South Asia Co-operative Environment Programme (SACEP)
Ministry of Environment and Natural Resources, Government of
Sri Lanka
and
United Nations Educational, Scientific and Cultural Organisation
(UNESCO)

A National Training Programme for Capacity Building of
Convention on Biological Diversity and Bio-safety Protocol
through Clearing House Mechanism

Colombo, Sri Lanka
28 - 30 April 2008
1. Introduction

South Asia Co-operative Environment Programme (SACEP) being and environmental intergovernmental organization of the region, developed a programme to build the capacities of various stakeholders of member countries on the Clearing House Mechanism of the Convention on Biological Diversity. The programme was approved by the 10th meeting of the Governing Council of SACEP held in January 2007.

Two 4 day national training programmes for post graduate students of Sri Lanka on CHM and access to information on biological diversity related conventions were successfully completed in March 2007. The program was conducted with the financial assistance of the Royal Belgian Institute of Natural Sciences and support from the Ministry of Environment and Natural Resources of Sri Lanka and CBD Secretariat. There were very high demands for the continuation of such programmes for the other stakeholders.

In order to carry forward the initiative, a MoU was signed with the United Nations Educational Scientific and Cultural Organization (UNESCO) to jointly undertake the activities common to both organizations in the region. One of the tasks agreed under this MoU was to ‘organize series of awareness, training, capacity development programmes of frontier areas of ecological science for better environment and sustainable development in the region by giving emphasis to the continuation of the capacity building programme on biodiversity CHM which SACEP already initiated’. In line with the MoU, a “National Training Programme for Capacity Building of Convention on Biological Diversity and Bio-safety Protocol through Clearing House Mechanism” has been designed to train senior level government officials on various issues concerning Biodiversity Clearing House Mechanism and Bio-safety Clearing House Mechanism.

2. Objective

The objective of this programme is to create awareness among government officials on Clearing House Mechanisms for both the CBD and Bio-safety and build their capacity on how to make use of them for conservation and management of country’s biological resources.

3. Venue, Dates, Roles and Participants

The training programme was held at the Ceylon Continental Hotel in Colombo, Sri Lanka from 28 to 30 April 2008. It was organized by South Asia Co-operative Environment Programme (SACEP) in collaboration with Ministry of Environment and Natural Resources, Government of Sri Lanka. The program was funded by UNESCO and UNEP-GEF Project for Building Capacity for Effective Participation in the Bio-safety Clearing House of the Ministry of Environment and Natural Resources, Government of Sri Lanka.

Thirty three participants comprising of mainly Senior Level Government Officials participated at the 3 day Non Residential Training Programme. Participants were selected in close consultation with the Ministry of Environment and Natural
Resources, Government of Sri Lanka. Majority of them were members of the Biosafety Clearing House Task Force setup by the Ministry of Environment and Natural Resources. Other participants are from the line agencies which are working closely with the Ministry of Environment and Natural Resources to manage the country's rich biological diversity. The list of participants is given in Annex I.

4. Cost

Annex II

Activities and Proceedings

5. Pre-training course activities

Detailed contacts, preparation of the agenda and other relevant requirements were prepared in consultation with the Ministry of Environment and Natural Resources, Sri Lanka during two weeks before the workshop. There were three international resources persons from UNEP and five local resource persons who contributed to the programme. The programme and list of resource persons is given in Annex III and IV respectively.

6. Opening Ceremony

The inauguration ceremony was started with the lightning of traditional oil lamp by the dignitaries. Dr. A.A. Boaz, Director General, SACEP welcomed the guests, invitees, resource persons, and participants. While welcoming, he briefed about the Clearing House Mechanisms and commitment of the SACEP for the cause of biodiversity and biosafety in the South Asian region. He also said that SACEP had previously conducted two training programmes on CHM for postgraduate students in collaboration with the Ministry of Environment and Natural Resources and with the financial assistance of Royal Belgian Institute of Natural Sciences during 2007. SACEP also initiated a programme to support member countries to establish their national CHMs and to establish a regional CHM. The Director General expressed his appreciation to the UNESCO and the Ministry of Environment and Natural Resources for extending financial support to this training programme.

The workshop was inaugurated by Mr. W.M. Wijesuriya, Additional Secretary, Ministry of Environment and Natural Resources. The Additional Secretary referred to the biosafety issues, problems in implementing the Cartagena Protocol on Biosafety in Sri Lanka vis-à-vis obligation of Sri Lanka for setting up the Biosafety Clearing House. He informed the participants that the national biosafety policy although is in place, need to be have the legal framework to implement the biosafety issues in Sri Lanka. The necessary official process is in progress. Mr. Prakash Bista, Task Manager, (Asia), UNEP-GEF Biosafety unit, Geneva spoke on the role of the BCH and the obligation vis-à-vis the implementation of the BCH project in Sri Lanka. He again reiterated the support of the BCH Advisors and the BCH team for the cause of biosafety. Dr. Ram Boojh, Professional Officer, UNESCO spoke on behalf of UNESCO and Mr. Prithi Perera, Secretary General of Sri Lanka National Commission for
UNESCO also addressed the gathering. Mr. Gamini Gamage, Director (Biodiversity), Ministry of Environment and Natural Resources, Government of Sri Lanka delivered the vote of thanks.

7. Training Sessions

The training was conducted in an informal manner. Participants were encouraged to ask questions and clarify their doubts any time during the sessions. The PowerPoint presentations, overlays, flip charts and white board were used during the training. Resource persons were extremely facilitative and helpful to the trainees and gave their fullest effort to deliver the best within the given time period. The trainees were extremely enthusiastic and actively participated by asking many questions on the subject.

The technical session of the workshop started as per the agenda. The workshop had two categories of the issue, the “Biodiversity and Clearing House Mechanisms” and the “Implementation of the Cartagena Protocol on Biosafety and the BCH”. During the introductory session, participants introduced themselves with their expectation from the workshop.

Part.I: Sessions on Biodiversity and Clearing House Mechanism

Prof Sarath Kotagama, Senior Lecturer, University of Colombo gave a broad overview of the Convention of Biological Diversity since its inception to the present status. Mr. Gamini Gamage, Director, Ministry of Environment and Natural Resources gave an overview of the Clearing House Mechanism (CHM) and the data base to be uploaded to the CHMs. He informed the participants that the website for the CHM is being prepared. Other speakers viz.
Dr. Sumith Abeysiriwardena, Consultant, CIC spoke on Biodiversity and Bio-safety CHMs and the private sector: Importance for the private sector while Dr. Anura Wijesekara, RO, HORDI spoke on the Information exchange in Crop Wild Relatives.

**Part-II: Sessions on Cartagena Protocol on Biosafety and Biosafety Clearing House**

Participants were given a detailed overview of the Cartagena Protocol on Biosafety and also the Biosafety Clearing House. Prof. Athula Perera, Director, Post Graduate Institute of Agriculture gave an overview of biotechnology and biosafety with his experience of formulations of the National Biosafety Framework for Sri Lanka. The participants were given presentation and demonstration on surfing the BCH, finding information on the BCH and registering information on the BCH using the Management Centre. In addition, the participants were briefed on the country’s chosen option for participating in the BCH (Option 3) and the additional tools using Option 1, a content management systems called “Hermes” and “BCH AjaxPlug-in”. Participants were given hands-on training on interactive modules, and case studies for finding and registering information on the BCH central portal. There were break-out group activities introduced to make the workshop more interactive and participatory. Moreover, as per the participants’ clamor on some more reference materials about the BCH, an overview on “moodle” was done which was very much appreciated.

The PowerPoint presentations, overlays and lecture notes circulated are given in Annex V.

**8. Practical Session**

Fifteen computers were hired with the internet facilities and made available throughout the programme. Trainees were given opportunity to access CHM websites and search for information required. They have been trained extensively on how to use the CHM and BCH for finding important information available for the research and study purposes.
9. Assessment and Anticipated Outcome

At the end of each day and also at the end of the workshop, the participants expressed their feelings and provided their feedback. Overall, the feedback was very positive, and the participants expressed that the workshop was very beneficial and was a mind opener. The workshop gave an exposure to them which will benefit them in discharging their day-to-day activities on biosafety. Accordingly, the workshop provided a good opportunity to share information, technology, rules, and regulations. Some of the participants noted that they are clear about the “Clearing House Mechanism” and the “BCH” vis-à-vis the role of each member to comply with the international agreements such as CPB.

The training was conducted in a cordial, relaxed and enthusiastic atmosphere which was much appreciated by all. In general the participants were of the opinion that the content of the training course was very good and that the delivery of the lessons had been positive and encouraging. Participants unanimously expressed that all the resource persons were accessible and interactive.

At the end, the trainees were invited to comment in general on the workshop content and management. One trainee spoke on behalf of all participants and it was encouraging that the trainees were pleased with the training programme and accordingly, no negative comments were received.

10. Closing Ceremony

A closing program followed and graced by Mr. M. A. R. D. Jayathillake, Secretary, Ministry of Environment and Natural Resources, Government of Sri Lanka. Two participants were requested to speak about their impression on the workshop. The certificates of attendance were handed over to the participants by the Mr. M. A. R. D. Jayathillake, Secretary, Ministry of Environment and Natural Resources, Government of Sri Lanka, Mr. Prakash Bista, Task Manager, (Asia), UNEP-GEF Biosafety unit and Mr. Prasanth Daish Abeygunawardane, Advisor, SACEP. Mr. W.K. Rathnadeera, Senior Programme Officer of SACEP delivered the vote of thanks and closing remarks.
# List of Participants

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# Financial Statement

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Dr. A. A. Boaz  
Director General  

Jacintha S. Tissera  
Administrative Officer
Annex: III

A National Training Programme for Capacity Building of Convention on Biological Diversity and Biosafety Protocol through Clearing House Mechanism
April 28-30, 2008
Colombo, Sri Lanka

AGENDA

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<tr>
<td>Day 1 – April 28, Monday  (Pre-Workshop Meeting &amp; inauguration)</td>
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</tbody>
</table>
| 8:30 – 9:00 | Welcome and Courtesy Call  
Secretary, Ministry of Environment and Natural Resources  
The BCH Focal Point, Sri Lanka  
Mr. Prakash Bista, UNEP-GEF-BCH Task Manager  
Dr. Manoranjana Hota, BCH-CPB Regional Advisor  
Dr. Ruel V. Maningas, BCH IT Regional IT Advisor |
| 9:00 – 09:45 | Inauguration with lighting of traditional oil lamp  
Welcome address by Dr. A. A. Boaz, Director General, SACEP  
Address by Prof. Sarath Kotagama, Senior Lecturer, University of Colombo  
Address by Mr. Prithi Perera, Secretary General, Sri Lanka National UNESCO  
Address by Mr. W. M. Wijesuriya, Addl. Secretary, Ministry of Environment and Natural Resources  
Address by Mr. Prakash Bista, UNEP-GEF-BCH Task Manager  
Address by Ms. Minja Yang, Director, UNESCO  
Vote of Thanks by Mr. Gamini Gamage, Director (Biodiversity), Ministry of Environment and Natural Resources. |
| 09:45 –10:00 | TEA/Registration |
| Day 1 – April 28, Monday |
| 10.00-10.30 | Presentation of workshop Agenda and General Introduction to biosafety protocol status in Sri Lanka  
Introduction of Facilitators, Participants & Workshop Team  
Mr. Gamini Gamage, The BCH Focal Point & participants |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:30 –12:00</td>
<td><strong>Introduction to biological diversity: Convention on Biological Diversity and importance of its CHM</strong>&lt;br&gt;Prof. Sarath Kotagama, Senior Lecturer, University of Colombo</td>
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<td></td>
<td><strong>Biodiversity Clearing House Mechanism (CHM)</strong>&lt;br&gt;Mr. Gamini Gamage</td>
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<td></td>
<td><strong>Discussions and Open Forum</strong></td>
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<tr>
<td>12:00-1.00</td>
<td><strong>LUNCH</strong></td>
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<tr>
<td>1.00-2.00</td>
<td><strong>Expectation Setting</strong>&lt;br&gt;Dr. Manoranjan Hota &amp; Dr. Ruel V. Maningas&lt;br&gt;BCH Regional Advisors &amp; Workshop Facilitators</td>
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<tr>
<td>2:30 – 3:30</td>
<td><strong>Presentation on &quot;Introduction to the Cartagena Protocol on Biosafety (CPB)</strong>&lt;br&gt;Dr. Manoranjan Hota, Regional CPB Advisor</td>
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<td></td>
<td><strong>Discussions and Open Forum</strong></td>
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<tr>
<td>3.30-3.45</td>
<td><strong>TEA</strong></td>
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<tr>
<td>3:45 – 5:00</td>
<td><strong>Bio-safety, Bio-technology, and Cartagena Protocol and Technology Transfer: present status</strong>&lt;br&gt;Prof. A. L. T. Perera, Head, PGIA, University of Peradeniya</td>
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<td></td>
<td><strong>Discussions and Open Forum</strong></td>
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<tr>
<td>5:00 – 5:15</td>
<td><strong>WORKSHOP NAVIGATION MEETING</strong></td>
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<tr>
<td><strong>Day 2 – April 29 (Tuesday)</strong></td>
<td><strong>Report on Workshop Navigation Meeting Output</strong>&lt;br&gt;Selected Workshop Participant</td>
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<tr>
<td>8:30 – 9:30</td>
<td><strong>Presentation on “Introduction to the BCH”, &amp; “Benefits and Obligations of the Country”</strong>&lt;br&gt;Dr. Ruel V. Maningas &amp; Dr. Manoranjan Hota</td>
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<td></td>
<td><strong>Discussions and Open Forum</strong></td>
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<tr>
<td>9:30 – 10:25</td>
<td><strong>Introduction to Interactive Modules</strong>&lt;br&gt;Dr. Ruel V. Maningas, BCH Regional IT Advisor&lt;br&gt;Interactive Module No. 1 <em>(Cartagena Protocol on Biosafety)</em>&lt;br&gt;Interactive Module No. 2 <em>(Biosafety Clearing House)</em>&lt;br&gt;Workshop Participants (to be facilitated by Dr. Maningas and Dr. Manoranjan Hota)</td>
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<tr>
<td>10:25 – 10:40</td>
<td><strong>TEA</strong></td>
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<tr>
<td>10:40 to 11:00</td>
<td><strong>Presentation on &quot;Information Requirements for the BCH&quot;</strong></td>
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<td>Time</td>
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<tr>
<td>11:00 – 11:30</td>
<td>Presentation on &quot;Surfing the BCH Central Portal&quot;</td>
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<td></td>
<td>Dr. Ruel V. Maningas, Regional IT Advisor</td>
<td></td>
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<tr>
<td></td>
<td>Discussions and Open Forum</td>
<td></td>
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<tr>
<td>11:30 – 12:00</td>
<td>Presentation and Demonstration on “Finding Information on the BCH Central Portal”</td>
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<tr>
<td></td>
<td>Dr. Ruel V. Maningas &amp; Dr. Manoranjan Hota</td>
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<tr>
<td>12:00 – 1:30</td>
<td>LUNCH</td>
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**Day 2 afternoons – April 29 (Tuesday)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:30 – 3:00</td>
<td>Ice Breaker</td>
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<tr>
<td></td>
<td>Hands-On Exercises No. 1 &amp; 2 (Finding Information on the BCH Central Portal)</td>
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<tr>
<td></td>
<td>Workshop Participants (to be facilitated by Dr. Maningas and Dr. Manoranjan)</td>
</tr>
<tr>
<td>3:00 – 3:20</td>
<td>COFFEE BREAK</td>
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<tr>
<td>3:20 – 4:00</td>
<td>Hands-On Exercises No. 3 (Finding Information on the BCH Central Portal)</td>
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<tr>
<td></td>
<td>Workshop Participants (to be facilitated by Dr. Maningas and Dr. Manoranjan)</td>
</tr>
<tr>
<td>4:00 – 4:40</td>
<td>Presentation and Demonstration on “Registering BCH Information”</td>
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<tr>
<td></td>
<td>Dr. Ruel V. Maningas, Regional IT Advisor</td>
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<tr>
<td>4:40 – 5:00</td>
<td>Workshop Navigation Meeting</td>
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</table>

**Day 3 mornings – April 30 (Wednesday)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 – 9:30</td>
<td>Biodiversity and Bio-safety CHMs and the private sector: importance for the private sector</td>
</tr>
<tr>
<td></td>
<td>Dr. Sumith Abeysirirwadena, Consultant, CIC</td>
</tr>
<tr>
<td>9:30-10:30</td>
<td>Information exchange in Crop Wild Relatives</td>
</tr>
<tr>
<td></td>
<td>Dr. Anura Wijesekara, RO, HORDI</td>
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<tr>
<td>10:30-10:45</td>
<td>TEA</td>
</tr>
<tr>
<td>10:45 – 11:45</td>
<td>Presentation &amp; Demonstration on SCBD Tools for National Participation</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<td>------------</td>
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<tr>
<td>11:45 – 01:00</td>
<td>Setting-up of Sri Lanka National BCH System</td>
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<td>BCH Focal Point</td>
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<td></td>
<td>National Data Entry/IT Staff</td>
</tr>
<tr>
<td></td>
<td>Dr. Ruel V. Maningas, Regional IT Advisor</td>
</tr>
<tr>
<td>01:00 – 2:00</td>
<td>LUNCH</td>
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<tr>
<td><strong>Day 3 – April 30 (Wednesday)</strong></td>
<td></td>
</tr>
<tr>
<td>2:00 – 3:30</td>
<td>Hands-On Exercises <em>(Sri-Lanka National BCH System Operation)</em></td>
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<tr>
<td></td>
<td>TEA</td>
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<tr>
<td>3:30 – 4:15</td>
<td>Implications of the CBD and its CHM to the Country: legal issues</td>
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<tr>
<td></td>
<td>Mr. Anandalal Nanayakkara, Attorney at Law</td>
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<tr>
<td>4:15 – 4:40</td>
<td>Closing Ceremonies</td>
</tr>
<tr>
<td></td>
<td>Secretary of Environment and Natural Resources</td>
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<tr>
<td></td>
<td>Impression from Participants</td>
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<td>Distribution of Certificate of Participation</td>
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<td>Closing Remarks</td>
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<tr>
<td>4:40 – 5:00</td>
<td>POST-WORKSHOP Meeting</td>
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<td></td>
<td>The BCH Focal Point</td>
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<td>National Data Entry/IT Staff</td>
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<td></td>
<td>Dr. Manoranjan Hota, Regional CPB Advisor</td>
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<tr>
<td></td>
<td>Dr. Ruel V. Maningas, Regional IT Advisor</td>
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</tbody>
</table>

List of Participants

Local Resource Persons
Prof. Sarath Kotagama  
Department of Zoology  
University of Colombo  
Colombo 03

Prof. Athula Perera  
Director  
PGIA  
Old Galaha Road  
Peradeniya

Dr. Anura Wijesekara  
National Project Coordinator  
Horticulture Research and Development Institute (HORDI)  
P.O. Box 11  
Peradeniya

Mr. Gamini Gamage  
Director (Biodiversity)  
Ministry of Environment and Natural Resources

International Resource Persons
Mr. Prakash Bista  
UNEP-GEF-BCH Task Manager

Dr. Manoranjan Hota  
BCH-CPB Regional Advisor

Dr. Ruel V. Maningas  
BCH IT Regional IT Advisor
Workshop Agenda,
General Introduction to Biosafety Protocol status in Sri Lanka,
Introduction of Facilitators & participants

Ministry of Environment & Natural Resources

Workshop Agenda
Day 1 – April 28, Monday
• Introduction to biological diversity
• Biodiversity Clearing House Mechanism
• Introduction to the Cartagena Protocol on Biosafety
• Bio-safety, Bio-technology, and Cartagena Protocol and Technology Transfer

Workshop Agenda contd.
Day 2 – April 29, Tuesday
• Introduction to the BCH
• Interactive Modules
• Finding Information for the BCH
• Surfing the BCH Central Portal
• Demonstration & Hands-On Exercises Finding Information on the BCH Central Portal
• Registering BCH Information

Finding Information on the BCH Central Portal

Workshop Agenda contd.
Day 3 – April 30, Wednesday
• Biodiversity and Bio-safety CHMs and the private sector
• Information exchange in Crop Wild Relatives
• Presentation & Demonstration on SCBD Tools for National Participation
• Setting-up of Sri Lanka National BCH System
• Hands-On Exercises
• Implications of the CBD and its CHM to the Country: legal issues

Biosafety Protocol Status
Signature
24th May 2000

Ratification
28th April 2004

UNEP-GEF Project on Development of National Biosafety Framework for Sri Lanka
May 2003 – December 2005

• National Biosafety Framework of Sri Lanka
• National Biosafety Policy: 2005
Current Legal situation

New Biosafety Law being drafted

Competent Authorities use existing regulations

Ministry of Health
Food (Control of Import, Labeling and Sale of Genetically Modified Foods) Regulations 2006
Under section 32 of Food Act 1980

Administrative system

- National Competent Authority: MENR
- Sectoral Competent Authorities:
  DoA, DoH, DAPH, MI, DWLC, DFAq.Re

National Biosafety Data base

National biosafety website
www.biosafety.lk

Introduction of Facilitators & Participants
Thank You
Management of Biodiversity Information

Biodiversity Clearing House-Mechanism

Sujith S Ratnayake
Biodiversity Secretariat
Ministry of Environment & Natural Resources

Biodiversity & Convention on Biological Diversity

- Term “Biological Diversity” - genetic diversity + species diversity + ecosystem diversity
- Term “Biodiversity” – very broader spectrum/scope
- Major events of CBD implementation
  - > signed & ratified – 5th June 1992 & 23 March 1994
  - > establishment of National Experts Committee 1994
  - > Inhial of national CBD implementation 1997
  - > Preparation of 1st & 2nd National Reports 1999 & 2002
  - > Preparation of addendum to FBCAP - 2006
- Cartagena Protocol on Biosafety
  - > sign & ratified – 2000 & 2004
  - > preparation of National Biosafety framework
  - > formulation of national biosafety policy
  - > Establishment of Biosafety CHM (Website & Database)

Convention on Biological Diversity

Objectives –
Conservation
Sustainable use
Fair & equitable sharing of benefits

Important Articles
- general measures (6) - identification & monitoring (7)
- In-situ conservation (8) - ex-situ conservation (9)
- Sustainable use (10) - incentive measures (11)
- Research and training (12) - public edu. & awareness (13)
- Impact assessment (14) - Access to genetic resources (15)
- Access & transfer of Tec. (16) - exchange of inf. (17)
- Tec. & scientific cooperation (18) - Handling of biotechnology (19)

Information and Technology

Expertise in managing information and technology varies enormously from country to country.

For this reason the Convention has established a “Clearing-House Mechanism” to ensure that all governments have access to the information and technologies they need for their work on biodiversity.

What is Clearing –House ?

- Originally referred to a financial establishment where checks & bills are exchanged among member banks so that only the net balances need to be settled in cash.
- Today, its meaning has been extended
  - any agency
  - good, service or information
  - demand/supply
- Effective and timely information exchange (Management)

Article 17 Exchange of Information

- The contracting parties shall facilitate the exchange of information from all publicly available sources relevant to the conservation and sustainable use of biological diversity taking into the account the special needs of developing countries
Clearing –House Mechanism (Article 18 (3))

- The contracting parties shall promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity where necessary, through appropriate international and national institutions.

- CBD established CHM to promote and facilitate technical and scientific cooperation.

- The CHM seeks to support the CBD’s thematic and cross-cutting programs of work by promoting cooperation in six key areas;
  - tools for decision-making
  - training and capacity building
  - research
  - funding
  - technology transfer
  - repatriation of information

Data & Information

Often two terms used interchangeably

But they have specific meaning

Data & Information

- Data are facts, events transactions and so on which have been recorded. They are the input raw materials from which information is produced.

- Information is data that have been processed in such a way as to be useful to the recipient.

Definitions

- Information : “Differences that makes a difference” (G. Bateson, 1979)

- Environmental Information
  (a) the state of the elements, such as air and atmosphere, water, soil, land, landscape and natural sites including wetlands, coastal and marine areas, biological diversity and its components, including genetically-modified organisms, and the interaction among these elements.

- Environmental Information
  (b) Factors, such as substances, energy, noise, radiation or waste, including radio active waste, emissions, discharges and other releases into the environment, affecting or likely to affect the elements of the environment referred to in (a)

- Environmental Information
  (c) Measures (including administrative measures), such as policies, legislation, plans, programmes, environmental agreements, and activities affecting or likely to affect the elements and factors referred to in (a) and (b) as well as measures or activities designed to protect those elements
Environmental Information

- (d) reports of the implementation of the legislation
- (e) Cost-benefit and other economic analyses and assumptions used with in the framework of the measures and activities referred to in (c); and
- (f) the state of human health and safety, including the contamination of the food chain, where relevant, conditions of human life, cultural sites and built structures in as much as they are or may be affected by the state of the elements of the environment referred in (a) or, through those elements, by any of the matters referred to in (b) and (c)
- Information is in written, visual, aural, electronic or any other material form

These information can be found in,
- Documents, leaflets, reports, books, notes, memos, meeting notes, in fact any thing written down
- Pictures, maps, plans, designs, models, video, posters, diagrams, sketches, graphs, illustrations
- Tape recordings, recorded presentations, Dictaphone tapes, compact discs
- Any type of computer file, word processor file, database, spreadsheet, computer models (including 3-d models), specially written bespoke programmes, emails, achieved web pages/sites, temporary or cached files, still images, video images, computer generated images
- Any other material form - that is, other forms not widely available, or not yet developed or invented

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**Biodiversity and Information Management Priorities**

Principles of AGENDA 21 (chapter 40 – Information for decision making)

Two programme areas;

- Bridging data gap
  - to achieve more cost effective & relevant data collection and assessment better identification of users
  - to strengthen local, provincial, national & international capacity to collect and use multi-sectoral info.
  - to ensure timely, reliable & usable information in local, provincial, national & international levels
  - to make relevant information accessible.

- Improving information
  - to strengthen existing national and international mechanisms
  - to strengthen national capacities
  - to make relevant information accessible.

---

**DATA, INFORMATION AND MONITORING UNDER THE CBD**

- Survey linking of Dbs Art. 6,7,10
- International cooperation & contact setting Art. 4,5,10,12,17,18
- Monitor species, habitats, land-uses, and processes Art. 7,10,14
- Identify BD resources Art. 6,7
- Collect requirements, and guidelines for maintenance & sustainable use Art. 6,7,8,10.
- Assess BD threats, factors that stand in the way of achieving targets, and opportunities Art. 7,14
- Set targets Art. 4,8,10
- Develop population mgt. strategies and land use mgt recommendations Art. 8,10,12
- Action by Govt., Landowners, managers, etc. Art. 3,4,6,7,8,10,11,12

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**The Clearing-House Mission**

- Promote and facilitate technical and scientific cooperation, with and between countries
- Develop a global mechanism for exchanging and integrating information on biodiversity
- Develop the necessary human and technological network
The Mechanism’s Key Characteristics

- Compatible with different levels of national capacity
- Needs-driven
- Structurally decentralized
- Provides access to information
- Supports decision-making
- Has no vested interest in controlling the expertise or information
- Created for the mutual benefit of all participants

Philosophy of Clearing-House

- Broad participation and easy access must be a top priority
- Database can therefore be tapped through both traditional and electronic means of communication
- Ensure the participation of indigenous communities, whose unique knowledge

Where are the information?

International level

- CGIAR/IPGRI – SINGER
- UNEP/WCMC - World Database on Protected Areas (WDPA).
- FAO’s World Information and Early Warning System (WIEWS)
- IUCN – Species Information system
- BGCI- Botanic Garden database

National Level

- National institutions keep their own record
- Herbaria
- Genebanks
- Ministries of Environment, Forestry, Agriculture, Planning etc.
- Universities and Research Institutes
- NGO groups

Partners of CHM

- Secretariat to the CBD – coordinated by Executive Secretary
- Information Advisory Committee – overseen and guiding
- Network of National Focal Points – information exchanges
- Network of regional organizations (research institutes etc)- information exchange
- Network of NGOs – information exchange

CHM(WEBSITE) Contents

- Text of the convention and protocol
- List of Signatories and parties
- National and other reports
- Event calendar
- Initiatives – Global Taxonomic Initiative, Invasive spp. initiative.
- Case studies
- Other programmes – Forestry/protected areas
  - Inland waters/ Marine and coastal etc./Dry & sub humid land,
- Guidelines
  - Akwe: Kon guidelines
  - Addis Ababa principles & guidelines
  - Guidelines on BD & Tourism Development
  - Bonn guidelines
- Principles & approaches – Ecosystem approach
Information Management National Level Initiatives

- Metadata for BD Information Management
- National Conservation Review, Protected area gap analysis
- Environment Information Management System (EMIS)
- Biodiversity information System Managed by DWLC
- CHM-Biosafety - Database
- CWR project – GRiS
- GPA- Plant Genetic Resources for Food & Agriculture

National Policy on the use of spatial Data
National Reporting for UN conventions
Draft National Policy on Data Sharing & Information Management

Metadata and CHM

- Structured data about data or data which describes attributes of data or information about data
- Solution of data custodians
- Metadata includes:
  - Descriptive data
  - Subject data (terminology chosen from a control vocabulary or thesaurus)
  - Access data describing SW&HW requirement
  - Administrative data
  - Any other inf. deemed relevant to better understand or characterize the data
- Why is metadata important?
  - Provides information to data catalogues and other clearing houses
  - Promote data sharing
  - (significantly) expands the opportunities to develop conventions so that data exchange & integration become possible (interoperability)

Metadata and CHM

- By using levels of interoperability users will be able to:
  - describe a document, item or web page
  - facilitate the searching, locating & retrieving
  - facilitate the creation of distributed interoperable info. system
- Metadata offers the CHM the means to:
  - improve remote searching of contents found on the Convention site
  - improve the ability of remote users to locate needed inf.
  - allow users to more easily ascertain the value of inf. on the site
  - offer better interoperability through the use of 3 levels of standards
  - Foster the use of controlled vocabulary.
Metadata for BD Management In Sri Lanka

  - Summary matrix on institutions.
  - List of (BD) information management institutions.
  - Page for individual institute.
  - Summary matrix an Database.
  - Summary of information an datasets.
  - Pages for DBs of individual institute.
  - Exports Report by institutions.

- Statistical Compendium (NR), (Count.)

Mata data for biodiversity management in Sri Lanka

Statistical Compendium of Biodiversity in Sri Lanka.
- Biodiversity & Geography
- Biodiversity & Economy.
- Biodiversity & Culture.
- Biodiversity & Industry.
- Biodiversity & Legal Aspects.
- Biodiversity & Research.
- Biodiversity & Negative Impacts.
- Biodiversity & Investments.
- Establishment of Biodiversity related other DBS.
- Establishment of Biodiversity Assessment Unit.

Sri Lanka CWR Information Network

Genetic Resources Information System (GRIS)

- Open source software and conceived as Modeling tool
- Document and manage plant genetic resources \textit{in situ} and \textit{ex situ}
- GRIS (v3.1) being used in Morocco, Algeria, Tunisia, Libya, Egypt, Lebanon, Yemen, Oman and Vietnam.
FAO Report on the State of the Plant Genetic Resources

- 1st National Report on SPGR 2002
- 2nd National report on SPGR 2007
- National Information Sharing mechanism on Plant Genetic Resources for Food and Agriculture NISM-PGRFA
Support to CHM Implementation

- Cross-cutting Policies & Strategies
- GEF focal point for international cooperation & BD Project implementation
- National Status Reports on Biodiversity
- BD Impact Assessment tools (EIA, SEA, SIA)
- Agreements & MOUs (MTA, Code of Ethics, Data & information Sharing)
- BD Statistical Compendiums
- BD Assessment Studies, Gap Analysis & Check lists, Registries (TK)
- BD Meta Data Base & Information Networks
- National Capacity Need Assessments (NCSA)
- National Red listing Process

Common constrains on Information Management.

- Lack of (Data sharing) policy.
- Lack of Legal instruments.
- Sustainable financing mechanism?
- Inadequate HRM for Information Management
- Inadequate Technical & maintenance Facilities.
- Fast development of SW & HW/Compatibility
- Lack of Human resources.
  - No of Persons.
  - No of skilled persons.
- Lack of coordination & Partnership among the institute.
  - etc., etc., .........

Thank You
Biosafety, Biotechnology, Cartagena Protocol and Technology Transfer

Prof. Athula Perera
Professor of Agricultural Biology
University of Peradeniya

B.Sc (Agric) 1974
M.Sc. (Japan) 1980 – Genetics
Ph.D. (UK) – Applied Genetics
Post-doctoral Training:
Rice Biotechnology (USA, UK)
Biosafety (India, Malaysia, Switzerland, Malaysia, Norway, Iran)

Sri Lanka is among the 25 Biodiversity Hotspots in the world

Table 1. Global Area of Biotech Crops in 2007: by Country (Million Hectares)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Area (million hectares)</th>
<th>Biotech Crops</th>
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<tbody>
<tr>
<td>1*</td>
<td>USA</td>
<td>57.7</td>
<td>Soybean, maize, cotton, squash, papaya, alfalfa</td>
</tr>
<tr>
<td>2*</td>
<td>Argentina</td>
<td>19.1</td>
<td>Soybean, maize, cotton</td>
</tr>
<tr>
<td>3*</td>
<td>Brazil</td>
<td>15.0</td>
<td>Soybean, cotton</td>
</tr>
<tr>
<td>4*</td>
<td>Canada</td>
<td>7.0</td>
<td>Canola, maize, soybean</td>
</tr>
<tr>
<td>5*</td>
<td>India</td>
<td>6.2</td>
<td>Cotton</td>
</tr>
<tr>
<td>6*</td>
<td>China</td>
<td>3.8</td>
<td>Cotton, tomato, poplar, petunia, pawaya, sweet pepper</td>
</tr>
<tr>
<td>7*</td>
<td>Paraguay</td>
<td>2.6</td>
<td>Soybean</td>
</tr>
<tr>
<td>8*</td>
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<td>Maize, soybean, cotton</td>
</tr>
<tr>
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<td>Soybean, maize</td>
</tr>
<tr>
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<td>Philippines</td>
<td>0.3</td>
<td>Maize</td>
</tr>
<tr>
<td>11*</td>
<td>Australia</td>
<td>0.1</td>
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</tr>
<tr>
<td>12*</td>
<td>Spain</td>
<td>0.1</td>
<td>Maize</td>
</tr>
<tr>
<td>13*</td>
<td>Mexico</td>
<td>0.1</td>
<td>Cotton, soybean</td>
</tr>
<tr>
<td>14</td>
<td>Colombia</td>
<td>&lt;0.1</td>
<td>Cotton, carnation</td>
</tr>
<tr>
<td>15</td>
<td>Chile</td>
<td>&lt;0.1</td>
<td>Maize, soybean</td>
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<td>16</td>
<td>France</td>
<td>&lt;0.1</td>
<td>Maize</td>
</tr>
<tr>
<td>17</td>
<td>Honduras</td>
<td>&lt;0.1</td>
<td>Maize</td>
</tr>
<tr>
<td>18</td>
<td>Czech Republic</td>
<td>&lt;0.1</td>
<td>Maize</td>
</tr>
<tr>
<td>19</td>
<td>Portugal</td>
<td>&lt;0.1</td>
<td>Maize</td>
</tr>
<tr>
<td>20</td>
<td>Germany</td>
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<td>Maize</td>
</tr>
<tr>
<td>22</td>
<td>Romania</td>
<td>&lt;0.1</td>
<td>Maize</td>
</tr>
</tbody>
</table>

* 13 biotech mega-countries growing 50,000 hectares, or more, of biotech crops.
Source: Clive James, 2007.
National Biosafety Framework Development Project – Sri Lanka

Objective: To prepare a draft National Biosafety Framework for Sri Lanka (NBFS) in order to regulate the importation of Genetically Modified Organisms (GMOs) and Genetically Modified Food, Feed and Processed products to Sri Lanka

- May 2003 – Nov. 2004

Elements of the Framework

- 1. Regulatory system
- 2. Administrative structure
- 3. Risk Assessment & Management
- 4. Mechanism for public participation
- 5. Biosafety Policy

National Coordinating Committee:
Ministry, Biodiversity, Forests, Health, Legal Draftsman, Customs, Wildlife, National Science Foundation, Quarantine, NGO, Animal production & Health, Fisheries & aquatic resources, National chamber of commerce, Central Env. Auth.

2. Awareness workshops on GMO/GMF

- Target groups: Farmers, consumer org., NGOs, private sector, scientists, school children, teachers, teacher trainers, university students, public health inspectors, doctors & lawyers, national chamber of commerce
- Provinces: Western, Southern, Central, North-Central, Wayamba, Sabaragamuwa, S-E
  - North & East – not completed
- Best resource persons from the area
- Appropriate language, handouts, simple slides, exhibits, models, posters
- Similar sessions, different levels
- Feedback

Training Programmes

- Risk Assessment & Management
  - Scientists (110); NGO; others
- Laboratory Safety Procedures
  - Scientists
- GMO/GMF Detection methods
  - Scientists

Publicity

- Brochure, Logo, Newsletters (1/4m), Sticker, Wall papers, Posters, Dockets, Exhibits, Calendars (2004, 2005),
- T-shirts, TV advertisements and programmes, Booklets, Translations, Newspaper articles, Magazine articles, Public presentations, Scientific presentations and sessions, exhibitions
Risk Assessment & Management

Key terms (in risk management framework)
- Risk identification — The process of determining what can happen, when, and how
- Risk analysis — A systematic use of available information to determine how often specified events may occur and the magnitude of their consequences
- Risk evaluation — The process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels, or other criteria
- Risk assessment — The overall process of risk analysis and risk evaluation
- Risk treatment — Selection and implementation of appropriate options for dealing with risk

Addressed in CPB:
- Article 15 (Risk Assessment)
- Article 16 (Risk Management)
- Annex III

Stepwise Approach:
- identify any harm/hazards
- likelihood for harm to occur
- magnitude of its effects
- minimize risk (thru’ RM or termination)

Example:
- RA of Bt-Cotton (MON531)

Summary of approvals:
- Where? (Argentina, Australia, Canada, China, India, Japan, Mexico, S. Africa, USA)
- When? (from 1996)
- Intended Use? (release, Food, Feed, FF)

Characteristics of Cotton
- Centre of origin
- Reproduction (SP, bees)
- Toxins (Gossypol)
- Allergenicity
- Donor Organism Characteristics
  - Name: B. thuringiensis kurstaki
  - Gene: cry1Ac
- Pathogenicity: Specific toxicity of Bt-protein to target Lepidopteran insects

Introduced Genetic Elements
- Genes, promoter, terminator, copy number & form
- cry1Ac (Cry1Ac delta-endotoxin)
- neo (NPT II-antibiotic SM for transformed plants)
- aad (ADD - SM for transformed bacteria, not expressed)
- CaMV 35S promoter
**Characteristics of Modification**
- Introduced DNA (cry1Ac, neo, aad, 35S promoter, NTR nos)
- Genetic stability of introduced trait (4 generations)
- Expression (leaf, seed, 25ug/plant, 3x in growing season)

**Environmental Risk Assessment**
- Outcrossing potential
- Increased weediness
- Secondary and non-targets
- Impact on biodiversity

**Outcrossing**
- Mainly self-pollinating
- Main pollinators - honeybees, bumblebees
- Pollen - heavy & sticky
- Outcrossing rate - upto 28%, declines with distance from pollen source

**Outcrossing Potential in SL**
- Cultivated conventional cotton (Gossypium hirsutum) in release area?
- Presence of other cotton species
- Outcrossing with G. barbadense possible, not with G. tomentosum (chromosomal incompatibility & non-synchronous flowering)
- Hybrids - sterile, unstable, weak

**Increased Weediness**
- Will novel genes confer ecological advantage to GM-cotton?
- Will resistance to kanamycin and specific lepidopteran insects make cotton more invasive or weedy?
- Are GM-cotton seeds more dormant?

**Adverse Effects on Non-targets**
- What are the non-targets?
- Are Cry1Ac and NPTII toxic to only lepidopteran species?
- Is host range specificity of native and synthetic proteins similar?
- Dietary toxicity studies?

**Impact on Biodiversity**
- Presence of wild relatives
- Transfer of novel phenotypic traits
- Effect of new traits to wild relatives in unmanaged environments (the wild)
Risk management includes steps to manage identified harm to an acceptable level used systematically during R&D and evaluation methods to reduce risks to low levels (controls, containment).

Risk Management for Release differs from case-to-case determined by:
- risk assessment
- organism involved
- method of release

Socio-economic Considerations may include:
- the impact of the approval on particular communities (e.g. livelihoods of poor farmers) in the country;
- the economic impacts on organic farmers of the potential loss of "GM-free" status;
- the potential loss of export markets for agricultural produce; and
- concerns about the potential impact of a particular GMO on food security.

Small farmers, indigenous peoples, women, small and medium enterprises and the domestic scientific community,

Monitoring What should monitoring focus on?
- environmental impacts (positive and negative)
- impact on human health (farm workers) and the environment
- effects on endangered species
- presence of superweeds
- insect resistance build-up
- negative impact on soil micro-organisms
- disruption of food chain

PUBLIC PARTICIPATION What is public participation?
- "sharing or taking part in"
- how and to what extent people are able to express their views;
- take part in decision-making
- contribute to policy formulation

Article 23 - Cartagena Protocol Key Elements:
- Public awareness
- Public education
- Public participation
- Access to information

Article 20, paragraph 1 of the Cartagena Protocol on Biosafety established the BCH as part of the clearing-house mechanism of the Convention on Biological Diversity, in order to:
(a) Facilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms; and
(b) Assist Parties to implement the Protocol, taking into account the special needs of developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition as well as countries that are centres of origin and centres of genetic diversity.
National Biosafety Clearing House

NBCH Website

- Information on regulations, guidelines, domestic decisions, roster of experts, procedures, progress of applications, etc.
- Literature and links to other scientific sources.
- Discussion fora, debates, seminars

POSSIBLE CONTENTS

1. Rules and Regulations
2. Status of Approvals
3. Status of research
4. Library:
   - Official documents of the country
   - List of international documents and links to these documents
   - Listing of important biosafety websites and links
   - Brief overview of biosafety regulations in other countries
   - Formats of various application forms
5. Events (National and international):
   - Listing of National and international conferences/workshops related to biosafety
6. Roster of experts
7. Press clippings
8. Frequently Asked Questions (FAQs) on biosafety

Current Situation

National Biosafety Framework - √ 2005
National Biosafety Policy - √
National Biosafety Law - On-going
Use of existing regulations - Health √ - Food labeling
Others – Competent Authorities - ?
National Database - √ (2004) - needs updating!!
National Information Centre - required
Public awareness - 2003, 2004... required
Training: Risk Assessment & Management 2004
GMO/FFP Detection 2006
Technology Transfer - RA&M - required
GM Testing √
What is Biodiversity?

and Biodiversity conservation through the CBD

Professor Sarath W Kotagama
Professor of Environmental Science
University of Colombo
Colombo 3, Sri Lanka

Biological Diversity & Biodiversity

- Biodiversity as a word was coined by Walter Rosen in 1986
- It came in to the scientific literature only after 1998
- It is NOT defined in the Convention on Biological Diversity or CBD
- It is today a common used word with few knowing its exact meaning

What is the DEPTH?

Article 2 of the Convention

The variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and ecosystems.

BIODIVERSITY gives

DEPTH and

WIDTH to

Biological Diversity

ECOSYSTEM DIVERSITY...
What is the **WIDTH**?

Besides biology

WILDLIFE, ECOLOGICAL RESEARCH, BIOTECHNOLOGY, GENE BANKS, PHARMACEUTICALS, FORESTRY, COASTAL MANAGEMENT, ECONOMICS, HUMAN RIGHTS, EQUITY, AGRICULTURE, CONSUMPTION, TRADE, INTELECTUAL PROPERTY RIGHTS, INDIGENOUS KNOWLEDGE

**WHY are we concerned?**

“Loosing Battle”

“Born –again”
Realization of “bio-exploitation”

“Seeking Justice”

“Indigenous wealth-going Herbal”

Going Natural - beausticare

“Wealth of the future”

Bio-technological opportunities
“Security”

“Acting God!”

“Uncertainty”

Financial value of biodiversity

Estimates of annual markets for some products derived from genetic resources

<table>
<thead>
<tr>
<th>Products</th>
<th>Annual Sales (billion US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>75</td>
</tr>
<tr>
<td>Botanical medicines</td>
<td>20</td>
</tr>
<tr>
<td>Agricultural produce</td>
<td>300+</td>
</tr>
<tr>
<td>Ornamental horticulture</td>
<td>16</td>
</tr>
<tr>
<td>Crop protection</td>
<td>0.6</td>
</tr>
<tr>
<td>Biotech (except health &amp; agriculture)</td>
<td>60</td>
</tr>
<tr>
<td>Personal care &amp; cosmetics</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>ROUNDED TOTAL</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Source: ten Kate K and Laird SA (1999), *The Commercial Use of Biodiversity*, Earthscan Publications Ltd.

Causes of Biodiversity loss

- Unsustainable high rate of population growth
- Unsustainably high rate of natural resource consumption
- Narrowing spectrum of consumed/traded products for agriculture, forestry and fisheries

Causes of biodiversity loss . . . .

- Economic systems and policies that fail to value the environment and its resources
- Inequity in the ownership, management and flow of benefits from the use of and conservation of biological resources
- Deficiencies in knowledge and its application
- Legal and institutional systems that promote unsustainable exploitation
Mechanisms for the loss of biological diversity
- Habitat loss and fragmentation
- Alien invasive species
- Over consumption
- Pollution
- Global climate change
- Commercial agriculture
- Monocultures

How to Conserve?
- ONLY two ways...
  - In-situ conservation
  - Ex-situ conservation
  - Creation of Protected Areas
  - Zoos/ Botanic gardens etc

OBJECTIVES....
- the conservation of biological diversity
- the sustainable use of its components
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources

Background to the Convention..
- 1981 - Initial discussion IUCN 15th General Assembly
- 1989 – UNEP establish Ad-hoc working group
- 1991 – renamed Intergovernmental Negotiating Committee – prepare legal document
- 22 May 1992 – convention adopted by the Nairobi Final Act
- 5 June 1992 – signed at Rio Conference

How does the CBD approach the challenge?
- Common concern of humankind
- Sovereign rights
- Countries responsible for conservation
- Preventative and precautionary approach
The Ecosystem Approach

- Prioritises *in situ* conservation
- Backed up by *ex situ* conservation
- Sustainable use

**Significant characters...**

- is much more than a pure conservation treaty...
- is a FRAMEWORK convention
- its provisions are expressed as overall goals and policies NOT as hard and precise obligations

**Major features....**

**National Sovereignty and the Common Concern of Human Kind**

- Distinction between conservation and sustainable use
- Often concern individual resources rather than diversity *per se*
- Focus on National action

**1. State responsibility towards its own biological resource**

- Preamble
- Article 6 – general measures for conservation and sustainable use
- Article 8 – *in situ* conservation
- Article 10 – sustainable use

**2. Conservation and Sustainable use**

- Far reaching obligations...
- Articles 6 and 10 – intergration and decision making
- Article 7 – monitoring
- Article 8 – *in situ* conservation
- Article 9 – *ex situ* conservation

Article 10 – regulate and manage
Article 8(j) – indigenous knowledge
Article 12 – research and training
Article 13 – education and awareness
Article 14(1)(a) – impact assessment
Article 14(1)(c-e) – contingency measures
3. **Access Issues...ABS**

Access to genetic resources
Access to relevant technology and information
Access for benefits for the providing state

**What is Genetic resources?**
- Any material of plant, animal, fungal, microbial or other origin containing functional units of heredity of actual or potential value
- A matter for interpretation
- May include herbarium specimens

---

**Repatriation of information**
- Back to country of origin
- Through exchange of information and access
- Planning is vital!

**The International Regime on ABS**
- Under negotiation
- Focus on users
- Controversies
- International certificate

---

**The Bonn Guidelines**
- Guidance for governments and other stakeholders
  - responsibilities
  - negotiating access and benefit-sharing
  - elements for agreements
  - benefit-sharing examples
  - Implications for collections

---

4. **Guideline for bioprospecting**
5. Recognition of Ecosystem services
- Provide:
  - goods
  - ecosystem functions
  - aesthetic and cultural values
- High global value
- Cost of loss greatly exceeds benefits

6. Value Traditional Knowledge
- Article 8(j):
  - TK must be:
    - Respected, preserved and maintained;
    - Promoted, with the approval and involvement of the holders
  - Benefits arising from TK must be shared equitably

7. Protection of Traditional Knowledge
- National legislation
- Indigenous Peoples’ declarations and codes of conduct
- Professional codes of conduct
- People’s Biodiversity Registers
- Akwé: Kon guidelines

8. Respect Intellectual Property
- Types of IP include:
  - patents
  - copyright
  - plant breeders rights
- IP and plants?

9. Global Taxonomy Initiative
- The ‘taxonomic impediment’
- GTI operational objectives:
  - taxonomic needs assessment
  - taxonomic information sharing
  - training and capacity building
  - collaboration
  - National Focal Points

Intellectual Property issues
- Patents on life?
- Disclose sources?
- IP and benefit-sharing?
- Implications for collections
  - agree, and track, benefit-sharing terms
Global Strategy for Plant Conservation

- 16 Targets for:
  - understanding and documenting plant diversity
  - conserving plant diversity
  - sustainable use
  - education
  - capacity building

10. Invasive alien species

- Environmental and economic costs
- ‘Guiding Principles’
  - advice and goals
- Role of horticulture

11. Biosafety [Cartagena Protocol]

- Promotes safe use of Living Modified Organisms (LMOs)
- Procedure for governments on imports containing LMOs
- Biosafety Clearing House
- Relevance to botanical collections

International Treaty on Plant Genetic Resources for Food and Agriculture

- Came into force 29 June 2004
- Multilateral system
- Facilitated crop access
- Sharing of financial benefits
- Farmers’ rights

International Treaty: Facilitated access

- Food/feed purposes only
- Quickly, with minimal cost
- Standard MTA
- Recipients keep material available
- No before/after date
- Implications for collections

2010 Biodiversity Target

‘To achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth’
12. Funding...

Creation of GEF
CASE STUDY 1:
A Mexican trader wants to import cottonseed from US to Mexico for processing.

Objective:
Use the central portal to access information that a user might need to do business.

References:
BCH Module 4: Finding information from the BCH Central Portal

Scenario:
You are running a business in Mexico and want to move a shipment of cottonseed from the United States to Mexico for food processing. You know that the shipment may contain genetically modified cotton.

Use the BCH to answer the following questions:
1. What GM cotton has been approved in the US that might be in your shipment?
2. After the oil is extracted from the seed, the seed cake is used for animal feed. Have all of the GM cotton events you may be importing been approved for food and feed use in Mexico?
3. What are your next steps to apply for permission to import the shipment into Mexico?
Case Study 1:
A Mexican trader seeks information on the procedure for importation of LMOs

Training Objective:
Users to practice searching for decisions and organisms, and to use the BCH as a tool to support trade.

Requirements:
Access to the BCH.

Notes:
Users can work singly or in small groups for this exercise.
Some of the results do not make use of the unique identifier. You may wish to initiate a discussion on how this impacts users of the BCH who are looking for relevant information.
Answers may have changed from the date of preparation and trainers may wish to carry out the exercise beforehand to update the expected results.
CASE STUDY 4:
Registering Data into the BCH Central Portal:
Contact Information and Competent National Authorities.

Objective:
To understand the process of registering (submitting and approving) information on the BCH, specifically about Contact Information and Competent National Authorities
To have a general knowledge about the different data input screens.

References:
http://bchtraining.cbd.int (Training demonstration website)

Module 6: Using the Management Centre
Module 7: Registering National Information in the BCH Central Portal
CASE STUDY 4:
Registering Data into the BCH Central Portal:
Contact Information and Competent National Authorities.

Participants should form Groups by seating rows

Row 1: Group 1 – Greece
Row 2: Group 2 - Angola.
Row 3: Group 3 – Andorra
Row 4: Group 4 - Comoros.
Row 5: Group 5 - Benin.

Each user of a group will take the role of a National Authorized User and National BCH Focal Point, in turns

You have a username “GROUPE_x.NAU_n” (e.g. “GROUPE_3.NAU_2”) or “GROUPE_x.NFP” (e.g. “GROUPE_5.NFP”)

Deploying the lab:
First time, first in row will be BCH-NFP, all the other will be NAUs
Participants would enter the Training website using the following URL http://bchtraining.cbd.int
Use the login / password to enter into the management center – user as explained above, all passwords is “montreal”.
Following the assigned role (NAU1, NAU2, etc), each participant should enter some fictitious data about Contact Information and, after that, about Competent Authority National (referencing the previously registered Contact Information). She / he will see it as “pending approval”.
BCH-NFP also enters some record (NOTE that in this case it will be automatically validated).
When all group participants have entered at least one record each, the BCH-FP
validates or rejects one of them. The NAUs could watch the process on BCH-FP’s computer.
Participants exchange roles between them so that each participant can play the role of a BCH-FP.

**During this exercise, participants can explore the following functions:**

- Using the translation button (little grey button labelled SP, FR, RS, etc) to add a translation
- Using the Mailbox button. This function has been developed to show the emails exchange between the system and the users (confirmation emails, request for validation email.
- Edit or delete metadata
- Save a draft to make later changes
CASE STUDY 7:
A Customs Officer seeks information about the importation of LMOs.

Objective:
Use the central portal to access information that might be needed during border control.

References:
- Biosafety Protocol
- BCH Module 4: Finding information from the BCH Central Portal
- COP-MOP Decision BS-III/10

Scenario:
A new customs officer in Hungary receives documentation about a shipment of maize that has arrived from a Latin American port. The maize was sourced from Argentina and Brazil, and is destined for food processing in Hungary. The customs officer is unsure if this shipment triggers any specific concerns as regards the importation of LMOs.

Use the BCH and the Protocol to answer the following questions:

1. Who should the customs officer contact to seek clarification about Hungary’s import requirements for LMOs?
2. Will this shipment be subject to the provisions of the Cartagena Protocol?
3. What information should be available about the LMO?
4. What information should the customs officer expect to see on the documentation accompanying the maize shipment?
CASE STUDY 7:
A Customs Officer seeks information about the importation of LMOs.

TRAINER NOTES

Training Objective:
Users to practice searching for decisions and organisms, and to use the BCH as a tool to support trade.

Requirements:
Access to the BCH.

Notes:
Teachable moment: The BCH is continually updated which means that the records recovered when working through the case studies will change with time. As a trainer, it is important to ensure that you revisit the case studies you will be using during your training workshops to ensure that they are as current as possible.

Teachable Moment: Parties and non-Parties: Discuss the fact that Brazil is a Party to the Protocol and therefore has to provide information, but that Argentina is not a Party and therefore is not required to provide the information on the BCH.
A User's Guide to the Central Portal of the Biosafety Clearing-House

“Surfing the BCH Central Portal”

Draft text, January 2008
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1 Introduction to the module

What the user will learn in this module:
1. To navigate the Central Portal
2. To understand the main functionalities of the BCH Central Portal
3. To know what information the user can find in the BCH Central Portal
4. To search the databases available on the BCH Central Portal

Context:

The UNEP-GEF Project for Capacity Building for Effective Participation in the Biosafety Clearing-House (BCH) has prepared a modular training package that aims to provide a practical “how-to” guide for countries to assist them in learning, understanding, using, and setting-up national access to the BCH Central Portal. The training package is designed to be flexible and is tailored to meet diverse needs of different countries, allowing them to select those tools and ideas that are most useful to their situation, needs and priorities. The training package is divided into five modules, each addressing one element of the BCH Central Portal.

Audience:

This module is designed to provide guidance to users of the BCH Central Portal. It is developed for a non-technical audience with little or no knowledge of the Protocol and the BCH, but with a need to understand the requirements of the BCH Central Portal.

Purpose:

This module describes the main functions and information that can be found on the BCH Central Portal. Users will learn how to navigate the BCH Central Portal, knowing:

1. The structure of information available on the BCH Central Portal;
2. The different categories of information found on the BCH Central Portal.

While users are connected to the BCH Central Portal (http://bch.cbd.int/) they can read the sections of this module and surf its various components.
2 Home Page

URL: http://bch.cbd.int/

The *Home* page of the BCH Central Portal is a *Welcome* page that provides an entry to the Central Portal of the BCH. The BCH Central Portal is hosted and maintained by the Secretariat of the Convention on Biological Diversity. This *Home* page provides access to all areas of the Central Portal, which is in turn linked to all of the international, regional and national nodes that provide information to the BCH Central Portal.

Seven components of the *Home* page are:

1. Links to the six United Nations (UN) languages are provided in the top left corner of the Home page. These take the user to home pages in the six languages, which are provided to facilitate access to information.
2. A *Sign In* link for registered users to access the management centre and a link to *Sign up for an Account* are positioned in the top right corner.
3. Below these links it the title for the Biosafety Clearing-House and a link in the centre to the website for *Convention on Biological Diversity*.
4. The *navigation bar* runs across the Home page below the title. It provides links to the main components of the BCH Central Portal
5. The *welcome area* with Latest News and Latest Additions;
6. *Shortcuts* to popular sections such as the BCH Survey’07, the launch of the new site and the LMO and genes registry.
7. Links for users to *contact* the CBD Secretariat, access the site map, review the linkages and privacy policies and review the copyright statement are provided in the bottom left corner. Below these links is the date of the last update of the Home page and a link to enable users to rate this page.
This module introduces the user to the components of the BCH Central Portal.

2.1 Welcome to the BCH Central Portal

The Welcome to the BCH Central Portal page of the BCH Central Portal has a welcome area that briefly introduces the BCH, provides a quick link to the Management Centre and provides information about highlights, such as the latest news about the BCH Central Portal and the most recent additions to the databases.
2.2 The Management Centre

Immediately below the BCH introductory paragraph is a link to the Management Centre for users wishing to add new information or edit existing information. This link takes users to the sign in page for Management Centre.

Users need to be registered to enter or update information using the Management Centre. All information is validated by the national focal point or the BCH Secretariat before it is made public. Module MO06 provides detailed guidance on how to register information on the BCH Central Portal.

2.3 Latest News

The news links posted in this area are focused on the BCH and provide details of new processes and facilities on the Central Portal. These news items update users on changes and on progress with the development and implementation of the BCH Central Portal.
2.4 Latest Additions

The most recent additions to the BCH databases are displayed on this list. The list is updated every six hours and only the seven most recent entries show on the Home page.
The link to More additions takes the user to a page providing a longer list of the latest additions.

In many instances the Search results pages are longer than a standard computer screen and the user needs to scroll down the page to view all the items and links to additional search result pages where these exist.

3 The Navigation Bar

Above the welcome area of the Home page is a navigation bar that provides links to the major components of the BCH.

The BCH provides links to information about the Biosafety Clearing House, its development and management, highlights and policies.

The Protocol provides links directly to information about the Cartagena Protocol on Biosafety provided by the CBD. These links provide information about the text of the Protocol, Parties to the Protocol, COP-MOP decision, reporting, meetings, documents and notification under the Protocol.
Finding Information provides links to the categories of information in the BCH databases and to compiled information about national contact details and registries for LMOs, unique identifiers, organisms and genes.

Registering Information links the user to the sign in page for the BCH Management Centre, which can be used to manage submissions and to register new records with the BCH.

Resources provides access to other useful site resources such as common formats used on the BCh; the BCH Glossary and Thesaurus; the mailing lists for current awareness and technology specialist information updates; downloadable files of BCH forms, biosafety documents, competent national authorities, national focal points and roster of experts reports; online conferences; and a site map to the BCH portal.

Help provides access to frequently asked questions (FAQ), training modules, a guide to the BCH, the training site of the BCH and interoperability services.

On the right side of the navigation bar is a search box for locating country profiles. This provides a quick search function to locate all records for each country listed.

The menus on the BCH Central Portal use icons to illustrate aspects of the associated links. The commonly encountered menu icons include:

- Link takes the user to another website
- Link to a PDF document
- Link takes the user to a search facility on another website

Details of more icons used on the BCH Central Portal are provided in the Ready Reference 4 guide, which will be available on the Training Modules section under the Help menu.

### 3.1 The BCH

URL: http://bch.cbd.int/about/
The introductory page for the BCH section explains the Mandate of the Biosafety Clearing-House and provides some background information about the development of the site. The information about the BCH is divided into three sections:

1. **The BCH**, providing information about its modalities of operation, multi-year program of work, decisions, development and the advisory committee;

2. **Highlights**, providing news on BCH developments, new additions to the databases, notifications under the CBD and meetings and documents;

3. **Policies**, providing information about the listing of external websites, dealing with privacy and a disclaimer.

The content of the BCH section is accessed from the menu on the left side of The Biosafety Clearing-House page, or from The BCH drop down menu on the navigation bar.
3.1.1 The BCH

This section provides information about the establishment and running of the BCH Central Portal.

3.1.1.1 Modalities of Operation

The link for Modalities of Operation takes the user to the Modalities of operation of the Biosafety Clearing-House page which provides information about how the BCH functions and the roles of the institutions that participate in its establishment, maintenance and use. Eight modalities are described in this section:

1. The role of the BCH regarding the categories of information;
2. The characteristics of the BCH;
3. The functions included in the Secretariat’s administration of the BCH;
4. The role of the National Focal Points for the BCH;
5. Technical oversight and advice;
6. Obligations of partner organizations;
7. Reports on activities; and
8. Periodic review of the BCH.

The Modalities of operation of the Biosafety Clearing-House page provides information about each of these modalities.
3.1.1.2 Multi-year Program of Work

The link for Multi-year Program of Work takes the user to the Multi-year Program of Work page which outlines the establishment and maintenance of the major components of the BCH. This program is comprised of five elements as follows:

1. Structure and function of the central portal;
2. Information content and management;
3. Sharing information about and experience with LMOs;
4. Capacity-building and non-Internet accessibility;
5. Review of activities.

The Multi-year Program of Work page provides information about the objectives of and each of these program elements and possible activities for each program.

3.1.1.3 Decisions on the BCH
The link for **Decisions on the BCH** takes the user to the **Decisions on the BCH** page which provides links to decision documents from COP-MOP and ICCP meetings.

### 3.1.1.4 Development of the BCH

The link for Development of the BCH takes the user to the **Development of the BCH** page which provides information about stages of development of the BCH from 2003 to the present. Each entry has a link to a notification document detailing the developmental milestones. For example, the 2006 notification of the offline version of the BCH (Notification 2006-124) shown here.
3.1.1.5 BCH-IAC

The link for BCH-IAC takes the user to the BCH Informal Advisory Committee page which provides information about meetings of this advisory committee with links to meeting documents and a summary of the outcomes of each meeting.
3.1.2 Highlights

The section of the BCH Central Portal provides links to information that highlights the activities of the BCH, including new entries into the databases and interactions with respect to the CBD.

3.1.2.1 BCH News

BCH News links the user to the Latest News section reviewed under 2.3. It provides updates on changes to the BCH Central Portal and enables registered users to post news related to the BCH from this page, using the Submit news button.

At the bottom right of the Biosafety Clearing-House News page is a Subscribe to the Rss feed button, which takes the user to the RSS News feed.
Items page. This page briefly describes the function of the feeds, provides a link to Learn more about feeds and provides a link to subscribe to this feed.

3.1.2.2 Latest Additions

Latest Additions links the user to the Latest Additions page that was described in section 2.4 above. This page displays the most recent additions to the databases. The information is updated every six hours.

Selecting a Record ID takes the user to the linked record page.
3.1.2.3 Notifications

The **Notifications** link takes the user out of the BCH Central Portal to the CBD website. This page provides a search facility that can be used to find notifications filed under the Protocol. To search, select **Cartagena Protocol on Biosafety** from the **Subject Box** drop down menu and, where possible, refine the search with a word from the title of the document or the year the document was published. Click the **Go** button to obtain the search results.

Resources relating to the notifications can be accessed from the icons to the left of the notification records.
3.1.2.4 Meetings and Documents

The Meetings and Documents link takes the user out of the BCH Central Portal to the CBD site. This Calendar of SCBD Meetings page provides a list of upcoming meetings coordinated by the Secretariat of the CBD and a search facility to identify meetings related to specific aspects of the CBD.

If the user selects Cartagena Protocol on Biosafety in the Subject box, and then clicks on Go, the results page will provide a list of past, confirmed and tentative meetings with links to resources for the meetings, where these are available.

The search for meetings and documents can be refined by selecting specific search parameters such as country, year, month and words from the title.
3.1.3 Policies

The section on Policies provides links to information about the linking of external websites to the BCH, the privacy policy of the BCH and a disclaimer.

3.1.3.1 Linking External Websites Policy

The link for Linking External Websites Policy takes the user to the Linking External Websites Policy page which details how the Secretariat considers and selects sites for inclusion in the BCH Central Portal. These decisions are made on a case-by-case basis, using criteria established in the policy and guidance provided by the BCH Informal Advisory Committee, the Bureau of the COP/MOP, or the Parties to the Protocol.
3.1.3.2 Privacy Policy

The link to **Privacy Policy** takes the user to the **Privacy Policy** page which details how information submitted to the BCH Central Portal is handled and how the BCH manages information about visitors to the BCH Central Portal.

3.1.3.3 Disclaimer

The link to **Disclaimer** takes the user to the **Disclaimer** page which notes that while every effort is made to provide accurate information, the accuracy of the information provided through the BCH is not guaranteed. Parties to the Convention, Governments and other users of the database are encouraged to bring errors, inaccuracies and omissions to the attention of the Secretariat.
3.2 The Protocol

URL: http://bch.cbd.int/protocol/

The Protocol link on the navigation bar provides access to information about the Cartagena Protocol on Biosafety.

The Protocol page is divided into four sections that provide:
1. A brief introduction to the Protocol;
2. A short history of the development of the Protocol;
3. An explanation of the ICCP process; and
4. Related links to COP decisions, meetings of the Open-ended Ad Hoc Working Group on Biosafety and relevant publications.

The left hand menu on The Protocol page provides information in six areas:
1. Text of the Protocol;
2. Parties to the Protocol;
3. COP-MOP decisions;
4. Reporting;
5. Meeting and documents;

3.2.1 Text of the Protocol

The link for **Text of the Protocol** takes the user to the Text of the Protocol page which provides links to the complete text of the Cartagena Protocol on Biosafety. Links to full text documents in the six United Nations languages are provided in both MS Word and PDF format. Links are also provided to the text article by article. These links take the user to a page for each article with the text provided in English.

3.2.2 Parties to the Protocol

The link for **Parties to the Protocol** takes the user to the Parties to the Protocol page which provides a summary of the status of ratification of the Protocol and its entry into force. The table lists countries that have signed, ratified, accepted, approved or acceded to the Protocol and the date at which the Protocol entered into force in each country. Each country name provides a link to the Country Profile record that provides summary information about records submitted to the BCH Central Portal by that country.
3.2.3 COP-MOP Decisions

The link for COP-MOP Decisions takes the user to the Search COP-MOP Decisions page on the CBD website. This page provides links to full text decisions from COP-MOP 1 in the six United Nations languages and provides a search facility for finding specific decisions from all COP-MOP meetings.
The search criteria include biosafety-related subjects; a choice of COP-MOP meeting; keywords; or words in the title. The results can be grouped by meeting date or meeting group.

3.2.4 Reporting

The **Reporting** link takes users to the **Reporting page** which provides links to:
1. National Reports;
2. BCH Annual Reports; and
3. Annual Reports of the Roster of Experts.

The links to each of these sections take the user to the text lower down on the reporting page. Within this text is a search facility to access national reports from specific countries and annual reports from specific years.

3.2.4.1 National Reports

In the National Reports section of the Reporting page, first national reports and interim national reports can be accessed by selecting a country from the drop down menu in the text.
This section also provides links to an analysis of the national reports and the interim reports. These links take the user to the National Reports of the Cartagena Protocol on Biosafety page on the CBD website.

The search facility on the National Reports of the Cartagena Protocol on Biosafety page allows the user to access analyses of the data from individual country reports or from the reports of countries within country groups.

The user can refine the search using known words in the questions or selecting the matrix languages used for the analyses. Selecting the Go button calls up the search results. These are tabled below the search facility.
3.2.4.2 BCH Annual Reports

The **BCH Annual Reports** cover the operation of the BCH and are provided by the Secretariat at the end of each calendar year. These reports can be accessed by selecting the year of interest in the search box under the BCH Annual Reports section on the Reporting page. Selecting a year in the search box takes the user to the relevant Annual Report page which provides the text of the report.

3.2.4.3 Roster of Experts Annual Reports

During the year 2006, the Secretariat has continued to develop and implement the central portal of the Biosafety Clearing-House (BCH) in accordance with activities deriving from Biorisk 5–07, DD-101, DD-102, and the programme of work that was adopted by the Conference of the Parties serving as the meeting of the Parties at its second meeting (DD-102, annex).

The Secretariat conducted a BCH Training Workshop from 12–15 March 2006, back-to-back with the 14th meeting of the Conference of the Parties serving as the meeting of the Parties, in collaboration with the UNEP-GEF Biosafety Unit and their Regional Advisers for the BCH. The second meeting of the BCH Informal Advisory Committee was held in Geneva from 21 to 22 November 2006.

The following is a summary of the information currently contained in the BCH:

- Following on from the last year’s addition of the Biosafety Information Exchange Centre, a new section on information-sharing was added in 2006, with new categories of information including the Compendium of Academically-Appointed Biosafety Courses, a Directory of Organisations involved in Biosafety Education, and a Country Profile section. The Secretariat has introduced an intranet accessible Central Registry of Living Modified Organisms, including information on the transformation event, gene insert and characteristics of the modified, and its unique identification code.

- Search and help features were expanded, including providing access to all linked records in search results; a global desktop search facility; a "Virtual notebook" to save records; and online access to the training modules developed under the Inter-Parliamentary Union (IPU) project on building capacity for effective participation in the BCH.

- As at 31 December 2006, the BCH contained 16,756 records, including 394 records from Africa, 453 from Asia and the Pacific, 251 from Central and Eastern Europe, 357 from Latin America and the Caribbean, 1,671 from Western Europe and Others, and the records provided by the Secretariat for GOB-Expert collaboration with international organizations such as the World Health Organization (WHO) and the Environment Agency (EACH).
The *Roster of Experts Annual Reports* are provided each calendar year by the Secretariat and report on the operation of the Roster of Experts and the voluntary fund for the use of the roster.

To access the Roster of Experts Annual Reports the user can select the year of interest using the drop down menu in the text on these reports at the bottom of the *Reporting* page. Selecting a year takes the user to a PDF copy of the report for that year.

### 3.2.5 Meeting and Documents

The link to *Meetings and Documents* takes the user out of the BCH Central Portal to the *Calendar of SCBD Meetings* page on the CBD website.

This page provides links to PDF copies of lists of upcoming SCBD meetings and lists of tentative upcoming SCBD meetings. The date of last update of these lists is provided above these links.

The *Calendar of SCBD Meetings* page also provides a search facility to identify meetings related to specific aspects of the CBD.

If the user selects *Cartagena Protocol on Biosafety* in the *Subject* box and clicks on *Go*, a list of past, confirmed and tentative meetings is provided below the search facility. The table of search results provides links to documents for the meetings, where these are available.
The search for meetings related to the Protocol can be refined by selecting specific search parameters such as the subject of the meeting; the country that hosted or will host the meeting; year; month and words from the title.

### 3.2.6 Notifications

The link to **Notifications** takes the user out of the BCH Central Portal to the Notifications page on the CBD website (see Section 3.1.2.3). This page provides a search facility that can be used to find notifications filed under the CBD. The user can search for specific subjects related to the CBD, including the Protocol, or for the title, words in the title, or the year of the notification.

The user can refine the search terms to get a wider or narrower list of notifications. Resources relating to the notifications can be accessed from icons to the left of the notification records in the search result.
For example, to local 2008 notifications related to the Protocol, the user selects Cartagena Protocol on Biosafety from the Subject drop down menu and 2008 in the year box. Clicking on the Go button publishes the search results below the search facility.

A more detailed explanation of the Protocol is provided in Module 01.

### 3.3 Finding Information

URL: http://bch.cbd.int/database/
The links to categories of information in the databases of the BCH Central Portal are provided in the **Finding Information** drop down menu on the navigation bar.

On the **Finding Information** page, two sets of links are provided to access the categories of information in the BCH databases:

1. Links listed in the left hand menu of the **Finding Information** page; and
2. Links provided in the text headings on this page.

Each category of information links to a search facility that is designed to optimize the location of specific information within each of the databases. It is also possible to browse all entries in any one of the categories.
The types of data stored in the BCH databases and instructions for finding information are detailed in Module MO04.

### 3.4 Registering Information

**URL:**

https://bch.cbd.int/member/signin.shtml?returnurl=%2fmanagementcentre%2fdefault.shtml

The BCH Management Center provides an electronic, web-based mechanism to register, update, delete or correct information on the BCH databases. Registration of information through the Management Center of the BCH Central Portal is restricted, and access to this section of the web site is reserved for the BCH National Focal Points and other authorized users. Before new information is made publicly available, it is validated by the national focal point or the Secretariat.

Access to the BCH Management Center is restricted to registered members.

Detailed instructions on using the Management Centre are provided in Module MO06A.
3.5 Resources

URL: http://bch.cbd.int/resources/

The Resources page of the BCH Central Portal contains links to a collection of useful sub-pages. Some sections help to optimize the user’s interaction with the Central Portal while others provide more general biosafety-related information. The information available in this section is listed in the Resources drop down menu:

1. Common formats;
2. Glossary;
3. Thesaurus;
4. Mailing lists;
5. Downloadable files;
6. Online conferences; and
7. Site map.

To access any of these resources click on one of the headings in the Resources drop down menu on the navigation bar, or in the left hand menu bar on the Resources page. Each of these resource categories is introduced in more detail below.

3.5.1 Common Formats

Common formats are provided to standardize the structure and organization of information stored in the BCH databases. Use of these formats improves the efficiency of the BCH Central Portal and ensures easy and predictable access to information.

The common formats are the basis of the online entry forms used by the BCH Management Centre.
The **Common Formats** link in the **Resources** drop down menu on the navigation bar, or the link in text on the **Resources** page, or the link in the left hand menu of the **Resources** page all take the user to the **Common formats** page.

The **Common formats** page provides links to MS Word files or PDFs of the common formats and a table with links to sample formats.

### Common formats

Information is made available to the BCH by using standardized structures for organizing information known as common formats. Word files or PDFs of the common formats are available for download below (alternatively information may be reported directly online through use of the Management Centre).

#### Sample formats

**Core forms**

1. **Contact Details Reference**
   - Common format for providing Contact Details for a person or organization, for reference when creating other records. Latest edition: 14 February 2007.

2. **Organism (Non-modified)**

3. **Inserted Gene**

#### National Contacts

1. **National Focal Point**

2. **Competent National Authority**

3. **National Database or Website**
   - Common format for registering a National Database or Website (all records will also automatically be included in the Biosafety Information Resource Centre). Latest edition: 22 February 2007.

Common formats and sample formats are provided for the following categories of information:

1. Core forms;
2. National Contacts;
3. Laws and Regulations;
4. Decisions and Declarations;
5. Risk Assessments;
6. Modified Organisms;
7. Capacity Building Activities;
8. Roster of Experts;
9. Information-Sharing and Other Resources.

3.5.2 Glossary

The Glossary links take the user to the Glossary page which provides a list of definitions of common terms, acronyms and expressions used throughout the BCH Central Portal.

The Glossary links are in the Resources drop down menu on the navigation bar, or in the Glossary text on the Resources page, or in the left hand menu on the Resources page.

On the Glossary page a Disclaimer is provided and under this is an alphabetical bar linking to sections in the Glossary.

Below the alphabet is a table of all the Glossary terms in alphabetical order. The table provides a description of the use of each term in the BCH Central Portal.

3.5.3 Thesaurus

The Thesaurus provides a list of pre-defined terms and related synonyms, or ‘controlled vocabularies’, used in a specific context. These terms are used to register and search for information in the BCH databases.
The user can access the Thesaurus in two ways. If the link is used in the Thesaurus text on the Resources page, the user accesses the Thesaurus Domains page, which provides a list of term domains in alphabetical order. Each domain provides access to an alphabetical list of terms used in that domain. A key is provided to indicate which terms are ‘preferred’, non-preferred’ or ‘related’.

Selecting a term from the Terms tree list on the Thesaurus Domains page takes the user to the Term Description record. This record provides detail on the meaning of the term and how it is used in the BCH, including broader, narrower and preferred uses of the term and translations into the six UN languages. Within a term description, the preferred use term in the controlled vocabulary is a term selected from among synonyms to be used for indexing and retrieval purposes. For example, maize is the preferred use term over corn in the BCH.

Alternatively, the user can select the Thesaurus link in the left hand menu on the Resources page or from the Resources drop down menu on the navigation bar. These links take the user to the Thesaurus search facility on the Search Thesaurus page.
This search facility provides a drop down menu for selection of domains within the Thesaurus and a box for use of keywords or terms in the search. The user enters the domain and/or keyword(s) of interest and selects the **Search** button.

In the results list, a term is selected from the **Term ID** column for more information about its use in the BCH Central Portal. This takes the user to the **Term description** record, which provides detail on the meaning of the term and how it is used in the BCH Central Portal, including broader, narrower and preferred uses of the term and translations into the six UN languages.
Example: If a user wishes to understand the use of the term transboundary in activities related to the Protocol, the user enters the search terms All in the Filter by domain box and transboundary in the Search for box on the Search Thesaurus page. Selecting the Search button will provide a list of records describing how transboundary is used in various domains within the BCH Central Portal. The search results (in January 2008) identified five uses of the term in four domains within the BCH.

3.5.4 Mailing List

The Mailing List provides access to two listservs that are available through the BCH Central Portal. Listservs are lists of e-mailing addresses for people who have signed up to receive regular information about a particular topic.

The BCH Current Awareness Service sends out regular updates summarizing new information that has been added to the BCH. It is sent directly to users by e-mail (or to a specified fax number). The categories of information included in the awareness summaries, as well as the frequency of their delivery, are individually customized by each user.

The BCH Information Technology Specialist Updates sends out information that is intended to be of use to IT professionals who are involved in maintaining databases or websites that are interoperable with the BCH. It includes updates on changes in the BCH web service.
Users may subscribe to the BCH listservs by selecting follow this link in the Mailing List text on the Resources page.

Users can access the Mailing List page from the Resources drop down menu on the navigation bar, or from the link in the left hand menu on the Resources page.

The Mailing List page provides information about the two listservs and gives two links to subscribe. The first link is used if the user is already registered and has a BCH account. The second link is used if the user needs to sign up for a BCH account before subscribing to a listserv.

Selecting the first link takes the user to the Sign In to the Management Centre page. Once signed into the Management Centre the user may subscribe to a listserv.

Selecting the second link opens the Sign Up for a BCH Account page. Users register according to their affiliation with the BCH.

Details on using the Management Centre are provided in Module MO06A.
3.5.5 Downloadable files

The Downloadable Files page provides access to BCH forms which are provided to help Parties fulfill their responsibilities with respect to the Protocol’s information and reporting requirements. The BCH forms provide guidelines and templates for entering information about activities related to the Roster of Experts; biosafety documents; Competent National Authority activities; National Focal Point lists; and Roster of Experts reports. They are available in MS Word and PDF format and in the six United Nations languages.
The Downloadable Files page can be accessed from the link in the text on Downloadable Files on the Resources page, or from the link in the left hand menu on the Resources page, or from the link in the Resources drop down menu on the navigation bar.

3.5.6 Online Conferences

The Online Conferences page details current online conferences and provides access to these for the user. These conferences are organized to provide discussion and consultation platforms for Parties and interested stakeholders on specific aspects of the Protocol and its implementation.

The Online Conferences page can be access from the link in the left hand menu on the Resources page, or from the Resources drop down menu on the navigation bar.
3.5.7 Site Map

A detailed Site Map is provided to show how the BCH Central Portal is organized. The Site Map page can be accessed from the left hand menu on the Resources page, the Resources drop down menu on the navigation bar, or from the link provided in the Site Map text on the Resources page.

The site map is divided into two sections:
1. Central Portal and Primary Databases;
2. Additional Resources.

A key identifies information categories that can be accessed via a searchable database and information that can be accessed only by a registered user.
3.6 Help

URL: http://bch.cbd.int/help/

The Help page of the BCH Central Portal guides the user to five sections that provide assistance:

1. Frequently Asked Questions (FAQ) about the BCH and the Central Portal;
2. Training Modules on the BCH Central Portal;
3. Guide to the BCH Central Portal in the form of a brochure;
4. Training Site of the BCH designed to familiarize BCH Central Portal users with the functioning of the Management Center;
5. Interoperability Services.
3.6.1 FAQ

The Frequently Asked Questions (FAQ) page lists the answers to commonly asked questions about the BCH. The answers provide links to articles in the Protocol and to further information available on the BCH Central Portal.

The Frequently Asked Questions page is accessed from the Help drop down menu on the navigation bar, or on the Help page through the link in the left hand menu, or from the link in the FAQ text on the Help page.
3.6.2 Training Modules

The BCH Training Modules were developed under the UNEP-GEF BCH project, in collaboration with the United Nations Institute for Training and Research (UNITAR) and the Secretariat of the Convention on Biodiversity (SCBD). Content was provided and reviewed by world-renowned experts in the field.

The user can access the training modules from the Help drop down menu on the navigation bar, or on the Help page from the link in the left hand menu or from the link in the BCH Training Modules text on the Help page. These links take the user to the BCH Training Modules page.

The Training Modules are provided in three formats:
1. The BCH Training Modules;
2. The Interactive BCH Training Modules; and
3. The UNEP-GEF Training Workshop Manual

The BCH Training Modules are a series of five modules that provide an introduction to:
1. The Cartagena Protocol on Biosafety;
2. The Biosafety Clearing House;
3. The BCH Central Portal;
4. Finding Information about the BCH Central Portal; and
5. Registering Information about the BCH Central Portal
The **Interactive BCH Training Modules** are designed to be used in conjunction with the UNEP-GEF training manual to train participants during a workshop.

### Interactive BCH Training Modules

Two interactive BCH training modules are available that are designed to enable users to understand the concepts in a hands-on manner. The modules are designed to be used in conjunction with the UNEP-GEF training module to train participants during a training workshop. The modules are designed in Macromedia Flash and are very intuitive to use. However, these modules should be installed locally, their execution through the internet is not recommended because of the large file size.

The **UNEP-GEF Training Workshop Manual** is designed to give trainers an overview of the whole training process and to provide them with insight into some of the areas that should be covered when they are conducting a BCH training workshop. The complete online training workshop module provides guidelines on how a BCH training program can be conducted.

Copies of each module are available through links provided on the BCH Training Modules page.

### 3.6.3 Guide to the BCH

The **Guide to the BCH** is a short brochure that introduces the functions of the BCH. The user can access a PDF copy of the brochure directly from links in three places on the BCH Central Portal: the Help drop down menu on the navigation bar; the left hand menu on the Help page; or within the Guide to the BCH text on the Help page.
3.6.4 Training Site of the BCH

The *Training Site of the BCH* is designed to help BCH users familiarize themselves with the functioning of the Management Center. The information registered on the Training Site does not affect the official BCH Central Portal and is not made publicly available.

In order to access the Training Site, users require a BCH training account. The links to the training site from the *Help* drop down menu on the navigation bar, or from the left hand menu on the *Help* page, or from the link in the *Training Site* text, take the user to the *Welcome to the Training Site of the Biosafety Clearing-House* page where they can sign in for the Training Site.

The sign in page provides three additional, useful links for:

1. Opening a training account
2. Obtaining a reminder about a password
3. Access to the official BCH site.

3.6.5 Interoperability Services

The **Interoperability Services** documentation provides technical information about interoperability with the BCH, including information about version 3.0 of the BCH Web Service, XML Schemas and Controlled Vocabularies. It also provides Quick Starts in VBA, C4, VB.NET, JAVA, PYTHON and PERL and relevant articles.

Access to the documents can be obtained from the link in the Help drop down menu on the navigation bar, or on the Help page from either the link in the left hand menu or the link in the text on **Interoperability Services Documentation**.

The **BCH Interoperability Services 3.0** page provides links to quick starts; XML schemas and web service methods.
3.7 Country Profiles

URL: http://bch.cbd.int/

The Home page of the BCH Central Portal provides a quick search facility to obtain country profiles. The link is provided on the right hand side of the navigation bar. The drop down menu allows the user to select a country and display a summary of all the records entered onto the BCH by that country.

**Example.** A user wishes to familiarize herself with biosafety in Togo. The user selects Togo from the Country Profiles drop down menu on the Home page navigation bar.

The user is provided with a Country Profile of Togo that lists the records entered by this country. The country profile indicates the status of the country with respect to the Protocol and the types of documents that have been entered onto the BCH Central Portal. Links are provided to these records.
3.8 Managing Search Results

3.8.1 Sorting results

To change how the results of a search will be sorted, the user can select one of the options from the drop-down menu, **Sort results by**, that appears at the top of any search results page. The list of options will include only those options that are relevant for the type of search the user has conducted.

The sorting options that may be available to users include the following:
3.8.2 Exporting results to XML
The primary purpose of XML is to facilitate the sharing of data across different systems, particularly systems connected via the Internet.

The user can export or download information from the BCH Central Portal to use in other applications by using the Export Results function. The exported information is provided in XML format, which is useful for exchanging information. The export facility is found at the bottom of each Search results page and each record.

The user can select the Export Results function to export either individual records or the results of a database search. These results can be imported into another program such as a word processor or spreadsheet.
A User’s Guide to the Central Portal of the Biosafety Clearing-House

”Finding Information from the BCH Central Portal”

Draft text, January 2008
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1 Introduction to the module

What the user will learn in this module:

This module will introduce the user to the components of the BCH Central Portal and provide guidance on how to search for information in the BCH databases.

Context

The UNEP-GEF Project for Capacity Building for Effective Participation in the Biosafety Clearing-House (BCH) has prepared a modular training package that aims to provide a practical “how-to” guide for countries to assist them in learning, understanding, using, and setting-up national access to the BCH. The training package is designed to be flexible and is tailored to meet diverse needs of different countries, allowing them to select those tools and ideas that are most useful to their situation, needs and priorities. The training package is divided into five modules, each addressing one element of the BCH.

Audience

This module is designed to provide guidance to users of the BCH. It is developed for a non-technical audience with little or no knowledge of the Protocol and the BCH, but with a need to access and use data. Access to information is available to all users, but access to input facilities for the BCH is limited to those who have particular levels of access, e.g. National Focal Points (NFPs) and data entry personnel.

Purpose

This module provides detailed information about the databases found within the Finding Information section of the Central Portal. It explains how to find information about the BCH Central Portal. The web-based Central Portal allows governments to administer their information directly in the BCH databases. These databases, which form the nucleus of the BCH, can be searched to find relevant and useful information about the Protocol.

Each of the sections will guide the user into the different procedures to retrieve the maximum relevant information available through the BCH Central Portal.
2 Finding Information

URL: http://bch.cbd.int/database/

Under Article 20 the BCH was established to facilitate the exchange of information about LMOs. The requirements for the types of information are listed in this Article and the BCH maintains databases with the relevant information. Access to this information is provided through the Finding Information page of the BCH website, which can be found through a link on the navigation bar on the BCH Central Portal Home page. Welcome to the BCH Central Portal.

This section allows users to access a wide variety of scientific, technical, environmental, legal and capacity building information from the BCH databases. The categories of information are listed on the Finding Information page.
The various categories of information can be accessed from the link in the left hand menu or from links in the text on the Finding Information page. This module will investigate each of these categories and provide guidance on how to access specific information from each database.

## 2.1 National Contacts

URL: http://bch.cbd.int/database/contacts/

Article 19 of the Protocol requires the designation of a number of national institutions to fulfill various functions. Those institutions are referred to as National Contacts. Information about the types of National Contacts is listed on the Search for National Contacts page, together with the main responsibilities of each institution.

A search facility for information about National Contacts can be accessed from the link in the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page or from the link in the National Contacts text on the same page.
The National Contacts database enables the user to search for:

1. Protocol National Focal Points, who are responsible for managing communication between the CBD Secretariat and their respective governments;
2. BCH National Focal Points, who are responsible for coordinating with the CBD Secretariat regarding the development and implementation of the BCH;
3. Emergency Points of Contact for receiving notifications under Article 17 of the Protocol;
4. Competent National Authorities, who are designated and authorized by governments to be responsible for performing the administrative functions required by Article 19 of the Protocol; and
5. National Biosafety Websites and Databases
On the Search for National Contacts page the first **Search Now** button allows the user to browse all records in this database, when no criteria are selected in the search boxes below.

There are five search criteria boxes provided for refining searches on this database.

**Box 1** lists all the country names in a drop down menu, so that users can select a specific country for record entries. In addition, the button on the right side of
Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

Box 2 lists country groups in a drop down menu so that users can select a specific group of countries for a search. With the activation of the multiple selections button, several country groups can be selected at one time.

Box 3 lists the Type of National Contact, which allows the user to narrow the search to national contacts with specific responsibilities.
Box 4, Date of record, allows the user to narrow the search to when the record would have been entered onto the BCH. The drop down menu provides a number of options for the date the record was entered.

Box 5 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting Browse all records allows the user to obtain a list of all records on this database. The Search Now button allows the user to activate a search based on the search criteria selected in the search facility boxes. The search results are ordered alphabetically according to country name and grouped within countries according to the type of contact.

Adjusting the search criteria will change the results. Experience with the search facility will help the user to refine a search to obtain just the required information.
The Search Results pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.
Example 1: A user may wish to identify the contact points in Brazil for issues related to transboundary movement of LMOs. By selecting Brazil from the Select a country list and ‘Transboundary movement’ from the Type of National Contact list, the user narrows the search to the records most likely to provide the needed information.

When the Search Now button is clicked, a page of search results shows which National Contacts in Brazil have some responsibility for transboundary movement of LMOs. Selecting the title of the institution allows the user to open the record that contains the details for that national contact.

When repeating these examples, bear in mind that the results of searches will change with time as more records are entered into the BCH databases and as records are edited by parties.
Example 2: The same user may wish to identify BCH Focal Points in ASEAN countries. The user selects Asia-Pacific - Association of Southeast Asian Nations in the Select Country Group box and Biosafety Clearing-House Focal Point in the Types of National Contacts box. Selecting the **Search Now** button displays a set of results showing the BCH Focal Points in the countries that are members of ASEAN.
Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of 'all' will be used.

**Geographical areas**

Select a country:

- <Any>
- Americas - North American countries
- Americas - South American countries
- Americas - The Caribbean Community (Caricom)
- Asia-Pacific - Association of Southeast Asian Nations
- Asia-Pacific - Central Asian countries
- Asia-Pacific - East Asian countries
- Asia-Pacific - Economic and Social Commission for Asia and the
d- Asia-Pacific - Economic and Social Commission for Western Asia

Please use Control-key to select multiple values.

**Type of National Contact**

- <All>
- All National Focal Points (CPB, BCH, Art 17, CBD)
  - Biosafety Clearing-House Focal Point
  - Cartagena Protocol on Biosafety National Focal Point
  - Cartagena Protocol on Biosafety Secondary National Focal Point
  - CBD National Focal Point
  - Emergency Measures (Article 17) Contact Point
  - All Competent National Authorities (AIA, A11, Cont.Use, Handling)

Please use Control-key to select multiple values.
2.2 Laws and Regulations

URL: http://bch.cbd.int/database/laws/

Under the AIA procedure, Article 11(5) and Article 14, Parties are responsible for posting information about their relevant laws and regulations on the BCH. Information about country legal frameworks is made available on the BCH Central Portal.

The search facility for information about Laws and Regulations can be accessed from the link in the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu on the Finding Information page or from the link in the Laws and Regulations text on the same page.
This database enables users to search for:

1. National Laws;
2. National Regulations;
3. National Guidelines;
4. Bilateral Agreements;
5. Multilateral Agreements; and
6. Regional Agreements.

On the **Search for Laws and Regulations** page the first **Search Now** button allows the user to browse all records in this database, when no criteria are selected in the search boxes below.
There are six search criteria boxes provided for refining searches on this database.

**Box 1** lists all the country names in a drop down menu, so that users can select a specific country for record entries. In addition, the button on the right side of Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

**Box 2** lists country groups in a drop down menu so that users can select a specific group of countries for a search. With the activation of the multiple selections button, several country groups can be selected for a search.

**Box 3** lists the types of laws and regulations, allowing the user to narrow the search to either national or regional agreements.
Box 4 lists the subjects of laws and regulations related to the implementation of the Protocol. This list allows the user to narrow the search to one or more subject areas.

Box 5 Date of record, allows the user to narrow the search to when the record would have been entered onto the BCH. The drop down menu provides a number of options for the date the record was entered.

Box 6 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting Browse all records allows the user to obtain a list of all records on this database. The Search Now button allows the user to activate a search based on the search criteria selected in the search facility boxes. The search results are ordered alphabetically according to country name and grouped within countries according to the type of law or regulation.
Adjusting the search criteria will change the results. Experience with the search facility will help the user to refine a search to obtain just the information needed.

The Search Results pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.

**Example.** A user wishes to identify national laws and regulations in the Oceania region. Select Asia-Pacific-Oceania in the Select country group box. Select National laws, regulations & guidelines in the Type of Laws or regulations box. Activate Search Now. The search results are displayed and the user can select any record to study the documentation from specific countries in the region.
2.3 Country’s Decisions and other Communication

URL: http://bch.cbd.int/database/decisions/

Under the AIA procedure and Articles 6(1), 10(3), 11(6), 12(1), 13(1), 14(4), 17, and 25(3), Parties are responsible for posting information regarding their relevant decisions and declarations on the BCH. This information is made available on the BCH Central Portal.

A search for information about Country’s Decisions and other Communication can be accessed from the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page, or from the link in the Country’s Decisions and other Communication text on the same page.

This database enables users to search for decisions and other communication related to:

1. Decisions on LMOs under the Advance Informed Agreement;
2. Decisions on LMOs for food, for feed or for;
3. Other decisions & declarations; and
4. Risk Assessment Reports.

On the Search for Country’s Decisions and Other Communications page the first Search Now button allows the user to browse all records in this database, when no criteria are selected in the search boxes below.
There are six search criteria boxes provided for refining searches on this database.

**Box 1** lists all the country names in a drop down menu, so that users can select records from a specific country. In addition, the button on the right side of Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

**Box 2** lists country groups in a drop down menu so that users can select a specific group of countries for a search. With the activation of the multiple selections button, several country groups can be selected for a search.
Box 3 lists the types of decisions, declarations, notifications or reports available in the database. This can be used to help narrow the selection to decisions or communication on specific aspects of LMO utilization.

Box 4 allows the user to select decisions related to specific aspects of the LMOs such as names, traits, modifications, organisms and applicants. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which will open additional criteria search boxes to help narrow the search results.
Box 5 Date of record, allows the user to narrow the search to when the record would have been entered into the BCH database. The drop down menu provides a number of options for the date the record was entered.

Box 6 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting Browse all records allows the user to obtain a list of all records on this database. The Search Now button allows the user to activate a search based on the search criteria selected in the search facility boxes.

Searches that identify more than 1000 records are truncated to just the first 1000 records selected by the search. The results are ordered alphabetically.
according to country name and grouped within countries according to the type of decision or communication. Individual records can be accessed by selecting a product name in the list.

Adjusting the search criteria will change the results. Experience with the search facility will help the user refine a search to obtain just the required information.

The Search Results pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.

Example. A user wishes to identify all the decisions taken by New Zealand under Article 11 of the Protocol. Select New Zealand in the Select a country box. Select All decisions under Article 11 in the Type of decision, declaration, notification or report box. Activate the Search Now button.

The search results are displayed as a list of records. Detailed information about each record can be viewed by selecting the title of the decision (in bold blue type).
2.4 LMOs, Genes or Organisms

URL: http://bch.cbd.int/database/organisms/
The BCH Central Portal maintains three registries to assist users to locate information about LMOs. These are the:

1. Unique Identification Registry;
2. Gene Registry; and
3. Parent and Donor Organisms Registry.

Information from all three registries can be accessed with a single search facility that is located using the LMOs, Genes or Organisms link in the Finding Information drop down menu on the navigation bar, or in the menu on the left side of the Finding Information page, or in the text on LMOs on the same page.

### 2.4.1 Unique Identification Registry

The **Unique Identification Registry** provides summary information for all LMO entries, including the transformation event, genetic modification, and the unique identification code (if available) for each record.

Formatting note: The next four paragraphs provide additional information on the unique identification system used by the BCH and would be best in a box separate from the descriptive text of the registry.

The BCH Central Portal uses a unique identification system for living modified organisms to facilitate searching and retrieval of information. Currently, the only existing unique identification system in international use is the OECD Unique Identifier for Transgenic Plants.
The OECD **Unique Identifier** is a simple alphanumeric code that is given to each living modified plant that is approved for commercial use, including for use as food or feed, similar to the ISBN codes used to identify books. The OECD naming system has been designed so that developers of a new transgenic plant can generate an identifier and include it in the dossiers that they forward to national authorities during the safety assessment process. Once approved, national authorities forward the unique identifier to the OECD Secretariat for inclusion in the OECD’s product database, from which the information is automatically shared with the Biosafety Clearing-House.

The unique identifier is a nine-digit code, composed of three elements that are separated by dashes (-). These elements are:

1. 2 or 3 alphanumeric digits to designate the applicant;
2. 5 or 6 alphanumeric digits to designate the transformation event;
3. 1 numerical digit for verification (this is intended to reduce errors by ensuring the integrity of the alphanumeric code).

<table>
<thead>
<tr>
<th>ID</th>
<th>Record holder and type</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>14759</td>
<td>Unique Identification Registry</td>
<td>ACS-BN005 3 - InVigor™ Canola</td>
</tr>
<tr>
<td></td>
<td>Bayer CropScience (Aventis (AgrEvo (Plant Genetic Systems)))</td>
<td></td>
</tr>
<tr>
<td>14899</td>
<td>Unique Identification Registry</td>
<td>FLO-90066-3 - Long vase life carnation</td>
</tr>
<tr>
<td></td>
<td>Flonope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dianthus caryophyllus - Carnations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduced ethylene synthesis, Sulfoliurea tolerance</td>
<td>Cont.</td>
</tr>
</tbody>
</table>

Two approaches are possible for products created with more than one transformation event (often referred to as “stacked” transformation events), where these transformation events have been previously approved for commercialization. An applicant may choose to generate a novel unique identifier for such products, or they may choose to use a combination of the unique identifiers from products previously approved for commercialization.

The Unique Identification registry contains a single entry for each unique organism or transformation event, and includes detailed information about the organism. The registry presents this information summarized in table format, where each record may be selected for further details. However, multiple records may exist for each unique organism elsewhere in the BCH, since Governments may create their own record for a LMO if they wish. (For example, a Government may choose to create its own record if it wishes to report more information than is included in the registry, or for technical reasons.) To search through all LMO records, including such duplicates, the user should use the Unique Identification database.

Information from the Unique Identification Registry can be accessed with a single search facility that is located using the LMOs, Genes or Organisms link in the Finding Information drop down menu on the navigation bar, or in the menu on the left side of the Finding Information page, or in the text on LMOs.
on the same page. These links take the user to the Search for LMOs, genes and organisms page.

Records of LMOs in the Unique Identification registry provide the following information:
1. Contact information for the developer, company or applicant;
2. Name and identity of the LMO (trade name);
3. Unique identification;
4. Recipient or parental organism;
5. Transformation event;
6. Gene inserts;
7. Description of gene modification;
8. Other relevant information and references.

Three tabs at the top of a record provide links to general information, decisions and risk assessments available for each record. In addition, links to all decisions and risk assessments that refer to the LMO are provided at the bottom of each Unique Identification record.

Where available, the registry contains information about the commercial status of LMOs. This identifies organisms that may have been approved for release, but were never commercially released.

2.4.2 Gene Registry

The BCH maintains a Gene Registry which contains information about gene inserts and characteristics of the modification of LMOs. Gene records provide the following information:
1. Name of the gene;
2. Introduced or modified traits;
3. Gene product;
4. Gene function;
5. Donor organism;
6. References, if available;
7. Links to all registered organisms that contain this gene.

The BCH LMOs, Genes or Organisms databases can be searched by using the link in the left hand menu of the Finding Information page or from the link in the LMOs, Genes or Organisms text on the same page.

Information from the Gene Registry can be accessed with a single search facility that is located using the LMOs, Genes or Organisms link in the Finding Information drop down menu on the navigation bar, or in the menu on the left side of the Finding Information page, or in the text on LMOs on the same page. These links take the user to the Search for LMOs, genes and organisms page.

### Search for LMOs, genes and organisms

On this page you can search: (i) The LMO-Unique Identifiers Registry (LMO-UIDs), which provides summary information on all living modified organisms registered in the BCH including transformation events, genetic modifications, and the unique identification code (if available) for each record. Links to all decisions that refer to these organisms are provided at the bottom of each LMO record accessible through the registry; (ii) The Gene Registry, which provides summary information on gene inserts and characteristics of the genetic modifications of LMOs; and (iii) The Organism Registry, which provides summary information on parental, recipient or donor organisms related to the LMOs registered in the BCH.

<table>
<thead>
<tr>
<th>Registry Type</th>
<th>Gene</th>
<th>Parent of Donor Organism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of living modified organism</td>
<td>LMO-UID</td>
<td>Gene Registry</td>
</tr>
</tbody>
</table>

### 2.4.3 Parent or Donor Organism Registry

The BCH maintains a Parent of Donor Organism Registry, which provides summary information on parental, recipient or donor organisms related to the LMOs registered in the BCH Central Portal.

Information from the Parent of Donor Organism Registry can be accessed with a single search facility that is located using the LMOs, Genes or Organisms link in the Finding Information drop down menu on the navigation bar, or in the menu on the left side of the Finding Information page, or in the text on LMOs on the same page. These links take the user to the Search for LMOs, genes and organisms page.
2.4.4 Registry searches

On the Search for LMOs, genes and organisms page the user can search for information in:

1. The LMO-Unique Identifiers Registry (LMO-UIds), which provides summary information about all living modified organisms registered in the BCH including transformation events, genetic modifications, and the unique identification code (if available) for each record. Links to all decisions that refer to these organisms are provided at the bottom of each LMO record;

2. The Gene Registry, which provides summary information about gene elements and characteristics of the genetic modifications of LMOs; and

3. The Organism Registry, which provides summary information about parental, recipient or donor organisms related to the LMOs registered in the BCH.

On the Search for LMOs, genes and organisms page the first Search Now button allows the user to browse all records in this database, when no criteria are selected in the search boxes below.
Search for LMOs, genes and organisms

There are six search criteria boxes provided for refining searches on this database.

**Box 1** lists the three registries. In addition, the button on the right side of Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

**Box 2** lists filters for various aspects of the LMO that can be activated to narrow a search, i.e. unique identifier; applicant; LMO identity and technique used. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which open additional criteria search boxes to help narrow the search results.
Box 3 lists filters for gene name and gene trait and allows the user to filter the search results with either or both of these criteria. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which will open additional search boxes to help narrow the search results.

Box 4 lists the type of organism and provides filters for either the common name or the scientific name. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which will open additional search boxes to help narrow the search results.
Box 5 Date of record, allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.

Box 6 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting **Browse all records** allows the user to obtain a list of all records on this database. They are grouped according to the registry and individual records can be opened using the title of the record. The **Search Now** button allows the user to activate a search based on the search criteria selected in the search facility boxes.
Adjusting the search criteria will change the results. Experience with the search facility will help the user refine a search to obtain just the required information.

The **Search Results** pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.

**Example.** A user wishes to identify all the canola modifications produced by BASF that improve phytate degradation. The user selects **Filter by Applicant** in the **Type of LMO** box and BASF in the **Applicant** box. The user then selects **Filter by trait** in the **Type of gene** box and **Phytate degradation** in the **Introduced or modified traits** box. In the **Type of organisms** box the user selects the **Filter by common name option** and selects **Rapeseed** in the **Parental organism** box.

Activating the **Search Now** button presents the search results. The search results are displayed as a list of records. Detailed information about each LMO can be viewed by selecting the title of the record.
2.5 Roster of Experts

URL: http://bch.cbd.int/database/experts/

The governing body of the Convention established the roster of experts when the Protocol was adopted (see Decision EM-I/3). Its purpose is to provide advice and other support, as appropriate and upon request, to developing country Parties and Parties with economies in transition, to conduct risk assessment, make informed decisions, develop national human resources and promote institutional strengthening, associated with the transboundary movement of LMOs.

The governing body of the Protocol decided that access to the roster of experts will be maintained through the BCH, where nomination forms for the roster are available, so that Parties can nominate experts. Reports on the Roster of Experts database and the voluntary fund are accessible under the reporting section of The Protocol pages. Module 03 covers access to these reports.

The search facility for the Roster of Experts database can be accessed from the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page or the link in the Roster of Experts text on the same page. These links take users to the Search the Roster of Experts page where they can search for biosafety experts nominated by Governments.

On the Search the Roster of Experts page the first Search Now button allows the user to browse all records in this database, when no criteria are selected in the search boxes below. The results are grouped by country.
Search the Roster of Experts

On this page you can search for biosafety experts nominated by Governments. The Roster was established by ExCoF-1 Decision No.2 and aims “to provide advice and other support, as appropriate and upon request, to developing country Parties and Parties with economies in transition, to conduct risk assessment, make informed decisions, develop national human resources and promote institutional strengthening, associated with the transboundary movements of UNOs.”

Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of “all” will be used.

**Geographical areas**

- Select a country: <Any>  
- Select country group (optional): <Any>

**Experts**

<All>

**Date of record**

<All>

**Keyword search**

Enter keywords. Separate words with AND or OR.

There are five search criteria boxes provided for refining searches on this database.

**Box 1** lists all the country names in a drop down menu, so that users can select experts nominated from a specific country. In addition, the button on the right side of Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

**Box 2** lists country groups in a drop down menu so that users can select experts nominated from countries in a specific regions. With the activation of the multiple selections button, several country groups can be selected for a search.
Box 3 provides filters to narrow the search by name, nationality or nominating country. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which will open additional criteria search boxes to help narrow the search results.

Box 4 is a Date of record option that allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.
Box 5 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting Browse all records allows the user to obtain a list of all records on this database. The search results are ordered alphabetically according to country name. The Search Now button allows the user to activate a search based on the search criteria selected in the search facility boxes.

Adjusting the search criteria will change the results. Experience with the search facility will help the user refine searches to obtain just the information required.

The Search Results pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.

Example. A user wishes to identify experts from Europe who have experience in forestry and risk assessment. The user selects Eurasia - European Commission for Europe in the Geographical areas, country group box and enters forestry AND risk assessment in the Keywords box.
Activating the **Search Now** button presents the search results. The search results are displayed as a list of records, grouped according to country. Detailed information about each expert can be viewed by selecting the expert’s name, which opens the biosafety expert record.

### Search the Roster of Experts

On this page you can search for biosafety experts nominated by Governments. The Roster was established by EXCOM 1 Decision EM.23 and aims "to provide advice and other support, as appropriate and upon request, to developing country Parties and Parties with economies in transition, to conduct risk assessment, make informed decisions, develop national human resources and promote institutional strengthening, associated with the transboundary movements of LMOs."

Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of "all" will be used.

#### Geographical areas

Select a country

Select country group (optional)

- [Eurasia - Economic Commission for Europe (except non-regional)]

#### Experts

Select a country

- [Africa]

#### Date of record

Select a country

- [All]

#### Keyword search

Enter keywords. Separate words with AND or OR.

- **Forestry AND risk assessment**

---

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2.6 Capacity-Building

URL: http://bch.cbd.int/database/activities/

Under Article 22 Parties are required to cooperate in the developing and/or strengthening of human resources and institutional capacity for the effective implementation of the Protocol. Through the BCH, Parties and others can access information about capacity-building and other assistance for implementation of the Protocol. In addition, governments can register their capacity-building needs and priorities with the BCH Central Portal. This information is sent to donor governments.

A search for information about Capacity Building can be accessed from the link on the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page, or from the link in the Capacity Building text on the same page.
On the Search for information on Capacity-Building page the user can search for:

1. Biosafety Capacity Building Projects;
2. Capacity-Building Opportunities;
3. Compendium of Academically-Accredited Biosafety Courses; and

On the Search for information on Capacity-Building page the first Search Now button allows the user to browse all records in this database, when no criteria are selected in the search boxes below.

There are eight search criteria boxes on this page.
Box 1 allows the user to select countries or regions requesting or providing assistance. In addition, the button on the right side of Box 1 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

The default setting for each drop down menu is at the top of the menu list.

Box 2 lists all the country names in a drop down menu, so that users can search for information from a specific country.
Box 3 lists country groups in a drop down menu so that users can select information from a group of countries within a specific region. With the activation of the multiple selections button, several country groups can be selected for a search.

Box 4 allows the user to narrow a search to specific capacity building categories such as capacity building projects; capacity building opportunities; Country needs and priorities; biosafety courses.

Box 5 provides filters under the heading Project, Opportunity, Needs and Priorities. Selecting a filter from the drop down menu opens an additional search box with a drop down menu of options related to the selected filter. Multiple filters can be selected, which will open additional criteria search boxes to help narrow the search results.
Box 6 provides a list of training offered, that can be filtered by thematic area or type of accreditations.

Box 7 Date of record, allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.

Box 8 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.
At the bottom of the search facility are two buttons to initiate a search. Selecting **Browse all records** allows the user to obtain a list of all records on this database. They are ordered alphabetically according to country name and grouped within countries according to the registry holding the records. The **Search Now** button allows the user to activate a search based on the search criteria selected in the search facility boxes.

Adjusting the search criteria will change the results. Experience with the search facility will help the user to refine a search to obtain just the information required.

The **Search Results** pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.

**Example.** A user wishes to identify which capacity building projects have been completed in African countries. The user selects **Africa - African Union** in the **Geographical areas, country group** box, **capacity building project** in the **Capacity building categories** box and **Filter by status** in the **Project, Opportunity, Needs and Priorities** box. Selection of the filter opens a **Status** box, in which the user selects **completed**. Activating the **Search Now** button reveals the search results ordered alphabetically according
to country. Information about each of these activities can be accessed by selecting the name of the project.
2.7 Biosafety Information Resource Centre

URL: http://bch.cbd.int/database/resources/

Article 20 of the Protocol establishes the BCH to facilitate the exchange of information and experience with LMOs among Parties, in order to assist them in implementing the Protocol. To help fulfill this role the BCH contains information submitted by Parties, governments and organizations that is relevant to biosafety and implementation of the Protocol.

The Biosafety Information Resource Centre (BIRC) contains electronic catalogues of biosafety-related publications and information resources. Its objective is to increase the accessibility and utilization of available biosafety information and resources by policymakers, educators, researchers, and the general public. Contributions to BIRC are welcome from all BCH registered users.

A search for information about BIRC can be accessed from the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page, or from the link in the Biosafety Information Resource Centre text on the same page. These links take the user to the Search the Biosafety Information Resource Centre page.

These links enable users to access electronic catalogues of biosafety-related publications and information resources including:

1. news services;
2. e-mail listservs;
3. online databases and search engines;
4. reports and case studies;
5. journals and newsletters; and
6. teaching materials (manuals, toolkits and presentations).

There are six search criteria boxes on this page.

**Search the Biosafety Information Resource Centre (BIRC)**

On this page you can search for electronic catalogues of biosafety-related publications and information resources including: news services; e-mail listserve; online databases and search engines; reports and case studies; journals, newsletters and teaching materials (manuals, toolkits and presentations). Its objective is to increase the accessibility and utilization of available biosafety information and resources for policymakers, educators, researchers, and the general public. BIRC contributions are welcome from all BCH registered users.

Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of “all” will be used.

- **Publication year**: <All> (Box 1)
- **Thematic area**: <All> (Box 2)
- **Type of record**: <All> (Box 3)
- **Language**: <All> (Box 4)
- **Date of record**: <All> (Box 5)
- **Keyword search**: Enter keywords, Separate words with AND or OR. (Box 6)

**Box 1** lists options for the publication date of the article. The first box allows the user to choose ‘all’, ‘earlier than’ or later than the year in the second box. The second box allows the selection of years from 1989 to the present.

The default setting for each drop down menu is at the top of the menu list.

**Box 2** lists the major thematic areas of the Protocol and allows the user to narrow a search to one or more of these. The button on the right side of Box 2...
(and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

Box 3 lists the types of records stored in the BRIC database. This allows the user to narrow the search to a specific source of information.

Box 4 lists languages and allows a user to limit a search to documents in one or more languages.

Box 5 provides a selection option for the date of record. This allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.
Box 6 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting Browse all records allows the user to obtain a list of all records on this database. They are ordered alphanumerically according to the article title. The Search now button allows the user to activate a search based on the search criteria selected in the search facility boxes.

Adjusting the search criteria will change the results. Experience with the search facility will help the user refine searches to obtain just the articles required.

The Search Results pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.
Example. A user wishes to identify articles written recently about liability issues. The user selects later than and 2006 in the publication year boxes and Liability and redress in the Thematic area box. Clicking on the Search now button, calls up the search results. The results are presented in alphabetical order based on the titles of the articles.

To help identify the most recent articles, the user selects the Date of last update option in the Sort records by box at the top of the search results. This reorders the results, starting with the most recently updated article. Note that the Date of last update does not order the articles according to publication date. Some older articles may have been added more recently than new ones.
2.8 **Scientific Bibliographic Database**

URL: http://bch.cbd.int/database/bibliographic-references/

Article 20 of the Protocol establishes the BCH in order to facilitate the exchange of information and experience with Living Modified Organisms among parties, so as to assist them in implementing the Protocol. To help fulfill this role the BCH Central Portal contains information submitted by Parties, governments and organizations that is relevant to biosafety and implementation of the Protocol.

In addition to the Biosafety Information Resource Centre (BIRC) detailed in section 2.7 of this module, the BCH maintains a database of scientific publications related to genetic modification, biosafety and the implementation of biotechnology. **Scientific Bibliographic Database** is managed by the International Centre for Genetic Engineering and Biotechnology (ICGEB) and made available to all users.

The search facility for publications from the Scientific Bibliographic Database can be accessed using the link in the Finding Information drop down menu on the navigation bar, or the link in the left hand menu of the Finding Information page or the link in the Scientific Bibliographic Database text on the same page. These links take the user to the Search the Scientific Bibliographic Database on Biosafety page.
The Search the Scientific Bibliographic Database on Biosafety page provides access to a collection of scientific publications relevant to biosafety and risk assessment of biotechnology products. The database is searchable and is updated monthly. It contains records of articles published in national and international scientific periodicals from 1990 onwards. Each record is vetted by scientists from the ICGEB for its contribution to the numerous scientific debates concerning genetically modified organisms.

On the Search the Scientific Bibliographic Database on Biosafety page the first **Search Now** button allows the user to browse all records in this database when no criteria are selected in the search boxes below. The results are sorted alphabetically according to the title and start with quotation marks, followed by numerals and then letters. Note that a search of all records in the Scientific Bibliographic Database returns too many results and the display will be limited to 1000 records.

There are ten search criteria boxes on this page.
Box 1 provides an option for the user to type in the title of a publication, when this is known. The user can also enter a word or words from the title, using established search syntax with AND or OR between strings of words.

Box 2 allows the user to search for a specific author by inserting the author’s last name into this search box.

Box 3 lists options for the publication date of the article. The first box allows the user to choose all, earlier than or later than. The second box allows the selection of a year from 1989 to the present.

The default setting for each drop down menu is at the top of the menu list.
Box 4 allows the user to search the database for articles published by specific publishers. The publisher's name should be entered in this box to activate this search option.

Box 5 lists the major thematic areas of the Protocol and allows the user to narrow a search to publications relevant to one or more of these areas. The button on the right side of Box 2 (and some subsequent boxes) allows the user to activate multiple selections of countries in the list.

Box 6 lists the types of publications stored in the Scientific Bibliographic Database. This allows the user to narrow the search to a specific type of publication.

Box 7 lists languages and allows a user to limit a search to one or more languages.
Box 8 allows the user to enter an ISSN number to locate a specific publication of interest.

Box 9 provides a selection option for the date of record. This allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.

Box 10 provides an opportunity for using keywords to narrow the search. These words can be in the title, abstract or reference of the publication. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting **Browse all records** allows the user to obtain a list of all records on the database. Note that a search of all records in the Scientific Bibliographic Database returns too many results and the display will be limited to 1000 records.

The **Search Now** button allows the user to activate a search based on the search criteria selected in the search facility boxes.
Adjusting the search criteria will change the results. Experience with the search facility will help the user refine searches to obtain just the publications required.

**Example.** A user wishes to identify recent scientific articles on gene flow from crops. The user selects *later than 2006* in the publication year boxes and enters *gene flow OR outcrossing* in the **Keyword search**. The search results are presented in alphabetical order based on the titles of the articles.
The user finds a useful article by the author Lavigne and refines the first search by adding this name to the Author(s) search box. This identifies further, recent articles by the same author on the subject of gene flow from crops.
### Search results

<table>
<thead>
<tr>
<th>ID</th>
<th>Record holder and type</th>
<th>Status</th>
<th>Date of creation</th>
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<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>30963</td>
<td>Scientific Bibliographic Database</td>
<td>Published</td>
<td>2007-03-01 01:32 GMT (CC BY-ND)</td>
<td>2008-01-26 20:58 GMT (CC BY-ND)</td>
<td><a href="https://creativecommons.org/licenses/by-nd/4.0/">CC BY-ND</a></td>
</tr>
</tbody>
</table>

#### General information

**Title**

Modelling and estimating pollen movement in isolated rape (Brassica napus) at the landscape scale using genetic markers.

**Authors**

Devos, C.; Lévesque, C.; Austerlitz, F.; Klein, E. K.

**Date**

2007

**Rights**

Laboratoire d’Écologie, Systématique et Évolution, UMR CNRS-CNRS-ESPE-UM 7079, 2053 boulevard, Université Paris-Sud, 91405 Orsay, France.
2.9 Organizations

URL: http://bch.cbd.int/database/organizations/

The worldwide and multidisciplinary nature of the Protocol provides a wide stakeholder base for its implementation, extending beyond the Parties to the agreement. The BCH Central Portal maintains a database of organizations involved in some way with the Protocol. This information is provided to help facilitate information sharing about aspects of the Protocol and experiences with its implementation.

The search facility for information about Organizations can be accessed from the Finding Information drop down menu on the navigation bar, or from the link in the left hand menu of the Finding Information page or from the link in the Directory of International Organizations involved in Biosafety Activities text on the same page. These links take the user to the Search the Directory of Organizations involved in Biosafety Activities page.

The search facility on this page allows users to access information about organizations involved in activities relevant to the implementation of the Protocol. It includes summaries of the activities of these organizations and their contact information.

On the Search the Directory of Organizations involved in Biosafety Activities page the first Search Now button allows the user to browse all records in this database when no criteria are selected in the search boxes below. The results are sorted alphabetically according to the name of the organization.

There are seven search criteria boxes on this page.
Search the Directory of Organizations involved in Biosafety Activities

On this page you can access information about international organizations involved in activities relevant to implementation of the Biosafety Protocol with summaries of their activities and contact information.

Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of "all" will be used.

Box 1 provides an option for the user to type in the name of the organization, when this is known.

Box 2 allows the user to search for a specific contact person by inserting the person’s last name into this search box.

Box 3 lists options for the type of organization and puts the categories in a drop down menu. The button on the right side of Box 3 (and some subsequent boxes) allows the user to activate multiple selections of type of organization in the list.
The default setting for each drop down menu is at the top of the menu list.

**Box 4** lists all the country names in a drop down menu, so that users can search for organizations from a specific country.

**Box 5** lists country groups in a drop down menu so that users can select organizations from a group of countries within a specific region. With the activation of the multiple selections button, several country groups can be selected for a search.

**Box 6** provides a selection option for the date of record. This allows the user to narrow the search to when the record would have been entered onto the BCH Central Portal. The drop down menu provides a number of options for the date the record was entered.
Box 7 provides an opportunity for using keywords to narrow the search. The user can use standard keyword syntax to search with multiple words or core parts of words.

At the bottom of the search facility are two buttons to initiate a search. Selecting **Browse all records** allows the user to obtain a list of all records on the database. The **Search Now** button allows the user to activate a search based on the search criteria selected in the search facility boxes.

Adjusting the search criteria will change the results. Experience with the search facility will help the user refine searches to obtain just the information required.

The **Search Results** pages have a sorting facility above the list of records. This can be used to sort the records according to criteria specific for that category of information. Note that the sorting criteria change when the user selects different search criteria.
Example. A user wishes to identify organizations that work with farmers and so enters farmer* OR agriculture into the **Keyword search** facility. The results indicate a number of organizations with links to farmers. To narrow the search to projects linked to the private sector, the user selects **industry** in the type of organization box.

Choose fields as needed to narrow search results. If no category is selected to narrow the search for a particular field, a default value of “all” will be used.

**Organization name**

**Contact name**

**Type of organization**

<All>

**Geographical areas**

Select a country

<Any>

Select country group (optional)

<Any>

**Date of record**

<All>

**Keyword search** Enter keywords. Separate words with AND or OR.

Farmer* OR agriculture

<table>
<thead>
<tr>
<th>Search results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort records by <strong>Organization name</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>Record holder and type</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>15866</td>
<td>Organization</td>
<td>Groupe de recherche et d’application technologiques (GRET)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NGO Non-Governmental Organization</td>
</tr>
<tr>
<td>15876</td>
<td>Organization</td>
<td>African Centre for Technology Studies (ACTS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NGO Inter-Governmental Organization</td>
</tr>
<tr>
<td>15987</td>
<td>Organization</td>
<td>Agriculture &amp; Biototechnology Strategies (AGBTS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industry</td>
</tr>
</tbody>
</table>

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3 Compiled Information

URL: http://bch.cbd.int/database/

The Compiled lists of information are maintained and regularly updated by the BCH for categories of data that are frequently requested by users. This information is provided in a format that is easily accessible, either on the screen or in a PDF file. The lists are accessible to all users and provide updated information about national contact details; LMOs-UIds; organisms; and genes.

Access to the compiled lists of information is provided from the link in the Finding Information drop down menu on the navigation bar or from the link in the left hand menu of the Finding Information page.

3.1 National Contacts

URL: http://bch.cbd.int/database/contacts/focalpoints.shtml

Access to the compiled lists of national contacts can be obtained using the National Contacts link in the left hand menu of the Finding Information page or in the Finding Information drop down menu on the navigation bar of the BCH Central Portal.

These links take users to the National Contacts & Competent Authorities page, which provides links to complied lists of:

1. Cartagena Protocol National Focal Points;
2. Biosafety Clearing-House National Focal Points;
3. Emergency Measures Contact Points (Article 17); and
4. Competent National Authorities
National Contacts & Competent Authorities

Cartagena Protocol National Focal Points

National Focal Points (NFPs) are responsible for managing communication between the Secretariat and respective governments. Under Article 14 of the Cartagena Protocol, each Party must designate one national focal point to be responsible on its behalf for liaison with the Secretariat.

Biosafety Clearing-House (BCH) National Focal Points

BCH National focal points are responsible for coordinating with the CBD Secretariat regarding the development and implementation of the BCH, under Decision BS-1/1 (Annex D) National focal points (or, where appropriate, Institutional Focal Points) for the Biosafety Clearing-House shall be nominated to liaise with the Secretariat regarding issues of relevance to the development and implementation of the Biosafety Clearing-House, whose functions shall include the following roles and responsibilities:

Emergency Measures Contact Points (Article 17)

The Protocol requires Parties to provide a point of contact for receiving notifications under Article 17 of the Cartagena Protocol pertaining to unintentional transboundary movements and emergency measures.

Competent National Authorities

Competent National Authorities, designated under Article 19 of the Cartagena Protocol, are responsible for performing the administrative functions required by the Protocol.

All designated Competent National Authorities (CNAs) are registered in the Biosafety Clearing-House. Each CNA entry contains contact information and a brief description of the functions of the organization.

Albania

1. Ministry of Agriculture and Food

Regulatory functions
All functions pursuant to the Cartagena Protocol on Biosafety

Sheshi Skonderboj, Nr. 2
Tirana
Albania

Tol: +355 4 232 79
Fax: +355 4 227 92

2. Ministry of Environment, Forestry and Water Administration

Regulatory functions
All functions pursuant to the Cartagena Protocol on Biosafety
Handling, transport, packaging and identification
Intentional introduction into the environment (A1/A)
LMOs for use as food or feed or for processing
Pharmaceuticals
Public awareness and participation
Transboundary movement (import/export)
Transit and contained use

Cont. ↓
3.2 LMOs-UIDs Registry

URL: http://bch.cbd.int/database/organisms/uniqueidentifiers/

The BCH modalities of operation require the BCH to make use of existing unique identification systems for living modified organisms, to facilitate searching and retrieval of information.

The LMO-Unique Identifiers Registry (LMO-UIds) provides summary information about all LMOs registered in the BCH Central Portal, and the unique identification code (if available) for each record. Links to all decisions and risk assessment reports that refer to these organisms are accessible through the record page for each LMO.

Access to the compiled lists of LMOs and Unique Identifiers can be obtained using the LMOs-UIDs Registry link in the left hand menu of the Finding Information page, or in the Finding Information drop down menu on the navigation bar of the BCH Central Portal. These links take the user to the LMOs and Unique Identifiers Registry page.

On this page LMOs are listed in alphabetical order according to the unique identification code. A link is provided through the Record ID to the Unique Identification page for each record. Under the page title three tabs are available that link the user to:

1. General information about the LMO;
2. Country decisions on the LMO; and
3. Risk assessment documents for the LMO.
3.2.1 General information

The General information page provides information about the LMO that includes:

1. the developer;
2. a description of the LMO and its transformation,
3. links to the organism and gene inserts;
4. the commercial status;
5. links to other websites with biosafety information specific to the LMO; and
6. a list of records on the BCH that reference this LMO.

3.2.2 Country Decisions

The Country Decisions page lists the countries where the LMO has received a decision or where a decision is pending. The table provides links to decisions for different uses of the LMO and the decision records available on the BCH Central Portal.

3.2.3 Risk Assessments

The Risk Assessments page provides links to risk assessment records and other risk assessment documents for this LMO, where these are available on the BCH Central Portal or on other websites.
Example. A user may wish to access country decision documents on an LMO with a known Unique identifier, such as MON810. The user opens the LMOs-UIds Registry and scrolls down the list to **MON-ØØ81Ø-6**.

The user selects the record number, **14750**, which opens the **Unique Identification - MON-ØØ81Ø-6** page. Under **general information** the user confirms that this is the LMO they are interested in. At the bottom of this page, the user finds a list of decision documents on this LMO.

For a quick overview of decisions on the LMO, the user selects the **Country Decisions** tab which opens a table of decisions in a number of countries. The user selects each of these links to access decision records, which clarify the scope of the decision for the LMO in each country.
3.3 Organisms Registry

URL: http://bch.cbd.int/database/organisms/organismslist.shtml

The Organisms Registry includes those organisms that have been registered as parental, recipient or donor organisms on the BCH Central Portal.
Access to the compiled lists of parental, recipient or donor organisms registered on the BCH Central Portal can be obtained using the Organisms Registry link in the left hand menu of the Finding Information page or in the Finding Information drop down menu on the navigation bar of the BCH Central Portal. These links take the user to the BCH Organisms Registry page.

This page provides a list of organisms registered on the BCH Central Portal. The organisms are listed in alphabetical order according to the taxonomic status, which is the scientific name. Links are provided via the Record ID to the Parent or Donor Organism record.

Each record provides information about biological characteristics, including taxonomic status, common name, origin, centre of origin and centre of genetic diversity. Links to other records that have referenced this record are provided at the bottom of each Parent or Donor Organism record.

Example. A user wishes to find information about melons and the biosafety issues related to this plant species. The user opens the BCH Organisms Registry page and scrolls down to the scientific name for melons, which is Cucumis.

By selecting the Record ID link, 12081, the record for melons is opened. This Parent or Donor Organisms record provides information about the characteristics of melons that are related to biosafety. It also provides links to...
other websites and to other documents in the BCH Central Portal that reference this plant. Among the documents available on the BCH Central Portal are decision entries and unique identification entries.

### BCH Organisms Registry

The BCH Organisms Registry includes those organisms that have been registered with the BCH as parental, recipient or donor organisms. Each record provides further information about relevant biological characteristics, including information on taxonomic status, common name, origin, centre of origin and centre of genetic diversity. Links to relevant LMO records are provided at the bottom of each individual record.

<table>
<thead>
<tr>
<th>Record ID</th>
<th>Taxonomic Status</th>
<th>Common Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12124</td>
<td>Cucumis melo</td>
<td>Melons</td>
<td>The melon is the fruit and plant of a typically vine-like (climber and trailer) herb. Many different melon cultivars have been produced, perhaps the most popular or well-known being cantaloupe and honeydew, more...</td>
</tr>
</tbody>
</table>

### Parent or Donor Organism

**Record information and status**

- **Record ID**: 12124
- **Status**: Published
- **Date of creation**: 2006-04-07 20:05 GMT (kirsty.mclean@biodiv.org)
- **Date of last update**: 2006-06-08 00:15 GMT (kirsty.mclean@biodiv.org)
- **Owner**: kirsty.mclean@biodiv.org

**Organism Identification**

- **Taxonomic name or status**: *Cucumis melo*

**Common names**

- Melons

**Organism details**

**Characteristics related to biosafety**
### 3.4 Gene Registry

URL: http://bch.cbd.int/database/organisms/genes/

The **Gene Registry** on the BCH Central Portal provides summary information about gene inserts, including genes, gene elements and characteristics of the genetic modifications of the LMOs registered with the BCH Central Portal.

By convention, gene names are written in italics and the proteins derived from genes use the same name but start with a capital letter and are in normal print. For example, the *cry1A(b)* gene produces the Cry1A(b) protein.

Access to the Gene Registry can be obtained using the **Gene Registry** link in the left hand menu of the Finding Information page or in the Finding Information drop down menu on the navigation bar of the BCH Central Portal.

The gene elements are listed in alphabetical order according to the name of the element. The Gene Registry table provides:

1. The Record ID;
2. the name of the gene or gene element;
3. the trait conferred by the element;
4. the donor organism from which the element was isolated; and
5. a brief description of the function of the gene or gene element.

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6351</td>
<td><strong>Decision on LMO for FFP under Article 11</strong></td>
</tr>
<tr>
<td></td>
<td>Cantaloupe A</td>
</tr>
<tr>
<td></td>
<td>Agritope, Inc</td>
</tr>
<tr>
<td></td>
<td>Cucumis melo - Melons</td>
</tr>
<tr>
<td>6409</td>
<td><strong>Decision on LMO for FFP under Article 11</strong></td>
</tr>
<tr>
<td></td>
<td>Cantaloupe B</td>
</tr>
<tr>
<td></td>
<td>Agritope, Inc</td>
</tr>
<tr>
<td></td>
<td>Cucumis melo - Melons</td>
</tr>
<tr>
<td>15388</td>
<td><strong>Unique Identification Registry</strong></td>
</tr>
<tr>
<td></td>
<td>Cantaloupe A (delayed ripening)</td>
</tr>
<tr>
<td></td>
<td>Agritope, Inc</td>
</tr>
<tr>
<td></td>
<td>Cucumis melo - Melons</td>
</tr>
<tr>
<td></td>
<td>Reduced ethylene synthesis, Kanamycin resistance</td>
</tr>
<tr>
<td>15389</td>
<td><strong>Unique Identification Registry</strong></td>
</tr>
<tr>
<td></td>
<td>Cantaloupe B (delayed ripening)</td>
</tr>
<tr>
<td></td>
<td>Agritope, Inc</td>
</tr>
<tr>
<td></td>
<td>Cucumis melo - Melons</td>
</tr>
<tr>
<td></td>
<td>Reduced ethylene synthesis, Kanamycin resistance</td>
</tr>
<tr>
<td></td>
<td>Cont. ↓</td>
</tr>
</tbody>
</table>
The Record ID provides a link to the Gene record. The Gene record provides information about the gene, its function, the donor organism and additional information through links to records on the BCH Central Portal that reference this gene and to other websites that provide biosafety information about the gene.
**Example.** A user wishes to identify the function of a gene element found in an LMO. The user selects the **Gene Registry** link from the **Finding Information** menu and opens the **Gene Registry** page. The user scrolls down the list of genes and gene elements to the name of the element: *bla*.

The Gene Registry identifies *bla* as a gene from *Escherichia coli* that confers resistance to the antibiotic, ampicillin. The function description in the table indicates that *bla* is commonly used as a marker gene in transformation experiments.

The user selects the **Record ID**, 14975, and opens the **Gene** record. This record provides additional information about the *bla* gene and provides links to the donor organism and other records in the BCH Central Portal that reference *bla*. These records include a risk assessment and decision documents.

### Gene Registry

The BCH Gene Registry provides summary information on gene inserts and characteristics of the genetic modifications of the LMOs registered in the BCH.

<table>
<thead>
<tr>
<th>Record ID</th>
<th>Name</th>
<th>Trait</th>
<th>Donor organism</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>14975</td>
<td><em>bla</em></td>
<td>Ampicillin resistance</td>
<td><em>Escherichia coli</em></td>
<td>The <em>bla</em> gene confers resistance to the antibiotic ampicillin. Typically used as a marker gene.</td>
</tr>
</tbody>
</table>

### Gene

**Record information and status**

- **Record ID**: 14975
- **Status**: Published
- **Date of creation**: 2006-06-09 21:02 GMT (kirsty.mclean@biodiv.org)
- **Date of last update**: 2006-06-20 15:57 GMT (kirsty.mclean@biodiv.org)
- **Owner**: kirsty.mclean@biodiv.org

**Gene information**

- **Name of the gene**: *bla*

**Introduced or modified traits**

- Ampicillin resistance

**Product**

- *bla*-based transgene

**Records referencing this document**

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14443</td>
<td>Final conclusions: Risk analysis of genetically modified yellow maize events to be used as feed for birds (MON 00021-19) [Courtesy translation]</td>
</tr>
<tr>
<td>218</td>
<td>Monsanto - Monsanto - Hybrid Fem - Hybrid Male - Hybrid Fem - Hybrid Male - Monsanto</td>
</tr>
</tbody>
</table>
4 Search using Record ID

URL: http://bch.cbd.int/database/

The BCH Central Portal provides a quick search facility for users who know the Record ID of the information they are accessing. The Go to record ID search box is located on the Finding Information page at the bottom of the left hand menu.

Users wishing to access a specific record can enter the record number here and press Go to be taken directly to the record.

Example. A user looking for Record ID 300 will enter 300 in the Go to record ID search box and then press Go.

This takes the user to a Law, Regulation or Guideline record submitted by Estonia. The Title of the document indicates that the record is for a biosafety law.
### Law, Regulation or Guideline

**Record information and status**

<table>
<thead>
<tr>
<th>Record ID</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Published</td>
</tr>
<tr>
<td>Date of creation</td>
<td>2003-03-14 22:58 GMT (<a href="mailto:Liina.Fek-Piiroon@skm.envir.ee">Liina.Fek-Piiroon@skm.envir.ee</a>)</td>
</tr>
<tr>
<td>Date of last update</td>
<td>2005-05-06 22:54 GMT (<a href="mailto:hardo.lilevaji@envir.ee">hardo.lilevaji@envir.ee</a>/1595)</td>
</tr>
<tr>
<td>Owner</td>
<td><a href="mailto:hardo.lilevaji@envir.ee">hardo.lilevaji@envir.ee</a>/1595</td>
</tr>
</tbody>
</table>

### General information

**Country**

- Estonia

**Jurisdiction**

- Estonia

END
Biosafety Clearing House Training Workshop
Manoranjan Hota & Ruel Maningas
Regional Advisors
28 April, 2008
Colombo

About us?
Regional Advisors
Dr. Manoranjan Hota
Email: hota_m@yahoo.com

Dr. Ruel Maningas
Email: rvmconsult@yahoo.com

Methodology
• Presentations
• Interactive modules
• Hands-on Lab
• Real data entry

Ground Rules
• Cell phones on silent modes
• One participant at one time
• Punctuality
• Groups
• Group activities
• Workshop Navigation Meetings
• Evaluation forms
**Introduction to the Cartagena Protocol on Biosafety and Importance of the BCH**

Manoranjan Hota & Ruel Maningas
BCH Advisors
28 April, 2008
Colombo

**What is the Cartagena Protocol on Biosafety?**

The Cartagena Protocol on Biosafety is an international agreement (treaty), concluded and adopted in the framework of the Convention on Biological Diversity (CBD).

**Principle 15 of the Rio Declaration on Environment and Development states:**

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

**Elements of the precautionary approach in the CPB**

The preamble, reaffirming "the precautionary approach contained in Principle 15 of the Rio Declaration on environment and Development" Article 1, indicating that the objective of the Protocol is "in accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on environment and Development".

**What is the purpose of the CPB?**

"To contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and focusing, in particular, on transboundary movements". This objective is to be achieved in accordance with the precautionary approach.

**BCH Definition**

The Biosafety Clearing-House (BCH) is an information exchange mechanism established by the Cartagena Protocol on Biosafety to assist Parties to implement its provisions and to facilitate sharing of formation on, and experience with, living modified organisms (LMOs).
The Biosafety Clearing-House

Article 20 of the Cartagena Protocol established the Biosafety Clearing-House to:

(a) Facilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms, and

(b) Assist Parties to implement the Protocol, taking into account the special needs of developing country Parties.

Importance of the BCH

The BCH is the primary mechanism through which this information will be available, and is therefore a cornerstone of the Protocol’s biosafety regime. The BCH will be particularly important with regard to the transboundary movement of LMO-FFPs.

Importance of the BCH

Parties to the Protocol are obliged to make certain information available through the BCH. The BCH also gives countries access to important information provided by others: for example, about relevant national laws and regulations; about decisions other countries have made regarding specific LMOs; and about biosafety-related capacity-building initiatives and assistance.

Importance of the BCH

It is essential for the successful implementation of the Protocol.
- Provides a “one-stop shop” where users can readily access or contribute relevant biosafety-related information.
- This would assist Governments to make informed decisions regarding the importation or release of LMOs.

Public Awareness and Education at the CPB

The Protocol requires Parties to promote and facilitate public awareness, education and participation on biosafety and to ensure that the public has access to information on LMOs that may be imported.

In accordance with their laws and regulations, Parties are to consult the public in the decision-making process regarding LMOs, make the public aware of the results of decisions, and inform the public about access to the Biosafety Clearing-House.

Thank You!
Module Objective

- To give a general overview of the Central Portal
- This module describes the main functionalities and information that can be found on the BCH Central Portal.
- Users will learn how to navigate into the BCH Central Portal, knowing
  - the structure of information available on the BCH Central Portal
  - the different categories of information found onto the BCH

Module Outline

- Welcome Page
- The Main Sections of the BCH Central Portal
  - The BCH
  - The Protocol
  - Finding Information
  - Registering Information
  - Resources & Help
  - Country Profile
- Latest Additions and News
- Other Features

Welcome Page

The BCH: Information about BCH including highlights and policies

The Protocol

The Protocol: Includes text of the Protocol, parties to the Protocols and others
Finding Information

- The BCH databases have been grouped by topic. Each topic has its own entry page that provides links to related databases and other useful information.
- See Toolkit Module 2 “Finding information within the BCH Central Portal”

Registering Information

- Registered users can register with the Management Centre.
- BCH National Focal Point will be required to verify the accuracy of the record information before it is made public.

Resources

- The Resources section of the Welcome Page contains links to a collection of useful sub-pages.
- Some of these are related to assisting the user with the Central Portal while others provide biosafety-related information.

Help

- FAQ or frequently asked questions about the BCH and the Central Portal.
- Training Modules: include step-by-step process in BCH Operation i.e. Finding and registering information.
- Guide to the BCH: helps in navigating through the BCH Central Portal.
- Training site: a mirror site of the BCH central portal for training on creating and managing BCH information.
- Interoperability Services: include interoperability standards and guidelines for the BCH exchange of information with existing international, regional or national databases.

Country Profile

Summary information about a country, including ratification status and information being reported to the BCH

Latest additions and news
Module Questions

• What are the main sections on the BCH Central Portal?
• What kind of information can be found on the Central Portal?
• Who can use this information?
• Who can register new information on the Central Portal?
• What kind of Tutorials and manuals are available?
• What kind of news and latest additions can be found on the Portal?
• What are the different help and resources available?
OBJECTIVE

- Understand the various databases available on the central portal
- Search the database available on the BCH central portal

How

- Presentation
- Case Studies:

Database

- National Contacts
- Laws & Regulations
- Decisions & Other Country Communications
- LMOs, Genes or Organisms
- Roster of Experts
- Capacity Building
- Biosafety Information Resource Centre
- Scientific Bibliographic Database
- Organizations
- Compiled Information

National Contacts

- Requires a number of institutions
- Institutional information kept here

Article 19
National Focal Points

- NFPs responsible to manage communication with secretariat.
- Each record has contact details, phones, email.

Competent National Authority

- Information CNAs.
- Each CNA entry contains contact information and a brief description of the functions of the organization.

National Biosafety Websites

- Information about National databases.
- Each entry contains a web address & brief description.

Laws and Regulations

- Parties must post information on laws & regulations.
Finding Information on BCH

Laws & Regulations

National Laws, Regulations & Guidelines

Article 20.3a

Make available laws, regulations & guidelines information required by parties about AIA

Laws & Regulations

Bilateral, Regional & Multilateral Agreements

Article 20.3b

Information about bilateral, regional & multilateral agreements
Additionally, use BCH to inform each other of any agreements etc

Decisions and other Country’s Communication

Information about the AIA Procedure

Information about final decisions taken by parties on LMOs
Final decisions not covered in the above 2
Risk Assessments on LMOs
Any Unique Identifiers for LMOs used in the BCH

Decisions and other Country’s Communication...

Under the relevant articles parties are responsible for posting information regarding relevant decisions & declarations on BCH

Capacity Building
Capacity Building

- Capacity Building Projects
- Capacity Building Opportunities
- Compendium of Training Courses
- Country needs and priorities
- Outcomes and Lessons Learned

Roster of Experts

- Use & function
- History
- Procedures for nominating experts
- Guidelines for operation of Roster

Roster of Experts

- Risk Assessment
- Make informed decisions
- Develop National Human Resources
- Promote Institutional Strengthening

Reports on Biosafety Assignments

Provides links to a database of reports on Biosafety Experts Assignments

Search for National Contacts
Review questions

• What are the different databases on the BCH?
• Where would the NFPs, CNAs be found?
• Where would you find information about AIA procedures?
• Where are the Decisions, declarations found?
• What is the role of the Roster of Experts database?
An introduction to the Biosafety Clearing House

Dr. Manoranjan Hota & Dr. Ruel Maningas
BCH Regional Advisors - Asia

What is a Clearing House Mechanism?

- The mechanism's key characteristics:
  - Compatible with different levels of national capacity
  - Needs-driven
  - Structurally decentralized
  - Provides access to information
  - Supports decision-making
  - Has no vested interest in controlling the expertise or information
  - Created for the mutual benefit of all participants

What is the role of the BCH?

- Under Article 20, the Cartagena Protocol establishes the Biosafety Clearing House (BCH). The Protocol sets out two functions for the BCH:
  - To facilitate the exchange of scientific, technical, environmental and legal information on and experience with LMOs
  - To assist a Party to implement the Protocol.

What are the Characteristics of the Biosafety Clearing-House

- Guided by the principles of inclusiveness, transparency and equity, and open to all Governments;
- Makes use of metadata about each record (i.e., descriptive identifiers such as name, date, author, etc.), to facilitate the submissions, searching, location and retrieval of information;
- Makes use of common format to report information, such as decision information, laws and regulations, and national contact details, using a modular data structure where possible;
Characteristics of the Biosafety Clearing-House

• Making use, where appropriate, of a **controlled vocabulary** to describe records, which can be translated into the official United Nations languages, to facilitate the ability to search for records in all languages;

• Making use of existing **unique identification** systems for living modified organisms, as appropriate, to facilitate searching and retrieval of information.

How does the BCH work?

• **Inclusiveness, Transparency and Equity**

• **Open to all governments.**

• Governments need to put in place lines of communication and information exchange.

How does the BCH work?

• **A Party must nominate a national focal point for the BCH**
  - Clearance for publishing information registered on the BCH
  - Liaison with the Secretariat liaison with the Secretariat of the Protocol

How does the BCH work?

• **Who can access the BCH?**
  - information in the Biosafety Clearing-House is open and accessible to all users

• **Who can put information on the BCH**
  - different government departments or agencies.
  - registering and updating information on the BCH is restricted to authorized users.

How does the BCH work?

• **Language requirements of the BCH**
  - information should be submitted to the BCH in a UN official language (Arabic, Chinese, English, French, Russian or Spanish).
  - a Party can put links to other documents which are in their original language.
  - MOP-1 encourages use of commonly used international languages

What information can be found on the BCH?

• There are several broad categories of information that are required by the BCH:
  - Laws and Regulations;
  - National Contacts;
  - Decisions and Declarations on LMOs;
  - Risk Assessments;
  - Unique Identification;
  - Capacity Building;
  - Roster of Experts;
  - National Reports submitted by Parties.
Laws and Regulations

• Existing national legislation, regulations and guidelines for implementing the Protocol, as well as information required by Parties for the AIA procedure (ongoing obligation);
• National laws, regulations and guidelines applicable to the import of LMOs intended for direct use as food or feed, or for processing (Article 11(5)) (ongoing requirement);
• Bilateral, multilateral and regional agreements and arrangements (Article 14) (requirement).

National Contacts

• Contact details for competent national authorities (Article 19) (critical information);
• Contact details for national focal points (Article 19) (liaising with the Secretariat);
• BCH national focal points (validation of information).

Decisions and Declarations on LMOs

• Decisions by a Party on regulating the transit of specific LMOs (Article 6(1));
• Final decisions regarding the importation or release of LMOs (e.g. approval or prohibition; any conditions attached to approvals; requests for further information; extensions granted; reasons for decision) (Article 10(3));
• Information on the application of domestic regulations to specific imports of LMOs (Article 14(4));

Decisions and Declarations on LMOs (cont)

• Final decisions regarding the domestic use of LMOs that may be subject to transboundary movement for direct use as food or feed, or for processing (Article 11(1));
• Final decisions regarding the import of LMOs intended for direct use as food or feed, or for processing that are taken under domestic regulatory frameworks (Article 11);
• Declarations regarding the framework to be used for LMOs intended for direct use as food or feed, or for processing (Article 11(6));

Decisions and Declarations on LMOs (cont)

• Review and change of decisions regarding intentional transboundary movements of LMOs (Article 12(1));
• LMOs subject to simplified procedures regarding intentional transboundary movement and exempted by a Party from the AIA procedure (Article 13(1));
• Occurrence of unintentional transboundary movements that are likely to have significant adverse effects on biological diversity, and related information, including contact point for further information (Article 17);
• Illegal transboundary movements of LMOs (Article 25(3)).

Risk Assessments

• Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and relevant information regarding products thereof, namely, processed materials that are of living modified organism origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology (Article 20(3)(c)).
Unique Identification

- The BCH contains a database providing a registry of unique identification classifications as a key to access records in the BCH, such as the OECDs unique identifiers for transgenic plant lines for LMOs-FFP.

Capacity Building

- Through the BCH, Parties and others can access important information about capacity-building and other assistance for implementation of the Cartagena Protocol;
- For example, the BCH contains databases of capacity-building opportunities and projects and initiatives;
- Governments can also register their capacity-building needs and priorities;
- Eventually, a database on capacity-building outcomes and lessons learned will also be added.

Roster of Experts

- The governing body of the Protocol has decided that access to the roster of experts will be maintained through the BCH;
- The roster of experts was established by the governing body of the Convention when the Protocol was adopted;
- Purpose is to provide advice and other support, as appropriate and upon request, to developing country Parties and Parties with economies in transition,
  − to conduct risk assessment,
  − make informed decisions,
  − develop national human resources and
  − promote institutional strengthening, associated with the transboundary movement of LMOs.

Roster of Experts (cont)

- Parties are encouraged to provide the Secretariat with an evaluation of any advice provided by experts from the roster and results achieved;
- Evaluations will be made available to the BCH in order to assist other Parties in making decisions about use of the roster of experts;
- Through the BCH, nomination forms for the roster can be accesses to enable Parties to nominate experts;
- Guidelines for the use of experts from the roster, and information on the voluntary fund can also be accessed through the BCH.

Roster of Experts (cont)

- The expert nominated by a country can be of any nationality.

National reports submitted by Parties

- The Protocol requires each Party to submit a periodic report on its implementation of the Protocol to the Protocol’s governing body;
- These reports will be made available on the BCH.
Benefits and Obligations

• Benefits from using the BCH:
  – access information about the national laws, regulations and guidelines of other Parties; and other countries decisions and assessments relating to specific LMOs;
  – ensure that all potential exporters of LMOs to their country or those who wish to transport LMOs across their territory, are aware of national regulatory requirements;

• Obligations
  – Make some information (Article 20 of the Cartagena Protocol lists some of the specific information)
  – The governing body of the Protocol may well adopt further decisions in future regarding operational and technical aspects of the BCH

Types of information to make available

• All Parties will need to put some basic information on the BCH.
• Non-Parties are also encouraged to contribute appropriate information to the BCH
• Required information should be posted within defined time-frames, or as soon as feasible

• As soon as the Protocol enters into effect for a country
  – Party competent national authority (or authorities).
  – Party existing laws, regulations or guidelines relevant to LMOs
Types of information to make available

• When a country takes certain steps for example:
  – If a Party enters into a bilateral, regional or multilateral agreement or arrangement regarding the transboundary movement of LMOs; or
  – If the Party adopts or amends laws, regulations or guidelines relevant to LMOs.

• When a country takes certain decisions for example:
  – final decision on the importation or release of LMOs (e.g. under the AIA procedure)
  – final decision regarding domestic use, of a LMO that may be subject to transboundary movement for direct use and food or feed, or for processing.

• If certain events occur for example:
  – illegal transboundary movement of LMOs; or
  – notification of an occurrence of an unintentional transboundary movement of a LMO.

For More Information

• Visit www.unep.ch/biosafety/bch.htm; and
• In addition, you can send an email to jyoti@unep.ch.

QUESTIONS???
Introduction to Hermes and Ajax Plug-in
Dr. Ruel V. Magingas, BCH IT Advisor-Asia
rvmconsult@yahoo.com

About Hermes

- The SCBD developed a tool called Hermes.
- Hermes is an online Content Management System based on the Central Portal of the BCH.
- A very simple and easy to use CMS that allows for the creation and edition of additional web pages, sections and contents.

Characteristics/Functionalities of HERMES

- Easy to configure, add/remove sections, links, button, text and so on
- Multi-lingual
- Data entry through the Management Centre and CMS used for the creation/ modification of country nBCH

Hermes Application Process Layout

1. Enter Data on BCH using Mgt. Centre
2. Information published on BCH portal
3. Hermes retrieves data from Central Portal/ CMS used to modify local website
4. Information Available on Local BCH website
5. Hermes information data from Central Portal/ CMS used to modify local website

Hardware & Software Requirements of Hermes

- Internet Access
- PC with web browser
- No database software is needed

Benefits of Using Hermes

- System developed and supported by SCBD
- Easy to install and operate
- Does not require a local database, records are taken from the Central Portal
- The BCH information is also available as national BCH website
- One information entry point
- The BCH Training already covers all the required skills to register the information and comply with the CP obligations.
- Low cost in money and human resources
Overview of BCH Ajax Plug-In

Introduction

• The BCH Ajax Plug-in is a tool that facilitates integration of information from the BCH central portal to any website.

• Allows dynamic display of information in the nBCH and the BCH central portal

• The BCH Ajax Plug-in is a client side application.
  – The connection to the BCH Central Portal is made directly by the client (end-user)

Introduction

• The use of the BCH Ajax Plug-in does not require any specific IT knowledge
  – the plug-in works on all server platforms and does not require any software installation.
  – all required files are located on the BCH Central Portal and maintained by the Secretariat

Compatibility

• The BCH Ajax Plug-in is actually compatible with Internet Explorer 6+ and Mozilla Firefox 1.2+; the Secretariat fully supports the following versions:
  – Internet Explorer 7.0
  – Mozilla Firefox 2.0

• Support for Apple Safari is under development

Maintenance

• The BCH Ajax Plug-in is fully supported and maintained by the Secretariat
  – All files are located at the BCH Central Portal, hence, there is no need for maintenance at the local level

Integration

• The BCH Ajax Plug-in has been designed to make its integration to any website as simple as possible

• It can be integrated to any webpage by simply adding the following lines of HTML

```html
<script type="text/javascript" charset="utf-8" src="http://bch.biodiv.org/centralportal/ui/offsite/bch-offsite.js"></script>
<script type="text/javascript">
GenerateRecords("focalPoint", "ca", "en");</script>
```
Here is a very basic HTML page integrating the BCH Ajax Plug-in:

```html
<html>
<body>
<h1>National Focal Points</h1>
<script type="text/javascript" charset="utf-8" src="http://bch.biodiv.org/centralportal/ui/offsite/bch-offsite.js"></script>
<script type="text/javascript" charset="utf-8">
GenerateRecords("focalPoint", "ca", "en");
</script>
</body>
</html>
```

**Customization**

- The BCH Ajax Plug-In can be easily customized to show any specific type of BCH national information for any country.
- It can be customized by simply changing the parameters of the `GenerateRecords` method defined below.

```javascript
function GenerateRecords(documentType, country, language);
```

**Customization...**

- `documentType` - The parameter specified what type of BCH national information to display. The valid values are the following:

<table>
<thead>
<tr>
<th>Type of Information to Display</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Focal Point</td>
<td>focalPoint</td>
</tr>
<tr>
<td>Competent National Authority</td>
<td>authority</td>
</tr>
<tr>
<td>National Database</td>
<td>nationalDatabase</td>
</tr>
<tr>
<td>Law, Regulation or Guideline</td>
<td>law</td>
</tr>
<tr>
<td>Agreement or Arrangement</td>
<td>agreement</td>
</tr>
<tr>
<td>Decision on LMO</td>
<td>decisionUnderAIA</td>
</tr>
<tr>
<td>Decision on LMO-FFP</td>
<td>decisionUnderA11</td>
</tr>
<tr>
<td>Decision on Lab Data Analysis</td>
<td>decision</td>
</tr>
<tr>
<td>Others</td>
<td>others</td>
</tr>
<tr>
<td>Report on an accident</td>
<td>reportOnAnAccident</td>
</tr>
<tr>
<td>Capacity Building Framework</td>
<td>capacityBuildingFramework</td>
</tr>
<tr>
<td>Capacity Building Project</td>
<td>capacityBuildingProject</td>
</tr>
<tr>
<td>Capacity Building Process</td>
<td>capacityBuildingProcess</td>
</tr>
<tr>
<td>Others</td>
<td>others</td>
</tr>
</tbody>
</table>

- `country` - The parameter specifies which country for which the information is displayed.
- The BCH Ajax plug-in uses 2-letter ISO 3166 country codes.
- The official list can be found at: [http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html](http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html)

- `language` - The parameter specifies in which language the information should be displayed.
- The BCH Ajax Plug-in will not be limited to the 6 UN languages.

**Examples**

The Bahamas Biosafety Clearing-House webpage on Focal Point with no AJAX Plug-In inserted.
Examples

With Ajax Plugin

THANK YOU!!!
National Participation into the BCH
Option 3

Dr. Ruel V. Maningas
BCH IT Regional Advisor-Asia

4 Options: overview

Parties are able to make national information available using the following 4 options:

1. Use the BCH Central Portal Management Center
2. Send data to SCBD (Non-Internet)
3. Make data available through a local website and allow the central portal to crawl to retrieve metadata
4. Store data on national BCH databases, and actively make those data available through the central portal using BCH interoperability protocols

BCH. Option 3

• BCH Central Portal crawls your info

Option 3

• 3. BCH Crawler
  – Place your documents online on your web server and wait for the BCH to download them

Option 3

• Pros
  – Allow interoperability with existing databases
  – Relatively easy to implement
  – Information is hosted locally

• Requirements
  – Requires a National Web Site
  – Requires a stable internet connectivity
  – Requires some IT knowledge
  – Requires development
  – Publishing of information may be delayed (about 24h)
  – Party is responsible for maintenance, backups, etc.
The end.
Objective

• Understand the Management Centre
• Use the Central Portal to register information into the BCH

Institutional Structure

• In the framework of the Cartagena Protocol on Biosafety, two groups of users are considered for interacting with the Biosafety Clearing House:
  – National Focal Point for the Biosafety Clearing House (NFP-BCH)
  – National Authorized User (NAU)

How

• Presentation
• Demonstration

Registering Information through the Management Centre

• Registered users can register with the Management Centre.
• BCH National Focal Point will be required to verify the accuracy of the record information before it is made public.
Registering Information on BCH

Management Centre

• For NAUs:
  Shows records that only the NAU has added and which are either still being edited, or which have been submitted for approval to the NFP.

• For NFPs:
  Shows records that only the NFP has added, and also shows all records which have been submitted by NAUs for approval.

BCH vs BCH Training Website

BCH Website: http://bch.cbd.int
BCH Training Website: http://bchtraining.cbd.int

• Training site to help in the learning & understanding.
• Similar to the real website but may have differences due to upgrading.

Registering Information Section of the BCH

• Data entry interface for registering, updating, deleting or correcting information
• Access restricted to the BCH NFPs and other authorized users

Sign-in to Management Centre

• Requires a username and password
• Use the email address used for registering as a user

Register New Information

• Allows a NAU or a NFP to add new records to the BCH
• New records can be:
  ➢ saved for editing later
  ➢ published
• But all records submitted for publishing by a NAU must be approved by the NFP before they will be finally published on the BCH
• NFP can publish records directly
Manage Your Information

- For managing country records which have previously been published to the BCH
- NAUs and NFPs see the same information – no difference
- Allows NAUs and NFPs to edit or unpublish previously published records
- But all changes (edits & deletions) must still be approved by the NFP

Manage Your Information (3)

Summary of Published Records for your country

View Published Records

View Requests made to the NFP regarding previously published records

Review questions

- What are the two groups of users considered for interacting with the BCH portal?
- What is the BCH training website, and how do you reach it?
- Describe the workflow for registering and approving information on the BCH
- Who validates the new information to be made public in the Central Portal?
- Who can register new information on the Central Portal?
- When is information made public?
- How to sign-in to the Management Centre?
- What are Common Formats? Why are they needed?
- What is the Thesaurus or Common Vocabulary?
- What types or categories of information can be registered?
- Who can manage Authorized Users for a Party?
- How does the NFP know that he/she has some information to review and validate on the Central Portal?
- How does an NAU know the state of the registered information?
### National Contacts

<table>
<thead>
<tr>
<th>National Focal Points</th>
<th>Individuals or institutions responsible for managing communication between their government and the CBD Secretariat, and members of the public.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent National Authorities</td>
<td>Authorities responsible for performing the administrative functions required by the Protocol.</td>
</tr>
<tr>
<td>National Biosafety Websites and Databases</td>
<td>Online resources maintained as official sources of information by a national government.</td>
</tr>
</tbody>
</table>

### Laws and regulations

<table>
<thead>
<tr>
<th>National guideline</th>
<th>A national guideline is intended to assist with providing ways of complying with national laws, and national regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>National law</td>
<td>A national law is a law that has been passed by the national legislative body of a country’s government.</td>
</tr>
<tr>
<td>National regulation</td>
<td>In most jurisdictions, a national regulation is ‘subordinate legislation’, usually of an administrative nature, that is authorized by a national law.</td>
</tr>
<tr>
<td>Regional agreement or arrangement</td>
<td>Any regional agreements and arrangements between governments to implement provisions of the Protocol.</td>
</tr>
</tbody>
</table>

### Decisions and declarations

<table>
<thead>
<tr>
<th>Decisions under AIA</th>
<th>Decisions on intentional release into the environment under the Advance Informed Agreement procedure (AIA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisions under Article 11</td>
<td>Decisions on LMOs for direct use as food or feed, or for processing, including placing on the market, and decisions related to import.</td>
</tr>
<tr>
<td>Other decisions and declarations</td>
<td>Includes notifications of illegal or unintentional transboundary movement, decisions under the simplified procedure, domestic regulations, field trials not covered by the AIA procedure, decisions prior to entry into force of the Protocol, decisions on transit and contained use, and declarations made on ratification of the Protocol.</td>
</tr>
<tr>
<td><strong>Risk assessments</strong></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td><strong>Risk assessments</strong></td>
<td>Summaries of risk assessments or environmental reviews taken in accordance with Annex III of the Protocol.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Organisms</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LMO Registry</strong></td>
<td>Summary information about all LMOs registered with the BCH.</td>
</tr>
<tr>
<td><strong>Gene registry</strong></td>
<td>Summary information about gene inserts.</td>
</tr>
<tr>
<td><strong>LMO database</strong></td>
<td>All LMO records in the BCH (includes national duplicates).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Capacity-building activities</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity-building needs and priorities</strong></td>
<td>National and regional capacity-building needs and priorities required to implement the Biosafety Protocol that have been identified and categorized in line with the elements of the capacity-building action plan.</td>
</tr>
<tr>
<td><strong>Capacity-building opportunities</strong></td>
<td>Includes information on available or upcoming capacity-building opportunities, such as: technical assistance, scholarships and fellowships, personnel exchange/internships, scientific and technical cooperation, partnerships, discussion forums, professional networks, and others. Opportunities are typically short-term.</td>
</tr>
<tr>
<td><strong>Capacity-building projects</strong></td>
<td>Includes information on various ongoing biosafety capacity building projects and other relevant initiatives, such as the UNEP/GEF project on development of national biosafety frameworks. Each record contains basic information about each project/initiative, including: its status and location, the lead organization(s) and contacts, funding details, objectives and activities, main outcomes, lessons learned and a brief description. Projects are typically long-term (i.e. duration of 6 months or more.)</td>
</tr>
<tr>
<td><strong>Outcomes and Lessons Learned</strong></td>
<td>Summaries of the reports from completed capacity-building activities.</td>
</tr>
<tr>
<td><strong>Biosafety Courses</strong></td>
<td>Biosafety education and training programs with academic accreditation.</td>
</tr>
<tr>
<td>Roster of experts</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Expert Roster</strong></td>
<td>Details of biosafety experts who have been nominated by a government as an expert in their field.</td>
</tr>
<tr>
<td><strong>Report on Expert Assignment</strong></td>
<td>Reports on the assignments undertaken by Biosafety Experts contacted through the Roster.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biosafety Information Resources</strong></td>
</tr>
<tr>
<td><strong>Biosafety Organizations</strong></td>
</tr>
<tr>
<td><strong>Country Profile</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Reports</strong></td>
</tr>
<tr>
<td><strong>BCH Annual Reports</strong></td>
</tr>
<tr>
<td><strong>Roster of Experts Annual Reports</strong></td>
</tr>
</tbody>
</table>
Practice with the BCH Training Site

Web address: https://bchtraining.cbd.int/

Use your existing BCH account to practice registering record on the BCH Training site.

Access the Management Centre

Web address: https://bch.cbd.int/member/signin.aspx
1. **Open the Management Centre**
   
   Open the Management by following the link under “Registering Data” on the Left-Hand Menu bar.

2. **Get a BCH account**
   
   Sign-up for a BCH account by filling in the online form.

3. **Forgotten password**
   
   Re-set your password by following the instructions on the Management Centre home page.

4. **Sign-in to your account**
   
   Enter your email address and password and click the “sign-in” button.

**Navigating the Management Centre Home Page**

Web address: [https://bch.biodiv.org/managementcentre/default.aspx](https://bch.biodiv.org/managementcentre/default.aspx)
1. **Draft records**
   Access your draft records by clicking on the title of the record.

2. **Existing records**
   View and edit your existing records by following the “Manage your information” link.

3. **New records**
   Create a new record by following the “Register new information” link.
Creating new records

Web address: https://bch.cbd.int/managementcentre/myrecords.shtml

1. **Create a new BCH record**
   Choose a record from the drop-down list and click on the “create” button, then fill in the form and submit for publishing.

2. **Get form for offline use**
   Download a copy of the common format for registering information to enter information off-line.

3. **Create a core reference record**
   Create a core reference record (such as contact details) for you to use when registering BCH records.
### Laws, Regulations and Agreements

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **a** | Existing national legislation and guidelines for implementing the protocol as well as information required by Parties for the Advanced Information Agreement procedure (AIA)  
(Article 20 Paragraph 3(a).) |
| **b** | National laws, regulations and guidelines applicable to the import of LMOs intended for direct use as food or feed or for processing  
(Article 11 Paragraph 5) |
| **c** | Bilateral, multilateral and regional agreements and arrangements  
(Articles 14 paragraph 2 and 20 paragraph 3(b)) |
| **l** | Information on the application of domestic regulations to specific imports of LMOs (article 14 paragraph 4.) |

### Contact Information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **d** | Contact details for competent national authorities  
(Articles 19.2 and 19.3) |
| **e** | Contact details for national focal points.  
(Articles 19 paragraph 1&19 paragraph 3) |
| **f** | Contact details for emergency contact point for receiving notifications of unintentional transboundary movements of LMOs  
(Article 17 paragraph 2) |

### Decisions and Declarations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **h** | Decisions by a party on regulating the transit of specific living modified organisms (LMOs)  
(Article 6 paragraph 1) |
| **i** | Occurrence of unintentional transboundary movements that are likely to have significant adverse effects on biological diversity and related information, including the contact point for further information  
(Article 17 paragraphs 1&3) |
| **j** | Illegal transboundary movements of LMOs  
(Article 25 Paragraph 3) |
<p>| <strong>k</strong> | Final decisions regarding the importation of release of LMOs (i.e approval or prohibition, any conditions, requests for further information, extensions granted, reasons for decision) |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Article 10 Paragraph 3 and article 20 paragraph 3(d)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>m</strong></td>
<td>Final decisions regarding the domestic use of LMOs that may be subject to transboundary movement for direct use as food or feed, or for processing (Article 11 Paragraph 1)</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>Final decisions regarding the domestic use of LMOs intended for direct use as food or feed, or for processing that are taken under domestic regulatory frameworks (Article 11 Paragraph 4) or in accordance with annexe III (Article 11 paragraph 6) (requirement of Article 20 Paragraph 3(d))</td>
</tr>
<tr>
<td><strong>o</strong></td>
<td>Declarations regarding the framework to be used for LMOs intended for direct use as food or feed or for processing (Article 11 Paragraph 6)</td>
</tr>
<tr>
<td><strong>p</strong></td>
<td>Review and change of decisions regarding intentional transboundary movements of LMOs. (Article 12 Paragraph 1)</td>
</tr>
<tr>
<td><strong>q</strong></td>
<td>LMOs subject to simplified procedures regarding intentional transboundary movement and exempted by a party from the AIA procedure (Article 13, Paragraph 1.)</td>
</tr>
<tr>
<td><strong>Other Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>g</strong></td>
<td>Reports submitted by the parties on the operation of the protocol. (Article 20 paragraph 3(e):)</td>
</tr>
<tr>
<td><strong>r</strong></td>
<td>Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and relevant information regarding products thereof, namely processed materials that are of LMO origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology: (Article 20 paragraph 3 (c).)</td>
</tr>
</tbody>
</table>