

**FIRST REGULAR NATIONAL REPORT ON THE IMPLEMENTATION OF THE  
CARTAGENA PROTOCOL ON BIOSAFETY**

*Origin of report*

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<i>Submission</i>	
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Date of submission:	February 2008
Time period covered by this report:	September 2003 to January 2008.

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report:

Ministry of Environment and Forests (MoEF), Government of India (GOI) has constituted a consultative group comprising of subject specialists as well as inter-ministerial representatives, research institutions and others to advise the government on matters related to the Convention on Biological Diversity and the Cartagena Protocol on Biosafety. The national report has been reviewed and deliberated by the consultative group.

Some of the documents which have been consulted for preparation of the report are given below:

1. The Environment (Protection) Act, 1986 (EPA, 1986).
2. Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/ Genetically Engineered Organisms or Cells, 1989 notified by the MoEF under EPA, 1986 herein referred as 'Rules '1989'.
3. Recombinant DNA Safety Guidelines, 1990 issued by the Department of Biotechnology (DBT), Ministry of Science and Technology (MoS&T), GOI
4. Revised Guidelines for Research in Transgenic Plants & Guidelines for Toxicity and Allergenicity

- Evaluation of Transgenic Seeds, Plants and Plant Parts, 1998 issued by DBT, GoI.
5. New Seeds Policy, 2005 issued by the Ministry of Agriculture (MoA), GOI.
  6. Biological Diversity Act, 2002 issued by the MoEF, GOI.
  7. Biological Diversity Rules, 2004 issued by the MoEF, GOI.
  8. Plant Quarantine (Regulation of Imports into India) – Order, 2003 issued by the MoA, GOI.
  9. Guidelines for import of germplasm, 2004 by National Bureau of Plant Genetic Resources (NBPGR).
  10. National Environment Policy, 2006 issued by the MoEF, GOI
  11. National Biotechnology Strategy and Policy, 2005 issued by the DBT, GOI.
  12. Food Safety & Standards Act, 2006 issued by the Ministry of Health and Family Welfare (MoH&FW), GOI.
  13. Report of the Task Force on Agriculture Biotechnology set up by the MoA under the Chairmanship of Prof. M S Swaminathan, 2004.
  14. Report of the Task Force on Recombinant Pharma set up by the MoEF under the Chairmanship of Dr R A. Mashelkar, Director General –Council for Scientific and Industrial Research (CSIR), 2005.
  15. Annual Reports of MoEF, GoI for the financial years 2005-2006 and 2006-2007.
  16. Destructive Insects & Pests Act, 1914 issued by the MoA, GOI.
  17. Prevention of Food Adulteration Act, 1954 issued by MoH&FW, GOI.
  18. DGFT Notification relating to Inclusion of GM Policy in the Foreign Trade Policy (2006-09) issued by the Ministry of Commerce and Industries (MoC&I), GOI.
  19. Gazette Notification No. GSR 584 (E) to GSR 589 (E) dated 21<sup>st</sup> September, 2006 empowering Seed Inspectors / Seed Analysts/ Laboratories notified under the Seed Act, 1966 and Seed Control Order, 1983 under the EPA, 1986.
  20. Gazette Notification No. GSR 616 (E) dated 4<sup>th</sup> October, 2006 exempting certain categories of recombinant pharma from the purview of Rules, 1989.
  21. Gazette Notification No. S.O.1519(E) dated 11<sup>th</sup> September, 2007 exempting GM food stuffs, ingredients in foodstuffs and additives from the purview of Rules, 1989.
  22. Draft Guidelines for Food Safety Assessment formulated by the Indian Council of Medical Research (ICMR).
  23. Draft notification GSR 152 (E) dated 10.03.2006 on Mandatory Labelling by the MoH&FW, GOI.
  24. Weapons of Mass Destruction and their delivery systems (Prohibition of Unlawful Activities) Act, 2005 by the Ministry of External Affairs (MEA), GOI.
  25. Report of the Sub Committee on Bt cotton and related issues constituted by the MoEF, GOI.
  26. Report of the Expert Committee on Bt brinjal constituted by the MoEF, GOI.
  27. Background documents prepared by the MoEF, DBT and Biotech Consortium India Limited (BCIL) for countrywide workshops on biosafety issues related to transgenic crops, 2002-2006.
  28. Minutes of the GEAC meetings available at <http://envfor.nic.in>.

29. Report of the National Commission on Farmers, 2006 set up by MoA, GOI.  
National Policy for Farmers, 2007 issued by MoA, GOI.

*Obligations for provision of information to the Biosafety Clearing-House*

1. Several articles of the Protocol require that information be provided to the Biosafety Clearing-House (see the list below). For your Government, if there are cases where relevant information exists but has not been provided to the Biosafety Clearing-House (BCH), describe any obstacles or impediments encountered regarding provision of that information (note: To answer this question, please check the BCH to determine the current status of your country's information submissions relative to the list of required information below. If you do not have access to the BCH, contact the Secretariat for a summary):

In accordance with Article 20, the following information has been provided on the BCH.

- a. National laws, regulations and guidelines for manufacture, import, export, storage and use of Living Modified Organisms (LMOs).
- b. Contact details of competent authorities, national focal points and emergency contacts.
- c. Capacity building project database and country needs.

Regarding other information to be provided to the BCH in respect of decisions and declarations for import/export of LMOs, India so far has neither been a Party of import or export of LMOs except imports for the purpose of research and development. During the period of reporting there has been no occurrence of unintentional/illegal transboundary movement of LMOs, which has been brought to the notice of the Government.

In respect of domestic use of LMOs, Bt cotton is the only transgenic crop approved for commercial cultivation in India.

2. Please provide an overview of information that is required to be provided to the Biosafety Clearing-House:

<i>Type of information</i>	<i>Information exists and is being provided to the Biosafety Clearing-House</i>	<i>Information exists but is not yet provided to the Biosafety Clearing-House</i>	<i>Information does not exist /not applicable</i>
a) Existing national legislation, regulations and guidelines for implementing the Protocol, as well as information required by Parties for the advance informed agreement procedure (Article 20.3(a))	X		
b) National laws, regulations and guidelines applicable to the import of LMOs intended for direct use as food or feed, or for processing (Article 11.5);	X		
c) Bilateral, multilateral and regional agreements and arrangements (Articles 14.2, 20.3(b), and 24.1);			X- NA

d) Contact details for competent national authorities (Articles 19.2 and 19.3), national focal points (Articles 19.1 and 19.3), and emergency contacts (Article 17.2 and 17.3(e));	X		
e) In cases of multiple competent national authorities, responsibilities for each (Articles 19.2 and 19.3);			X- NA
f) Reports submitted by the Parties on the operation of the Protocol (Article 20.3(e));			X- NA
g) Occurrence of unintentional transboundary movements that are likely to have significant adverse effects on biological diversity (Article 17.1);			X- No such situation has arisen
<i>Type of information</i>	<i>Information exists and is being provided to the Biosafety Clearing-House</i>	<i>Information exists but is not yet provided to the Biosafety Clearing-House</i>	<i>Information does not exist /not applicable</i>
h) Illegal transboundary movements of LMOs (Article 25.3);			X- No such situation has arisen
i) Final decisions regarding the importation or release of LMOs (i.e. approval or prohibition, any conditions, requests for further information, extensions granted, reasons for decision) (Articles 10.3 and 20.3(d));			X- No such notification has been received.
j) Information on the application of domestic regulations to specific imports of LMOs (Article 14.4);	Rules, 1989 under the domestic legislation would apply.		
k) 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);			X- Nil
l) 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 11.4) or in accordance with annex III (Article 11.6) (requirement of Article 20.3(d))			X- No imports permitted
m) Declarations regarding the framework to be used for LMOs intended for direct use as food or feed, or for processing (Article 11.6)	Rules, 1989 under the domestic legislation would apply.		

n) Review and change of decisions regarding intentional transboundary movements of LMOs (Article 12.1);			X- None
o) LMOs granted exemption status by each Party (Article 13.1)			X- None
p) Cases where intentional transboundary movement may take place at the same time as the movement is notified to the Party of import (Article 13.1);			X- None
q) Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and relevant information regarding products thereof (Article 20.3(c)).	X- Information has been provided.		

*Article 2 – General provisions*

3. Has your country introduced the necessary legal, administrative and other measures for implementation of the Protocol? (Article 2.1)	
a) full domestic regulatory framework in place (please give details below)	X
b) some measures introduced (please give details below)	
c) no measures yet taken	
4. Please provide further details about your response to the above question, as well as description of your country's experiences and progress in implementing Article 2, including any obstacles or impediments encountered:	
<p>The Government of India had enacted the Environment (Protection) Act in 1986 to provide for protection and improvement of environment and related matters. Under this Act, the rules and procedures for the manufacture, import, use, research and release of GMOs as well as products made by use of such organisms were notified by the MoEF vide Notification No. 621 in Official Gazette of Government of India on December 5, 1989. These rules and regulations cover the areas of research as well as large-scale applications of GMOs and products made therefrom throughout India. The rules cover activities involving manufacture, use, import, export, storage and research. The notification orders compliance of safeguards and any non-compliance including non-reporting of an activity in this area would attract punitive actions provided under the EPA.</p> <p>These rules also define the competent authorities and composition of committees for handling various matters under the rules. Presently there are five functional competent authorities as mentioned below:</p> <ol style="list-style-type: none"> <li>I. Institutional Biosafety Committee (IBSC)</li> <li>II. Review Committee on Genetic Manipulation (RCGM)</li> <li>III. Genetic Engineering Approval Committee (GEAC)</li> <li>IV. State level Biotechnology Coordination Committees (SBCC)</li> <li>V. District Level Committees (DLC):</li> </ol> <p>IBSC, RCGM and GEAC are of regulatory function and SBCC and DLCs are for monitoring purposes. The Rules mandate that every institution engaged in GMO research must establish an IBSC to oversee such research and to interface with the RCGM in regulating it. The RCGM working under the DBT</p>	

supervises research activities involving the use of GMOs whereas approvals for environmental release (including confined field trials) of GMOs are given by the GEAC, established under the MoEF. The SBCC and DLC at the State level play major roles in monitoring and enforcement mechanisms.

India's Custom's Department enforces compliance of Rules, 1989 at the point of entry through the provisions of the Foreign Trade Policy Notification, 2006.

*Articles 7 to 10 and 12: The advance informed agreement procedure*

See question 1 regarding provision of information to the Biosafety Clearing-House.

5. Were you a Party of import during this reporting period?	
a) yes	
b) no	X
6. Were you a Party of export during this reporting period?	
a) yes	
b) no	X
7. Is there a legal requirement for the accuracy of information provided by exporters <sup>1/</sup> under the jurisdiction of your country? (Article 8.2)	
a) yes	X
b) not yet, but under development	
c) no	
d) not applicable – not a Party of export	
8. If you were a Party of export during this reporting period, did you request any Party of import to review a decision it had made under Article 10 on the grounds specified in Article 12.2?	
a) yes (please give details below)	
b) not yet, but under development	
c) no	
d) not applicable – not a Party of export	X
9. Did your country take decisions regarding import under domestic regulatory frameworks as allowed by Article 9.2(c).	
a) yes	
b) no	X
c) not applicable – no decisions taken during the reporting period	
10. If your country has been a Party of export of LMOs intended for release into the environment during the reporting period, please describe your experiences and progress in implementing Articles 7 to 10 and 12, including any obstacles or impediments encountered:	
Not applicable since India has not been a Party of export of LMOs during the reporting period.	

<sup>1/</sup> The use of terms in the questions follows the meanings accorded to them under Article 3 of the Protocol.

11. If your country has taken decisions on import of LMOs intended for release into the environment during the reporting period, please describe your experiences and progress in implementing Articles 7 to 10 and 12, including any obstacles or impediments encountered:

No such decisions have been taken since India has not been a Party of import of LMOs for the purpose of intentional release into the environment during the reporting period.

*Article 11 – Procedure for living modified organisms intended for direct use as food or feed, or for processing*

See question 1 regarding provision of information to the Biosafety Clearing-House.

12. Is there a legal requirement for the accuracy of information provided by the applicant with respect to the domestic use of a living modified organism that may be subject to transboundary movement for direct use as food or feed, or for processing? (Article 11.2)

a) yes

X

b) not yet, but under development

c) no

d) not applicable (please give details below)

13. Has your country indicated its needs for financial and technical assistance and capacity-building in respect of living modified organisms intended for direct use as food or feed, or for processing? (Article 11.9)

a) yes (please give details below)

X

b) no

c) not relevant

14. Did your country take decisions regarding import under domestic regulatory frameworks as allowed by Article 11.4?

a) yes

b) no

c) not applicable – no decisions taken during the reporting period

X

15. If your country has been a Party of export of LMOs intended for direct use for food or feed, or for processing, during the reporting period, please describe your experiences and progress in implementing Article 11, including any obstacles or impediments encountered:

Since India has not been Party of export of LMOs for the purpose of food, feed or processing during the reporting period we have no experience in the implementation of Article 11.

16. If your country has been a Party of import of LMOs intended for direct use for food or feed, or for processing, during the reporting period, please describe your experiences and progress in implementing Article 11, including any obstacles or impediments encountered:

Since India has not been a Party of import of LMOs for the purpose of food, feed or processing during the reporting period we have no experience in the implementation of Article 11.

*Article 13 – Simplified procedure*

See question 1 regarding provision of information to the Biosafety Clearing-House.

17. Have you applied the simplified procedure during the reporting period?	
a) yes	
b) no	X
18. If your country has used the simplified procedure during the reporting period, or if you have been unable to do so for some reason, please describe your experiences in implementing Article 13, including any obstacles or impediments encountered:	
No simplified procedure has been adopted by India in implementing Article 13 during the reporting period.	

*Article 14 – Bilateral, regional and multilateral agreements and arrangements*

See question 1 regarding provision of information to the Biosafety Clearing-House.

19. Has your country entered into any bilateral, regional or multilateral agreements or arrangements?	
a) yes	
b) no	X
20. If your country has entered into bilateral, regional or multilateral agreements or arrangements, or if you have been unable to do so for some reason, describe your experiences in implementing Article 14 during the reporting period, including any obstacles or impediments encountered:	
Since India has neither been a Party of import or Party of export of LMOs, we have not entered into any bilateral, regional or multi-lateral agreements or arrangements as per the provisions of Article 14 during the reporting period.	

*Articles 15 and 16 – Risk assessment and risk management*

21. If you were a Party of import during this reporting period, were risk assessments carried out for all decisions taken under Article 10? (Article 15.2)	
a) yes	
b) no (please clarify below)	
c) not a Party of import / no decisions taken under Article 10	X
22. If yes to question 21, did you require the exporter to carry out the risk assessment?	
a) yes – in all cases	
b) yes – in some cases (please specify the number and give further details below)	
c) no	
d) not a Party of import / no decisions taken under Article 10	X
23. If you took a decision under Article 10 during the reporting period, did you require the notifier to bear the cost of the risk assessment? (Article 15.3)	
a) yes – in all cases	
b) yes – in some cases (please specify the number and give further details below)	
c) no	



d) not a Party of import / no decisions taken under Article 10	X
24. Has your country established and maintained appropriate mechanisms, measures and strategies to regulate, manage and control risks identified in the risk assessment provisions of the Protocol? (Article 16.1)	
a) yes – fully established	X
b) not yet, but under development or partially established (please give further details below)	
c) no	
25. Has your country adopted appropriate measures to prevent unintentional transboundary movements of living modified organisms? (Article 16.3)	
a) yes – fully adopted	X
b) not yet, but under development or partially adopted (please give further details below)	
c) no	
26. Does your country endeavour to ensure that any living modified organism, whether imported or locally developed, undergoes an appropriate period of observation commensurate with its life-cycle or generation time before it is put to its intended use? (Article 16.4)	
a) yes – in all cases	X
b) yes – in some cases (please give further details below)	
c) no (please give further details below)	
d) not applicable (please give further details below)	
27. Has your country cooperated with others for the purposes specified in Article 16.5?	
a) yes (please give further details below)	X
b) no (please give further details below)	
28. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Articles 15 and 16, including any obstacles or impediments encountered:	
<p>All decisions on the import and domestic use of living modified organisms are made by the GEAC on the basis of thorough assessment of the potential risks posed by the organism, as per stringent requirements under the Rules, 1989 and Biosafety Guidelines of 1994 and 1998. Risk assessment requirements under the Rules, 1989 are consistent with the requirements under the Protocol and as are provided for in Annex III.</p> <p>India is in the process of further strengthening the institutional capabilities and core competence of the personnel for implementation of Article 15 and 16 of the Protocol.</p>	

*Article 17 – Unintentional transboundary movements and emergency measures*

See question 1 regarding provision of information to the Biosafety Clearing-House.

29. During the reporting period, if there were any occurrences under your jurisdiction that led, or could have led, to an unintentional transboundary movement of a living modified organism that had, or could have had, significant adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health in such States, did you immediately consult the affected or potentially affected States for the purposes specified in Article 17.4?	
a) yes – all relevant States immediately	
b) yes – partially consulted, or consultations were delayed (please clarify below)	
c) no – did not consult immediately (please clarify below)	
d) not applicable (no such occurrences)	X
30. Please provide further details about your response to the above question, as well as description of your country's experiences in implementing Article 17, including any obstacles or impediments encountered:	
During the reporting period, there were no known occurrences under Indian jurisdiction that led, or could have led, to an unintentional transboundary movement of a living modified organism that had, or could have had, significant adverse effects on the conservation and sustainable use of biological diversity and/or human health.	

*Article 18 – Handling, transport, packaging and identification*

31. Has your country taken measures to require that living modified organisms that are subject to transboundary movement within the scope of the Protocol are handled, packaged and transported under conditions of safety, taking into account relevant international rules and standards? (Article 18.1)	
a) yes (please give details below)	X
b) not yet, but under development	
c) no	
d) not applicable (please clarify below)	
32. Has your country taken measures to require that documentation accompanying living modified organisms for direct use as food or feed, or for processing, clearly identifies that they 'may contain' living modified organisms and are not intended for intentional introduction into the environment, as well as a contact point for information? (Article 18.2(a))	
a) yes	X
b) not yet, but under development	
c) no	
33. Has your country taken measures to require that documentation accompanying living modified organisms that are destined for contained use clearly identifies them as living modified organisms and specifies any requirements for the safe handling, storage, transport and use, the contact point for further information, including the name and address of the individual and institution to whom the living modified organisms are consigned? (Article 18.2(b))	
a) yes	X
b) not yet, but under development	

c) no	
34. Has your country adopted measures to require that documentation accompanying living modified organisms that are intended for intentional introduction into the environment of the Party of import and any other living modified organisms within the scope of the Protocol, clearly identifies them as living modified organisms; specifies the identity and relevant traits and/or characteristics, any requirements for the safe handling, storage, transport and use, the contact point for further information and, as appropriate, the name and address of the importer and exporter; and contains a declaration that the movement is in conformity with the requirements of this Protocol applicable to the exporter? (Article 18.2(c))	
a) yes	X
b) not yet, but under development	
c) no	
35. Please provide further details about your responses to the above questions, as well as a description of your country's experiences and progress in implementing Article 18, including any obstacles or impediments encountered:	
<p>During the reporting period, India has neither been an importer nor exporter of LMOs except for the purpose of research and therefore experience in implementing Article 18 is limited to that extent. However, domestic regulations are in place, which require prior approval of competent authorities, before import /export of LMOs irrespective of the purpose it is being imported for.</p> <p>In respect of imports of LMOs for the purpose of contained use, r DNA Biosafety Guidelines, 1990 stipulate detailed procedure for import including the type of containment, packaging, labelling, contact point and documents to accompany shipment. NBPGR is the nodal institute for import of LMOs (transgenic plant materials) for research purpose. Clearance for import of transgenic plant material, for research purposes is issued by the RCGM under Rules, 1989 based on the safety of the material and the national need and taking into consideration the facilities available with the importer for in-soil tests on the transgenic material. The importer of a transgenic plant material is required to furnish, an appropriate phyto-sanitary certificate issued by the authority of the country of export. Such imports are required to be routed through the Director, NBPGR on the basis of the import permit issued by the RCGM.</p>	

*Article 19 – Competent national authorities and national focal points*

See question 1 regarding provision of information to the Biosafety Clearing-House.

*Article 20 – Information-sharing and the Biosafety Clearing-House*

See question 1 regarding provision of information to the Biosafety Clearing-House.

36. In addition to the response to question 1, please describe any further details regarding your country's experiences and progress in implementing Article 20, including any obstacles or impediments encountered:
<p>The information on national legislations, guidelines and decisions taken under the domestic regulatory framework in respect of LMOs have been posted on the national BCH ( <a href="http://indbch.nic.in">http://indbch.nic.in</a>). Details of approvals under domestic regulatory framework may be viewed at <a href="http://www.envfor.nic.in/divisions/csurv/geac/geac_home.html">http://www.envfor.nic.in/divisions/csurv/geac/geac_home.html</a>, <a href="http://dbtbiosafety.nic.in">http://dbtbiosafety.nic.in</a> and <a href="http://www.igmoris.nic.in">http://www.igmoris.nic.in</a>.</p>

*Article 21 – Confidential information*

37. Does your country have procedures to protect confidential information received under the Protocol and that protect the confidentiality of such information in a manner no less favourable than its treatment of confidential information in connection with domestically produced living modified organisms? (Article 21.3)	
a) yes	X
b) not yet, but under development	
c) no	
38. If you were a Party of import during this reporting period, did you permit any notifier to identify information submitted under the procedures of the Protocol or required by the Party of import as part of the advance informed agreement procedure that was to be treated as confidential? (Article 21.1)	
a) yes	
If yes, please give number of cases	
b) no	
c) not applicable – not a Party of import / no such requests received	X
39. If you answered yes to the previous question, please provide information on your experience including description of any impediments or difficulties encountered:	
Since India has not been a Party of import, we have no experience in implementing the Article 21.1	
40. If you were a Party of export during this reporting period, please describe any impediments or difficulties encountered by you, or by exporters under your jurisdiction if information is available, in the implementation of the requirements of Article 21:	
Since India has not been a Party of export, we have no experience in implementing the Article 21.	

*Article 22 – Capacity-building*

41. If a developed country Party, during this reporting period has your country cooperated in the development and/or strengthening of human resources and institutional capacities in biosafety for the purposes of the effective implementation of the Protocol in developing country Parties, in particular the least developed and small island developing States among them, and in Parties with economies in transition?	
a) yes (please give details below)	
b) no	
c) not applicable – not a developed country Party	X
42. If yes to question 41, how has such cooperation taken place:	
Not applicable.	
43. If a developing country Party, or Party with an economy in transition, during this reporting period has your country contributed to the development and/or strengthening of human resources and institutional capacities in biosafety for the purposes of the effective implementation of the Protocol in another developing country Party or Party with an economy in transition?	
a) yes (please give details below)	X

b) no	
c) not applicable – not a developing country Party	
44. If yes to question 43, how has such cooperation taken place:	
India has contributed in training personnel from other developing countries. Furthermore, Indian biosafety experts participated in the workshops organized by the Govt. of Vietnam, Thailand, Sri Lanka, Malaysia and others for exchange of information, sharing of experiences on implementation of the national biosafety regulations, risk assessment and management and other related issues. Under the GEF-World Bank project an international conference on implementation of Cartagena Biosafety Protocol was organised at New Delhi in November, 2006.	
45. If a developing country Party or a Party with an economy in transition, have you benefited from cooperation for technical and scientific training in the proper and safe management of biotechnology to the extent that it is required for biosafety?	
a) yes – capacity-building needs fully met (please give details below)	
b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	
46. If a developing country Party or a Party with an economy in transition, have you benefited from cooperation for technical and scientific training in the use of risk assessment and risk management for biosafety?	
a) yes – capacity-building needs fully met (please give details below)	
b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	
47. If a developing country Party or a Party with an economy in transition, have you benefited from cooperation for technical and scientific training for enhancement of technological and institutional capacities in biosafety?	
a) yes – capacity-building needs fully met (please give details below)	
b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	

48. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Article 22, including any obstacles or impediments encountered:

Recognizing capacity building as a critical element for effective implementation of Cartagena Protocol on Biosafety, the GOI through its various ministries/departments (MoEF, DBT, MoA, MoH&FW) has initiated several capacity building activities.

With the support of GEF-World Bank, a capacity building project has been completed to enhance national capacity in order to implement the various provisions of Cartagena Protocol on Biosafety. The objective of the project was to address the capacity building needs of the country for implementing the national biosafety framework related to the transboundary movement of LMOs.

Four research institutions have been strengthened in terms of institutional and technical capacities to assess, manage and monitor risks associated with biosafety.

- Central Food Technological Research Institute (CFTRI), Mysore
- National Bureau of Plant Genetic Resources (NBPGR), New Delhi
- National Research Centre on Plant Biotechnology (NRCPB), New Delhi and
- G.B. Pant University of Agriculture and Technology (GBPUAT), Pantnagar

Training of experts has been undertaken in risk assessment and management including a review of the regulations, guidelines and procedures with particular reference to information / data requirements in India by regulatory authorities. To ensure systematic training programmes, a training needs assessment survey was undertaken followed by extensive training programmes across the country for capacity building of various stakeholders to strengthen the institutional and legal framework for the implementation of Protocol at central and state levels and also in specialized institutions. In order to facilitate information sharing and networking within the country various publications and documents including a Biosafety Newsletter are brought out regularly. A separate website on capacity building on biosafety has been created to upload information about capacity building activities.

An International Conference on the Implications of the Cartagena Protocol on Biosafety was organized in New Delhi, India from November 20-22, 2006, under the GEF-World Bank Capacity Building Project on Biosafety. The objective of the conference was to identify areas and strengthen capacity among key stakeholders and share country and regional experiences about biosafety issues. Speakers from UN agencies and other international organizations *viz.* World Bank, UNU, UNEP-GEF, ICGEB and USAID participated in the Conference. Many eminent scientists and experts from various countries *viz.* India, Canada, Mexico, Colombia, Philippines, Ghana and China deliberated in the Conference and shared their views on biosafety. Various issues that were discussed include international and national efforts for implementation of the Cartagena Protocol on Biosafety, capacity building in biosafety, labeling of LMOs, risk assessment and detection of LMOs, information sharing and the Biosafety Clearing House, etc. The conference was attended by 175 participants representing a cross section of stakeholders from concerned Ministries at the Centre, State governments, research institutions, universities, industry, media etc.

GEF-World Bank supported capacity-building project was designed in such a way so as to consolidate capacity building efforts in the country. Each of the activities addressed gaps or barriers that have been identified during the project preparation and implementation process. Capacity building activities were designed to strengthen not only the capabilities of the focal point to the Protocol, but also of key Ministries, agencies and scientific research institutions. However, capacity building on biosafety is seen as a continuous effort rather than an isolated activity. Therefore, efforts are being made to initiate Phase II Capacity Building Project which envisions wider participation of institutions and stakeholders.

India also participated in the FAO Regional Capacity Building Project on Biosafety of GM Crops. The project involves regional consultation for standardization of procedures for risk assessment / management (double verification and GMO detection); public awareness of GMOs including material and methodologies for effective out reach and establishment of Asian Bionet.

India being a vast and diverse country, additional cooperation and financial resources are required for building capacity of its personnel for implementation of the various provisions of the Protocol and harmonizing it with domestic and international biosafety regulations. With the rapid advancements being made in the areas of modern biotechnology there is a need for a continuous sharing of best practices in biosafety regulations to ensure effective implementation of the Protocol.

*Article 23 – Public awareness and participation*

49. Does your country promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms in relation to the conservation and sustainable use of biological diversity, taking also into account risks to human health? (Article 23.1(a))	
a) yes – significant extent	X
b) yes – limited extent	
c) no	
50. If yes, do you cooperate with other States and international bodies?	
a) yes – significant extent	
b) yes – limited extent	X
c) no	
51. Does your country endeavour to ensure that public awareness and education encompass access to information on living modified organisms identified in accordance with the Protocol that may be imported? (Article 23.1(b))	
a) yes – fully	
b) yes – limited extent	X
c) no	
52. Does your country, in accordance with its respective laws and regulations, consult the public in the decision-making process regarding living modified organisms and make the results of such decisions available to the public? (Article 23.2)	
a) yes – fully	X
b) yes – limited extent	
c) no	
53. Has your country informed its public about the means of public access to the Biosafety Clearing-House? (Article 23.3)	
a) yes – fully	X
b) yes – limited extent	
c) no	

54. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Article 23, including any obstacles or impediments encountered:

With the release of Bt cotton, the first LMO, extensive efforts have been made to create awareness amongst all stakeholders such as scientists, industry, government departments, NGOs, farmers, etc. Series of workshops have been conducted to sensitize various stakeholders regarding domestic regulatory requirements and the provisions of the Cartagena Protocol. The stakeholders are given opportunities to present their views in the regulatory meetings. The biosafety data, views of various stakeholders and decisions are available in the public domain ([http://www.envfor.nic.in/divisions/csurv/geac/geac\\_home.html](http://www.envfor.nic.in/divisions/csurv/geac/geac_home.html) and <http://www.igmoris.nic.in> ).

With the release of Bt cotton, the first LMO in the country, extensive efforts have been made to create awareness amongst all stakeholders such as scientists, industry, government departments, NGOs, farmers, etc. Series of workshops have been conducted to sensitize various stakeholders regarding domestic regulatory requirements and the provisions of the Cartagena Protocol. The priority area for training are identified for specific stakeholders followed by conduct of workshops. The stakeholders are given opportunities to present their views in the regulatory meetings. The local level workshops are held in regional languages to ensure better interaction. The biosafety data, views of various stakeholders and decisions are available in the public domain ([http://www.envfor.nic.in/divisions/csurv/geac/geac\\_home.html](http://www.envfor.nic.in/divisions/csurv/geac/geac_home.html) and <http://www.igmoris.nic.in> ).

In addition to the websites, other information tools viz. publications and documents were prepared and distributed widely for creating public awareness. Efforts were made to prepare documents specific to the needs of various stakeholders and also in different languages so as to ensure wider outreach to different sections of the society. Some of the important documents are as follows:

1. Biosafety Information Kit
2. Project Implementation Guide Book
3. Capacity Building on Biosafety :Training Needs Assessment
4. Biosafety : Issues and Challenges
5. Rice Biology Document
6. Crop Biotech & Biosafety
7. Documents for SBCC, DLC & IBSc
8. Biosafety and Mass Media
9. Proceedings of the International Conference on the Implications of the Cartagena Protocol on Biosafety
10. Training Manual on Biosafety concerns of transgenics and detection of LMOs
11. Training Manual on National training Workshop on Biosafety and Web resources in GMOs
12. Training Manual on Biosafety Issues and Web Resources in GMOs
13. Training Manual on Molecular Testing and Diagnostic Methods for Transgenic Crops
14. Training Manual on Biosafety issues in the Management of Genetically Modified Crops
15. Training Manual on Biosafety Measures for monitoring of Deliberate and unintended release of Transgenic Crops
16. Critical Control points in Genetically Modified Seed Production
17. Technical Bulletin of GM Crops Database: An Interactive Web Resource
18. Training Programme for Legal Practitioners & Legal Officers on the Implementation of the Cartagena Protocol on Biosafety in India
19. Document on Launching Workshop on Biosafety



20. Environmental Risk Assessment, socio-Economic Considerations and Decision-Making Support for LMOs in India  
 21. Pre-market Biosafety and Risk Assessment of GM crops and GM-derived Products  
 22. Biosafety News Letters.  
 23. Documentary on GEF – World Bank Capacity Building Project.

*Article 24 – Non-Parties*

See question 1 regarding provision of information to the Biosafety Clearing-House.

55. Have there been any transboundary movements of living modified organisms between your country and a non-Party during the reporting period?	
a) yes	
b) no	X
56. If there have been transboundary movements of living modified organisms between your country and a non-Party, please provide information on your experience, including description of any impediments or difficulties encountered:	
Not applicable.	

*Article 25 – Illegal transboundary movements*

See question 1 regarding provision of information to the Biosafety Clearing-House.

57. Has your country adopted appropriate domestic measures to prevent and penalize, as appropriate, transboundary movements of living modified organisms carried out in contravention of its domestic measures? (Article 25.1)	
a) yes	X
b) no	
58. Have there been any illegal transboundary movements of living modified organisms into your country during the reporting period?	
a) yes	
b) no	X
59. Please provide further details about your response to the above question, as well as description of your country's experiences in implementing Article 25, including any obstacles or impediments encountered:	
Not applicable.	

*Article 26 – Socio-economic considerations*

60. If during this reporting period your country has taken a decision on import, did it take into account socio-economic considerations arising from the impact of living modified organisms on the conservation and sustainable use of biological diversity, especially with regard to the value of biological diversity to indigenous and local communities? (Article 26.1)	
a) yes – significant extent	
b) yes – limited extent	
c) no	

d) not a Party of import	X
61. Has your country cooperated with other Parties on research and information exchange on any socio-economic impacts of living modified organisms, especially on indigenous and local communities? (Article 26.2)	
a) yes – significant extent	
b) yes – limited extent	
c) no	X
62. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Article 26, including any obstacles or impediments encountered:	
Since India has been neither a Party of import or export of LMOs, no occasion for cooperation with other parties on research and information exchange on socio economic aspects of Living Modified Organisms arose during the reporting period.	

*Article 28 – Financial mechanism and resources*

63. Please indicate if, during the reporting period, your Government made financial resources available to other Parties or received financial resources from other Parties or financial institutions, for the purposes of implementation of the Protocol.	
a) yes – made financial resources available to other Parties	
b) yes – received financial resources from other Parties or financial institutions	X
c) both	
d) neither	
64. Please provide further details about your response to the above question, as well as description of your country's experiences, including any obstacles or impediments encountered:	
India has sourced funding from GEF through the World Bank for a capacity building project on biosafety. The project has been successfully completed in June, 2007. India has also put in a request for funding the phase-II of the GEF project.	

*Other information*

65. Please use this box to provide any other information related to articles of the Protocol, questions in the reporting format, or other issues related to national implementation of the Protocol:
A. India has been neither an importer nor exporter of LMOs except for the purpose of research and contained use. During the reporting period the Govt. has taken a decision to release of Bt cotton. In addition, India is in the process of developing several transgenic crops of which Bt brinjal (eggplant) is in the advanced stage of testing.
B. List of acronyms used in the report is annexed (Annex I).

*Comments on reporting format*

The wording of these questions is based on the Articles of the Protocol. Please provide information on any difficulties that you have encountered in interpreting the wording of these questions:

No specific constraints have been encountered in interpreting the wordings of the questions. However, there should be more options such as 'yes', 'to a large extent' in addition to 'a full extent' and 'a limited
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extent' in questions 49 to 53.