



# CONVENTION ON BIOLOGICAL DIVERSITY

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

Second meeting

Montreal, 30 May-3 June 2005

Item 14 of the provisional agenda\*

## **SOCIO-ECONOMIC CONSIDERATIONS: COOPERATION ON RESEARCH AND INFORMATION EXCHANGE (ARTICLE 26, PARAGRAPH 2)**

*Note by the Executive Secretary*

### **I. INTRODUCTION**

1. At its first meeting, the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety adopted a medium-term programme of work for the period covering from its second to the fifth meetings. According to the medium-term programme of work, the second meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety is expected to consider, among other things, the issue of socio-economic considerations as provided for under Article 26 of the Biosafety Protocol. The programme of work further indicates that the focus of this meeting should be issues relating to cooperation on research and information exchange on any socio-economic impacts of living modified organisms, especially on indigenous and local communities, as specified in paragraph 2 of Article 26.

2. The present note has, therefore, been prepared by the Executive Secretary to assist the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety in its consideration of the issue of cooperation on research and exchange of information on socio-economic impacts of living modified organisms in the context of paragraph 2 of Article 26 of the Protocol. The note briefly describes, in section II, the background to Article 26 of the Protocol. Section III provides a summary of some existing processes where socio-economic impacts of technologies in general, and socio-economic impacts of living modified organisms in particular, have been under consideration. This is not intended to be exhaustive, as there might be more processes and arrangements both at national and international level than those discussed herein, which may be relevant or useful to draw lessons from. Section IV highlights some opportunities available for cooperation on research and exchange of information regarding socio-economic impacts of living modified organisms. Again, this is rather an indicative list of opportunities or possible avenues for advancing cooperation regarding socio-economic impacts of living modified organisms. Finally, section V of the note proposes elements of a draft decision for consideration by the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety.

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\* UNEP/CBD/BS/COP-MOP/2/1.

## II. SOCIO-ECONOMIC CONSIDERATIONS IN THE BIOSAFETY PROTOCOL

3. Socio-economic considerations of the impacts of living modified organisms were from the outset brought up during the negotiations for the Biosafety Protocol and were among the issues that continued to divide the negotiators throughout the negotiations process. Some countries considered that the subject raised broad and complex issues that would render implementation of any legal provision on it difficult and counter-productive. There was a concern that the consideration of the social and economic impacts of living modified organisms by Parties of import could lead to discrimination and protectionism. The wide scope of such considerations, it was argued, could easily be used to erect undue trade barriers and to distort international trade in these products.

4. Other countries, however, expressed their concern regarding a number of adverse impacts that they thought the introduction of products of modern biotechnology would potentially have on their societies and economies. Many potential importers of living modified organisms were concerned that these organisms could undermine the livelihoods of their farmers, and indigenous and local communities through the possible displacement of local varieties, loss of markets and employment, and posing threat to their cultural and ethical values. They argued that the introduction of living modified organisms could erode their diverse agricultural systems and undermine the value of biological diversity, its conservation and sustainable use.

5. At the end of the first negotiating meeting, the Secretariat was asked to prepare a study on socio-economic impacts of biotechnology, which later changed to a request to compile a bibliography of existing literature on both positive and negative potential socio-economic impacts of biotechnology. The bibliography was compiled and submitted to the second meeting of the Biosafety Working Group (BSWG). <sup>1/</sup> The bibliography was extensive and the literature has been increasingly growing since corroborating the breadth of the issues involved and the growing interest in the subject.

6. A compromise was finally reached, as reflected in Article 26 of the Protocol. The first paragraph of this Article provides for the possibility of taking into account socio-economic considerations in reaching a decision on whether to import living modified organisms by a Party of import. In doing so, Parties are required to ensure that their acts are consistent with their international obligations. The second paragraph encourages Parties to cooperate on research and information exchange on any socio-economic impacts of living modified organisms, especially on indigenous and local communities.

## III. SOCIO-ECONOMIC CONSIDERATIONS UNDER OTHER PROCESSES AND ARRANGEMENTS

### A. *The United Nations*

7. In accordance with General Assembly resolution 56/182 of 21 December 2001, on science and technology for development, the Secretary General of the United Nations submitted to the General Assembly at its fifty-eighth session a report entitled on the impact of new biotechnologies, with particular attention to sustainable development, including food security, health and economic productivity. <sup>2/</sup> The report contains an overview of the global impact of biotechnology and particularly the impact of this technology in developing countries.

8. The report also highlights some of the concerns related to biotechnology. It mentions that biotechnology has the potential to displace several chemical products, particularly agricultural products, and to dislocate production bases and as a consequence local markets and livelihoods as a result of the possibility of growing, using this technology, various plants outside of their normal geographical ranges. It also points out how patenting of products that have already been used by people in developing countries have tainted the image of biotechnology industry. The report summarizes these issues as constituting

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<sup>1/</sup> UNEP/CBD/BSWG/2/4  
<sup>2/</sup> Document A/58/76 of 9 May 2003.

economic risks associated with biotechnology that need to be addressed in order to resolve some of the existing controversies surrounding the technology. <sup>3/</sup>

### **B. The World Bank**

9. Projects proposed for financing by the World Bank are required to go through environmental assessment in order to ensure that they are environmentally sound and sustainable. According to operational policy 4.01 in the Bank's operational manual of January 1999, environmental assessment takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary settlement, indigenous peoples, and cultural property); and transboundary and global environmental aspects. Global environmental issues include adverse impacts on biological diversity.

10. The Bank requires consultations with project-affected groups and local non-governmental organizations for projects with major social components such as those affecting indigenous peoples. <sup>4/</sup> There is also a separate operational directive (OD 4.20) of the Bank that addresses the concerns of indigenous peoples.

11. Neither the manual nor the directive of the World Bank can appropriately be extended to envisage the possible consideration of socio-economic impacts of living modified organisms in the context of the Biosafety Protocol. However, it is important to note that the practice of analysing the social and economic impacts of planned projects or activities has been well established for a very long time, as part of environmental impact assessment, a tool which is widely used to evaluate potential impacts and to arrive at decisions that ensure environmentally sound and sustainable outcome.

### **C. Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)**

12. The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) is one of the agreements under the World Trade Organization (WTO). It applies to all sanitary and phytosanitary measures that affect trade. SPS measures that WTO members may take are required to be based on an assessment appropriate to the circumstance. <sup>5/</sup>

13. There are relevant economic factors that WTO members are required to take into account in assessing the risk to animal or plant life or health and determining the appropriate measure to be applied. These factors are: the potential damage in terms of loss of production or sales in the event of entry, establishment or spread of a pest or disease; the costs of control or eradication in the territory of the importing Member; and the relative cost-effectiveness of alternative approaches to limiting risks. <sup>6/</sup>

### **D. Convention on Biological Diversity**

14. Article 14 of the Convention on Biological Diversity contains provisions on impact assessment and liability and redress for damage to biological diversity. In an effort to promote impact assessment with a view to avoiding or minimizing adverse impacts on biological diversity, the Conference of the Parties has taken a number of actions since its fourth meeting. Information on impact assessments that consider environmental effects and interrelated socio-economic aspects relevant to biological diversity, strategic environmental assessments, existing legislation on environmental impact assessments, and on case-studies relating to environmental impact assessments, was gathered and synthesized by the Secretariat and reviewed by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). At its sixth meeting, the Conference of the Parties adopted guidelines on impact assessment

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<sup>3/</sup> Ibid., p. 9.

<sup>4/</sup> It should be noted that both the Convention on Biological Diversity and the Biosafety Protocol use the term "indigenous and local communities".

<sup>5/</sup> SPS Agreement, Article 5, para. 1.

<sup>6/</sup> Ibid., para. 5.

developed in collaboration with the International Association for Impact Assessment (IAIA) and considered and submitted to it by SBSTTA. <sup>7/</sup>

15. According to the guidelines, environmental impact assessment is “a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human health impacts, both beneficial and adverse”. <sup>8/</sup>

16. The Conference of the Parties also adopted, pursuant to Article 8(j) and Article 14 of the Convention, recommendations for the conduct of cultural, environmental, and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities. <sup>9/</sup> The section on socio-economic impact assessments calls for the conduct of analysis of various factors, including employment, income and asset distribution, and traditional systems of production. It emphasizes the need for evaluating the potential effects to indigenous and local communities such as in terms of job opportunities, access to markets and income generation. The recommendations also include the development and use of socio-economic indicators in consultation with the concerned communities, giving due consideration to, among other things, health, safety, food and livelihood security aspects and the possible effects on social cohesion and mobilization.

17. The note by the Executive Secretary <sup>10/</sup> prepared for the second meeting of the Ad Hoc Open-Ended Inter-Sessional Working Group on Article 8(j) and Related Provisions, entitled “Background to the draft guidelines or recommendations for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on sacred sites and on lands and waters occupied or used by indigenous and local communities”, describes the scope of social impact assessments. Accordingly, social impacts are “impacts which may affect the well-being, vitality and variability of a community- that is, the quality of life of a community measured in terms of various socio-economic indicators, such as income distribution, employment levels and opportunities, health and welfare, (...) infrastructure, and services.” <sup>11/</sup> The document further notes that one of the key issues in socio-economic assessments is the degree to which a proposed development will improve or hurt the independent economic status of an affected community. For instance, it is mentioned that a community may be vulnerable if its subsistence economy is converted to a cash economy.

18. The Working Group on Article 8(j) and Related Provisions carried out further work on guidelines for the conduct of cultural, environmental and social impact assessment, in accordance with the request made by the Conference of the Parties in its decision VI/10. The outcome of this work was submitted to the Conference of the Parties at its seventh meeting and adopted as the Akwé:Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and social Impact assessment regarding Developments Proposed to Take Place on, or which are likely to Impact on, Sacred Sites and on Lands and Waters Traditional Occupied or Used by Indigenous and Local Communities. <sup>12/</sup>

19. The Conference of the Parties has also been considering the potential impacts of genetic use restriction technologies (GURTs) on smallholder farmers, and indigenous and local communities. GURTs are products of genetic engineering, which are supposed to render the subsequent generation of a seed variety sterile (V-GURTs) or restrict the use of a specific trait unless treated by external inducers to activate the trait’s expression (T-GURTs). GURTs, if developed and applied, will have a significant effect on breeding, seed supply, farming and agrobiodiversity systems.

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<sup>7/</sup> Decision VI/7 A of the Conference of the Parties, on Guidelines for Incorporating Biodiversity-Related Issues into Environmental Impact Assessment Legislation and/or Processes and in Strategic Environmental Assessment, adopted on the basis of SBSTTA recommendation VII/10.

<sup>8/</sup> Decision VI/7 A, annex, para. 1 (a).

<sup>9/</sup> Decision VI/10.

<sup>10/</sup> UNEP/CBD/WG8J/2/6/Add.1.

<sup>11/</sup> Ibid. para. 100.

<sup>12/</sup> Decision VII/16 F, annex.

20. Recognizing the potential impacts of GURTs on agricultural biological diversity and on communities depending on it, the Conference of the Parties decided, at its sixth meeting, to establish an ad hoc technical expert group (AHTEG) that would examine the potential impacts on smallholder farmers, indigenous and local communities and on Farmers' Rights. The Group was convened by the Executive Secretary in February 2003 and its report was submitted to the ninth meeting of SBSTTA and to the third meeting of the Working Group on Article 8(j) and Related Provisions. Despite a lack of consensus on certain issues, the Group identified some potential negative impacts of socio-economic nature that may be caused by the GURTs. <sup>13/</sup>

21. According to the report of the Group, GURTs could cause a number of socio-economic impacts including: (i) narrowing down the possible options of varieties that could be available in local seed markets; (ii) displacement of local varieties, thus reducing diversity; (iii) creating a situation where breeding efforts would concentrate in the private sector, undermining participatory crop breeding; and (iv) undermining traditional seed-exchange systems and resulting in the displacement of traditional farming systems, thus causing a loss of livelihoods and associated social, cultural and spiritual values and knowledge. When it comes to impacts on indigenous and local communities, the report of the AHTEG pointed out that no potential positive impact could be identified.

22. The report also includes a recommendation to invite the meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol to consider the potential biosafety impacts of GURTs. The Conference of the Parties took note of the report of the AHTEG, at its seventh meeting, as well as the report of the Food and Agriculture Organization of the United Nations (FAO) on the potential impacts of GURTs on agricultural biodiversity and agricultural production systems. <sup>14/</sup> The FAO report was prepared in response to the invitation extended by the Conference of the Parties at its fifth and sixth meetings. <sup>15/</sup>

#### ***E. International Association for Impact Assessment (IAIA)***

23. The International Association for Impact Assessment (IAIA) is a forum for advancing best practice in impact assessment. It issues various publications covering different impact assessment areas based on international experience, review and best practice. IAIA develops and makes available international guidelines and principles in different areas and issues pertaining to impact assessment for consideration and use, as appropriate, by the impact assessment community. Social impact assessment is one such important area where international principles have been developed and made available to practitioners.

24. Social impact assessment <sup>16/</sup> is a process of analysing, monitoring and managing the social consequences of development, according to the IAIA definition. <sup>17/</sup> It is understood to include "the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programmes, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment".

#### ***F. Convention concerning Indigenous and Tribal Peoples in Independent Countries (ILO No. 169)***

25. The ILO Convention concerning Indigenous and Tribal Peoples in Independent Countries emphasizes the special importance of cultures and spiritual values of indigenous peoples and their

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<sup>13/</sup> UNEP/CBD/SBSTTA/9/INF/6- UNEP/CBD/WG8J/3/INF/2.

<sup>14/</sup> Decision VII/3.

<sup>15/</sup> Decisions V/5 and VI/5.

<sup>16/</sup> Much of the literature on impact assessment uses the term 'social impact assessment' to refer to both social and socio-economic impacts. See C.J. Barrow, *Environmental and Social Impact Assessment: An Introduction*, Centre for Development Studies, University of Wales Swansea, 1997, p. 226.

<sup>17/</sup> IAIA, Special Publication Series No.2, May 2003.

collective attachment to their territories and natural resources. <sup>18/</sup> It relates environmental topics to these peoples. It calls upon Governments to undertake studies, as appropriate, to evaluate the social, spiritual, cultural and environmental impacts of activities planned to be carried out in areas inhabited by indigenous and tribal peoples. <sup>19/</sup>

#### IV. OPPORTUNITIES FOR COOPERATION ON RESEARCH AND INFORMATION EXCHANGE ON SOCIO-ECONOMIC IMPACTS OF LIVING MODIFIED ORGANISMS

26. Paragraph 2 of Article 26 of the Biosafety Protocol encourages Parties to cooperate on research and information exchange concerning any socio-economic impacts that may arise from the introduction of living modified organisms into the environment, especially on indigenous and local communities. It has been quite some time since efforts to identify and assess the social impacts of a proposed project, activity, programme or policy have become almost a routine in the area of impact assessment. There is a good deal of literature and information on the nature, principles, techniques and methods of social impact assessment. Nevertheless, the issue of socio-economic impacts of modern biotechnology in general and of living modified organisms, in particular is an area that has received attention relatively recently.

27. Parties to the Convention on Biological Diversity are under obligation to facilitate the exchange of information, which includes exchange of results of socio-economic research <sup>20/</sup> that are relevant to the conservation and sustainable use of biological diversity. This information is also required to address issues relevant to biotechnology as referred to in Article 16 of the Convention. Article 26, paragraph 2, of the Biosafety Protocol is, therefore, consistent with Article 17, paragraph 2, of the Convention.

28. The clearing-house mechanism of the Convention is the means by which Parties to the Convention are trying to promote and facilitate the exchange of information (including exchange of results of socio-economic research, as described in Article 17, paragraph 2, of the Convention) and technical and scientific cooperation in the field of conservation and sustainable use of biological diversity. The Biosafety Protocol established a Biosafety Clearing-House as part of the clearing-house mechanism under the Convention, in order to facilitate the exchange of scientific, technical, environmental and legal information and experience on living modified organisms. <sup>21/</sup> It may, therefore, be appropriate to consider the Biosafety Clearing-House as one possible avenue for cooperation among Parties to the Protocol in advancing research, disseminating research results and facilitating exchange of other information relevant to socio-economic impacts of living modified organisms.

29. The work of the Convention on Biological Diversity concerning Article 8(j) and related provisions of the Convention and the one concerning GURTs are relevant to the subject of socio-economic considerations under the Biosafety Protocol, and hence need to be tapped. The Akwé:Kon Voluntary Guidelines, referred to in paragraph 18 above, may offer an indicative framework on how to take into account socio-economic considerations by a Party of import in assessing the potential impacts of living modified organisms.

30. The Secretariat has established a working relationship with IAIA in fulfilling its tasks related to Article 14 of the Convention on impact assessment and minimizing adverse impacts. The collaboration with IAIA could extend to the work under the Protocol, especially with regard to socio-economic impacts of living modified organisms as provided for under Article 26 of the Protocol. IAIA could be invited to develop further its principles for social impact assessment with specific focus on the potential impacts of modern biotechnology in general and living modified organisms in particular. IAIA provides a good opportunity for undertaking fresh research or harnessing research results from around the world on this particular issue and making them available for the purpose of Article 26 of the Biosafety Protocol.

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<sup>18/</sup> Article 13.1, ILO Convention 169.

<sup>19/</sup> Article 7.3, ILO Convention 169.

<sup>20/</sup> Article 17, paragraph 2, of the Convention on Biological Diversity.

<sup>21/</sup> Article 20, paragraph 1, of the Biosafety Protocol.

31. The United Nations Environment Programme (UNEP) is responsible for, among other things, analysing, reviewing and developing environment-related policies. It develops generic guidelines and principles in various areas with a view to assisting Governments in developing their individual or collective policy positions in response to emerging environmental issues and events. In that context, UNEP might be invited to look into the issue of socio-economic impacts of biotechnology/living modified organisms and develop guidelines on how socio-economic considerations should be taken into account in a manner that meets the objective of the Biosafety Protocol without being undue barrier to trade.

32. FAO also maintains a great deal of information, research papers and a wide range of technical reports regarding agricultural biotechnology. The theme of its 2004 report, *The State of Food and Agriculture 2003-04* is “Agricultural biotechnology: meeting the needs of the poor?” The report reviews latest information derived from research and surveys as regards the impacts of transgenic crops, including their economic and social impacts. FAO is committed to continue <sup>22/</sup> providing member countries with objective information and analysis regarding biotechnology and its applications in crops, livestock, fisheries and forestry. Parties to the Biosafety Protocol could, therefore, benefit from results of research and other information on socio-economic impacts of living modified organisms that would be made available through FAO. This approach would also be consistent with Article 29, paragraph 4 (c), of the Protocol, which requires the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol to seek and utilize the services, cooperation and information of other competent international organizations, intergovernmental and non-governmental bodies.

33. The socio-economic impacts of biotechnologies or living modified organisms are also receiving attention at national level. There are debates involving Governments and civil-society organizations on the likely impacts of living modified organisms and calls for research, especially research on the potential socio-economic impacts of introducing such organisms. <sup>23/</sup> The emphasis of most of these activities is on the impacts of agricultural biotechnologies such as genetically modified crops. The private sector also has shown interest in investigating socio-economic considerations. <sup>24/</sup>

34. As it was mentioned earlier, the information generated or compiled by national and international agencies such as those mentioned above, could be disseminated through the Biosafety Clearing-House for the benefit of Parties to the Protocol. The latter could, therefore, enhance cooperation among themselves and encourage others to cooperate with them in sharing research results and any other information on socio-economic impacts of living modified organisms using the Biosafety Clearing-House.

## V. ELEMENTS OF A DRAFT DECISION

35. The Conference of the Parties serving as the meeting of the Parties to the Protocol may wish to invite or request, as appropriate, Parties, other Governments and relevant international organizations to:

- (a) Continue to cooperate within existing processes and arrangements;
- (b) Give more emphasis to research on socio-economic impacts of living modified organisms and to allocate resources for that purpose;
- (c) Share their research methods and results on socio-economic impacts of living modified organisms, if any, through the Biosafety Clearing-House;

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<sup>22/</sup> Foreword, *The State of Food and Agriculture 2003-04* (Rome 2004).

<sup>23/</sup> For example, one of the recommendations of New Zealand’s Royal Commission on Genetic Modification states that public research funding portfolios be resourced to include research on the socio-economic and ethical impacts of the release of genetically modified organisms. The Commission was set up in May 2000 to undertake inquiry on the options available to New Zealand to deal with genetic modification, and to advise on appropriate changes to the relevant regulatory and policy arrangements. Socio-economic impacts are also routinely considered in several countries in connection with technology assessment, in this case biotechnology assessment.

<sup>24/</sup> See, for example, *Biotechnology in Third World Agriculture: Some Socio-Economic Considerations*, by Klaus M. Leisinger, Syngenta Foundation for Sustainable Agriculture at: [http://www.syngentafoundation.com/biotechnology\\_third\\_world\\_agriculture.htm](http://www.syngentafoundation.com/biotechnology_third_world_agriculture.htm)

(d) Share with others their information and experiences, including experiences in implementing the Akwé: Kon Voluntary Guidelines;

(e) Provide to the Executive Secretary their views on socio-economic impacts of living modified organisms in the context of Article 26 of the Protocol, and on possible modalities of incorporating socio-economic considerations into decision making as regards importing living modified organisms so that the Executive Secretary would be able to prepare a synthesis of the views and information for consideration by the Conference of the Parties serving as the meeting of the Parties to the Protocol at one of its future meetings.

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