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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

Fourth meeting

Bonn, 12-16 May 2008

Item 6 of the provisional agenda*

REPORT OF THE FOURTH COORDINATION MEETING FOR GOVERNMENTS AND ORGANIZATIONS IMPLEMENTING OR FUNDING BIOSAFETY CAPACITY-BUILDING ACTIVITIES

Note by the Executive Secretary

I. PROCEEDINGS

1. The fourth Coordination Meeting for Governments and Organizations Implementing or Funding Biosafety Capacity-Building Activities was held from 11 to 13 February 2008 in New Delhi, India. It was hosted by the Government of India through the Ministry of Environment and Forests (MoEF) and the International Centre for Genetic Engineering and Biotechnology (ICGEB). It was held on the campus of the ICGEB's New Delhi Component. The Government of Norway and the ICGEB provided financial support for participants from developing countries and countries with economies in transition to attend the meeting.

2. The meeting was attended by 39 participants from 18 countries and 11 organizations. The countries were: Austria, Brazil, Cambodia, Canada, Costa Rica, European Community, Germany, India, Malaysia, Mexico, the Netherlands, Norway, Republic of Moldova, Serbia, Slovenia, South Africa, United Republic of Tanzania, and Zambia. The organizations included: Food and Agriculture Organization of the United Nations (FAO), The World Bank, United Nations Development Programme (UNDP/Malaysia), United Nations Environment Programme-Global Environment Facility (UNEP/GEF), International Centre for Genetic Engineering and Biotechnology (ICGEB), International Food Policy Research Institute (IFPRI), Public Research and Regulation Initiative (PRRI), Third World Network and Global Industry Coalition (GIC). The full list of participants is contained in annex II of this report.

3. The meeting was officially opened by Mrs. Meena Gupta, Secretary to the Ministry of Environment and Forests of India. In her remarks, Mrs. Gupta welcomed the participants to India and thanked the Secretariat of the Convention on Biological Diversity and the ICGEB for their support in

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organizing the meeting. She underscored the strategic importance of capacity-building for the implementation of the Cartagena Protocol on Biosafety in order to ensure the safe use of modern biotechnology. She noted that biotechnology is critical for developing countries to address, among others, issues related to food security and poverty alleviation. However, it must be used in a sustainable way to avoid risks to the conservation of biodiversity. She highlighted the need for countries to develop their capacities to implement the Protocol, including those which address risk assessment and risk management, labeling, documentation of living modified organisms (LMOs), liability and redress, socio-economic considerations, public awareness. Furthermore, she emphasized the need for a broad vision as well as sound conceptual and legal frameworks. Coordinated and functional governance for meeting new challenges and making biosafety regulations more effective are also required.

4. Mrs. Gupta noted that India was one of the few developing countries to adopt biosafety measures, having introduced its biosafety rules even before the Convention on Biological Diversity was adopted in 1992. She also reported that India recently completed the implementation of a capacity-building project on biosafety funded by the GEF-World Bank. The project addressed a number of issues including training and technological support for information management and institutional support for regulating LMOs. It also helped in the development of a regulatory framework that addresses the safe handling of LMOs from the laboratory to the field, large-scale field trials and the commercial release of LMOs.

5. Opening remarks were also made by Mr. Charles Gbedemah on behalf of the Executive Secretary of the Convention on Biological Diversity (CBD) and Mr. Decio Ripandelli, Director of Administration and External Relations at the ICGEB in Italy. Prof. V S Chauhan, Director of the ICGEB's New Delhi Component, also gave brief welcome remarks. Mr. A. K. Goyal, Joint Secretary at the MoEF provided a vote of thanks.

6. Mr. Gbedemah thanked the Government of India and the ICGEB for hosting the meeting. He also thanked the Government of Norway and the ICGEB for providing the financial support for the participation of developing countries and countries with economies in transition. He noted that coordination meetings have provided important forums for the major stakeholders involved in biosafety capacity-building to share information and experiences. They also help in identifying key capacity-building issues and potential opportunities for collaboration. He highlighted that the meetings have also played an important role in developing ideas for creating tools and mechanisms for improving capacity-building on specific issues, such as regional cooperation, in order to support the implementation of the Protocol. In conclusion, he recognized the contributions made by Dr. Decio Ripandelli, Dr. Vanga Siva Reddy of the ICGEB and Dr. Ranjini Warriar of the MoEF for organizing this meeting. He also thanked members of the Steering Committee for their guidance and support throughout the preparation of the meeting.

7. Mr. Ripandelli welcomed participants to the ICGEB's New Delhi campus and expressed gratitude to the Government of India and the SCBD for accepting the offer to hold the meeting at the ICGEB. He noted that the ICGEB is one of the primary centres of excellence for advanced research and training in genetic engineering and biotechnology. It is actively involved in biosafety capacity-building, including through training, information dissemination and biosafety research. He welcomed participants to visit the laboratories and other parts of the centre to learn more about ICGEB's activities.

8. The participants elected Mr. Hartmut Meyer (Germany) to serve as Chairperson of the meeting and Ms. Francisca Acevedo Gasman (Mexico) to serve as Rapporteur.

9. The meeting adopted its agenda on the basis of the provisional agenda (UNEP/CBD/BS/CM-CB/4/1), which was developed by the Secretariat in consultation with the Steering Committee. It also adopted its organization of work, which is contained in annex 2 to this report.

10. Under agenda item 3.1, Dr. Mwananyanda Mbikusita Lewanika of Zambia gave a report on the third coordination meeting, which was held in Lusaka from 26 to 28 February 2007 (UNEP/CBD/BS/CM-CB/3/3). Mr. Kangayatkarasu Nagulendran of Malaysia also delivered a brief report on the outcomes of the Second International Meeting of Academic Institutions and Organizations Involved in Biosafety Education and Training, which was held in Kuala Lumpur from 16 to 18 April 2007 (UNEP/CBD/BS/CM-ET/2/4).

11. Under agenda item 3.2, participants made short presentations on the latest developments regarding their ongoing capacity-building projects and initiatives. Participants were invited to submit written briefs to the Secretariat for compilation into an information document (UNEP/CBD/BS/COP-MOP/4/INF/9) which will be made available at the fourth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol (COP-MOP) due to take place in Bonn, Germany, from 12 to 16 May 2008.

12. During the first session on the second day, Mr. Decio Ripandelli gave a short presentation of the history, mission and structure of the ICGEB and its various activities. He reported that the ICGEB is an intergovernmental organization, which is comprised of three components located in Trieste, Italy; New Delhi, India; and Cape Town, South Africa. Since its inception in 1987, the ICGEB has been operating within the United Nations System. It offers a centre of excellence for research and training in genetic engineering and biotechnology, with special attention to the needs of developing countries. The centre develops and provides to its Member States technical instruments and information necessary to enable them to benefit from biotechnology while keeping them informed about its potential risks. Currently, the ICGEB has 57 full-fledged Member States and 20 other countries are signatories or associated to its statutes. In addition, it has an effective global research network of 38 ICGEB Affiliated Centres, based in its Member States, which host many of the centre's training activities and channel ICGEB resources and services to local institutions. A Collaborative Research Programme was established to stimulate research between ICGEB and the network of Affiliated Centres as well as to develop research programmes of specific interest to participating countries. In 1997, the ICGEB established a Biosafety Unit, which provides: (i) access to current scientific information, primarily through online informatics tools (which are interoperable with the Biosafety Clearing-House) as well as scientific and technical publications; (ii) training courses; and (iii) at the request of individual Member States, tailored support for local biosafety capacity-building initiatives. Mr. Ripandelli reported that, since 1991, nearly 1,000 scientists from over 80 different countries have attended ICGEB workshops.

13. Under agenda item 5 (Other matters), the meeting participants discussed ways to improve the Coordination Mechanism during the period between the coordination meetings. In this regard, participants emphasized the need to improve the interaction and exchange of information between governments and organisations implementing or funding biosafety capacity-building activities. The Biosafety Capacity-Building Collaborative Portal, established by the Secretariat through the BCH, could be used for this purpose but had not been effectively utilized. The participants agreed to organize, through the Biosafety Capacity-Building Collaborative Portal, e-mail conferences on the two issues to be addressed at the fifth coordination meeting, namely: (i) integration of biosafety into broader national development plans, strategies and programmes, such as Poverty Reduction Strategy Papers (PRSPs) and the national programmes for achieving the Millennium Development Goals; and (ii) environmental risk assessment and post-release LMO monitoring and evaluation. The Chair of the Steering Committee, Mr. Hartmut Meyer of Germany, offered to develop the concept note (background document) as well as the

discussion topics/modules. He also offered to moderate the two online conferences in collaboration with the Secretariat. An invitation will be sent to all Parties, other Governments and organizations actively implementing or funding biosafety capacity-building activities to participate in the online conferences. At the end of each e-mail conference, a brief summary document will be prepared which will form the basis for further discussion at the fifth coordination meeting.

14. Also under agenda item 5, the participant from Costa Rica, Mr. Alejandro Hernandez Soto, expressed his country's interest in hosting the next coordination meeting. He will make further consultations with the relevant national authorities and inform the Secretariat in due course of the final decision. The participants welcomed the expression of interest and tentatively agreed to host the meeting in the first quarter of 2009.

15. On the last day, participants reviewed and adopted the draft report of the meeting covering the proceedings of the previous two days. The Secretariat was requested to incorporate proceedings of the last day and send the final draft to all participants for comments. The present report has been finalized on that basis. The meeting ended on Wednesday, 13 February 2008 at 5.30 pm.

II. SUBSTANTIVE ISSUES

16. The following principal substantive issues were discussed at the meeting:

(a) Capacity-building initiatives for and experiences gained in addressing socio-economic considerations in decision-making regarding LMOs (agenda item 4.1);

(b) Capacity-building for and experience gained with the implementation of identification and documentation requirements under Article 18, paragraph 2, of the Protocol (agenda item 4.2).

A. *Capacity-building initiatives for and experiences gained in addressing socio-economic considerations*

17. Under agenda item 4.1, four case-study presentations were made by Dr. Casper Linnestad of the Norwegian Biotechnology Advisory Board; Dr. Francisca Acevedo, of the National Commission for the Knowledge and Use of Biodiversity (CONABIO) Mexico; Mr. John Komen of the International Food Policy Research Institute (IFPRI); and Mr. Andreas Heissenberger, of the Federal Environment Agency, Austria. Dr. Ranjini Warriar of the Ministry of Environments and Forest, India also made a short presentation.

18. In his presentation, entitled "Experiences and lessons learned in addressing socio-economic considerations in decision-making regarding LMOs: Reflections on the Norwegian Gene Technology Act", Dr. Linnestad described Norway's approach to addressing socio-economic considerations under the Norwegian Gene Technology Act. He reported that in deciding whether or not to approve any LMO application, the Norwegian Biotechnology Advisory Board places significant consideration on whether the LMO release presents a benefit to the community locally and a contribution to sustainable development globally. He highlighted the following as some of the questions asked: (i) Is an LMO socially justifiable? (ii) Is there a need or demand for the product? (iii) Can it solve, or contribute to solve, a problem for the community locally? (iv) Is it better than corresponding products already on the market? (v) Are there better alternatives to the product? Does it contribute to the creation of new employment opportunities? (vi) Does it cause problems for existing production systems that otherwise should have been preserved? (vii) Is the distribution of benefits between generations affected? and (viii) Is the distribution of benefits or burdens between rich and poor countries affected? He noted that one of

the challenges is the fact that the relevant information most often is not included in the LMO applications. Furthermore, elements of sustainability, ethics and social benefit are not easy to assess. He recommended that an inter-disciplinary approach is needed to address socio-economic considerations.

19. In her presentation, entitled “Experiences and lessons learned in addressing socio-economic considerations regarding LMOs: The case study of Mexico”, Dr. Acevedo described a case study on the social and cultural effects associated with transgenic maize production. This was carried out as part of a broader assessment of the “The effects of Transgenic Maize in Mexico” under the framework of the Commission for Environmental Cooperation (CEC), an international organization created by Canada, Mexico, and the United States of America under the North American Agreement on Environmental Cooperation (NAAEC). She highlighted the importance of maize diversity to the livelihoods and socio-cultural wellbeing of local communities. She further noted that maize in Mexico is a staple food, rather than a commodity, and does not represent a single product but many. Some of the key findings of the case study were that: (i) due to the close relationship between maize and culture, genetic contamination of the maize landraces affected local people socio-economically; (ii) risks were high when considering biopharma and industrial products; and (iii) there were health impacts related to a decrease in diet quality. The case study emphasized the need to ensure that socio-economic assessments are conducted right from the beginning and that key stakeholders, especially local communities (including farmers, consumers, etc), are involved. It was noted that when studying socio-economic impacts, results could vary a lot from one region to another. The context varies and therefore one solution does not fit all problems, which are multiple and variable. The assessment recommended that more studies should be undertaken and disseminated.

20. Mr. Komen, in his presentation entitled “Supporting Biosafety Policy Decisions: Best Practices for Assessing the Social and Economic Impacts of Transgenic Crop Varieties on Small-scale Farmers”, described a case study being carried out by IFPRI and Oxfam - America on the “Best Practices for Assessing the Social and Economic Impacts of Transgenic Crop Varieties on Small-scale Farmers”. He reported that field studies were being carried out on Bt maize in Honduras and the Philippines; Roundup Ready soybean in Bolivia; and Bt cotton in Colombia, China and India. The study is aimed at enabling national and local decision-makers to assess the benefits of transgenic crop varieties, make policy choices and develop regulatory processes. In particular, this project addresses the need for better information on policies and procedures regarding the social and economic aspects of transgenic crop varieties. Its specific objectives are to: (i) develop a “best practices” methodology that will generate useful information about the socio-economic impacts of the adoption of transgenic crop varieties by small-scale farmers in developing economies; (ii) pilot this methodology in a set of comparative case studies; (iii) draw policy implications for local and national decision-makers in the countries where case studies are conducted; and (iv) contribute to the development of policy and governance tools that effectively incorporate socio-economic considerations into decision-making by these and other countries, including the implementation of the Protocol. Preliminary findings from the study reveal that the cost of Bt seeds affects the capacity of farmers to acquire and plant the seeds and that there are stewardship problems in maize production (e.g. pesticide dosage and timing). Mr. Komen noted that ex-post analysis is required across a range of countries and products in order to inform LMO decision-making in other countries.

21. In his presentation, entitled “Socio-economic considerations regarding LMOs: A European Perspective”, Mr. Heissenberger reported that in the European Union (EU), the topic of socio-economic considerations regarding LMOs is mainly discussed in the context of a “co-existence” between agricultural systems using LMOs and those systems which do not (i.e. conventional and organic farming systems which play a key role in preserving biodiversity). It is observed that co-existence measures are needed to prevent or minimize any potential negative effects of “industrial farming” using GM crops on organic agriculture and traditional farming systems. Mr. Heissenberger said studies have shown that

organic farming and traditional farming practices in general have positive effects on biodiversity compared to large-scale “industrial farming”. He also noted that the percentage and market share of organic farming are increasing in many European countries, such as Austria and that contamination of organic products with LMOs would lead to severe decrease of income for farmers and subsequently to a loss of this type of environmentally-friendly agriculture. Therefore it is important to ensure that the “industrial farming” using GM crops does not impact negatively traditional farming systems and organic agriculture. In his conclusion, Mr Heissenberger noted that there is a need to develop capacity-building measures to enable countries and local communities to establish co-existence measures.

22. In her short presentation, Dr. Warriar described how the Government of India is currently addressing socio-economic considerations regarding LMOs. She reported that socio-economic evaluation of LMOs is not mandatory under Indian’s current biosafety regulatory system. However, the system provides for evaluation of the economic benefits of LMOs through systematic evaluation of agronomic performance. Dr. Warriar also reported that the Government of India commissioned case studies to assess the socio-economic and environmental implications of transgenic crops, such as Bt cotton and Bt eggplant. In the case of Bt cotton, a cost-benefit analysis approach was used. Socio-economic surveys were carried out to determine, *inter alia*, the benefits arising from the level of yield and reduction in the use of pesticides versus the cost of production and the implications on the farming practices. In the case of Bt eggplant, the regulatory agency requested a socio-economic survey, which included parameters such as the demand for the product, the existing alternatives, changes in the consumption patterns, the cost of production, the level of productivity, the quality of the product, changes in cropping pattern and others. The results of those case studies will be used to guide the development of policy guidelines for handling socio-economic considerations in national decision-making regarding LMOs.

23. In order to facilitate further discussions on this topic, the presenters were asked to share their views, based on the experience and lessons learned from their respective case studies, regarding when a socio-economic impact assessment should be made and how the outcomes of the assessment outcomes should be included in the decision-making process.

24. In response to the above questions, Dr. Linnestad reported that according to the Gene Technology Act of Norway (1993), socio-economic considerations should be taken into account during the decision-making process and the contribution of the LMO to sustainable development should also be addressed in the assessment. He noted, however, that although the act states that “significant emphasis shall also be placed on whether the deliberate release represents a benefit to the community and a contribution to sustainable development”, so far this holistic approach has proven difficult due to the fact that scientific literature and relevant data are limited. Additionally, information and discussions on socio-economic issues and sustainability are usually not included in the GMO-applications that Norway receives for evaluation.

25. Dr. Acevedo reported that based on the lessons learned from the maize case study in Mexico, socio-economic impact assessment should be done at the country level during the early planning stages of developing or introducing an LMO and it should be needs-driven. She noted that the assessment can be useful in determining possible future acceptance or rejection of the LMO by society and this can be an important factor in decision-making. Ex-post studies are also valuable as feedback for the review of the decisions taken and as an input for further research on the matter. Dr. Acevedo suggested that socio-economic impact assessments should be undertaken and discussed among experts on the subject. However, it is essential to communicate with end users and to enlist their participation. Finally, Dr. Acevedo recommended that outcomes of socio-economic impact assessments should be integrated as an annex component of the risk-assessment reports for consideration in the decision-making process.

26. Mr. Heissenberger reported that, according to European legislation, the European Commission is required to prepare a report on the socio-economic effects of LMOs every three years. However, the definition or clarification of socio-economic considerations is unclear in current legislation and associated guidelines, and there is no provision for a risk-benefit analysis. He also noted that a guideline document, published by the European Commission (General Directorate for Agriculture), states that all co-existence measures, and therefore the decision on how related socio-economic considerations should be taken into account, have to be executed at the national level. In practice, this means that the general assessment on which the decision, which is taken at a central (EU) level, is based, does not take socio-economic considerations into account. These considerations and possible impacts are taken into account only at the post-authorization step (at the national or sometimes even at the regional level) by the countries. This is reflected in a number of different laws and regulations addressing the implementation of co-existence, which primarily lay down criteria for the cultivation of LMOs.

27. Finally, Mr. Komen observed that ex-post socio-economic analyses across a range of countries and products are important in order to inform LMO decision-making in other countries. It is also important to apply a multi-disciplinary approach, combining economic analysis with social science methods, in order to better determine effects on biodiversity and human health (e.g., through altered farming practices), and to identify institutional factors that may moderate or boost economic and social effects. He also highlighted the need for capacity-building efforts to support economic and policy research institutes in developing countries to conduct socio-economic studies regarding LMOs, employing common methodologies, to enable them to inform national decision-making processes. Local researchers also need to be encouraged to translate findings from their studies into practical “toolkits” that would provide decision-making guidance on LMOs.

B. Capacity-building for and experience gained with the implementation of identification and documentation requirements under Article 18, paragraph 2, of the Protocol

28. Under agenda item 4.2, four case-study presentations were made by Prof. Rubens Onofre Nodari of the Ministry of the Environment, Brazil; Prof. Chris Viljoen of the LMO Testing Facility, University of the Free State in South Africa; Dr. Esmeralda Prat of the Global Industry Coalition; and Ms. Maddalena Querci of the European Commission Joint Research Centre (EC-JRC), Biotechnology and LMOs Unit.

29. Prof. Nodari made the first presentation, entitled “The current status, emerging experiences and lessons learned in the implementation of LMO identification and documentation requirements under Article 18.2 of the Biosafety Protocol in Brazil”. He described existing segregation or identity preservation systems in Brazil and how they work. These include: (i) non-LMO soybean traceability systems, including the farmer cooperative traceability systems for organic soybean; (ii) the Identity Preservation (IP) systems for agroecological products; and (iii) the segregation systems for LMO products (e.g. Monsanto’s royalties collect system, which was developed to identify Soybean Roundup Ready™ trading and storage in order to collect the royalties from the farmers). He outlined efforts being made in Brazil to implement the identification and documentation requirements for LMO shipments including the enactment of legislation on LMOs and Decree n° 4,680, of 2003. Prof. Nodari discussed some of the challenges faced in the implementation of identification requirements for genetically modified products, notably problems related to coexistence of conventional and transgenic products and a lack of coexistence rules for soybean. He also highlighted some of the primary issues faced by importing countries, including: (i) the handling of LMOs at ports of entry; (ii) transportation requirements; (iii) distinct handling of imported LMOs; (iv) contamination of landraces when grains are to be used as seed; and (v) labelling systems when the imported products are for industrial use. He noted

that many countries also lack capacity to develop and implement traceability systems including: (i) capacity needs related to sampling strategies and representativeness; (ii) methods of unambiguous identification of LMOs; (iii) vulnerable points of the transit and transportation of cargos regarding contamination; (iv) certification strategies and methods; (v) identity preservation systems; and (vi) understanding Protocol decisions and international trade requirements. Finally, he made a number of recommendations on possible strategies for building the capacities for implementation of the identification requirements under the Protocol.

30. In his presentation, entitled “The current status, emerging experiences and lessons learned in the implementation of LMO identification and documentation requirements under Article 18.2 of the Biosafety Protocol in South Africa”, Prof. Viljoen described the LMO import documentation requirements in South Africa for contained use, for intentional introduction into the environment (including trial releases) and for LMOs with general release and/or commodity clearance. He also described the policy on LMO consignments in transit through South Africa and outlined their documentation requirements, including specific information that must be included in the notification letter. He also outlined the handling and packaging requirements at the port of entry. Furthermore, he set out some of the challenges and limitations in implementing the LMO documentation requirements in South Africa. These include: (i) the diversity of languages in which the documents are issued; (ii) difficulties in obtaining official information on the legal status of LMOs (e.g. approved events) in non-Party countries; and (iii) the lack of agreement on the requirements for LMO status verification in different countries. Prof. Viljoen also described the requirements for certification under the permit system, which is used in South Africa. The permit system involves submission of an affidavit and verification through LMO testing. He discussed the challenges for certification or verification of the LMO status, including determining what LMO testing should be required as well as the threshold cut-off to be used for adventitious contamination. Finally, Prof. Viljoen outlined some of the key capacity-building needs for implementing the documentation and identification requirements under Article 18.2 of the Protocol. These include the need for (i) developing criteria for documentation and verification; (ii) establishing regional LMO testing facilities; (iii) harmonizing documentation requirements; and (iv) capacity for verification and certification of LMO consignments at first point of entry.

31. In her presentation, entitled “Implementation of Article 18.2(b) and (c) of the Biosafety Protocol: Experiences of the Global Industry Coalition”, Dr. Prat described efforts made, and experiences gained, by the Global Industry Coalition (GIC) towards the implementation of the documentation and identification requirements under Article 18.2(b) and (c) of the Protocol. She reported that following the entry into force of the Protocol in September 2003, the GIC has developed guidelines to assist its members in meeting the documentation and identification requirements under Article 18.2(b) and (c) of the Protocol. These guidelines were updated in 2005 to reflect the decisions taken by the Parties to the Protocol at their first meeting. The guidelines are intended to assist members to, *inter alia*, determine whether there is necessary clearance for an LMO shipment (including through checking existing national regulations) and the appropriate information that should be included in the shipping documentation. Dr. Prat also reported that the GIC, together with the International Seed Federation (ISF), conducted a survey of global members regarding the implementation of the documentation and identification requirements. To date, the survey results indicate that Protocol guidance on documentation requirements for shipments under Article 18.2(b) and (c) is working well. Shipments under Article 18.2(c) are occurring to and from 39 countries (including 32 Parties), so far without incident. No concerns have been raised by import officials or customs agents. In this regard, the GIC supports continued use of the guidance language on existing shipping documentation and irrespective of whether countries have national regulations implementing Article 18.2(b) and (c). Furthermore, Dr. Prat presented results of an analysis undertaken by the GIC of the information submitted to the BCH by 14 countries against known company approvals (including type of approval, LMO details, etc). She reported that the results show an average of 35 per

cent accurate postings, 30 per cent incorrect postings and 35 per cent missing postings per country. She also noted that most of the BCH postings on decisions are incomplete or inaccurate.

32. Ms. Querci's presentation, entitled "Experiences gained with the use of sampling and detection techniques by the European Commission Joint Research Centre (EC-JRC)", described the main activities of the centre. These include: (i) biotechnology research and development (encompassing LMO sampling, detection and analysis); (ii) coordination of the European Network of GMO Laboratories (ENGL); and (iii) management of the EC Reference Laboratory for GM Food & Feed (CRL-GMFF) and Community Reference Laboratory for GMOs (CRL-GMO). She reported that the ENGL acts as a scientific and technical platform to advance European harmonization and standardization of means and methods for sampling, detecting, identifying and quantifying LMOs from a wide variety of matrices (including seed, grains, food, feed and environmental samples). The ENGL's specific activities include: development of methods for qualitative and quantitative analyses, validation methods; training, technology transfer and capacity building; development of reference materials; development of sampling strategies for different GM-commodities and the establishment of databases. Ms Querci also described the EC's effort towards harmonization of sampling and detection methods, including: sampling strategies, sample preparation/extraction methods, sample analyses (using DNA-based and protein-based methods) as well as laboratory facility quality assurance, accreditation and validation standards. She outlined existing LMO sampling and method validation software and procedures, including: Kernel Sampling Technique Evaluation (KeSTE), Kernel Lot Distribution Assessment (KeLDA), Contaminants Distribution Estimate (CoDE) and the Analytical Methods Performance Evaluation (AMPE). She briefly described the KeLDA project, which is used to assess the distribution of LMO contaminations imported within EU Member States in grain lots. Furthermore, she illustrated the approaches used to reduce sampling and analytical errors. She also described recently developed multi-target approaches for LMO analyses. These include DNA micro-array technology and the Real-Time PCR-based ready-to-use multi-target analytical system for the detection of EU authorized and non-authorized GM events. Finally, Ms. Querci described the JRC's capacity-building and training programme, which includes hands-on training courses in LMO detection as well as the development of user manuals and training kits/CD-ROMs.

33. During the discussions, it was reported that both governments and the private sector have accumulated experience in implementing various documentation systems addressing issues other than the import and export of LMOs. For example, some governments and private sector actors have also accumulated experience in building up and implementing identification systems for LMOs. Participants also noted that the private sector plays an important role in implementing documentation systems. As such, it should be actively involved, together with other relevant stakeholders and actors, in the development process of documentation systems for LMOs. Regarding capacity-building for the sampling and detection of LMOs, participants emphasized the need to train more personnel in sampling and detection methods. In terms of the infrastructure, including laboratories, for the detection and analysis of LMOs, they cautioned that the cost of maintaining laboratories can be very high. Countries therefore need to examine carefully if they have the sufficient resources and demand of use to sustain such laboratories before investing heavily in establishing them and the creation of regional testing laboratories should be considered.

III. CONCLUSIONS AND RECOMMENDATIONS

34. The primary conclusions and recommendations of the meeting focused on the two substantive issues considered by the meeting: (i) capacity-building for addressing socio-economic considerations in decision-making regarding LMOs; and (ii) capacity-building for the implementation of identification and documentation requirements under Article 18, paragraph 2, of the Protocol.

A. *Capacity-building in addressing socio-economic considerations*

35. The aim of the coordination meeting in addressing this issue was to identify capacity-building requirements. These included the required expertise and institutional capacities to address socio-economic issues in national decision-making on LMOs. The meeting participants set out to identify ways and means of enabling Parties to develop the necessary capacities.

36. The participants observed that, while Parties have identified socio-economic considerations as one of the key elements in the Action Plan for Building Capacities for the Effective Implementation of the Protocol requiring urgent action, specific issues and needs have not yet been identified. It was also observed that, currently, only a limited number of biosafety capacity-building initiatives address the issue of socio-economic considerations under the Protocol. However, it was reported that socio-economic issues are being addressed in some other national decision-making processes not related to LMOs. These include environmental impact assessments (EIAs) and social impact assessments (SIAs). Accordingly, the participants concluded that, in order to effectively address capacity-building requirements concerning socio-economic considerations in national decision-making, specific issues and needs must be identified.

37. In the context of addressing the biosafety capacity-building needs of developing country Parties, with a view to implementing biosafety capacity-building initiatives, the meeting participants recommended the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol to:

(a) Invite Parties, other Governments and relevant stakeholders to submit to the Executive Secretary information on ongoing and planned biosafety capacity-building initiatives that include activities related to socio-economic considerations in national decision-making regarding LMOs;

(b) Invite Parties to identify their needs and appropriate processes to build awareness and exchange information and experiences on socio-economic considerations related to national decision-making regarding LMOs;

(c) Request the Executive Secretary to review existing biosafety capacity-building initiatives to determine if and how socio-economic considerations are identified as needs and included in the capacity-building activities;

(d) Request the Executive Secretary to conduct an analysis to determine if and how socio-economic considerations are already taken into account in the national decision-making processes regarding LMOs under existing legal frameworks and other mechanisms; and

(e) Request the Executive Secretary to convene a group of experts to identify issues that are related to socio-economic considerations in national decision-making regarding LMOs, and review the experience and methodologies currently used to assess socio-economic impacts in other decision-making processes, with the view to supporting the identification of capacity-building requirements for addressing socio-economic considerations in decision-making regarding LMOs.

B. *Capacity-building for implementation of the identification and documentation requirements*

38. With regard to capacity-building relating to the implementation of identification and documentation requirements under Article 18, paragraph 2, of the Protocol, participants noted that capacity-building requirements may differ depending on whether a country is an importer or an exporter of LMOs (or both). They also observed that capacity-building for the implementation of Article 18.2 of

the Protocol and decision BS-III/10 will be an ongoing task due to the changing nature, types and amounts of imports and exports of LMOs and products.

39. In the context of identifying measures to address capacity-building needs, the meeting participants recommended to the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol to invite Parties, *inter alia*, to:

(a) Identify their capacity-building needs for establishing appropriate LMO documentation and identification systems to implement Article 18.2 of the Protocol and decision BS-III/10, especially paragraphs 4(a) and 4(b) of decision III/10;

(b) Develop and implement biosafety capacity-building initiatives that address identified documentation and identification needs in a timely manner, recognizing that documentation systems for import and export of LMOs may differ from country to country;

(c) Assess if and how the experience with existing documentation systems can be used in developing LMO documentation systems;

(d) Involve all relevant stakeholders and actors in: (i) the process of developing documentation systems for LMOs, and (ii) the identification of the institutions needed to implement those systems;

(e) Identify and train the relevant stakeholders, for example competent authorities, customs and inspection control officials, other government officials and relevant private sector personnel, in order for them to be able to implement LMO documentation systems;

(f) Develop guidelines and other instruments to assist relevant stakeholders and actors, such as those involved in the transportation system, to implement the LMO documentation requirements;

(g) Make available on the BCH any existing national laws and regulations related to the LMO identification and documentation requirements under 18.2 of the Protocol and decision BS-III/10 and to ensure the accuracy and completeness of their information in order to support compliance by all relevant stakeholders and actors;

(h) Identify the needs for developing norms and operational criteria to support the implementation of international rules and standards for LMO sampling and detection with the view to fostering mutual recognition of information and results concerning LMO identification within and between the countries.

Annex I
ORGANIZATION OF WORK

Plenary	
Monday 11 February 2008 9 a.m. – 9.30 a.m.	<i>Agenda item:</i> 1. Opening of the meeting.
9.30 a.m. – 10 a.m.	<i>Agenda items:</i> 2. Organizational matters: 2.1. Election of officers; 2.2. Adoption of the agenda; 2.3. Organization of work.
10 a.m. – 10.30 a.m.	Coffee/Tea Break
10.30 a.m. – 1 p.m.	<i>Agenda items:</i> 3. Standing items on the agenda: 3.1 Report of the third coordination meeting and the progress made in implementing the conclusions and recommendations of previous coordination meetings; 3.2 Update on ongoing and planned biosafety capacity-building projects/initiatives: latest developments and emerging opportunities for collaboration.
1 p.m. – 2 p.m.	Lunch Break
2 p.m. – 3.30 p.m.	<i>Agenda item 3 (continued)</i>
3.30 p.m. – 4 p.m.	Coffee/Tea Break
4 p.m. – 5.30 p.m.	<i>Agenda items:</i> 4. Issues for in-depth consideration: 4.1 Capacity-building initiatives for and experiences gained in addressing socio-economic considerations in decision-making regarding LMOs. <i>"Experiences and lessons learned in addressing socio-economic considerations in decision-making regarding LMOs: Reflections on the Norwegian Gene Technology Act "</i> , by Dr. Casper Linnestad, Norwegian Biotechnology Advisory Board <i>"Experiences and lessons learned in addressing socio-economic considerations regarding LMOs: The case study of Mexico"</i> , by Dr. Francisca Acevedo

	Plenary
	<p><i>"Supporting Biosafety Policy Decisions: "Best Practices" for Assessing the Social and Economic Impacts of Transgenic Crop Varieties on Small-scale Farmers"</i>, by Mr. John Komen, IFPRI</p> <p><i>"Socio-economic considerations regarding LMOs: A European Perspective"</i> by Mr. Andreas Heissenberger</p> <p>Discussion</p>
<p>Tuesday 12 February 2008 9 a.m. – 10.30 a.m.</p>	<p>Agenda items:</p> <p>4.2 Capacity-building for and experience gained in the implementation of identification and documentation requirements under Article 18.2 of the Protocol.</p> <p><i>"The current status, emerging experiences and lessons learned in the implementation of LMO identification and documentation requirements under Article 18.2 of the Biosafety Protocol in Brazil"</i>, by Prof. Rubens Onofre Nodari, Ministry of the Environment, Brazil</p> <p><i>"The current status, emerging experiences and lessons learned in the implementation of LMO identification and documentation requirements under Article 18.2 of the Biosafety Protocol in South Africa"</i>, by Prof. Chris Viljoen</p> <p><i>"Implementation of Article 18.2(b) and (c) of the Biosafety Protocol: Experiences of the Global Industry Coalition"</i>, by Dr. Esmeralda Prat, Biosafety Manager, Bayer CropScience</p> <p><i>"Experiences gained with the use of LMO sampling and detection techniques by the Joint Research Centre of the European Commission"</i> by Maddalena Querci</p> <p>Discussion</p>
10.30 a.m. – 11 a.m.	Coffee/Tea Break
11 a.m. – 1 p.m.	Agenda item 4 (<i>continued</i>)
1 p.m. – 2 p.m.	Lunch Break
2 p.m. – 3.30 p.m.	Agenda item 4 (<i>continued</i>)
3.30 p.m. – 4 p.m.	Coffee/Tea Break
4 p.m. – 5.30 p.m.	<p>Agenda item 5</p> <p>Consideration of the capacity-building needs and priorities of countries and interactions between recipients and providers of capacity-building assistance</p>

	Plenary
Wednesday 13 February 2008 9 a.m. – 1 p.m.	<i>Agenda items:</i> 6. Other matters; 7. Conclusions and recommendations; 8. Closure of the meeting.
2.00 p.m. – 3.30 p.m.	Visit to the ICGEB laboratories
3.30 p.m. – 5.30 p.m.	Visit to downtown New Delhi
6.00 p.m. –	Dinner hosted by ICGEB

Annex II

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