

CBD

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Above photo L-R: Shafqat Kakahel, Deputy Executive Director, UNEP; Taieb Chérif, Secretary General of ICAO and Ahmed Djoghlaif, CBD Executive Secretary at the opening of the 3rd meeting of the Ad Hoc Open-ended Working Group on Liability and Redress in the context of the Cartagena Protocol on Biosafety.

Implementation of the Cartagena Protocol on Biosafety: National Experiences and Perspectives

Message from Ahmed Djoghlaif, CBD Executive Secretary

The adoption of the Cartagena Protocol on Biosafety in January 2000 was a major milestone for biodiversity conservation and sustainable development. The Protocol established a framework that will enable us to derive maximum benefits from modern biotechnology while also safeguarding biodiversity and human health from the possible adverse effects of living modified organisms resulting from modern biotechnology.

The Protocol entered into force in September 2003 and, to date, 141 countries have ratified or acceded to it. This rapid rate of ratification/accesion has been paralleled by international and national efforts to implement the provisions of the Protocol. At the global level, the governing body of the Protocol, the Conference of the Parties serving as the meeting of the Parties to the Protocol (COP-MOP), has adopted a number of decisions which provide implementation guidance, tools and institutional mechanisms to assist

Parties meet their obligations under the Protocol.

At the national level, more than 130 countries have developed or are in the process of developing their national biosafety frameworks (NBFs) with support from the Global Environment Facility (GEF). These NBFs provide the foundation for implementation of the Protocol at the national level. They define the national biosafety policies, the regulatory regimes (laws, regulations and guidelines), the systems for handling applications, the mechanisms for enforcement and field monitoring and the systems for information-sharing and public participation.

This second issue of the Biosafety Protocol News focuses on national experiences in the implementation of the Protocol. It includes articles written by authors from six countries (Barbados, India, Iran, Kenya, Micronesia and Slovenia) who are involved in the

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On Wednesday, 2 May 2007, Gabon became the 141st country to deposit its instrument of ratification to the Cartagena Protocol on Biosafety with the UN Secretary General. The Protocol will enter into force for Gabon on 31 July 2007 in accordance with article 37 (2) of the Protocol. The complete list of the status of ratification is available on line at <http://www.cbd.int/biosafety/signinglist.shtml?sts=rtf&ord=dt>



Implementation...

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development and implementation of national biosafety frameworks. There is also an article by a regional advisor and trainer for the UNEP-GEF Project on Building Capacity for Effective Participation in the Biosafety Clearing House. All of the authors share their personal experiences and perspectives and highlight some of the key issues, challenges and lessons learned in the process.

All the articles underline the importance of involving relevant stakeholders in the different processes. Also highlighted

is the need to strengthen human resources as well as technical, legal and institutional capacities in developing countries and in countries with economies in transition. Furthermore, the articles from Barbados, Micronesia and Slovenia underscore the need for coordination, collaboration and exchange of information among relevant institutions, processes and initiatives at the national level.

I wish to extend my personal gratitude to all of the authors who contributed articles to this issue. I invite other countries, organizations and individuals to submit articles, opinions or

commentaries for publication in future editions of the Biosafety Protocol News. This newsletter provides an important medium for all Parties, other Governments, relevant agencies and other stakeholders to exchange information, news and experiences regarding ongoing efforts to implement the Protocol. We need to share and gather the information, experiences and lessons learned from the implementation processes at different levels in order to effectively address common challenges. I hope that you will find the information in this edition inspiring and useful in your national implementation efforts. □

Implementing the Biosafety Protocol in a Small Island Developing State: The experience of Barbados

by Angela Alleyne and Rickardo Ward

Introduction

In September 2002, Barbados became a Party to the Cartagena Protocol on Biosafety (CPB) to address the concerns emanating from the rapidly growing global biotechnology industry. This decision was arrived at due to:

- Our small natural resources asset base;
- The fragility of existing ecosystems and their associated vulnerability to natural disaster and invasive biological agents;
- The increasing pervasiveness of genetically modified products in international trade;
- Our heavy and ever-increasing dependence on imports; and
- Our lack of capacity as a Small Island Developing State (SID) to keep pace with and/or influence developments in the global biotechnology industry.

Furthermore, the most significant resource of Barbados is its people. Accordingly, any matter that is likely to affect the health of its population must be treated with the utmost seriousness.

National Implementation of the Cartagena Protocol on Biosafety

The Government of Barbados views with high regard the importance of honouring its obligations under the Multilateral Environment Agreements (MEAs) that it has signed. Accordingly, the country has taken a series of important steps towards the implementation of the Protocol. Over the last four years, Barbados has been involved in global biosafety initiatives to assist in developing measures to safeguard (i) the country's biodiversity and (ii) the health of the population from the potentially damaging effects associated with Living Modified Organisms (LMOs). These include participation in the UNEP/GEF projects entitled "Development of National Biosafety Frameworks" and "Building Capacity for Effective Participation in the Biosafety Clearing House (BCH) of the CPB".

The country's process in developing the Draft National Biosafety Framework (NBF) consisted of the following four steps:

- i. A stocktaking exercise to collect

information and data on the current status of biosafety and biotechnology in the country, including human and institutional resources.

- ii. Analysis of data and information with the participation of all stakeholders.
- iii. Further analysis and processing of information to determine priorities for the NBF.
- iv. Preparation of the NBF through a consultative process.

These steps helped to ensure that the process of developing the NBF (i) builds on existing efforts in the country, (ii) ensures that all relevant stakeholders were consulted and (iii) reflects national needs and priorities in the final product. The endorsement of the NBF by the Cabinet of Barbados has paved the way for the commencement of work in preparation for the establishment of national administrative and regulatory regimes.

Towards this end, a National Biosafety Awareness Workshop was convened 15-16 January 2007. The purpose of the Workshop was to sensitize

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Barbados...

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stakeholders to the proposed structure and functioning of the NBF regime and also to involve them in the identification of the key elements required in the formation of an implementation phase project to make the framework a reality. Currently ongoing is the preparatory process to fully identify the project and to submit it for consideration against the national Resource Allocation Framework (RAF) allocation.

Work to advance the project process under the BCH Project commenced with: (i) the establishment of a National BCH Task Force to assist in the execution of the project and, (ii) the identification of the option by which the country will store and manage information for input into the Central Portal of the BCH. The resource requirements and associated costs of staffing and equipment were evaluated. The existing status of institutional arrangements for Biosafety was also assessed. It was then determined that using the Central Portal of the BCH to register national data represents the most effective and implementable way for Barbados to start registering data in the BCH and, by extension, comply with this aspect of its obligations under the Protocol.

Implementation Issues and Lessons Learned

The NBF Development Project has contributed immensely towards building institutional capacity and assisting in the development of a framework for the management of LMOs. In addition to defining the national administrative and regulatory structures required, it has clarified the scope of the Protocol and the requirements for national compliance for all stakeholders.

Several lessons have been learned through this exercise. First, in terms of the projected timeframe, stakeholder and public participation in project implementation can be quite unpredictable and may affect delivery of the project outputs. For example, in

our case, the project had to be officially extended beyond the initial 18-month period in order to ensure stakeholder input was sufficiently considered and integrated into the delivery of the required outputs.

Second, and more importantly, in order to arrive at a common decision on the preferred structure of the proposed NBF, key stakeholders (who are expected to feature in the administration and regulation of national biosafety issues over the long-term) were involved in continuous discussions.

Given the magnitude of the tasks and the timeframe required to build capacity in biosafety, coordination was essential over the duration of the project. Coordination is further projected to be a necessary element in a successful implementation process over the long-term.

Close coordination with ongoing and planned activities that seek to develop and/or strengthen national capacity in biosafety is essential in order to avoid duplication, overlap and wastage of resources. Although both Biosafety Projects could have been carried out simultaneously, Barbados made an active decision to delay the implementation of the BCH Project until the NBF was fully defined and consensus was reached on the way forward for its creation.

The experience in developing the NBF revealed the inadequacy of the existing human, technical and financial resources. This is the key challenge faced by Barbados in meeting its obligations under the Protocol. This is true for most of the countries in the Caribbean region, including SIDS.

Not only is there limited capacity in place, there is also a high level of skill required to aid with Biosafety Risk Assessment and Management in any one CARICOM territory. Accordingly, the Government of Barbados has supported the following two regional

initiatives as an added means to ensure that the necessary regional structures are in place to support its domestic efforts to achieve compliance with the provisions of the Protocol (and also in solidarity with other territories of the region):

- Regional Coordination in Biosafety; and
- Regional Project for Implementing NBFs in the Caribbean Sub-Region.

The issue of funding for these initiatives remains a challenge, particularly as the indicative RAF allocation per country stands at US\$1 million to cover both biodiversity and biosafety over the 4-year GEF 4 cycle. It is believed that a more significant funding mechanism is required if the initiatives are to become viable and sustainable.

Conclusion

Barbados, as a Small Island Developing State, has made significant progress in meeting its obligations under the CPB since becoming a Party in 2002. Our participation in the global biosafety initiative has contributed immensely towards building capacity and assisting in the development of a framework for the management of LMOs. Nevertheless, the inadequacy of the existing human, technical and financial resources is the key challenge faced by the country to fully implement the provisions of the Protocol. The support of Barbados support for the regional biosafety initiatives is anticipated to significantly advance its capacity to meet these challenges. Moreover, considering the substantial amount of financial resources needed for capacity building in biosafety and the current RAF allocation per country, ways and means of involving other funding bodies in support of the work of the Protocol should be considered. □



Experiences in Implementation of a Biosafety System in Slovenia

by Darja Stanič Racman and Martin Batič



When we were invited by the CBD secretariat to share some experiences in the implementation of a biosafety system in Slovenia, we thought it might be interesting to highlight only some issues which might be more interesting to other countries rather than a description of the whole process of implementation. In the first part, we will focus on specific non-country driven implementation processes. In the second part, our focus will be on implementation solutions designed to compensate for the scarcity of resources, especially the lack of human capacity which is a fact of life in our small countries.

Slovenia is a relatively small country in the CEE region. The population is approximately 2 million people with 14,810 € GDP. It joined the EU in 2004 and entered the European Monetary Union in 2007.

While the first initiatives for drafting law on gene technology started in the late 1990s, the rejuvenated process took off in the year 2000 under the responsibility of the Ministry for the Environment and Spatial Planning. The process was stimulated by the clear understanding that Slovenia was going to become an EU member in the very near future and adopt the EU legal system. In the field of biosafety and environment, this meant that EU directives on contained use and deliberate release of Genetically Modified Organisms (GMOs) into the environment (including placement on the market) had to become part of Slovenian national legislation. While the Slovenian GMO Act was adopted in 2002, it took another three years to put into place all of the implementing regulations, measures and institutions needed for a fully operable biosafety system. It was at this point that the real test of the robustness and efficiency

of our regulatory system began. To date, it seems that Slovenia has done quite a satisfactory job.

It must be noted Slovenia's biosafety actions were driven by its desire to join the EU. Slovenia and eleven other countries in the CEE region have had their biosafety systems driven by the fact that they were becoming part of the regional EU biosafety system. The expectation was that the benefits of this regionally driven process would outweigh the advantages of taking a country-driven approach. Today, several years after Slovenia's accession to the EU, some pros and cons are manifesting themselves which I enumerate below:

Advantages:

- Minimum standards for all core elements of national biosafety systems were defined for the whole EU region (scope, risk assessment, administrative procedures, etc.)
- During the implementation phase we benefited directly from the experiences of other EU countries (which already had their systems in place) through capacity building projects and informal consultations.
- The EU has already established the systems for formal and informal coordination among member states at different levels whereby member states can exchange their positions, views, experiences and information. These include competent authorities meetings, networks of EU GMO inspectors, network of EU GMO detection laboratories.
- At the national level, areas where we had to comply with EU legislation (including biosafety) before entering the EU were treated politically as high priority issues. This greatly facilitated

the development and implementation of a national biosafety framework.

- Comparable national biosafety systems, with components of supranational/regional/EU elements, ensure every EU member state that all other member states are alike in decision-making, enforcement, labeling, etc. This provides for a much wider regional biosafety umbrella than if only a Slovenian biosafety system was in place.

Disadvantages:

- In order to fulfill the requirements of EU legislation in a short period of time, the required procedures were fitted to the existing administrative system. This brought about suboptimal administrative solutions.
- Transposing EU legislation on national legislation did not mean that we actually had capacities to implement the legislation (infrastructure, knowledge, resources, etc.,) at the time we entered the EU.
- There is a concern that, because the main elements and procedures were already defined in EU legislation, stakeholders were not consulted enough.

A major challenge in Slovenia is the lack of human capacity for the implementation of a national biosafety framework. Since entering into the EU in 2004, the number of notifications under our GMO Act and under GM feed and food legislation has increased substantially. Slovenia is inundated with administrative issues over notifications. Officers handling notifications have to take into consideration the position of Slovenia (based on risk assessment evaluation

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Slovenia ...

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for each notification) as well as to cooperate in the further development of EU regulatory frameworks and international efforts under the Cartagena Protocol on Biosafety. To address this problem, three competent authorities (the Ministry for the Environment and Spatial Planning, the Ministry for Agriculture, Forestry and Food and the Ministry for Health) held a meeting in 2006 to discuss how to use the resources available in the most effective manner. The meeting concluded that the three competent authorities should join forces and, when possible, unify processes and coordinate activities. Major components of collaboration/coordination were identified as follows:

- There should be only one risk assessment body to provide opinions to the competent ministries even if administrative procedures for GM food or feed or release of GMOs into the environment are involved.
- There should be only one official biosafety Slovenian website to make available all of the information that is to be made public in our legislation and other biosafety information (including that which is in the Slovenian BCH). The Ministry for the Environment and Spatial Planning will act as coordinator of the data flow and will manage the website.
- All enforcement offices of the competent ministries should coordinate their work and meet at least twice a year, first when they are preparing a monitoring plan for checking the compliance of products on the Slovenian market (seed, feed and food, etc.) and, second, when they present the results.
- All three competent ministries should also collaborate in providing resources to the national reference laboratory for GMO detection.

- The Ministries have also agreed on monthly coordination meetings at the technical level and on cooperation in capacity building activities where appropriate.

We are now implementing most of the above decisions and are already benefiting from improved information flow among different administrative bodies at all levels. A more efficient national system will hopefully free up some human resources for Slovenia to more actively contribute to international development in biosafety.

In conclusion, CEE countries that have implemented EU biosafety systems have fast-tracked their development and implementation of national biosafety systems. Even though some negative effects of this process have been observed, countries have benefited more and are better prepared to face the challenges of biosafety today.



For further information, Martin Batič and Darja Stanic Racman can be reached via email at Darja.stanic@gov.si □

CALENDAR OF EVENTS

July 2007:

2-6 July 2007
UNESCO HQ, Paris, France
Twelfth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-12)

Date and venue to be determined
African Regional Workshop on Capacity-building/Risk Assessment on LMOs

September 2007:

Date and venue to be determined
Regional Workshop on Capacity-building/Risk Assessment on LMOs (GRULAC)

October 2007:

4-5 October 2007
Montreal, Canada
Meeting of the Biosafety Clearing-House Informal Advisory Committee (BCH-IAC)

22-26 October 2007
Montreal, Canada
Fourth meeting of the Ad Hoc Open-ended Working Group of Legal and Technical Experts on Liability and Redress in the context of the Protocol

Date and venue to be determined
Asia and the Pacific Regional Workshop on Capacity-building/Risk Assessment on LMOs

November 2007:

21-23 November 2007
Montreal, Canada
Fourth meeting of the Compliance Committee under the Protocol

Date and venue to be determined
Regional Workshop on Capacity-building/Risk Assessment on LMOs (CEE)

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Implementing the Biosafety Protocol: The Iran Experience

by Mahnaz Mazaheri Assadi



The Islamic Republic of Iran signed the Cartagena Protocol on Biosafety on 23 April, 2001 and subsequently ratified it on 20 November, 2003. We were the active players in the development of the National Biosafety Framework (NBF) and assumed that the job ahead would be easy going. The Islamic Republic of Iran had the opportunity to develop the NBF under the UNEP-GEF Project on NBFs. The Department of Environment, as the National Executing Agency, quickly assembled an 18-member multi-stakeholder National Coordinating Committee (NCC) to give policy direction to the project. The 18 members comprising the NCC included 8 ministries, 4 NGOs and other officials. For the Islamic Republic of Iran, 18 February, 2004, is significant because it marks the day the Protocol became operational in Iran.

The process of developing the NBF included:

- Reviewing, compiling and ratifying pertinent laws to provide a comprehensive and stable legal system for biosafety;
- Creating sustainable administrative systems;
- Having stakeholders continuously on board for all discussions in order to prevent territorial conflicts; and
- Many other low key consultations.

The draft NBF is currently being reviewed by the government.

One big lesson we, the stakeholders, have come to appreciate is that NBFs cannot be forced to develop quickly. Rather, they should be allowed to evolve with time. We are currently waiting for further GEF funding (which will be augmented by the Government of the Islamic Republic of Iran) in order to help operationalize the Protocol through an implementation project.

The National Biosafety Council, backed by a Cabinet decree, has replaced the National Biosafety Committee of the development project. An approved National Biotechnology Strategy is in place, which is the country's 20-year

plan that emphasizes the development of all aspects of biotechnology. It ensures that "the development of biotechnology be in harmony with environmental regulations" and that "the development of biotechnology should be in accordance with the observation of biosafety regulations."

The strategy also indicates that, by the end of the strategy's action plan, a minimum of 0.5% of the Iranian agricultural area should be under the cultivation of transgenic crop plants. Although biosafety issues are being taken up very vigorously in the Islamic Republic of Iran by all stakeholders, the process still seems unfortunately slow. Personally, I refer to it as the "Turtle's Pace of the Biosafety Implementation Process". □

For further information

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Drafting a Biosafety Law: My Experience

by Rachel Omukatia Shibalira



Drafting the biosafety bill was one of the most tedious and nerve-racking, but worthy, experiences any drafter could wish for. The drafting of the Biosafety Law for Kenya began in 2001. In 2000, Kenyan top scientists, under the auspices of the National Council for Science and Technology, had developed draft regulations and

guidelines for conducting research in modern biotechnology. What they later learned was that the draft regulations could not find a place in any of the existing pieces of legislation. The only legislation in the country that contained a reference to biosafety was the Environmental Management and Coordination Act which contained regulatory provisions for environmental releases.

In 2001, Kenya was selected as one of the pilot projects for the UNEP-GEF biosafety projects. Through UNEP-

GEF, international experts came to Kenya and conducted several capacity building activities. One of the activities I attended was a crash course on biosafety, including risk assessment and decision-making procedures. I benefited from this training (which was our first national workshop) and, considering my background, it felt like groping in the dark as it was all scientific in nature. Nevertheless, there is a reason why they call Lawyers, the Learned Friends.

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My Experience ...

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The workshop was a melting pot in that it drew participants from various interest groups including scientists, non-scientists, policymakers, farmers (both conventional and organic), members of religious institutions and participants unaffiliated with a particular group. It is from this workshop that we learned the concepts of biosafety and we were able to draw out the following range of issues that need to be addressed:

Bridging the the gap: Scientists vs. Non-scientists

There was a big gap between the scientists and the non-scientists that needed to be bridged. Not only did the scientists speak in highly technical language that few could understand, there was also some unwillingness to share the information with the public. In my view, they were not yet ready to include the public in their deliberations. It was thus important that the whole notion of biosafety was demystified before the real issues were tabled.

Egg or Chicken scenario

As there was neither policy nor law in the country on biosafety, there was a tussle on whether it was necessary to have a policy first. While some stakeholders thought it would be too time-consuming to develop a policy, others were of the view that policy is a precursor to law, that law is a reflection of policy and that development of a policy was therefore essential. As part of the consensus building, it was agreed that the policy would be drafted in tandem with the law.

There was also the issue of whether to amend the existing legislation or to draft stand alone legislation. We embarked on a process to review the existing legislation and a total of seventy seven pieces of legislation were reviewed. By the end of the

review, it was clear to me as a drafter that new stand alone legislation was required.

Consensus Building

As there were divergent views held by the various stakeholders that risked causing conflicts, it was absolutely necessary to build consensus so as not to scuttle the law-making process. We held various stakeholders meetings, shared information and collected and collated the stakeholders' views. These views later helped shape the draft law.

In the process of finding a home for the agreed legislation, various government departments tussled over which department was best suited to host the law. Part of the consensus building was to ensure that the departments put the national interest before their self-interest..

Government/Cabinet approval

After four years of back and forth consultations, both the draft policy and bill were ready to be tabled in the cabinet for approval. The ministry concerned was to prepare a cabinet paper outlining the important issues for the cabinet's consideration. The paper was to be presented by the minister in charge. Once cabinet approval is granted, a policy document will be published and disseminated to the public while the bill will be tabled in Parliament for debate and enactment.

However, the country then underwent a political transition which had a tremendous effect on all other matters and the duties of the minister as he was a political appointee. The minister, having considered the various issues in his docket, political and non- political, decided that biosafety matters did not rank high on the list of priorities.

Subsequently, the ministry was split

into two, comprising of the Ministry of Education and the Ministry of Science and Technology, biosafety matters being dealt with by the latter. The minister, having been appropriately briefed, forwarded the documents to cabinet and, in October 2006, the cabinet approved the policy and the bill and directed the Attorney- General to table the bill in parliament for debate and enactment. At the time of writing this article Parliament is in recess. However, it is my hope that the members of parliament will pass this bill by the end of the year.

Involvement of Industry and Developed Countries

It would be naive of me to omit the fact that industry and developed countries played a role in the development of this law. Various countries, through their embassies or Departments of Agriculture, commented on the bill. Some felt that some of the provisions in the bill would stifle trade and research and they suggested that these provisions be omitted. Nevertheless, I had to keep in mind the views of those from whom I was getting my drafting instructions. I also had to remember my country's obligations under the Cartagena Protocol on Biosafety as well as other international agreements or arrangements that my country is a part of.

Conclusion

The process of drafting the biosafety law is long and iterative. I am sure most of the countries that have developed their biosafety laws have gone through similar experiences just as those that are still to develop their laws will go through it. The following great lessons were learned and may be applied in the drafting of any law:

1. Public participation is of utmost importance. The public should be involved right from conception through to implementation;

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CALENDAR OF EVENTS

February 2008:

14-15 February 2008
Montreal, Canada
Liaison Group on Capacity-building for Biosafety

March 2008:

10-14 March 2008 (Tentative)
Fifth meeting of the Ad Hoc Open-ended Working Group of Legal and Technical Experts on Liability and Redress in the context of the Protocol

May 2008:

12-16 May 2008
Bonn, Germany
Fourth meeting of the Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP-4)

19-30 May 2008
Bonn, Germany
Ninth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP-9)

For the complete list and updated information on SCBD meetings, please consult the SCBD Calendar of Meetings on line at:
<http://www.cbd.int/meetings/default.shtml>

Biosafety Enabling Activities: Federated States of Micronesia

by L. Heidi Primo

Far away from modern research centers, in the remote islands of the Federated States of Micronesia (FSM), one of the main difficulties encountered in developing an NBF is overcoming public perceptions fed by Hollywood movies about biotechnology gone haywire. FSM policy-makers are faced with the challenging question of whether or not FSM has the science and technology capacity to sustainably fulfill the obligations under the Cartagena Protocol on Biosafety. The major concern is whether or not we have sufficient in-country science and technology capacity to sustainably implement CPB obligations.

Our farmers still practice subsistence mixed agro-forestry rather than conventional export agriculture. Invasiveness is a primary concern. Most tropical staple foods are vegetatively propagated and of little commercial interest to private biotech firms and seed houses. A strictly local foods diet is giving way to imported produce and packaged goods. While farmers do lose crops to diseases, insects and virus outbreaks, the real challenge for food security, particularly in remote atolls, will be finding solutions to abiotic stress tolerance (i.e. brought on by droughts resulting from climate change and soil salinization). There is no strong negative consumer outcry in FSM about genetically engineered food. However, there are strong, vocal environmental organizations active in biodiversity conservation. Raising awareness about biosafety issues with multiple stakeholders is a primary objective of our UNEP/GEF NBF Enabling Activities.

Being both a biodiversity hotspot and a small island developing state with multiple entry ports and porous

borders, special consideration is given to strategizing for immediate and long-term capacity building needs. This is particularly so in conducting risk assessments in accordance with established protocols. Geographic dispersal and generally low educational levels in sciences makes distance education options attractive for furthering the professional development of quarantine, health, and extension workers.

Regional collaboration initiatives will be of critical importance for Micronesia in order for Pacific Island countries to support each other, share experts, pool information, apportion resources and develop a combined Biosafety Clearing House node.



L. Heidi Primo at the Micronesian Plant Propagation Center in Kosrae, Federated States of Micronesia.

L. Heidi Primo is currently the UNEP/GEF Biosafety Enabling Activities National Project Coordinator for the Federated States of Micronesia. She can be reached via email at biosafety@mail.fm. □



GEF-World Bank aided Capacity Building Project on Biosafety

by Desh Deepak Verma

The GEF-World Bank aided Capacity Building Project on Biosafety will enhance India's national capacity in order to implement the Cartagena Protocol on Biosafety. India already has a biosafety regulatory framework in place in the form of the "Rules for Manufacture, Use, Import, Export and Storage of Hazardous Microorganism/Genetically Engineered Organisms or cells, 1989". This project addresses the capacity building needs of the country for implementing the national biosafety framework related to the transboundary movement of LMOs in the context of the Protocol and coordination of the implementation of India's Biosafety Clearing House (BCH). The project activities started in 2003 and will conclude in 2007.

Specifically, the project will develop national capacities in biosafety required to:

- (i) Strengthen the institutional and legal framework to improve capacity and coordination in decision-making at the federal and state levels as well as in relevant specialized agencies;
- (ii) Improve capacity for risk evaluation and management;
- (iii) Strengthen laboratories/institutions for the analytical evaluation of GM ingredients and for certification services; and
- (iv) Enhance information-sharing and public awareness, including through the Biosafety Clearing-House.



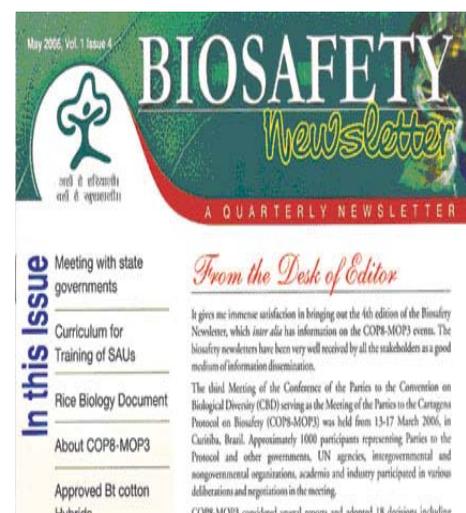
The development of national capacities in these areas will enhance national capabilities for the implementation of biosafety issues. The following four institutions are being strengthened:

- (1) The Central Food Technological Institute, (CFTRI) Mysore, Karnataka;
- (2) The National Bureau of Plant Genetic Resources (NBPGR), New Delhi;
- (3) The National Research Center on Plant Biotechnology (NRCPB), New Delhi; and
- (4) The G.B. Pant University of Agriculture and Technology

As part of the Project, a survey was undertaken to assess the training needs for capacity building in the area of biosafety related to the use of LMOs. The objective of the survey was to make a realistic assessment of the training needs prior to initiating steps for countrywide training programmes under the project. The assessment was done through a process of consultation with key stakeholders who represented central and state Governments, the scientific community, industry, social organizations and NGOs. Training programmes are also being

conducted which address all the stakeholders. □

India's BCH has been launched and is available at www.indbch.nic.in. A quarterly biosafety newsletter is also published regularly at the Indian BCH website. Desh Deepak Verma is the former Joint Secretary, Ministry of Environment and Forests, India; for further information concerning India's Biosafety policies and initiatives please contact the Project Coordinator and BCH Focal Point: Manoranjan Hota at hota@nic.in.





BIOSAFETY CLEARING-HOUSE (BCH)

My Learning Process in the BCH Project by Rohit Khanna



Writing about

experiences is not always easy. While we can all talk about them at length, it is always difficult to put “keyboard” to “word processor”. The UNEP-GEF Project for Building Capacity For Effective Participation in the Biosafety-Clearing House (BCH) has been involved with countries for their effective participation in the BCH Mechanism under the Cartagena Protocol on Biosafety. I have been working on the project as a trainer and, to a lesser degree, in assisting countries in the preparation of Memoranda of Understanding (MOUs) for the project.

The needs of the countries have been diverse and the learning experiences very interesting and fulfilling. Some countries have very limited demands regarding the number of records that they need to register in the BCH while others have complex needs. Registration of records in the BCH is based upon the obligations set out in the Protocol as well as country needs.

The options available for making information available in the BCH are as follows:

Option 1: Use the Management Center of the BCH;

Option 2: Use a local database

template and upload information;

Option 3: Make the information available locally and have the BCH collect it from the web server; and

Option 4: use a local database and publish this information on the BCH using agreed Internet protocols.

Some countries choose a sophisticated, complex option when their needs and obligations can actually be fulfilled by selecting a much simpler option. The option for using the Management Centre to enter information on the BCH is a feature of the BCH and is available to all of the participating countries. It is a tool that allows countries to comply with their obligations and enter information in the BCH. In all the countries that I have visited, the local knowledge on biosafety issues has been very high. As a result of my interactions when I have gone to assist countries with the BCH, I have come back so much more knowledgeable about biosafety issues.

Training is always a fascinating and dynamic area thanks to the different users, different needs and, above all, the facilities available for the training. In order to conduct the BCH training sessions, the requirements for the training space are quite specific and demanding. In addition to the standard equipment required (projector, whiteboard, etc.) the room should be equipped with computers with Internet access for the participants. There have been training rooms where

the Internet connectivity has been several megabytes/second (i.e. an information superhighway) whereas in other training rooms the connectivity has only been a few kilobytes/second (i.e. a barely drivable road!). Slow Internet connectivity puts extra demands on the training in terms of keeping the participants involved and enthusiastic.

Most of the training rooms were very nice. The layout ranged from somewhat formal to very informal. This meant that the level of interaction with the participants varied because in some places the atmosphere was very relaxed while in other places there was more of a classroom atmosphere. The participants are generally senior level people who are often not part of the “Internet Generation” (as we sometimes seem to expect all people to be). They have limited experience with computers and, in some cases, they have had no computer experience at all. However, this has never been a barrier to participation or to completing the exercises as part of the sessions. On the contrary, the least technically-minded people are typically the most enthusiastic and they do not take any short-cuts!

The closing day is always a sad day since it marks the end of the mission after making so many acquaintances and meeting so many wonderful people. It also means that the training has been completed (successfully!). The participants will now be able to

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BCH project... (continuation)
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use and impart the knowledge gained during the training session.

Although I do not have much experience in this area, another interesting part of my work has been assisting countries in the preparation of Memoranda of Understanding (MOUs). This line of work has meant explaining the options available to countries in order for them to fulfill their obligations under the Protocol as well as putting the pros and cons of the options on the table. On some occasions, countries expect the solution to be provided by the advisor. This can put the advisor in an awkward position sometimes when the advisor is expected to have all the answers! Diplomatic skills are required in order not to fall into the trap of actually selecting the options for countries. It is important to allow countries to make their own choices with the right guidance.

From my experience, one can never be prepared for all the eventualities and I have had to make last-minute adjustments and changes. This makes the experience all the more challenging. The experiences gathered from all of the various missions have been really valuable and have provided opportunities for learning not only about the BCH Project but also about Biosafety in general. The learning process continues...

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My Experience ...

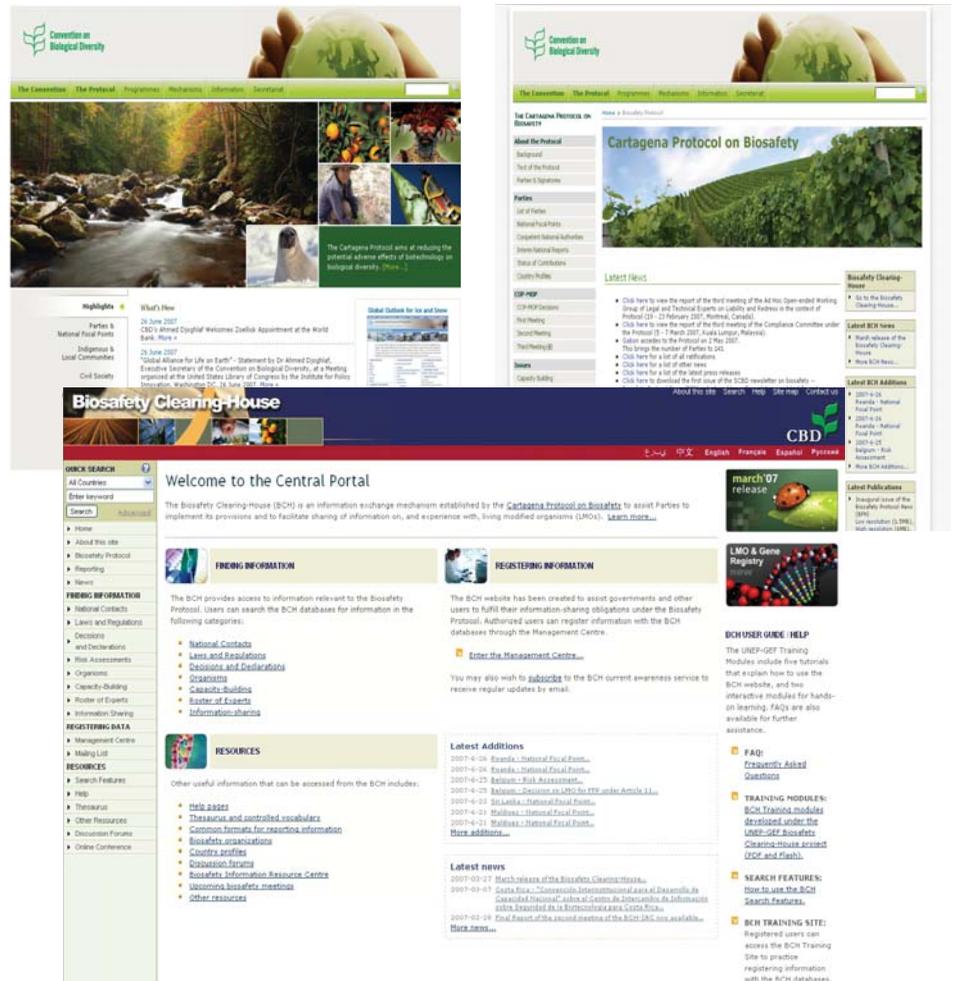
(continuation) From page 7

- Each country must keep in mind both regional and global activities that are taking place; and
- The sweetness of the pudding is in the eating of it. Because draft laws never get completed, it is better to enact a law and amend it as needed during the implementation phase.

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Please note that our website addresses has changed to:

www.cbd.int
www.cbd.int/biosafety
bch.cbd.int





The Second International Meeting of Academic Institutions and Organizations Involved in Biosafety Education and Training Concluded

by Erie Tamale, CBD

More than 60 representatives from 56 universities and other institutions involved in biosafety education and training met in the Malaysian capital, Kuala Lumpur from 16 to 18 April 2007, in order to find ways and means of enhancing long-term formal education and training in biosafety. The meeting was organised by the CBD Secretariat and the United Nations Industrial Development Organization (UNIDO) with financial support from the Governments of Switzerland and Denmark. It was hosted by the Government of Malaysia, through the University of Malaya, and was officially opened by Hon. Dato' Seri Azmi Khalid, the Minister of Natural Resources and Environment. The first meeting was held 4-6 October 2004 in Geneva.

Participants shared information on existing biosafety education and training programmes and collaborative initiatives and reviewed the progress made in implementing the recommendations made at the first meeting. They adopted a revised common format for the Compendium of Academically-Accredited Courses and the Biosafety Training Needs Assessment Matrix, both of which will be made available through the Biosafety Clearing-House (BCH).

The principal output of the meeting was an agreement to develop regional and sub-regional networks of academic institutions involved in biosafety education and training. This was done with a view to fostering collaboration and exchange of information and to pool resources to develop and deliver biosafety academic programmes. As an initial step, each region will embark on collecting information on relevant existing programmes and the key stakeholders involved and make the information available through the BCH. A number of concrete recommendations were also made regarding key issues,

regional and international activities, processes and mechanisms that could facilitate the development and delivery of biosafety academic programmes.

As a follow-up to the meeting, different regions (Africa, Asia-Pacific, Central and Eastern Europe and Latin America and the Caribbean) plan to organise regional consultative meetings to discuss, *inter alia*, options for developing biosafety academic programmes and institutional arrangements for collaboration. These include modalities for the exchange of faculty and the sharing

of academic materials, technical information and other resources. The CBD Secretariat was requested to send a notification to all Cartagena Protocol National Focal Points inviting them to initiate discussions with relevant authorities in their countries (e.g. Ministries of Education), in order to help facilitate the establishment of biosafety academic programmes at the national and regional level. Governments were invited to complete and return to the Secretariat the Biosafety Training Needs Assessment Matrix. They were also invited to:

(a) work closely with relevant academic institutions in order to develop appropriate biosafety programmes and (b) provide those institutions with funding and other support. □



L-R: Rofina Yasmin Othman, Malaysia; Charles Gbedemah, CBD; Hon. Dato' Seri Azmi Khalid, Minister of Natural Resources and Environment, Malaysia; George Tzotzos, UNIDO; Dato Amin Jalaluddin, Vice Chancellor, University of Malaya and Erie Tamale, CBD.

guiding principles, strategies and mechanisms that should be considered in the development and delivery of biosafety academic programmes. These included suggestions regarding curriculum development, delivery mechanisms, academic quality control and sustainability of the programmes. Furthermore, participants considered

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Summary of Outputs from recent Biosafety Meetings organized by the Convention on Biological Diversity

Third meeting of the *Ad Hoc* Open-ended Working Group of Legal and Technical Experts on Liability and Redress in the context of the Protocol 19-23 February 2007

The third meeting of the *Ad Hoc* Open-ended Working Group of Legal Technical Experts on Liability and Redress in the Context of the Cartagena Protocol met in Montreal, 19-23 February 2007. The meeting developed a blueprint intended to provide for a possible structure for the future negotiations of the Working Group. Operational texts on approaches, options and issues pertaining to liability and redress in the context of Article 27 of the Protocol were also submitted during the meeting and compiled further. The Working Group is set to meet again in Montreal, Canada 22-26 October 2007.

Third Coordination Meeting for Governments and Organizations Implementing and/or Funding Biosafety Capacity-building Activities 26-28 February 2007; Lusaka, Zambia:



This meeting was attended by 42 participants from governments, donor agencies, intergovernmental organizations, academia, NGOs and the private sector. Discussions focused on regional and sub-regional approaches to capacity-building in biosafety. Participants developed criteria for identifying issues that could be addressed through regional and sub-regional cooperation and criteria for determining institutional mechanisms for regional cooperation. In addition, participants shared experiences in, and capacity-building needs for, the implementation of LMO identification and documentation requirements under Article 18.2 of the Protocol and noted that this issue has not yet been comprehensively addressed at the national level. The meeting recommended that stocktaking exercises should be undertaken. The meeting concluded that case studies on national experiences be compiled and shared.

Fourth meeting of the Liaison Group on Capacity-building for Biosafety 1-2 March 2007, Lusaka, Zambia

The Liaison Group held its fourth meeting and, as requested by COP-MOP, the Liaison Group developed and recommended draft criteria and minimum requirements for experts to be nominated to the Biosafety Clearing-House's Roster of Experts. It also recommended elements of a quality control mechanism for the roster as well as other measures for improving the effectiveness and use of the roster.

Continued on page 13



Summary... (continuation)
From page 13

**Third meeting of the Compliance Committee under the
Cartagena Protocol on Biosafety
5-7 March, Kuala Lumpur, Malaysia**

The Compliance Committee under the Cartagena Protocol on Biosafety met in Kuala Lumpur, Malaysia on 5-7 March 2007. The Committee reviewed information compiled by the Secretariat on the experience of other multilateral environmental agreements regarding measures concerning cases of repeated non-compliance. It requested the Secretariat to revise the document in accordance with the comments and submit it to the next meeting of the Committee. The Committee followed up on issues arising from its second meeting including the issue of conflict of interest under rule 11 of the rules of procedure. It also reviewed general issues of compliance and possible lessons learned from analyzing the interim national reports. It also considered how the Committee might contribute to the upcoming review process of the effectiveness of the Protocol and the procedures and mechanisms on compliance, in particular in the context of Article 35 of the Protocol and decision BS-III/15 of the third meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol. The Committee is set to meet again in Montreal, Canada, 21-23 November 2007.

**Second International Meeting of Academic Institutions and Organizations
Involved in Biosafety Education and Training
16-18 April 2007, Kuala Lumpur, Malaysia**

The Second International Meeting of Academic Institutions and Organizations Involved in Biosafety Education and Training met in Kuala Lumpur, Malaysia, 16-18 April 2007, and was attended by more than 60 participants from 56 institutions. Its main outcome was an agreement to develop, at the regional level, networks of academic institutions involved in biosafety education and training. It was recommended that each region initiate a process to collect and share information on existing biosafety-related academic programmes and make it available to the Secretariat as well as to the respective National Focal Points. Some regions intend to organize follow-up regional consultative meetings to discuss options for developing academic programmes in biosafety and possible institutional arrangements for collaboration. Specific recommendations were also made regarding actions/mechanisms needed to develop academic programmes in biosafety. A detailed article about the meeting is on page 12.

BIOSAFETY SNAPSHOTS

**Third meeting of the *Ad Hoc* Open-ended Working Group of Legal and
Technical Experts on Liability and Redress in the context of the Protocol
19-23 February 2007**



Above photos L-R: View of the dais during the Third meeting of the Ad Hoc Open-ended Working Group of legal and Technical Experts on Liability and Redress in the context of the Protocol with Charles Gbedemah, CBD; Taïeb Chérif, Secretary General of ICAO; Shafqat Kakahel, Deputy Executive Director, UNEP; Co-chair René Lefeber, the Netherlands; Co-chair Jimena Nieto, Colombia; Ahmed Djoghlaif, CBD Executive Secretary; Eric Théroux, Government of Quebec; and Worku Yifru, CBD.



Above photo L-R: Co-chair René Lefeber, Co-Chair Jimena Nieto, Worku Yifru, CBD and Rapporteur Maria Mbengashe, South Africa.



Above photo L-R: Parkinson Ndonye, Kenya; Consolata Kiragu, Kenya; Aimee Mpambara, Rwanda; Ahmed Djoghlaif, CBD Executive Secretary and Ben Turtur Donnie, Liberia



Charles Gbedemah, CBD with Shafqat Kakahel, Deputy Executive Director, UNEP



Taleb Chérif, Secretary General of ICAO with Ahmed Djoghlaif, CBD Executive Secretary during the signing of the MOU between ICAO and CBD.



Margarita Palafox (Mexico), Alejandro Lago Candeira (Spain), Elleli Huerta Ocampo (Mexico), and Bernardo Velloso (Brazil)



Above photo: NGO participants reading the draft report of the meeting.



Above photo L-R: Co-chair René Lefeber and Co-Chair Jimena Nieto gaveling the meeting to a close.



**2nd Meeting of the European
Advisory Committees on Biosafety in the field of the deliberate release of GMO**
14-16 May 2007 Ljubljana, Slovenia



Above photo: Participants to the Meeting of the European Advisory Committees on Biosafety in the field of the deliberate release of GMOs.

**Green Customs Train-the-Trainer Workshop for
World Customs Organization's Regional Training Centres**
15-18 May 2007 Shanghai, China



Above photo: Achim Steiner, Executive Director, UNEP (center) with delegates from the Green Customs Train-the-Trainer workshop.

**Norway-Canada Expert Workshop on Risk Assessment for
Future Applications of Modern Biotechnology**
4-6 June 2007, Montreal, Canada



Above photos L-R: Participants from the workshop; Mwananyanda Lewanika, Zambia and Charles Gbedemah, CBD

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We would like to hear from you:

We are encouraging governments, particularly those that are Party to the Protocol and relevant stakeholders to send articles and digital photos on their implementation, awareness and outreach activities. Please send your contributions to

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