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**REPORT OF THE JOINT AARHUS CONVENTION/CARTAGENA PROTOCOL ON  
BIOSAFETY WORKSHOP ON PUBLIC AWARENESS, ACCESS TO INFORMATION AND  
PUBLIC PARTICIPATION REGARDING LIVING/GENETICALLY MODIFIED ORGANISMS<sup>1</sup>  
held in Nagoya, Japan, on 8-9 October 2010**

This advance version of the report was prepared by the secretariat of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) in consultation with the secretariat of the Convention on Biological Diversity. The final report will be prepared jointly by the two secretariats for the fourth session of the Meeting of the Parties to the Aarhus Convention (29 June – 1 July 2011).

## INTRODUCTION

1. At its second meeting (30 May - 3 June 2005, Montreal, Canada), the Conference of the Parties to the Convention on Biological Diversity (CBD) serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP), requested its secretariat to intensify cooperation with the secretariat of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) on issues of public awareness and participation (decision BS-II/6, paragraph (d)). In paragraph 11 of decision BS-II/13, Parties, other States and concerned relevant international bodies were invited to explore and maximize opportunities for cooperation in the promotion of public awareness, education and participation concerning living modified organisms (LMOs) through the frameworks provided by related national and international instruments, in particular the Aarhus Convention.
2. At its second session (25-27 May 2005, Almaty, Kazakhstan), the Meeting of the Parties to the Aarhus Convention adopted, through decision II/1, an amendment to the Convention, setting out provisions specifically requiring Parties to provide for early and effective information and public participation in decision-making regarding the deliberate release into the environment and placing on the market of genetically modified organisms (GMOs) (the GMO Amendment). In the same decision, the Meeting of the Parties recognized the need to cooperate with other international organizations and fora, in particular the Cartagena Protocol on Biosafety, with a view to maximize synergy and avoid duplication of effort, inter alia through encouraging the exchange of information and further collaboration between the secretariat of the Convention and that of the Cartagena Protocol. The Aarhus Convention's 2009-2011 work plan (decision III/9) envisages the organization of a joint workshop with the Cartagena Protocol on Biosafety in the current 2008-2011 intersessional period.
3. The joint Aarhus Convention/Cartagena Protocol on Biosafety workshop (8-9 October 2010, Nagoya) was attended by approximately 50 participants who shared knowledge, experiences and lessons learned in promoting public awareness, access to information and participation in decision-making concerning LMOs/GMOs. The workshop produced recommendations for the implementation of the

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<sup>1</sup>This document was not formally edited.

Cartagena Protocol on Biosafety's programme of work on public awareness, education and participation adopted at COP-MOP5 (11-16 October 2010, Nagoya) and to facilitate the implementation of the Aarhus Convention's GMO Amendment.

4. The workshop was the second event on which the two secretariats had collaborated in furtherance of decision BS-II/6 and decision II/1. The first workshop was held on 19-20 May 2008 in Cologne,<sup>2</sup> shortly after COP-MOP4 of the Cartagena Protocol (12 to 16 May 2008, Bonn).

5. The workshop on 8-9 October 2010 was attended by experts designated by 19 States, namely Antigua and Barbuda, Belarus, Belgium, Burundi, Finland, Georgia, Germany, Guinea, Guinea-Bissau, Indonesia, Hungary, Maldives, Norway, Republic of Moldova, Slovenia, Spain, Swaziland, Tajikistan and Vietnam.

6. Participants from the following international and regional organizations attended: the African Union Commission, Food and Agricultural Office Regional Office for Europe and Central Asia and the United Nations Education, Science and Culture Organization (UNESCO).

7. Participants from the following international non-governmental organizations (NGOs) attended: European ECO-Forum, GENET - European NGO Network on Genetic Engineering, Greenpeace International, Public Research and Regulation Initiative (PRRI) and RAEIN-Africa. Participants from the following national NGOs attended: "YANUS" Environmental Federation of Agricultural Association (Armenia), ECOROPA (Germany), Federation of German Scientists (Germany), Aarhus Net Japan (Japan), Japan Environmental Council (Japan), "Greenwomen" Analytical Environmental Agency (Kazakhstan), ECO-Tiras International Environmental Association (Republic of Moldova) and Washington Biotechnology Action Council (United States).

8. Participants from the following academic or research institutions attended: Osaka University (Japan), College of the Atlantic (United States of America) and Universidad Nacional Agraria La Molina (Peru).

9. Participants from Bayer BioScience NV (Belgium), ISAAA AFRICENTER (Kenya), Centre for Biosafety – GenØk (Norway), the OSCE Office in Tajikistan (Tajikistan) and the Global Industry Coalition (United States of America) also attended.

10. The meeting was chaired by Mr. Helmut Gaugitsch (Austria), the former Chair of the Aarhus Convention's Working Group on Genetically Modified Organisms.

### **OPENING OF THE WORKSHOP**

11. The workshop was opened by Mr. Helmut Gaugitsch, the Chair, at 9:30 a.m. on Friday, 8 October 2010. Speaking on behalf of Mr. Ahmed Djoghla, Executive Secretary of the Convention on Biological Diversity, Mr. Charles Gbedemah, Senior Programme Officer, Biosafety Division, Secretariat of the Convention on Biological Diversity, welcomed participants to the workshop. Representatives of the CBD and the Aarhus Convention secretariats then gave a brief overview on the objectives and expected outcomes of the workshop.

### **ORGANIZATION OF WORK**

12. The workshop consisted of plenary presentations followed by open discussion and case studies discussed in smaller groups and reported back to the plenary. The workshop opened with a three-minute

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<sup>2</sup> Report of the international expert meeting on good practices regarding access to information, public participation and access to justice regarding GMOs (ECE/MP.PP/WG.1/2009/3).

written exercise for participants on greatest needs and challenges regarding access to information, public awareness and participation. The results of this exercise were returned to during the open discussions held during the course of the workshop.

### **OVERVIEW OF LEGAL FRAMEWORK ON PUBLIC AWARENESS, ACCESS TO INFORMATION AND PARTICIPATION REGARDING LMOs/GMOs**

13. The Secretariat of the Convention on Biological Diversity provided an overview of article 23 of the Cartagena Protocol on Biosafety and introduced the draft programme of work on public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms to be considered by the Parties to the Cartagena Protocol on Biosafety during its COP-MOP5. The Aarhus Convention secretariat provided an overview of the Aarhus Convention's provisions on GMOs, including its GMO amendment currently pending entry into force.

### **PUBLIC AWARENESS AND ACCESS TO INFORMATION: GOOD PRACTICES, NEEDS AND CHALLENGES**

14. Presentations were made to the plenary on the following three themes, followed by an open discussion:

- (a) Outreach and awareness-raising regarding LMOs/GMOs in developing countries;
- (b) Access to information regarding the use of LMOs/GMOs, including access to scientific information and risk assessment and potential conflicts with intellectual property rights; and
- (c) Experiences with developing and implementing national mechanisms, frameworks and systems regarding public awareness and education and access to information regarding LMOs/GMOs.

#### **(a) Outreach and awareness-raising regarding LMOs/GMOs in developing countries;**

15. Third World Network (TWN) began by briefly describing how its own biosafety programme works to raise public awareness of biosafety issues, through, inter alia, capacity-building, public awareness and education initiatives, its biosafety website,<sup>3</sup> an information service on biosafety, biosafety publications and meetings and seminars on biosafety. The representative observed that biosafety awareness and outreach are about empowering the public, as well as enabling policy makers to make informed choices. Awareness and access to information in a timely manner are necessary pre-conditions for meaningful public participation and access to justice and it is therefore necessary to raise awareness not just about biosafety issues, but also about the public's rights to have access to information, to participate and to have access to justice. She stressed that there should be access to information on GMOs as well as about other non-GMO products that may meet development priorities. Information should be presented in a transparent and open manner, bearing in mind the challenges of communicating complex scientific issues including how to convey scientific uncertainty and scientific disagreement. She noted that it was important to consider what information certain stakeholders would receive – e.g. she remarked that there is currently a false divide between scientific and socio-economic and ethical issues – and it is important to reach out to sectors that are not organized to raise their awareness. The representative also mentioned the importance of the right to prior informed consent, e.g. regarding the location of release sites. With respect to confidential information, it was noted that Article 21 of the Cartagena Protocol needs to be implemented in a manner that is consistent with Article 23 but that the scope and criteria for protection of confidential information should be defined nationally. Finally, it was noted that the approach of the Agreement on Trade-Related Aspects of Intellectual Property Rights<sup>4</sup>, which protects undisclosed data against disclosure, except where necessary to protect the public, is not consistent with wide access to information.

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<sup>3</sup> The Third World Network (TWN) website on biosafety is available at [www.biosafety-info.net](http://www.biosafety-info.net).

<sup>4</sup> See Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, signed in Marrakesh, Morocco on 15 April 1994

**(b) Access to information regarding the use of LMOs/GMOs, including access to scientific information and risk assessment and potential conflicts with intellectual property rights**

16. The Federation of German Scientists emphasized that information should be available to all of the public, including farmers, consumers/citizens, politicians, journalists, and scientists. The representative noted that the trigger point for access to information requires knowing that there is information to access. It must be possible to understand (i) what is being presented; (ii) what information may be missing; and (iii) the assumptions behind the information provided. Access to information should be affordable, and it should be presented in a concise manner. In many cases, it may be useful to have scientific experts that can “translate” scientific information to make it more understandable to the general public. It was also noted that access to information should, among other things, include scientific information such as access to raw data, feeding studies and methodologies. Access to molecular data is needed so that other scientists may review the methodology used, reproduce the experiments and verify the findings. Another point was that classifying information as confidential business information has to be limited to the absolute minimum so as not to hinder or block scientific review and verification. It was also mentioned that details of trials and applications for release/marketing should be posted online in order to allow timely access and effective participation. It is important to ensure that risk assessments are carried out in a scientifically sound and transparent manner in accordance with Article 15 of the Protocol. It was noted that the Roadmap for Risk Assessment of Living Modified Organisms states that sound science is based on transparency, verifiability, and reproducibility and on the accessibility of data, taking into account the provisions of Article 21 of the Cartagena Protocol on Biosafety on the confidentiality of information<sup>5</sup>. The different approaches taken by various countries to scientific information regarding LMOs/GMOs was noted.

17. Vietnam outlined its regulatory framework on biosafety that has contributed to its system of public awareness on biosafety issues since 2005. The framework included, the 2008 Law on Biodiversity, which requires information on the potential risks of GMOs to be published and goods that contain GMOs and products derived from GMOs to be labelled. It also included the 2010 decree on biodiversity, which requires information to be published on the national biosafety clearinghouse website and a public hearing to be held one month before a GMO appraisal. It was noted that its regulatory framework was supported by a number of awareness-raising activities involving a wide range of stakeholders, including media activities and information materials such as brochures and newsletters. It was also noted that ongoing challenges included the technical nature of information on GMOs/LMOs, the influence of different interest groups on the information available and a lack of human resources to raise awareness about biosafety.

18. The presentations were followed by discussions on the needs and challenges and emerging good practices and lessons learnt regarding public awareness and access to information. The participants also discussed and recommended future actions and modalities for cooperation, and further possibilities for synergy and coordination between the Aarhus Convention and the Cartagena Protocol under this issue. Some of the key outcomes were as following:

- (a) Access to information is fundamental to awareness-raising and should be conducted in a timely manner for effective public participation.
- (b) While there is growing awareness of GMOs/LMOs, most people are still unaware of biosafety issues and their right to access information regarding biosafety. This creates public uncertainty regarding GMOs/LMOs as they are not fully informed about their benefits, risks or procedures.
- (c) The source from where information is provided and the type of information is essential. Independent information is at times difficult to provide but essential. Information should be

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<sup>5</sup> The roadmap was available as a pre-sessional document for the fifth meeting of the Parties (COP-MOP 5) on the website of the Cartagena Protocol on Biosafety: UNEP/CBD/BS/COP-MOP/5/12.

presented in more languages, especially local languages to facilitate outreach activities and materials.

(d) There is a lack of labelling of GMO products. Governments and industry should also make information regarding the location of field trials available to the public.

(e) There is a lack of capacity to maintain information mechanisms in many countries, including human, technical, institutional, legal, and financial capacity. In this regard, countries have to work on developing and maintaining mechanisms to raise awareness. Governments should work with their own government agencies, as well as NGOs and UN agencies. A proposal was for regional workshops to develop regional communication strategies, involving many stakeholders in an area such as risk assessment.

(g) The CBD's Biosafety Clearing-House (BCH), national biosafety clearing-houses and other information-sharing centres are important mechanisms for sharing information. The CBD's BCH can be essential as a capacity-building mechanism to share information and to provide a national contact point. To promote biosafety education, more needs to be done. For example, to date, field trials are not available in the BCH and the BCH is only used for commercial purposes. Cooperation to link the CBD's BCH with the Aarhus clearinghouse would be useful.

(h) Media involvement is essential to provide access to information and sharing information

(i) There is a need for guidelines on public awareness, access to information and education on LMO/GMOs.

(j) It is particularly important that policy makers and government officials are equipped to make informed choices. Collaboration within governments, in particular between ministries and parliamentarians to enhance their communication and coordination on biosafety issues is needed.

19. Following the open discussion, workshop participants had the opportunity to discuss two case studies on access to information regarding LMOs/GMOs in smaller interactive discussion groups<sup>6</sup>. The outcomes of the discussions are summarised below.

### **Case study 1: Outreach to Small-Scale Farmers and Rural Communities in South Africa**

20. The case study looked at an outreach programme by AfricaBio in South Africa. A number of small-scale maize farmers were invited to grow a field of insect-protected biotech maize next to a conventional field and then, with the support of programme staff, to share their experiences of growing the crop with other farmers in their local community through information days and other events. Workshop participants considered the case study to be a good practice in raising public awareness about the benefits of biotechnology. It was considered positive that the person raising awareness was a farmer himself, lived in the community and knew the local language, situation and culture. However some participants had concerns that the information presented was not complete or balanced. Some of the overall comments included: (i) The only entities mentioned in the case study are known proponents of biotechnology and it is not clear from the text if there were other organizations or experts involved who may have provided a different standpoint; (ii) Farmers may not represent the views of the whole community; (iii) The case study does not indicate what risk assessments of this project had been done nor what, if any, information was given to the farmers beforehand; (iv) It does not include any information about any local maize varieties or practices that could be affected by this trial; (v) It is not clear if the GM maize being planted in the case study had already been approved in South Africa when this programme was undertaken or whether the exercise took place before authorization. In general, the case study was seen as useful in raising awareness of biotechnology, but not of biosafety. The information focuses mainly on the increased maize yield and low insect numbers. If the case study was to raise awareness of biosafety, it would be important to get local people to survey which insects are beneficial and to carry out such assessments over multiple years. Also, it would be important to consider what other plants local people currently grow, which they may stop growing if they take up this crop. It was noted that the programme was led by an interested party. It was considered that information should not be presented by those with a financial interest but be neutral and transparent and include different stakeholders. Thus, in

<sup>6</sup>The case studies discussed are available at <http://www.unece.org/env/pp/gmo.htm>.

sum, while the methodology of working to raise awareness at the local level was considered to be good, the information presented should allow input from different sources and include more information about biosafety.

### **Case study 2: Labelling of genetically modified food in Australia and New Zealand**

21. This case study considered the joint GMO labelling standard for Australia and New Zealand. It was generally agreed that it was good practice to label GM food and feed, both for reasons of choice, and also because if there are later problems, scientists could follow up. It was felt that a common regional standard, such as the case study described for Australia and New Zealand, was of value and also that the Australian and New Zealand regime provides for a special designated organization that is independent and participatory. It was considered positive that labelling is required for GM products that could raise ethical, cultural or religious concerns. It was noted, however, that labelling alone is not sufficient. Labels raises awareness that there are GMOs in the products concerned, and thus allow consumers a choice when purchasing, but they do not explain what GMOs are. A "may contain GMO" label can be unclear for consumers. Experience from Europe were said to show that a "may contain" labelling option can be mis-used. Similarly, if negative labelling is to be used, e.g. "GMO free", there should be a strict regime to meet this standard in order to prevent false claims. It was remarked that thresholds for labelling (in this case 1%) are not science based, which would be at the level of detection, but are chosen for reasons of economics. It was noted that it would be helpful to label the type of GMO involved, particularly if there are any later problems, scientists can follow up. A contrary view expressed was that labelling is irrelevant for poorer countries that cannot afford testing. Also, labelling GM products is not positive, because labels act as a warning, so that retailers may decide not to put GM products on their shelves. Those of this view also considered that the CODEX approach is preferable, i.e. where the compositional analysis shows the GM and non-GM alternative are substantially equivalent, then it should not be labelled. Another view on this point is that consumer choice is multifaceted and safety may not be the sole reason for consumer choice – eg a consumer may choose free trade bananas because he or she believes in that method of production and not because of product safety of those bananas. It was remarked that the Australian and New Zealand exemptions allow several loopholes, mainly because the approach is product-based, not process-based. For example, oil from herbicide tolerant GM maize would not be labelled. The labelling therefore only gives consumers a choice on whether the product in the shop contains a GM ingredient, but doesn't allow them to make a decision about GMOs used in the production process. It was also considered that labelling should be standard across all foods, and there should not be exceptions for food in restaurants. It was remarked that the system provided for a weak enforcement mechanism and this should be strengthened. It would also be useful to provide contact details for where additional information might be obtained.

### **PUBLIC PARTICIPATION: GOOD PRACTICES, NEEDS AND CHALLENGES**

22. Presentations were made to the plenary on the following four themes, together with the opportunity for open discussion on each theme:

- (a) National experiences in implementing the Aarhus Convention's GMO amendment and public participation under the Cartagena Protocol on Biosafety, including public participation in LMO/GMO decision making at local, national and EU level;
- (b) Public participation in LMO/GMO risk assessment procedures, including the public's role (including environmental NGOs and other civil society organizations) in evaluating (i) LMO/GMO related socio-economic risks and (ii) other characteristics which might be different from environmental impact assessment procedures regarding non-LMO/GMO decisions;
- (c) Implementation and enforcement of LMO/GMO-related laws, in particular the main challenges and the role of the public with regard to these; and
- (d) Different types of public participation in LMO/GMO decisions.

**(a) National experiences in implementing the Aarhus Convention's GMO amendment and public participation under the Cartagena Protocol on Biosafety, including public participation in LMO/GMO decision making at local, national and EU level**

23. Three presentations were made regarding national experiences in implementing the Aarhus Convention and its GMO amendment and Article 23 of the Cartagena Protocol on Biosafety. The Republic of Moldova outlined its regulatory framework for public awareness and participation regarding LMOs/GMOs that facilitated activities supporting a system for public awareness and participation, including consulting the public in the decision-making process. With the aim of establishing and implementing a mechanism for public participation, Moldova had participated in the UNEP-GEF Project on Implementation of National Biosafety Frameworks to implement the Cartagena Protocol. Currently, Moldova is a Party to both the Cartagena Protocol and the Aarhus Convention and has ratified the Aarhus Convention's GMO amendment. The representative outlined a number of biosafety initiatives that had been undertaken. For example, Moldova's national Biosafety Action Plan was developed and widely consulted through meetings, workshops and debates with different stakeholders, including a wide range of stakeholders in order to reach consensus on the draft action plan. A socio-economic assessment of the draft action plan was performed to identify its impacts on the economy, trade, farmers and agriculture. Following its approval in 2009, the Biosafety Action Plan for 2009-2015 was published in newspapers and on the BCH and Ministry of Environment website. The National Biosafety Committee includes representatives from governmental bodies, academia, education and NGOs. Other initiatives that were noted were the government's regularly updated biosafety website and an electronic register of environmental NGOs. Public hearings are organized for applications for contained use, and the public has one month to comment on applications. Additional information, e.g. regarding the risk assessment information and monitoring plan, may be requested. The representative noted that Moldova faced a number of challenges regarding biosafety such as an insufficient level of awareness among decision-makers, the public and insufficient scientific data regarding possible adverse risks of GMOs as well as insufficient national capacities and experience in monitoring of GMOs in food and feed and in risk assessment and evaluation, in particular regarding public participation in risk assessment procedures. Other challenges include a low level of government-NGO cooperation and cross-sectoral cooperation and the gap in public awareness between urban and rural communities. For the future, it was noted, amongst other things, that it would also be helpful to have internationally agreed guidelines and/or toolkits regarding public participation in risk assessment procedures and regarding the management and labeling of GMOs and to increase the capacity of both the CBD's BCH and the Aarhus Convention Clearinghouse.

24. Belarus reported that the country has several pieces of national legislation on GMOs: the Law on Protection of Consumer Rights; the Law on Quality and Safety of Food Raw Materials and Foodstuffs for Human Life and Health; the Resolution of the Council of Ministers of the Republic of Belarus on Some Issues to Inform Consumers about Raw and Processed Food Products and the Law on Safety of Genetic Engineering. The Law on Safety of Genetic Engineering establishes a framework for, amongst other things, state oversight of the safety of genetic engineering and genetically engineered organisms, including liability for breaching its legal requirements. A National Biosafety Coordination Centre has been established with the main objectives being to provide information on GMOs and the safety of genetic engineering activities to concerned ministries, authorities, businesses, individuals and the media; to ensure the rights of citizens and public organizations to obtain information on the safety of genetic engineering; and to exchange information with biosafety focal points of other countries and international organizations. Public awareness and information is exchanged via the National Biosafety Coordination Centre's website<sup>7</sup>. The representative also highlighted that different activities relating to biosafety issues involving NGOs and civic associations had been taking place in Belarus. For example, the Belarusian NGO "Ecosphere" from December 2006 to March 2007 carried out a national study of public awareness about GMOs and GM products. Of over 700 respondents, about 60% were aware of GMOs, 4% believed GMOs safe for health, 16% paid attention to product labeling when making a purchase and 76% of study

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<sup>7</sup> The website is available at <http://biosafety.org.by>

respondents would like more information about GMOs and GM products. Another one was a roundtable discussion in particular with NGOs regarding the dissemination of information on GMOs.

25. ECO-Tiras (Republic of Moldova) made a number of suggestions to those working to raise public awareness on GMO issues. The representative said that it was important to be scientific, not populist, in their approach, using simple but accurate language. Other suggestions were to keep in mind the EU's view that there is no one answer regarding the danger of GMOs – each GMO needs to be risk-evaluated. Social-economic risk assessment should be equal in importance with other risk assessments. It was noted that working with the media is important as it is the most efficient public awareness-raising mechanism and actively establishing partnerships with the mass-media is worthwhile, in particular inviting them to consult with those working on GMO issues in order to avoid mistakes in media reports and articles. Unscientific articles or broadcasts that appear in the mass-media should be critiqued. It should be remembered that public awareness-raising is not for or against GMOs, but rather in favour of the public's right to know. It was remarked that risks should be evaluated proportionately and stakeholders should share their knowledge within their networks to multiply the effect of awareness. To build on this, it was further recommended that wherever possible, those working to raise public awareness should cooperate with state and local authorities and the specific interests of different groups should be borne in mind.

**(b) Public participation in LMO/GMO risk assessment procedures, including the public's role (including environmental NGOs and other civil society organizations) in evaluating (i) LMO/GMO related socio-economic risks and (ii) other characteristics which might be different from environmental impact assessment procedures regarding non-LMO/GMO decisions**

26. Two presentations were made regarding public participation in LMO/GMO risk assessment procedures. Greenpeace International noted the importance of the Cartagena Protocol on Biosafety and the Aarhus Convention as legal instruments that support public participation, while observing that there is, to date, limited support from and capacity of governments or other stakeholders, in particular regarding conducting socio-economic impact assessments. Under Article 26 of the Cartagena Protocol, Parties may take into account socioeconomic considerations arising from the impacts of LMOs., It was however noted that socio-economic impact assessment remains the poor stepchild of environmental risk assessment and management. For example, New Zealand has a Hazardous Substances and New Organisms Act, which supports regulations on LMOs and the participation of the public, with special recognition of the role of Maori, in the decision-making process, but sufficient access to information to ensure effective participation is still lacking in practice. The representative presented a case study from New Zealand showing how a failure to enforce information requirements can effectively preclude meaningful public participation and access to justice. An application to genetically engineer salmon from Panama for export was said to raise a number of socioeconomic and environmental issues, including a potential loss of natural and agricultural biodiversity, of traditional farming practices and of food sovereignty. In light of these examples, Greenpeace International highlighted the following needs: (i) to develop guidance under the strategic plan of the Protocol on integrating socio-economic considerations into the decision-making process; (ii) to increase research and information exchange on socio-economic impacts, including building capacity to do such research as part of risk assessment and management at the national level; (iii) to provide adequate access to information for effective public participation; (iv) to ensure that socio-economic impact studies are part of a package of information for public participation; and (v) to have policies on food security and food sovereignty in place at the national level to prevent transnational genetically engineered food production from negatively effecting domestic food production and land tenure with implications for access to justice.

27. A representative from the European NGO Network on Genetic Engineering (GENET) observed that participatory tools include both so-called "invited" public participation (e.g., consultations, and more rarely, stakeholder forums and dialogues) and "non-invited" public participation (e.g. press/media campaigns, lobbying government at local, national and international level, consumer campaigns and legal challenges, press work, publishing materials for policy makers, supporting and producing independent research). In light of NGOs' experiences that the outcomes of invited public participation are often

predetermined and limited, uninvited participation is the preferred option for many NGOs. In this regard, dialogue with civil society can be more open and promoted through a two-way exchange, with genuine interest in taking note of all sides to an issue. It was noted that consultations that are designed to get a particular answer are not constructive. Furthermore, public participation is often hindered by the lack of access to information with NGOs and individuals then needing to invest a lot of effort to access information that should have been available in the first place. Access to information should be free of obstacles so that efforts can go into participation. Public participation should occur from the very beginning, including in coming to decisions as to whether society wants or requires a certain technology. Another remark was that science should not be separated from its social context, with science being viewed as objective and social, ethical and political concerns as subjective and therefore not fit for the base of decision-making. The public should also not be considered as inherently ignorant on scientific issues and thus to be excluded from the debate. The representative further remarked that research should be responsive to society's needs, so that public funds for science are given in accordance with public interests. Resources need to be provided to assist NGOs to participate in consultations and public hearings, as otherwise there is an equality issue as NGOs do not have the resources that other interest groups may have to invest in participatory processes. Regarding EU Member States, it was noted that the most important decision-making takes place at the EU level which means that only the small number of NGOs based in Brussels have easy opportunities to participate. It was also noted that there is dissatisfaction amongst NGOs as to how the European Food Safety Authority (EFSA) formulates its opinions as NGOs consider that it suffers from a lack of civil society participation and strong ties to some industry members. While there have been some improvements, most of the consultations happen in a written form and there is little chance for direct participation as it is markedly more difficult for the average citizen/civil society group to participate in these decisions than on the regional/national level.

**(c) Implementation and enforcement of LMO/GMO-related laws, in particular the main challenges and the role of the public with regard to these**

28. Three presentations were given under the item on implementation and enforcement of LMO/GMO-related laws. A representative from the European ECO-Forum observed that NGOs are generally less satisfied with the implementation of legislation than they are with the actual legal provisions themselves, especially in the countries in Eastern Europe, the Caucasus and Central Asia. Public participation procedures are under developed and early participation remains a significant problem. It was emphasized that the requirement for the relevant public authority to identify the participating public has in some cases been used to exclude relevant members of the public from participation. He further mentioned that there is no feedback on how public comments have been considered and reasons for not incorporating them and that timeframes for commenting were insufficient. If decisions are reconsidered or changed, it is not always clear for either the government or the public, which changes require public participation beforehand. In addition, the practicalities of accessing information leave a lot to be desired. Information is often incomplete or of poor quality and it is generally only available after an application has been made. It is often not easily accessible or available at times convenient for the public. Exceptions as regards to access to information can be extensively or arbitrarily interpreted. It was noted that the intellectual property exception, in particular, has been misused, with access to reports prepared by third-party consultants for public authorities being denied.

29. A representative of the "Greenwomen" Analytical Environmental Agency noted that Kazakhstan has ratified the Cartagena Protocol and the Aarhus Convention. The Kazakh Ministry of Environmental Protection has indicated its intention to ratify the Aarhus Convention's GMO amendment but has so far not done so. In September 2010, Kazakhstan adopted a technical regulation "Requirements for Safety of Food Products Fabricated From Genetically Modified (Transgenic) Plants and Animals". The technical regulation sets minimal requirements for safety of transgenic foods during their fabrication, processing, circulation, use and elimination. Production of foods from genetically modified plants and animals is now only possible after conclusions of the environmental and sanitary-epidemic expertise. The representative highlighted that the regulation forbids the circulation of transgenic food products without registration in the "National Register of Genetically Modified Objects" and requires that information about food

products has to include data about components composed of or made from LMOs, above a threshold of 0,9 %. Despite the above, there are no concrete mechanisms for public participation in decision-making related to GMOs in Kazakhstan. It was noted that electronic dissemination of information is not systematic. There is also no regular access to scientific information. Even if civil society is legally entitled to be involved within the framework of international projects or governmental activities in risk evaluation, research and discussions of regulatory policy, such practices are not widely applied. It was also remarked that despite a legal obligation to indicate the presence of genetically modified components on the label, products containing GMOs easily penetrate the market. This is possible due to the insufficient number of laboratories specialized in identifying the presence of GMOs in products.

30. The Commission of the African Union noted that while most African countries are Parties to the Cartagena Protocol only seven African countries (Kenya, Tanzania, Ethiopia, Mali, Namibia, Cameroon and Zambia) have adopted biosafety legislation that provides for public participation as envisaged by Article 23 of Cartagena Protocol. The African Union outlined a number of common assumptions that are made about the public and their understanding of GMOs. For example, the “illiteracy model” assumes the public cannot understand GMO science or scientific uncertainty but once the public is educated they will accept GMOs as good and safe. The African Union remarked that, in contrast to common assumptions, the public can and do understand science and scientific uncertainty but rather they rework scientific information with reference to their own experiences, contextual needs, values, culture and interests. It was remarked that the poor of Africa should decide whether GMOs are useful and beneficial to them, not scientists or industrial groups, donor agencies or foreign governments. Scientific experts, industry and policy-makers often talk of dialogue, but in fact it is a monologue, as they do not attempt to listen to the public nor take into account the public’s views. It was highlighted that there was a need for bodies or committees on public participation to be set up with defined provisions and responsibilities. In doing so, the representative stressed that an annual budgetary allocation would be needed to promote a system of consultations for comments and recommendations. In light of the above, the representative observed that African biosafety policy-makers should: promote the adoption of legally binding biosafety instruments and provisions on public participation; question the assumptions and justifications that shape the claims made by some stakeholders; provide the public and NGOs opportunities to contribute, in an efficient manner, to biosafety decision-making and be transparent and accountable in fulfilling national obligations through structural enactments promoting public participation and promote financial support for an information mechanism to support communication tools for public participation.

#### **(d) Different types of public participation in LMO/GMO decisions**

31. A representative from Slovenia described its regulatory framework, including its national biosafety framework and GMO legislation. The Management of Genetically Modified Organisms Act (2002, amended 2004 and 2010) regulates contained use, deliberate release, placing on the market and the export and transit of all GMOs (GMMs, GM plants and GM animals) and their products. Under the Act, the public has the right to be informed about GMO management and to be involved in permitting process. The Act provides for a public GMO Register containing records, receipts and permits or approvals for contained use, deliberate release including field trials, placing on the market of GMOs and products and premises for GMOs. The public has the right to peruse the data from the GMO register and request and obtain an extract from the GMO Register upon payment of a charge not exceeding the material costs of communicating the data. The GMO management system is administered by a Commission for GMO Management, nominated by the government and consisting of representatives of science (social, humanist, natural, medical and veterinary), NGOs, the Chamber of Commerce and Industry and the Chamber of Agriculture and Forestry. It was noted that the Commission is independent and its work is public. In addition, two Scientific Committees provide professional assistance to ministries regarding contained use and deliberate release into the environment. The Scientific Committees issue annual reports on their work, which are available to the public. In an application for a permit for contained use class 3 and 4, for deliberate release and for placing on the market the public are entitled to have access to the notification, including the risk assessment, the Scientific Committee’s opinion and to take part in a public hearing. It was also highlighted that the Ministry’s decision on the permit is required to express a view on

the opinions and comments received from the public. The representative noted that while setting up the biosafety information system had been challenging, it has to date, among other things, simplified the notification procedure, facilitated the administrative and decision-making procedures, and supported the public being regularly informed by announcements. It observed that specific administrative systems providing information on LMOs/GMOs are needed; building ongoing human and financial capacity is essential; and improving education and enhancing the infrastructure facilitates meaningful public participation.

32. The presentations were followed by discussions on the needs and challenges as well as the emerging good practices and lessons learnt in public participation. The participants also discussed and recommended future actions and modalities for cooperation, and further possibilities for synergy and coordination, between the Aarhus Convention and the Cartagena Protocol under this issue. Some of the key outcomes were as following:

- (a) Public participation procedures are underdeveloped and early participation remains a significant problem. Government and state bodies must become more pro-active in encouraging public participation. There is a need for further commitment to and investment of funds in education, capacity-building and the sharing of information among stakeholders in order to improve both the public and officials understanding of and engagement with public participation in environmental decisions.
- (b) Timeframes should be revised in order to establish sufficient timeframes for participation and to give the public sufficient time to get informed and to prepare and participate effectively. Current deadlines are largely inadequate, particularly when combined with poor access to information. Internet should complement other systems of access to information and not replace them. Legislation/amendments should be made at national level (and also at the EU level) to allow for public participation early in the process.
- (c) It is necessary in many cases to include a general definition of the “public concerned” so that all interested public may be participate.
- (d) Greater attention should be given to the practical aspects of public participation. Relevant information (assessments, reports and other relevant documentation) should be available and accessible at times which are suitable for the general public (both during and outside office/general working hours). Notices must be made more citizen friendly.
- (e) Safeguards should be established to ensure public authorities take due account of public comments when making decisions.
- (f) It may be useful to establish national (and EU) committees to monitor public participation regarding GMOs.
- (g) Internationally agreed guidelines and/or toolkits regarding public participation in risk assessment procedures and regarding the management and labelling of GMOs and to increase the capacity of both the BCH and the Aarhus Convention Clearinghouse would be useful.

33. During the afternoon, participants then had an opportunity to take part in interactive discussion groups to review two case studies. The results from these case studies were as following:

#### **Case study 1: The “GM Nation?” Debate**

34. This case study considered the process by which the “GM Nation?” Debate was carried out in the United Kingdom. A number of positive aspects of the debate were identified. Such aspects included that it had attracted a high level of interest, with approximately 3 million hits on its website, and that it was a very inclusive and open, two-way process, with grassroots workshop setting agendas and sharing material and ideas, with the public being able to choose the topics they wished to participate in and being able to exchange on the socio-economic aspects of the GM issue. On the other hand, there were also concerns that participants in the “narrow but deep” focus groups and grass-roots discussion workshops were selected rather than these events being open to whoever wished to be consulted on these issues. It was also felt that the public participation was removed from the actual decision-making, with no real link to

the government policy. The public should be informed from the beginning of the concrete policy or legislation they are providing input on. Also, the social and scientific aspects were separated, and it was felt that it would be better to have one consultation package on all issues, including bioethical considerations. The importance of media accuracy was noted, which requires that the media be educated so that they understand the topic before writing about it. It was also noted that the public needs to be given all information and materials relevant to the decision-making with sufficient time to digest it before the participation takes place. For example, a tool kit could be released 6 months before to inform the public sufficiently beforehand.

## **Case study 2: Institutional Biosafety Committees**

35. Many companies and research institutes have Institutional Biosafety Committees (IBCs) that help them manage complex decisions about research and development activities involving biotechnology, or genetic engineering. The membership of IBCs usually includes people from outside of the research organisation in order to provide independent review and assessment of their plans. This case study considered Australia's approach which requires that IBCs actively participate in every stage of GMO research. Workshop participants in general considered that the Australian example was potentially a good practice, although the composition of the IBCs would be key in this regard. More than one lay person should be involved and the process by which the lay person(s) are nominated and selected should be open and participatory. The IBC also should include scientists from a variety of fields. There should be greater access to information and independent review of documents. An ethics committee would also be important. It was considered that the IBC with lay members could make a useful contribution, but should be in addition, and not instead, of other types of public participation such as public hearings.

## **CONCLUSIONS AND THE WAY FORWARD**

36. Participants were invited to undertake a short evaluation of the workshop. The results of the evaluation indicated that all or almost all participants found the workshop useful. All participants who completed the evaluation indicated that there was a need for other joint Aarhus Convention/Cartagena Protocol workshops and other cooperative activities among the two secretariats. Some participants would like to have more discussions on public participation related to LMOs/GMOs. Some participants outlined the need to further discuss capacity-building, implementation of laws and access to scientific information. A number of participants also mentioned the need for, among other things, frameworks, plans, guidelines or compilations of good practices on access to information and public participation regarding LMOs/GMOs.

37. The Chair concluded that this workshop had moved the issue on public awareness, access to information and participation forward with clear recommendations and practical solutions. He noted that the discussions had been constructive and all participants had had a possibility to make contributions. In light of the discussion during the workshop, the Chair suggested the following recommendations that might be taken into account by COPMOP-5 in its consideration of the programme of work on public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms item at its fifth meeting and processes and the Aarhus work programmes:

- (a) Public awareness, access to information and public participation are different subjects but very much related to each other. There can be no effective public participation without public awareness which requires education and access to information.
- (b) Public awareness, access to information and public participation are rights according to the provisions of the two Conventions, how to improve the practical implementation is our common goal.
- (c) Although it is sometimes important to distinguish between different groups of the public, all of the public should be welcome to participate in the decision-making process.

- (d) Guidance on how to ensure public awareness, access to information and participation would be helpful for many countries and stakeholders. The Aarhus Convention, its GMO amendment and its Lucca Guidelines on GMOs may be useful in this respect. Guidance on effective, accurate and balanced production and dissemination of information to raise awareness and promote public participation is also needed.
- (e) Guidance is needed on the level of detail of the documentation provided to the public in case of applications, how to deal with confidential information, how to involve broad scientific expertise, the time(s) in the decision-making at which public participation should occur, ways on how to include socio-economic considerations as well as environment and health considerations, mechanisms on how to provide feedback to the public on how their comments have been taking into account, improving the understanding by media representative or other multipliers in society.
- (f) Outreach with other international organizations could be beneficial for the process.
- (g) Collaboration of the two secretariats with respect to their clearing-house mechanisms, the Biosafety Clearing-House (BCH) and the Aarhus Clearinghouse should be arranged. The two secretariats could identify synergies and links for using these mechanisms for improved public awareness, access to information and public participation.
- (h) Effective implementation of Article 23 at the national level requires government officials, often in different ministries, to communicate and to work together.
- (i) Capacity-building, including funding for initiatives regarding public awareness, access to information and public participation on LMOs/GMOs is essential for developing countries and countries with economies in transition. The media, being communicators and multipliers of information, may also benefit from capacity-building.
- (j) Cooperation at all levels and regions is essential to implement the programme of work on public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms and the Aarhus work programmes; and
- (k) There should be an increased number of joint Aarhus Convention/CBD workshops and other joint workshops with more stakeholders. The Aarhus Convention and the Cartagena Protocol on Biosafety should also participate in other processes to raise awareness.

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