent to all national focal points together with the notification of 12 January 2001. The countries and regional economic integration organizations that specifically addressed this issue in their responses to the questionnaire were: Argentina, Costa Rica, Cuba, Ecuador, the European Union, India, Jamaica, Japan, Switzerland, Turkey, United States of America and Uruguay.

2. *The role of the ICCP:*^{1/}

(a) Assuming the overall responsibility for decisions regarding the establishment of the work programme related to capacity-building and evaluation of its implementation (as illustrated in document UNEP/CBD/ICCP/1/9);

(b) Setting norms for harmonization;

(c) Developing common formats to build capacity and encouraging consistency of standards in such matters as risk assessment and information exchange;

(d) Revising and updating the capacity-building framework in the light of responses to the questionnaire and the outcome of inter-sessional workshops and projects;

(e) Providing general guidelines from an international perspective;

(f) Gathering information required for the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol to decide what capacity-building projects will be the most effective in assisting countries to implement the provisions of the Protocol, including information on national priority capacity needs and how to meet them;

3. *The role of the Secretariat:*^{2/}

(a) Providing an administrative framework for creation of technical and scientific capacity;

(b) Implementing the pilot phase of the Biosafety Clearing-House, taking account of priority needs regarding the capacities of Governments for access to the Biosafety Clearing-House and the views of Governments on monitoring progress;

(c) Administering the Biosafety Clearing-House;

(d) Undertaking further synthesis and analysis of the identified needs of countries for implementation of the Protocol, and available means for assistance and information exchange;

^{1/} Since the mandate of the ICCP has ended, COP-MOP may wish to take up the roles that had been envisaged for the ICCP, as outlined in paragraph 2 of annex II.

^{2/} COP-MOP may wish to expand role 3(b) of the Secretariat specified above as the BCH moves from the pilot phase into full operation. Also as proposed by the Global Industry Coalition in its submission to the Secretariat, COP-MOP may wish to expand role 3(d) or to add a new role for the Secretariat to: "Provide technical assistance to Parties and other Governments to help them in conducting their needs assessments", in addition to the synthesis and analysis of the identified needs.

- (e) Serving as a focal point for organizations to submit information to be made public as regards capacity-building initiatives for the implementation of the Protocol, as well as for identifying needs for capacity-building;
- (f) Facilitating the flow of information;
- (g) Promoting synergies and keeping countries abreast of important developments and opportunities with respect to capacity-building – e.g., roster of experts;
- (h) Facilitating the functioning of the roster of experts;
- (i) Implementing the relevant recommendation of ICCP and later the decisions of the Conference of the Parties serving as the meeting of the Parties;
- (j) Cooperating with the UNEP/GEF enabling project on national biosafety frameworks;
- (k) Facilitating and promoting collaboration and coordination among existing initiatives on capacity-building; and
- (l) Providing coordination and leadership and suggesting ways and means to build capacity in countries, taking into account the recommendations of the ICCP.

4. *Subject to the decisions of the Conference of the Parties, the role of the Global Environment Facility (GEF) includes:*

- (a) Providing funds necessary to build legislative and administrative frameworks, and for training in risk assessment and risk management;
- (b) Deciding on further areas for financial support for capacity-building in accordance with the identified priority needs of developing countries, including results of the first meeting of the ICCP, responses to the questionnaire, the outcomes of inter-sessional workshops, and its previous pilot project on biosafety;
- (c) Implementing the GEF Initial Strategy adopted by the GEF Council in November 2000 to assist countries prepare for the entry into force of the Cartagena Protocol;
- (d) Facilitating the provision of technical support; and
- (e) Facilitating the use of existing and developing regional networks.

5. *The role of other bilateral and multilateral donors:*

- (a) Providing funding to Parties, governments and to the Secretariat, for relevant activities;
- (b) Co-financing or providing matching funds for building scientific capacity at the sub regional level, including sponsoring regional and sub-regional workshops;
- (c) Providing short- or long-term experts to advise on identified needs and demands for assistance on specific issues, including those listed in Article 22 of the Protocol;
- (d) Reinforcing collaboration among capacity-building projects on biotechnology and biosafety in order to avoid duplication and to efficiently use the limited resources available.

6. *The role of intergovernmental organizations:*

- (a) Assisting national authorities of Parties to take decisions;
- (b) Sharing “best practices”, models and information pertinent to relations between obligations under trade agreements and obligations under the Protocol;
- (c) Developing advice or standards on particular technical or regulatory issues: e.g., the work of the Organisation for Economic Co-operation and Development (OECD) on a unique identifier for LMOs and on Consensus Documents on common elements of risk assessment for particular species;
- (d) Contributing to implementation of the project on *Development of National Biosafety Frameworks*, in line with the terms agreed by the GEF Council and relevant decisions taken at the first meeting of the ICCP;
- (e) Providing access to databases containing information relevant to implementation of the Protocol: e.g. OECD’s Biotrack, the International Centre for Genetic Engineering and Biotechnology (ICGEB), the UNIDO Biosafety Information Network and Advisory Service (BINAS);
- (f) Developing common principles for public participation and access to information: e.g. the work of the United Nations Economic Commission for Europe under the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters;
- (g) Ensuring coordination and mutual supportiveness with other bodies and conventions concerned with LMO issues: e.g., the International Plant Protection Convention (IPPC), the Office International des Epizooties (OIE), the Food and Agriculture Organization of the United Nations (FAO) and the Codex Alimentarius Commission;
- (h) Reinforcing collaboration among capacity-building projects on biotechnology and biosafety in order to avoid duplication and to efficiently use the limited resources available; and
- (i) Providing co-financing for capacity-building activities.

7. *The role of regional networks:*

- (a) Promoting harmonization of technical, legal and scientific mechanisms in the countries;
- (b) Identifying and disseminating information related to best practice in the development of national biosafety frameworks, procedures for risk assessment and risk management, decision-taking, information exchange, and the use of human resources;
- (c) Developing regional centres that enable/ensure sharing of expertise and information as well as experiences and concerns;
- (d) Participating in the development of the Biosafety Clearing-House; and
- (e) Providing co-financing for capacity-building activities.

8. *The role of non-governmental organizations:*

- (a) Cooperating in consensus-building and assisting in raising public education and awareness;
- (b) Participating in and assisting in national and regional efforts to implement the Protocol, including helping to implement the Biosafety Clearing-House;
- (c) Contributing to guidance on Protocol implementation issues;
- (d) Integrating the views and interests of wider stakeholders, including indigenous and local communities, through increased public awareness, education and participation in decision-making and the development of policy and procedures;
- (e) Representing specialist or sectoral interests in relation to risk assessment and risk management issues;
- (f) Reinforcing collaboration among capacity-building projects on biotechnology and biosafety in order to avoid duplication and to efficiently use the limited resources available;
- (g) Associating with capacity-building initiatives, ensuring public participation and promoting public awareness on biosafety issues; and
- (h) Providing co-financing for capacity-building activities.

9. *The role of private sector/industry:^{3/}*

- (a) Participating in the effective implementation of the Protocol, including creation of awareness and provision of technical advice;
- (b) Creating confidence with consumers;
- (c) Developing techniques for identification, detection and analytical assessment and for monitoring;
- (d) Developing systems for labelling, traceability and unique identifier;
- (e) Improving capabilities of accessing and handling electronic information;
- (f) Providing scholarships in the areas mentioned above;
- (g) Undertaking risk assessment, and addressing information needs and concerns of industry;
- (h) Associating with initiatives on capacity-building and sharing experience with risk assessment and management of LMOs; and

^{3/} In response to the request made by the ICCP at its second meeting for submission of views and comments from Governments and relevant organizations on different issues, including capacity-building, the Global Industry Coalition (GIC) made suggestions, at the third meeting of the ICCP, contained in the additional sub-paragraphs 9(j) to 9(w) regarding what it considers to be more representative roles that industry can play in capacity- building. These elements were omitted in the report of the third meeting of the ICCP due to technical oversight. It should be noted that sub-paragraphs 9(a)-(i) are as contained in Annex II of the ICCP recommendation 3/5.

- (i) Providing co-financing for capacity-building activities.

Submission by the Global Industry Coalition on the revised description of roles of industry in capacity-building

- (j) Participating in and assisting in national and regional efforts to implement the Protocol;
- (k) Creating confidence with consumers;
- (l) Provision of technical advice concerning identification, detection and analytical assessment and for monitoring;
- (m) Provision of technical advice concerning proposed systems for labeling, traceability and unique identifier;
- (n) Improving capabilities of accessing and handling electronic information;
- (o) Undertaking risk assessment, and addressing information needs and concerns of industry;
- (p) Associating with initiatives on capacity-building and sharing experience with risk assessment and management of LMOs;
- (q) Providing co-financing for capacity-building activities;
- (r) Cooperating in consensus-building and assisting in raising public education and awareness;
- (s) Participating in and assisting in national and regional efforts helping to implement the Biosafety Clearing-House;
- (t) Contributing to guidance on Protocol implementation issues;
- (u) Representing specialist or sectoral interests in relation to risk assessment and risk management issues;
- (v) Reinforcing collaboration among capacity-building projects on biotechnology and biosafety in order to avoid duplication and to efficiently use the limited resources available; and
- (w) Associating with capacity-building initiatives, ensure public participation and promote public awareness on biosafety issues.

10. *The role of scientific/academic institutions:*

- (a) Promoting public awareness and implementing training and education activities;
- (b) Developing of centres of expertise and excellence for particular risk assessment and risk management issues;
- (c) Providing participants for the roster of experts;
- (d) Implementing exchange and scholarship programmes aimed at enhancing the teaching and research capacities of higher education and other private and public institutions in developing countries as regards biosafety related issues;

(e) Cooperating on research and information exchange on socio-economic impacts, especially on indigenous and local communities;

(f) Assisting in training and conducting risk assessment, research in LMOs for improved crop production;

(g) Participating in capacity-building initiatives as well as in other activities in relation with the implementation of the Protocol; and

(h) Providing co-financing for capacity-building activities.

*Annex III***IMPLEMENTATION TOOL KIT**

This implementation tool kit provides a compilation, as a checklist, of obligations found in the Cartagena Protocol on Biosafety. These obligations are organized in the following categories:

- Administrative tasks (initial and future)
- Legal requirements and/or undertakings
- Procedural requirements (AIA and Article 11)

I. ADMINISTRATIVE TASKS

	<i>Tasks</i>	<i>Article</i>	✓
	<i>Initial actions</i>		
1.	Designate one national authority responsible for liaison with the Secretariat and provide name/address to Secretariat.	19(1),(2)	
2.	Designate one or more competent authorities responsible for performing administrative functions under the Protocol and provide name(s)/address(es) to the Secretariat. If more than one, indicate the types of LMOs for which each competent authority is responsible.	19(1),(2)	
3.	Provide to the Biosafety Clearing-House: <ul style="list-style-type: none"> - any relevant existing laws, regulations or guidelines, including those applicable to the approval of LMO-FFPs; and - any bilateral, regional or multilateral agreements or arrangements. 	20(3)(a)-(b), 11(5), 14(2)	
4.	Specify to the Biosafety Clearing-House cases in which import may take place at the same time as the movement is notified.	13(1)(a)	
5.	Specify to the Biosafety Clearing-House imports of LMOs exempted from the AIA procedures.	13(1)(b)	
6.	Notify the Biosafety Clearing-House if domestic regulations shall apply with respect to specific imports.	14(4)	
7.	Provide the Biosafety Clearing-House with a point of contact for receiving information from other States on unintentional transboundary movements in accordance with Article 17.	17(2)	
8.	Notify the Secretariat if there is a lack of access to the Biosafety Clearing-House and hard copies of notifications to the Clearing House should be provided.	(e.g., 11(1))	
	<i>Follow-up actions</i>		
9.	Provide to the Biosafety Clearing-House: <ul style="list-style-type: none"> - Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and conducted in accordance with Art. 15; - Final decisions concerning the import or release of LMOs; and - Article 33 reports. 	20(3)(c)-(e)	
10.	Make available to the Biosafety Clearing-House information concerning cases of illegal transboundary movements.	25(3)	
11.	Monitor the implementation of obligations under the Protocol and submit to the Secretariat periodic reports at intervals to be determined.	33	
12.	Notify the Biosafety Clearing-House of any relevant changes to the information provided under part I above.		

II. LEGAL REQUIREMENTS AND/OR UNDERTAKINGS

	<i>Tasks</i>	<i>Article</i>	✓
1.	Ensure that the development, handling, transport, use, transfer and release of LMOs are undertaken in a manner that prevents or reduces the risks to biological diversity, taking also into account risks to human health.	2(2)	
2.	Ensure that there is a legal requirement for the accuracy of information provided by domestic exporters for purposes of notifications for export to another country and by domestic applicants for domestic approvals for LMOs that may be exported as LMO-FFPs.	8(2) 11(2)	
3.	Ensure that any domestic regulatory framework used in place of the AIA procedures is consistent with the Protocol.	9(3)	
4.	Ensure that AIA decisions are taken in accordance with Article 15.	10(1)	
5.	Ensure that risk assessments are carried out for decisions taken under Article 10 and that they are carried out in a scientifically sound manner.	15(1),(2)	
6.	Establish and maintain appropriate mechanisms, measures and strategies to regulate, manage and control risks identified in risk assessments associated with the use, handling and transboundary movement of LMOs under the Protocol.	16(1)	
7.	Take appropriate measures to prevent the unintentional transboundary movements of LMOs, including measures such as requiring a risk assessment prior to the first release of an LMO.	16(3)	
8.	Endeavour to ensure that LMOs, whether imported or locally developed, have undergone an appropriate period of observation that is commensurate with its life cycle or generation time before it is put to its intended use.	16(4)	
9.	Take appropriate measures to notify affected or potentially affected States, the Biosafety Clearing-House, and, where appropriate, relevant international organizations, when there is an occurrence within its jurisdiction that leads or may lead to an unintentional transboundary movement of and LMO that is likely to have significant adverse effects on the sustainable use and conservation of biodiversity, taking also into account risks to human health in such States.	17(1)	
10.	Take necessary measures to require that LMOs that are subject to transboundary movement under the Protocol are handled, packaged and transported under conditions of safety, taking into account relevant international rules and standards.	18(1)	
11.	Take measures to require that documentation accompanying LMO-FFPs <ul style="list-style-type: none"> - clearly identifies that they “may contain” LMOs and are not intended for intentional introduction into the environment; and - provides a contact point for further information. 	18(2)(a)	
12.	Take measures to require that documentation accompanying LMOs destined for contained use: <ul style="list-style-type: none"> - Clearly identifies them as LMOs; - Specifies any requirements for their safe handling, storage, transport and use; - Provides a contact point for further information; and - Provides the name and address of individuals or institutions to which they are consigned. 	18(2)(b)	
13.	Take measures to require that documentation accompanying LMOs that are intended for intentional introduction in the environment and any other LMOs within the scope of the Protocol: <ul style="list-style-type: none"> - Clearly identifies them as LMOs - Specifies the identify and relevant traits and/or characteristics; - Provides any requirements for the safe handling, storage, transport and use; - Provides a contact point for further information; - Provides, as appropriate, the name and address of the importer and exporter; and - Contains a declaration that the movement is in conformity with the requirements of the Protocol. 	18(2)(c)	
14.	Provide for the designation of confidential information by notifiers, subject to the exclusions set forth in Article 21(6).	21(1),(6)	
15.	Ensure consultation with notifiers and review of decisions in the event of disagreement	21(2)	

	<i>Tasks</i>	<i>Article</i>	✓
	regarding claims of confidentiality.		
16.	Ensure the protection of agreed-upon confidential information and information claimed as confidential where a notification is withdrawn.	21(3),(5)	
17.	Ensure that confidential information is not used for commercial purposes without the written consent of the notifier.	21(4)	
18.	Promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of LMOs, taking also into account risks to human health.	23(1)(a)	
19.	Endeavour to ensure that public awareness and education encompass access to information on LMOs identified in accordance with the Protocol that may be imported.	23(1)(b)	
20.	In accordance with relevant domestic laws, consult with the public in decision making under the Protocol, while respecting confidential information.	23(2)	
21.	Endeavour to inform the public about the means of public access to the Biosafety Clearing-House.	23(3)	
22.	Adopt appropriate measures aimed at preventing and, if appropriate, penalizing transboundary movements in contravention of domestic measures to implement the Protocol.	25(1)	
23.	Dispose, at its expense, LMOs that have been the subject of an illegal transboundary movement through repatriation or destruction, as appropriate, upon request by an affected Party.	25(2)	

III. PROCEDURAL REQUIREMENTS: ADVANCED INFORMED AGREEMENT ^{4/}

	<i>Tasks</i>	<i>Article</i>	✓
1.	Provide written acknowledgement of receipt of notification to notifier within 90 days, including:		
	- Date of receipt of notification;	9(2)(a)	
	- Whether notification meets requirements of Annex I;	9(2)(b)	
	- That the import may proceed only with written consent and whether to proceed in accordance with the domestic regulatory framework or in accordance with Article 10; OR	10(2)(a), 9(2)(c)	
	- Whether the import may proceed after 90 days without further written consent.	10(2)(b)	
2.	Communicate in writing to the notifier, within 270 days of receipt of notification: <ul style="list-style-type: none"> - Approval of the import, with or without conditions; - Prohibition of the import; - A request for additional relevant information in accordance with domestic regulatory framework or Annex I; or - Extension of the 270 day period by a defined period of time; AND 	10(3)(a)-(d)	
	Except where approval is unconditional, the reasons for the decision, including the reasons for the request for additional information or for an extension of time.	10(4)	
3.	Provide in writing to the Biosafety Clearing-House the decision communicated to the notifier.	10(3)	
4.	Respond in writing within 90 days to a request by an Exporting Party for a review of a decision under Article 10 where there has been a change in circumstances or additional relevant scientific or technical information has been made available, providing the reasons for the decision upon review.	12(2),(3)	

^{4/} Please note that the requirement of notification under Article 8.1 of the Protocol is inadvertently omitted from this section. That should be corrected.

IV. PROCEDURAL REQUIREMENTS: LIVING MODIFIED ORGANISMS FOR DIRECT USE AS FOOD, FEED OR FOR PROCESSING ^{5/}

	<i>Tasks</i>	<i>Article</i>	✓
1.	Upon making a final decision regarding domestic use, including placing on the market, of LMOs that may be subject to transboundary movement for direct use as food or feed, or for processing, inform the Biosafety Clearing-House within 15 days of making that decision, including the information listed in Annex II.	11(1)	
2.	Except in the case of field trials, provide hard copies of the final decision to the National Focal Point of Parties that have notified the Secretariat in advance that they do not have access to the Biosafety Clearing-House.	11(1)	
3.	Provide additional information contained in paragraph (b) of Annex II about the decision to any Party that requests it.	11(3)	
4.	In response to the posting of a decision by another Party, a Party that decides to import may take a decision on the import of LMO-FFPs: <ul style="list-style-type: none"> - either as approved under the domestic regulatory framework consistent with the Protocol; OR - in the absence of a regulatory framework, on the basis of a risk assessment in accordance with Annex III within no more than 270 days. In this case, a declaration must be made to the Biosafety Clearing-House. 	11(4),(6)	

^{5/} COP-MOP may wish to consider the following wording for Task 4 proposed by the Global Industry Coalition: “If a Party requires a decision for the import of LMO-FFPs under its domestic legislation, such legislation must be in conformity with the Protocol. Where a decision is required pursuant to a declaration under Article 11(6) in the absence of domestic legislation, the decision must be made on the basis of a risk assessment in accordance with Annex III within no more than 270 days.”

*Annex IV***SUMMARY OF GOVERNMENT SUBMISSIONS REGARDING CAPACITY-BUILDING
NEEDS AND PRIORITIES ^{6/}***Number and percentage of countries that indicated different capacity priority needs*

<i>Specific priority needs identified</i>	Number of countries	Percentage
(i) Legislative and regulatory framework		
Development of legal frameworks	23	56.1
Regulatory training (legal, policy, enforcement, inspection etc.)	22	53.7
Implementation of legal frameworks	16	39.0
Biosafety standards	15	36.6
Harmonization of biosafety-related sectoral laws/policies	9	22.0
Mainstreaming biosafety into other sectors	8	19.5
Compliance mechanisms	7	17.1
Multidisciplinary strategic planning	4	9.8
Negotiation of bilateral, regional and multi-lateral agreements	1	2.4
Other	5	12.2
(ii) Administrative framework		
Administration of the AIA procedure	21	51.2
Decision-making system and administrative procedures	21	51.2
Customs and border control procedures	16	39.0
Institutional entities for handling biosafety issues	12	29.3
Monitoring and reporting on implementation of the Protocol	10	24.4
Mechanisms for considering socio-economic impacts	10	24.4
Inter-agency communication and coordination	7	17.1
Mechanisms for private sector and community involvement	5	12.2
Mechanisms for review of decisions	1	2.4
Other	5	12.2
(iii) Technical, scientific and telecommunication infrastructure		
LMO testing laboratories and equipment	27	65.9
Border control and inspection facilities	22	53.7
LMO containment (including quarantine) facilities	14	34.1
LMO research facilities	12	29.3
Database infrastructure and protocols	11	26.8
Computer hardware, software and networks	9	22.0
Office facilities, equipment and supplies, including maintenance	7	17.1
LMO disposal facilities (e.g. incinerators)	4	9.8
Telecommunication facilities, internet connectivity and information security	2	4.9
Transportation means	2	4.9
(iv) Funding and resource management		
Financial assistance (e.g. project grants or loans)	33	80.5
Public-private sector partnerships	21	51.2
Information on funding sources	17	41.5
Fundraising skills, including proposal writing	9	22.0
Financial management skills	9	22.0

^{6/} This analysis is based on the 41 submissions by Parties and other Government received by the Secretariat as of 30 September 2003 in response to the notification that was issued by the Executive Secretary in May 2003.

<i>Specific priority needs identified</i>	Number of countries	Percentage
Others	2	4.9
(v) Mechanisms for follow-up, monitoring and assessment		
Inspection procedures and control measures	31	75.6
Mechanisms for detecting unintentional or illegal LMO movement	27	65.9
Long-term LMO monitoring and surveillance	23	56.1
Emergency measures for unintentional movements	19	46.3
Others	3	7.3

<i>Human Resources Development and Training</i>		
Scientific methods and protocols relevant to risk assessment and management	26	63.4
Detection, testing and quantitative analysis of LMOs	21	51.2
Training of policy-makers and regulators	21	51.2
Support for case-by-case cost-benefit analysis of LMOs	18	43.9
Assessment and integration of socio-economic considerations	16	39.0
Assessment of trade impacts of biosafety-related measures	16	39.0
Assessment of LMO characteristics	15	36.6
Analysis of the linkages between other international agreements and Protocol requirements	13	31.7
Legal drafting and policy analysis skills	11	26.8
Information technology and database management	10	24.4
Evaluation of genetic modifications	8	19.5
Assessment of the extent and effects of gene flow	7	17.0
Molecular biology skills	5	12.2
Applied ecology	3	7.3
Others	7	17.1

<i>Risk Assessment</i>		
National frameworks (principles, procedures and mechanisms) for risk assessment	23	56.1
Risk assessment methodologies	16	39.0
Risk assessment review mechanisms (e.g. review bodies, scientific advisory committees)	15	36.6
Scientific expertise to undertake risk assessments	12	29.3
Expertise to review and audit risk assessments	11	26.8
Access to reference materials / databases on risk assessment	9	22.0
National biosafety research	8	19.5
Others	4	9.8
<i>Risk Management</i>		
Risk management frameworks, strategies and mechanisms	29	70.7
Capability for detection, management and prevention of unintentional transfer of LMOs	23	56.1
Tools for monitoring the handling and use of LMOs	23	56.1
Emergency measures for unintentional LMO releases	11	26.8
Mechanisms for cooperation with other Parties regarding risk management	9	22.0
Others	3	7.3

Public awareness, education and participation		
Biosafety awareness activities (e.g. seminars, radio talks, etc)	24	58.5
Biosafety awareness materials and equipment	22	53.7
Support to promote public participation in decision-making	18	43.9
Means for public access to the Biosafety Clearing-House	9	22.0
Media engagement skills and strategies	9	22.0
Risk communication skills and strategies	9	22.0
Support to ensure timely public access to information on impending LMO imports	5	12.2
Other	1	2.4
Information exchange/data management (including BCH)		
Data collection, management and storage	18	43.9
Information exchange and data management infrastructure	13	31.7
Interoperability of national databases with the BCH	12	29.3
National BCH node	11	26.8
Information Technology specialists	10	24.4
Standardized formats and procedures for information-exchange	8	19.5
Mechanisms to ensure synergies and information-exchange	7	17.1
Secure systems to manage confidential information	6	14.6
Staff dedicated to handle IT needs	6	14.6
Sub-regional and regional node for the BCH	4	9.8
Other		
Scientific, technical and institutional collaboration		
Mechanisms for regional and international cooperation and sharing of experiences	29	70.7
Inter-institutional networks and communications with the public	24	58.5
Access to information on available opportunities for collaboration	23	56.1
Other	4	9.8
Technology transfer		
Technologies for handling, transport and identification of LMOs	19	46.3
Technologies for risk assessment of LMOs	19	46.3
Technologies for monitoring of LMOs	16	39.0
Management of intellectual property rights	8	19.5
Capability for assessment of available appropriate technologies	7	17.1
Enabling policies and incentives for technology transfer	6	14.6
Technologies for information exchange / data management	5	12.2
Access to proprietary technologies on preferential terms	3	7.3
Other	1	2.4
Identification of LMOs		
Methods and systems for identification of LMOs, e.g. unique identification systems	28	68.3
Inspection systems for LMO shipments	21	51.2
Guidelines for safe handling, packaging and transport of LMOs	18	43.9
Documentation systems for LMOs shipments	15	36.6
Systems for segregation of LMOs	6	14.6
Other	1	2.4

*Annex V***LIST OF ONGOING AND COMPLETED CAPACITY-BUILDING PROJECTS AND OTHER INITIATIVES RELATED TO BIOSAFETY****(a) Ongoing projects**

- 1) African Resource and Training Regional Centre for Biosafety and Protection of Biodiversity, by *International Centre for Genetic Engineering and Biotechnology (ICGEB)*
- 2) Africa-wide Capacity Building Programme in Biosafety, by *the Commission of the African Union*
- 3) ASEAN Programme Activities on Biosafety Capacity Building by *the Secretariat of the Association of South East Asian Nations (ASEAN)*
- 4) Assessing Ecological and Human Health Effects of Genetically Engineered Organisms by *The Edmonds Institute*
- 5) Ateliers d'information et de formation sur la biosécurité / Information and training workshops on biosafety by *SOLAGRAL*
- 6) Australian Capacity building activities in the field of Biosafety – Framework, *Australian Department of Foreign Affairs and Trade*
- 7) Australian Quarantine and Inspection Service (AQIS) Head Office In-House Training, by *Environment Australia*
- 8) Australian Training in non-APEC International Fora, by *Environment Australia*
- 9) Biosafety Capacity Building Programme for Developing Countries by *Third World Network (TWN)*
- 10) Biosafety Governance Program by *Institute for Social, Economic and Ecological Sustainability (ISEES), University of Minnesota.*
- 11) Biosafety Information Network and Advisory Service (BINAS) by *United Nations Industrial Development Organization (UNIDO)*
- 12) Biosafety Outstation by *International Center of Genetic Engineering and Biotechnology (ICGEB)*
- 13) Biosafety Programme of the *International Center of Genetic Engineering and Biotechnology (ICGEB)*
- 14) Biosafety Project on Developing Guidelines for Latin America and the Caribbean by *United Nations University (UNU); Biotechnology for Latin America and Caribbean (BIOLAC)*
- 15) Biotechnology Activities by *Food and Agriculture Organization of the United Nations (FAO)*
- 16) Bulgaria Capacity Building Project for the Implementation of National Biosafety Framework by *AgroBioInstitute (ABI)*
- 17) Cameroon Capacity Building Project for the Implementation of National Biosafety Framework by *Ministry of the Environment and Forestry*
- 18) Canada-Latin America Initiative on Biotechnology for Sustainable Development (CamBioTec) by *BIOTECCanada, in collaboration with International Development Research Centre (IDRC) and Canadian International Development Agency (CIDA)*
- 19) Capacity Building activities undertaken by Australian Quarantine and Inspection Service (AQIS) Training Services, Sydney, Australia

/...

- 20) Capacity-Building Efforts of Individual Biotechnology Companies – *compiled by Global Industry Coalition*
- 21) Capacity-Building for Biosafety by *Consultative Group on International Agricultural Research (CGIAR)*
- 22) Capacity-Building Framework by *European Association for Bioindustries (Europabio)*
- 23) Capacity-Building Task Force on Trade, Environment and Development by *United Nations Conference on Trade and the Environment (UNCTAD) and UNEP*
- 24) China Capacity Building Project for the Implementation of National Biosafety Framework by *State Environmental Protection Administration (SEPA), China*
- 25) Colombia Capacity Building Project for the Implementation of the National Biosafety Framework by *Alexander Von Humboldt Institute and The World Bank*
- 26) Cuba Capacity Building Project for the Implementation of National Biosafety Framework by *Ministry of Science, Technology and Environment (CITMA)*
- 27) Danish Assistance to Capacity-Building in Biosafety by *DANCEE (Danish Cooperation for Environment in Eastern Europe) and DANCED (Danish Corporation for Environment and Development)*
- 28) East African Regional Programme and Research Network for Biotechnology, Biosafety and Biotechnology Policy Development (BIO-EARN) by *Biotechnology Advisory Center (BAC) of the Stockholm Environment Institute (SEI)*
- 29) Environnement et Développement durable: les enjeux de la biosécurité by *Réseau Interdisciplinaire Biosécurité (RIBios) c/o - Institut universitaire d'études du développement (IUED), Genève;*
- 30) EU Twinning Project PL 01/EN/IB/03 – “Biological Safety System in Poland” by *Polish Ministry of the Environment and the German Federal Ministry for Health and Social Security*
- 31) European Commission International Cooperative Programme (INCO) by *European Commission (EC)*
- 32) FAO Capacity Building Project in Biosafety of GM Crops in Asia (2002-2005) by *FAO Regional Office for Asia and the Pacific*
- 33) GEF Initial Strategy for Assisting Countries to Prepare for Entry into Force of the Cartagena Protocol on Biosafety by *Global Environment Facility (GEF)*
- 34) German Biosafety Capacity-Building Initiative for the Implementation of the Cartagena Protocol by *German Federal Ministry for Economic Cooperation and Development (BMZ)*
- 35) Implementation of Biosafety Frameworks in Pre-Accession Countries of Central and Eastern Europe by *Netherlands Ministry of the Environment*
- 36) India Capacity Building Project to Implement the National Biosafety Framework by *Ministry of Environment and Forests and The World Bank*
- 37) Indo-Swiss Collaboration in Biotechnology (ISCB) by *Swiss Agency for Development and Cooperation (SDC) and Department of Biotechnology (DBT), India.*
- 38) Institutional capacity building project by *Global Industry Coalition (GIC)*
- 39) Integrating Biosafety into Biotechnology Development: Comparative Analyses of Policies and Strategies in Asia and their Implications by *Biotechnology Advisory Center (BAC)*
- 40) ISAAA Biosafety Initiative by *International Service for the Acquisition of Agri-biotech Applications (ISAAA)*

- 41) ISNAR Biotechnology Service (IBS) - *International Service for National Agricultural Research (ISNAR)*
- 42) IUCN Biosafety Capacity Building Initiative - Asian Region by *IUCN - Regional Biodiversity Programme, Asia*
- 43) Kenya Capacity Building Project for the Implementation of National Biosafety Framework by *Ministry of Environment and Natural Resources*
- 44) Malaysia Capacity Building Project for the Implementation of National Biosafety Framework by *Ministry of Science, Technology & the Environment (MOST)*
- 45) Mexico Capacity Building Project for the Implementation of National Biosafety Framework by *National Commission on Biosafety and Genetically Modified Organisms (CIBIOGEM)*
- 46) Namibia Capacity Building Project for the Implementation of National Biosafety Framework by *The Namibian Biotechnology Alliance (NABA) and UNEP/GEF*
- 47) Network for Capacity Building in Biotechnology and Biosafety for African Universities (BIONET-Africa) by *International Centre of Insect Physiology and Ecology (ICIPE)*
- 48) Plant Biotechnology Programme of the *African Agency of Biotechnology (AAB)*
- 49) Poland Capacity Building Project for Implementation of National Biosafety Framework by *Ministry of Environment and UNEP/GEF*
- 50) Regional Website Initiative by *Global Industry Coalition (GIC)*
- 51) Research Capacity-Building on Agricultural Biotechnology by *Rockefeller Foundation*
- 52) Southern Africa Regional Biosafety programme (SARB) by *South African Agricultural Council-Vegetable and Ornamental Plant Institute (VOPI)*
- 53) Technical Cooperation Network on Plant Biotechnology in Latin America and the Caribbean by *REDBIO Foundations and FAO*
- 54) Training in Biosafety by *BIOTECanada*
- 55) Training Programme on Biosafety by *United Nations Institute for Training and Research (UNITAR)*
- 56) Uganda Capacity Building Project for the Implementation of National Biosafety Framework by *The Uganda National Council for Science and Technology (UNCST) and UNEP*
- 57) UNEP/GEF Demonstration projects to support the implementation of National Biosafety Frameworks in 8 countries by *United Nations Environment Programme (UNEP) and Global Environment Facility (GEF)*
- 58) UNEP/GEF Project on Development of National Biosafety Frameworks by *United Nations Environment Programme (UNEP); Global Environment Facility (GEF)*
- 59) U.S. Agricultural Biotechnology for Sustainable Development Project (ABSD) by *United States Agency for International Development (USAID)*
- 60) U.S. initiatives for capacity building by other international capacity-building projects supported by GEF and CGIAR to which the U.S. Government provides funding
- 61) U.S. initiatives for capacity building by *USDA, National Science Foundation (NSF) and National Institutes of Health (NIH)*
- 62) U.S. initiatives for capacity building in biosafety by *US Department of State*
- 63) USAID Agricultural Biotechnology Support Project, ABSP (1991-2002) by *United States Agency for International Development (USAID) and Michigan State University*

- 64) USAID Program for Biosafety Systems, PBS (2003-2005), *coordinated by International Service for National Agricultural Research (ISNAR)*
- 65) USAID Regional Biotechnology and Biosafety Program in East/Central Africa) *by USAID and Association for Strengthening Agriculture Research in East and Central Africa (ASARECA)*

(b) Completed Projects

- 66) Argentina - Chile Biosafety Project. (CIDA Project #540/19426) *by BIOTECanada, FAB (Argentina) and grEvo Canada*
- 67) Asia-Pacific Workshop on Biosafety: Environmental Impact Analysis of Transgenic Plants (1997) *by M.S. Swaminathan Research Foundation*
- 68) Biosafety Seminars and Workshops *by the Global Industry Coalition (GIC)*
- 69) Biotechnology Research projects *by Global Industry Coalition (GIC)*
- 70) Fellowships, Study Tours and Internships *by Global Industry Coalition (GIC)*
- 71) International Workshops (four) on Biosafety Regulatory Capacity-Building (Canada-Mexico Workshop; 1999) *by Environment Canada*
- 72) Study on the Impacts of Modern Technology *by International Labour Organization (ILO)*
- 73) Training programmes in biosafety and biotechnology *supported by Global Industry Coalition (GIC)*
- 74) Twinning Light Project (Austria-Lithuania) “Strengthening of Institutional Capacity of Lithuania to Implement EU Requirements on Chemicals and GMOs Management *by Federal Environment Agency - Austria Ltd and Lithuanian Ministry of Environment*
- 75) UNEP-GEF Pilot Biosafety Enabling Activity Project (1997-1999) *by United Nations Environment Programme.*
- 76) Workshops on Biosafety Regulation *by Asia Pacific Economic Cooperation/ Agricultural Technical Cooperation Experts' Group (APEC/ATC)*
