

# BIO SAFETY



A Quarterly  
Newsletter

## Newsletter

### From the Desk of Editor



I congratulate the Secretariat to the Convention on Biological Diversity (CBD) for publishing the informative document "Framework and Action Plan for Capacity-Building for the Effective Implementation of the Cartagena Protocol on Biosafety (2012-2020)", adopted by the sixth meeting of the Conference of the Parties serving as the Meeting of the Parties (COP-MOP) to the Cartagena Protocol on Biosafety hosted by India at Hyderabad in October 2012. The release of the document is timely and it would be of immense help to Parties in planning and executing the capacity building activities. The readers are encouraged to use this document in planning capacity building in their organization.

As part of the UNEP-GEF supported Phase -II Capacity Building initiatives, a two day workshop on "Problem Formulation for Identifying Protection Goals Relevant to the Environmental Risk Assessment of GE Plants in India" was organized by the Ministry of Environment and Forest in the month of December 2013. Several institutions have started working on the preparation of biology documents. We propose to continue with more activities in the future and shall keep our readers updated.

**Hem Pande**  
*Additional Secretary*

Ministry of Environment and Forests

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### Ad Hoc Technical Expert Group on Socio-economic Considerations: Consultative Meeting

Secretariat to the CBD has established an Ad Hoc Technical Expert Group (AHTEG) on Socio-economic Consideration (Article 26 of the CPB) in order to develop conceptual clarity on socio-economic considerations arising from the impact of living modified organisms (LMOs) on the conservation and sustainable use of biological diversity, especially with regard to the value of biological diversity to indigenous and local communities. The AHTEG has been set up pursuant to the decisions taken in COPMOP 6 held at Hyderabad in October 2012. The Group is expected to examine (i) Outcomes of the online discussion forums that were held throughout March and April of 2013 and the four regional online real-time conferences that took place in June 2013; and (ii) Global overview of information, in order to develop conceptual clarity on Socioeconomic Considerations.

The Group comprises of five representatives from each region i.e Africa, Asia-Pacific, Central and Eastern Europe (CEE), Group of Latin America and the Caribbean (GRULAC) and The Western European and Others Group (WEOG). India is represented in the ATHEG as a representative from Asia-Pacific region.

The first meeting of the AHTEG is scheduled in Seoul, Republic of Korea on 17-21 February 2014.

# Workshop on **Problem Formulation for Identifying Protection Goals Relevant to the Environmental Risk Assessment of GE Plants in India**

December 19-20, 2013, New Delhi



A technical workshop on “Problem Formulation for Identifying Protection Goals relevant to the Environmental Risk Assessment of GE Plants in India” was convened by the Ministry of Environment & Forests (MoEF) under the aegis of the Phase II Biosafety Capacity Building Project jointly with South Asia Biosafety Programme. The workshop was held on December 19-20, 2013 at NASC Complex, New Delhi.

The objective of the workshop was to initiate discussion on preparation of protection goals as derived from the Environment (Protection) Act, 1986. The workshop was expected to be a starting point towards formulating the Environmental Risk Assessment (ERA) guidelines. The workshop was attended by 24 invited participants including international faculty, senior experts and members of regulatory committees.

The workshop was initiated with a presentation on “Introduction to Environmental Legislation, Regulations and Protection Goals in India” by Dr. Ranjini Warriar, Director, MoEF. The concept of problem formulation in the context of GE crops was introduced by experts from Center for Environmental Risk Assessment (CERA),

Research Foundation (CERA-ILSI) i.e. Dr. Andrew Roberts and Dr. Ray Layton. Dr. S. R. Rao, Advisor, DBT provided an overview of biosafety regulations and developments in the country in the context of GE plants.

Two case examples of scoping exercise for identification of protection goals in development projects and pesticide registration were presented by Dr. Ranjini Warriar and Dr. T. P. Rajendran, Former Assistant Director General (Plant protection), Indian Council of Agricultural Research, to familiarize the participants with the process of identification of protection goals as per environmental legislations in India.

The participants were divided into breakout groups to deliberate on formulating protection goals using different case studies. The group discussions and interventions by experts helped the participants in understanding the process of identification of protection goals. It is proposed to carry forward this process and develop a set of protection goals relevant to Indian environmental regulations through a series of such meetings under the ongoing Phase II Biosafety Capacity Building Project.

## Workshop of Network of Laboratories for the Detection and Identification of Living Modified Organisms November 25-27, 2013, Italy

Detection and identification of living modified organisms (LMOs) is a cross-cutting issue relevant to a number of articles of the Cartagena Protocol on Biosafety. Accordingly, the capacity to detect and identify LMOs is a core requirement for the effective implementation of the provisions of the Protocol and national biosafety frameworks. Recognizing the above, an electronic network of laboratories has been established by COP-MOP with a view to bringing together representatives of laboratories involved in the detection of LMOs for sharing of information and experiences that could help facilitate the identification of LMOs. The network has been engaged in online discussion and workshops to exchange information and experience on the implementation of relevant standards and methods involved in the identification of LMOs.

In continuation to the above, a “Workshop of the Network of Laboratories for the Detection and Identification of Living Modified Organisms” was held at European

Commission's Joint Research Centre (JRC), Institute for Health and Consumer Protection, Ispra, Italy, from 25 to 27 November 2013. The specific objectives of the workshop were to develop:

- (a) A detailed implementation strategy for the detection and identification of LMOs consisting of a plan of action to assist Parties in making progress toward the outcomes of the Strategic Plan
- (b) A set of recommendations identifying possible key players and specific activities to assist in the implementation of the plan of action in (a) above.

The workshop was attended by 24 participants from 22 Parties (Antigua and Barbuda, Belarus, Brazil, Democratic Republic of the Congo, El Salvador, European Union, Germany, Hungary, India, Japan, Jordan, Kenya, Lebanon, Liberia, Lithuania, Malaysia, Mexico, Norway, Republic of Moldova, Slovenia, South Africa and the former Yugoslav Republic of Macedonia) as well as four observers from organizations (Global Industry Coalition (GIC), GenØk - Centre for Biosafety, and International Seed Testing Association (ISTA)).

Dr. Gurinderjit Randhawa, Principal Scientist, National Bureau of Plant Genetic Resources, New Delhi was nominated by the Ministry of Environment and Forests, Govt. of India to participate in the workshop. Dr. Randhawa, has led the activities in the area of GMO/LMO detection at NBPGR for more than a decade and has also collaborated with international organizations. She made a presentation on “Cost Efficient DNA based GM Detection” at the workshop. Dr. Randhawa was also nominated as moderator of one of the five authorized areas namely “Experience and Case Studies on Detection and Identification” for the compilation of technical tools and guidance.

The report of the workshop including the authorizations may be viewed at <http://bch.cbd.int/protocol/meetings/documents.shtml?eventid=5324>:

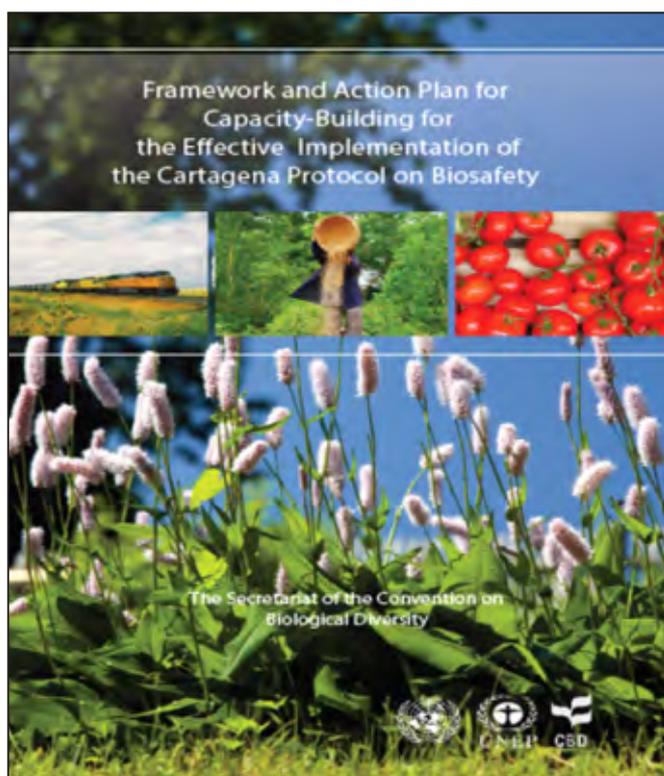


## Framework and Action Plan for Capacity-Building for the Effective Implementation of the Cartagena Protocol on Biosafety(2012 - 2020)

The publication on “Framework and Action Plan for Capacity-Building for the Effective Implementation of the Cartagena Protocol on Biosafety” has been released by Secretariat to Convention on Biological Diversity in December 2013. This framework and action plan was adopted in the sixth meeting of the Conference of the Parties serving as the meeting of the Parties (COP-MOP-6) to the Cartagena Protocol on Biosafety held at Hyderabad in October, 2012. This document is designed to serve both as a reference or guidance document and as a plan of action on capacity-building for the implementation of the Protocol. It has been prepared by taking into account the findings and recommendations of an independent evaluation of the previous action plan as well as the needs, views, experiences and lessons learned by Parties, other Governments and relevant organizations.

and procedures; the infrastructure (facilities, equipment and materials, inter-institutional networks and partnerships, and human resources); and (iii) the systemic level (including the enabling policy and legal frameworks, governance systems, external partnerships and externalities that affect the effectiveness and sustainability of capacity-building efforts).

This framework has been developed within the context of the Strategic Plan for the Protocol. In particular, it seeks to guide and assist Parties, other Governments and relevant organizations to develop, implement and evaluate biosafety capacity-building activities in a strategic, systematic, and forward-looking manner. The framework and action plan sets the overall vision; provides basic guiding principles; proposes strategic steps and tasks that Parties, other Governments and relevant organizations could take at the national, regional and international levels; and presents a results-oriented action plan to translate the ideas in the strategic plan into concrete actions and results.



In the context of this framework and action plan, capacity-building is described as the process of developing, strengthening and maintaining the capabilities needed to elaborate and implement measures to ensure the safe transfer, handling and use of living modified organisms resulting from modern biotechnology. This encompasses development of capacities at (i) the individual level (including the knowledge, skills, and competencies of individuals); (ii) the organizational level (including the institutional structures, processes

*The vision of the document is “By 2020 all Parties will have in place the requisite human resources and institutional capacities for ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health”.*

The framework is relevant to a wide range of individuals and organizations involved in the design, implementation and/or funding of biosafety capacity-building initiatives. It can be adapted to many situations and contexts to address specific capacity-building needs and challenges. It is a living tool that will be updated on the basis of the experiences gained and lessons learned from previous and ongoing global efforts.

This document can be accessed at [http://bch.cbd.int/protocol/publications/bs\\_frameworkactionplan\\_en.pdf](http://bch.cbd.int/protocol/publications/bs_frameworkactionplan_en.pdf)



# Low Level Presence of Transgenic Plants in Seed and Grain Commodities : Environmental Risk/Safety Assessment, and Availability and Use of Information



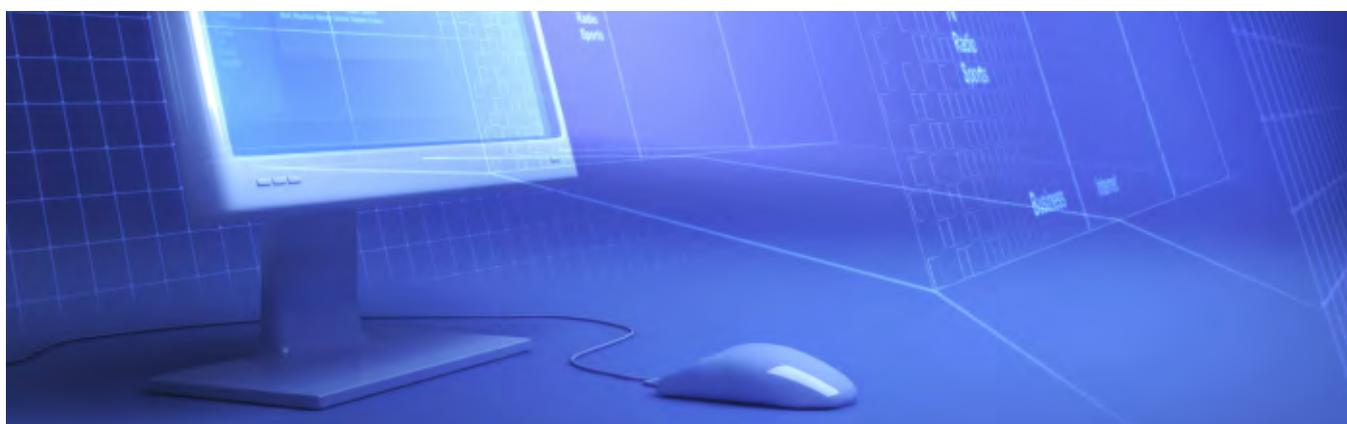
the number of such LLP incidents is likely to increase globally because of increasing numbers of transgenic seeds entering the market, the increasing international movement of seeds and/or commodities and biological factors (e.g. inadvertent cross pollination between seed production fields). It is a synthesis of current approaches to environmental risk/safety assessment, information access, and information use in addressing LLP situations in seed and includes examples of how such an assessment may be used to inform environmental risk management and returning an LLP situation to compliance with legislative mandates.

This document presents approaches to risk/safety assessment in LLP situations where there is knowledge of the identity of the unauthorized transgenic plant. It does not, however, address the question of how to establish the identity of the unauthorized transgenic plant. In addition, this document does not address low level presence situations arising from field trials for product development or basic research, or situations in which no authorization has been granted in any country, although the approach described here may be fruitfully applied in such situations. It does not address issues related to food/feed safety.

The Organisation for Economic Co-operation and Development (OECD) has published a document on “Low Level Presence (LLP) of Transgenic Plants in Seed and Grain Commodities: Environmental Risk/Safety Assessment, and Availability and Use of Information”. The scope of this document covers a situation where seed contains low levels of transgenic seed that have been reviewed for environmental risk/safety and received uthorization for commercial cultivation (unconfined release) in one or more countries but not in the country of import. This document is to serve as an aid to risk assessors and regulators conducting an environmental risk/safety assessment and accessing and using information in response to LLP situations in seed where there is asynchronous uthorization of the transgenic plant involved. It is anticipated that

This document captures the experience of the participant countries of the OECD Working Group in addressing LLP situations in the environment, particularly with regard to the scientific basis and approach for undertaking an environmental risk/safety assessment in an LLP situation in the environment (individual country experiences are captured in Annex II which includes references to national or regional guidance documents). This document can be accessed at

[http://search.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO\(2013\)19&docLanguage=En](http://search.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO(2013)19&docLanguage=En)



# Upcoming Events

Title	Organized/hosted by	Date & Venue	Website
<b>National Events</b>			
Bangalore India Bio 2014	Vision Group on Biotechnology	February 10-12 2014, Bangalore	<a href="http://www.bangaloreindiabio.in/Index_New.php">http://www.bangaloreindiabio.in/Index_New.php</a>
International Conclave on Sugar Crops & Sugar Fest - 2014 Sweeteners and Green Energy from Sugar Crops : Emerging Technologies	Society for Sugar Research and Promotion	February 15-17 2014, Lucknow	<a href="http://www.iisr.nic.in/download/InternationalConclave.pdf">http://www.iisr.nic.in/download/InternationalConclave.pdf</a>
Biennial Conference of Indian Society of Weed Science - Emerging Challenges in Weed Management	Indian Society of Weed Science and Directorate of Weed Science Research	February 15-17 2014, Jabalpur	<a href="http://isws.org.in/Bc2014/default.html">http://isws.org.in/Bc2014/default.html</a>
Indian Seed Congress 2014	National Seed Association of India	February 18-19 2014, Gandhinagar	<a href="http://nsai.co.in/events/forthcoming-events/1040.html">http://nsai.co.in/events/forthcoming-events/1040.html</a>
International Conference on "Probing Bioscience for Food Security & Environmental Safety"	Applied Zoologists Research Association (AZRA) and Central Rice Research Institute	February 16-18 2014, Cuttack, Odisha	<a href="http://www.crrri.nic.in/azra_first_circular.pdf">http://www.crrri.nic.in/azra_first_circular.pdf</a>
Seminar on "Agri Biotechnology"	Confederation of Indian Industry	February 25 2014, Chennai	<a href="http://www.cii.in/Events.aspx?gid=S">http://www.cii.in/Events.aspx?gid=S</a>
International Conclave on Sugar Crops & Sugar Fest - 2014	Society for Sugar Research and Promotion and Indian Institute of Sugarcane Research	February 15-17 2014, Lucknow	<a href="http://www.iisr.nic.in/download/InternationalConclave.pdf">http://www.iisr.nic.in/download/InternationalConclave.pdf</a>
SOYCON-2014 International Soybean Research Conference	Society for Soybean Research and Development (SSRD) in collaboration with the Directorate of Soybean Research and Indian Council of Agricultural Research	February 22-24 2014, Indore	<a href="http://www.soycon2014.com/">http://www.soycon2014.com/</a>
Workshop on Key Issues in Commercialization of Biotechnology	Department of Biotechnology, Govt. of India and Biotech Consortium India Limited, New Delhi	March 3, 2014 New Delhi	
National Seminar on GM Crops: Prospects and Issues	Kerala Agricultural University	March 17-18, 2014 Thrissur, Kerala	<a href="http://www.kau.edu/Seminars/national_seminar_cpmbm.htm">http://www.kau.edu/Seminars/national_seminar_cpmbm.htm</a>
<b>International</b>			
"Risk Assessment: The Role of Science in GMO Decision-making"	National Biotechnology Development Agency, Abuja, Nigeria) (ICGEB) Biosafety Unit, Trieste, Italy	June 30 - July 4 2014, Trieste, Italy	<a href="http://www.icgeb.org/meetings-2014.html">http://www.icgeb.org/meetings-2014.html</a>
Theoretical and Practical Course "Plant Tissue Culture: Tool for Genetic Engineering of Plants"	ICGEB and National Biotechnology Development Agency, Nigeria	August 10-23, 2014 Abuja, Nigeria	<a href="http://www.icgeb.org/meetings-2014.html">http://www.icgeb.org/meetings-2014.html</a>
13th International Symposium on the Biosafety of Genetically Modified Organisms (ISBGM013)	International Society for Biosafety Research (ISBR)	November 9-13 2014, Cape Town South Africa	<a href="http://isbr.info/ISBGM013">http://isbr.info/ISBGM013</a>
Ninth meeting of the Informal Advisory Committee on the Biosafety Clearing-House (BCH-IAC)	Secretariat of Convention on Biological Diversity	April 2-4, 2014, Ispra, Italy	<a href="http://bch.cbd.int/protocol/#tab=2">http://bch.cbd.int/protocol/#tab=2</a>
Tenth meeting of the Liaison Group on Capacity-building for Biosafety	Secretariat of Convention on Biological Diversity	April 7-9, 2014 Budapest, Hungary	<a href="http://bch.cbd.int/protocol/#tab=2">http://bch.cbd.int/protocol/#tab=2</a>

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