FAO INTERNATIONAL CONFERENCE (2009)

The Use of Biotechnologies for Food and Agriculture in Developing Countries: Learning from the Past and Planning for the Future

STEERING COMMITTEE MEETING REPORT 10-11 July, 2008 Rome, Italy

INTRODUCTION

The first meeting of the Steering Committee (SC) for the proposed 2009 International Conference on Biotechnologies for food and agriculture in Developing Countries took place on 10-11 July, 2008, at the Food and Agriculture Organization (FAO) headquarters in Rome, Italy.

OPENING

Agenda item 1: Welcome and opening remarks by FAO

Shivaji Pandey (Chair, FAO Working Group on Biotechnology) opened the meeting by welcoming the SC members and gave a quick overview of the need for such a Conference vis-à-vis the current food crisis. He stated that there are approximately 820 million hungry people in developing countries, and this number is on the increase due to soaring food prices. The area under agriculture has declined as also has the rate of growth in agricultural productivity while the demand for food continues to escalate. He noted that although biotechnologies on their own cannot solve the world's problems of poverty and hunger, they represent one of the factors that can help in bridging the gap between the demand and supply of food.

Agenda item 2: Brief self-introduction of SC members

The opening remarks were followed by the participants providing a brief self-introduction. The SC meeting brought together a unique and eminent group of individuals with experience and expertise in all biotechnologies and in all the main food and agricultural sectors. Twenty five were invited in their personal capacity, selected because of their scientific expertise in biotechnologies in one or more of seven main areas (crops, forestry, livestock, fisheries, food processing and safety, environment, and science and technology policy), giving also due consideration to their geographical location worldwide. In addition, 17 members represented relevant stakeholder groups, including UN and non-UN intergovernmental organizations, civil society organizations, private foundations and private sector organizations, and 10 individuals participated from the FAO Secretariat. The names and affiliations of the SC participants are listed in Appendix 1.

ADOPTION OF THE AGENDA

Andrea Sonnino (Secretary, FAO Working Group on Biotechnology) gave a short PowerPoint presentation about the Conference and its rationale, objectives, content and expected outputs. He emphasized that the scope of the proposed Conference was to cover all biotechnologies, which represent a wide range of tools, and not just genetically modified organisms (GMOs), and to include all the food and agricultural sectors (crops, forestry, livestock, fisheries, agro-industry). While some biotechnologies are more universal and may be applied to all the sectors (e.g. use of DNA markers for characterization), others are more sector-specific (e.g. tissue culture in crops and forestry, embryo transfer in livestock, fermentation in food processing, etc.). He argued that the major controversy

surrounding GMOs had overshadowed other applications of biotechnology which may be highly relevant for addressing development problems.

In line with the concept note circulated amongst the SC members before the meeting, his presentation described the three expected outputs from the four-day Conference:

- i) Documentation of the current state of use of biotechnologies in developing countries;
- ii) An analysis and understanding of the factors that determine the success or failure of applying biotechnologies in developing countries; and
- iii) Development of a Plan of Action that will enable developing countries to successfully use appropriate biotechnologies in the future for their food and agricultural needs.

He concluded by giving an overview of the meeting agenda and requesting any inputs before its adoption. As there were none, the meeting agenda was adopted as presented (Appendix 2).

AGENDA ITEMS FOR DISCUSSION

Agenda item 3: Conference rationale, objectives and expected outputs

Regarding the Conference rationale and objectives, there was consensus from the SC that concrete steps needed to be taken to move beyond the "business-as-usual" approach and to respond to the current food crisis and address the challenges posed by climate change in undermining food production in the developing world in order to ensure global food security. It was also underscored that a multifunctional approach and the integration of agricultural biotechnologies with other non-biotechnology innovative strategies was vital for sustainable agricultural development as is reflected in recent reports such as the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) and the 2008 World Bank Development Report. It was agreed that the objective of the Conference should not be to promote the use of biotechnologies in developing countries but rather to empower developing countries to make informed decisions about the use of biotechnologies according to their requirements and needs. It was emphasized that the aim of the Conference was not to focus on science merely for the sake of science but on "science for development". It was suggested that the proposed title of the Conference be revised and re-formulated to reflect these discussions.

With reference to the scope of the Conference, there was consensus from the SC about the inclusion of all the food and agricultural sectors. Different opinions were expressed concerning which biotechnologies to include, with one suggestion that the Conference should cover only non-GMO biotechnologies and another proposal to include new technologies such as converging technologies, nanotechnologies and synthetic biology. The issue of addressing energy needs and biofuels and their impact on feed and food safety was raised as well. Finally, it was agreed that the Conference would focus on all biotechnologies as originally proposed, excluding additional technologies and topics. In addition, it was proposed, and agreed by the SC that the Conference should consider the major agricultural problems for each sector that currently lack a solution, such as Avian Influenza or the Ug99 wheat fungus, and the role that biotechnology could play in solving them.

Pertaining to the outputs of the Conference, there was general consensus regarding the usefulness of having a stock-taking exercise across the different sectors, describing the current status and analyzing previous successes/failures in order to learn from the past and make recommendations for the future. Even though the primary focus of the Conference would be on developing countries, it was decided not to restrict the lessons learnt to developing countries only, but to include pertinent case studies from developed countries. Experiences from both the public and private sector would be relevant.

There was also agreement about the necessity of producing a Plan of Action which was not just of academic relevance but also had political impact and that it should be finalized after the Conference

(accounting for discussions and comments from stakeholders present at the Conference) and then submitted to FAO governing bodies for their consideration and possible endorsement.

There was general agreement that FAO, as a neutral forum, was well placed to guide the Conference.

Agenda item 4: Budget and resources for the Conference (potential donors, sponsors)

Andrea Sonnino informed the SC that the initial budgetary estimates for the Conference were over \$800,000, of which approximately half was for travel of participants from developing countries and the remainder was for communication, publication, the Conference secretariat and consultants. The possibility of holding the Conference in more than one language was also discussed at the meeting. If this were indeed the case, then the related expenses of translations and interpretations would also need to be added onto the budget estimate.

So far, a total of \$80,000 had been actually committed, provided by the US mission to the UN agencies in Rome, to partially cover the cost of the first SC meeting. The remaining cost for the meeting was covered by FAO and other organizations that funded their respective participants. There had also been promises of funding for the Conference from several other donors. Shivaji Pandey stressed, and it was agreed by the SC, that acquiring financial support from several different sources was essential, as it would ensure that the Conference was organized in an independent and transparent manner and that its outputs were credible, balanced and based on a wide consensus.

Many members of the SC expressed an initial interest in partnering their affiliated organizations with FAO for the Conference, with respect to technical resources, specifically: The European Commission Joint Research Center (EC-JRC), EMBRAPA (Brazilian Agricultural Research Corporation), CGIAR Generation Challenge Program, Global Forum on Agricultural Research (GFAR), HarvestPlus, International Center for Genetic Engineering and Biotechnology (ICGEB), International Life Sciences Institute (ILSI), Organization for Economic Co-operation and Development (OECD), Seed Science Center and the Biosafety Institute at Iowa State University, United Nations Educational, Scientific and Cultural Organization (UNESCO), and World Health Organization (WHO).

The SC members were encouraged to become ambassadors for this initiative and seek technical and/or financial support in this context.

Agenda item 5: Course of action between the SC meeting and the Conference itself

On the first day of the meeting, the terms of reference (ToR) for the SC were circulated which included the establishment and organization of working groups, each of which would be responsible for the preparation of a technical document before the Conference. Andrea Sonnino introduced this agenda item and informed the SC that six working groups were proposed, one each to produce five sector-specific technical documents (crops, forestry, livestock, fisheries, and food processing and safety) and a sixth group that would produce a document on policy options. Each sector-specific technical paper would document the current status of application of biotechnologies in developing countries; provide an analysis of the reasons for successes and failures of various biotechnologies in developing countries; and make recommendations for the future. The 6th group would produce a policy document describing the current status of national biotechnology policy options with reference to all five sectors in developing countries, covering also capacity building and intellectual property rights frameworks. It would review specific cases of successes and failures stemming from biotechnology policy formulation and implementation in developing countries and finally identify options to assist countries in the development of national policies on biotechnology appropriate for their own needs.

He also proposed that, when finalized, a "synthesis group" would assimilate all six documents into a holistic, synthesis document with cross-cutting parameters. The synthesis document would elaborate on the integrated information by identifying the gaps and needs that require intervention either at local, national, regional or global levels, and suggest a set of recommendations with both technical and policy issues being addressed. The second function of the synthesis document would be to propose a draft for the Plan of Action that would consist of key elements to assist developing countries meet their food and agricultural needs and provide an agreed framework for international cooperation and funding support in this area.

The draft ToR for the working groups and synthesis group and for the seven documents (5 sector-specific, one on policy options and one synthesis document) were distributed to the SC members before discussion of agenda item #5. After this introduction, the floor was opened for comments and discussion.

Most comments related to the sector-specific technical papers. It was proposed that the ToR should give greater emphasis to the "preparing for the future" component (including consideration of key unsolved problems for each sector). In addition, several cross-sectoral aspects (such as potential socio-economic, cultural, regulatory, environmental, agro-ecological, nutritional, health and hygiene, consumer interest and perceptions, sustainable livelihoods, equity, technology transfer and food security impacts) as well as the unexpected ramifications of biotechnology adoption and implementation needed to be considered before defining a particular application of biotechnology as a success/failure under the "learning from the past" component. The utility of using case studies to understand the effects of biotechnology implementation was emphasized. Based on these comments, revised ToR were prepared by the FAO secretariat and circulated among the SC members after lunch.

For the policy options paper, it was suggested that it should also cover regulation and standard setting. For all six documents, the need to have a standard, clear and acceptable definition of what characterizes a success or a failure in the context of implementing biotechnologies (or biotechnology policies, for the 6th paper) was underlined. Similarly, it was decided that a consistent definition of biotechnology needed to be employed by the five sector-specific working groups.

SC members were later requested to indicate their interest in contributing to one (or more) of the six working groups.

Agenda item 6: Develop organizational structure of the Conference

With regard to the potential venue/date, the SC was informed that no venue had yet been decided and that hosting the Conference before October 2009 would be difficult, given the large amount of preparation needed. The floor was then opened for inputs on this issue. Venue suggestions put forward by the SC members included China, Tunisia and Turkey. It was agreed that the SC would consider these options, although the finalization of the venue would be subject to approval from the Governments of the proposed countries. The SC was informed that there was interest from the Government of Iran in hosting the Conference. It was also brought to the attention of the SC that the UN Commission for Science and Technology for Development (UNCSTD) was planning to organize a conference in early 2009 on technology as a response to the current food crisis and that the Malaysian Ministry of Science and Technology had offered to host it. The SC welcomed other offers after the meeting to host the Conference and, regarding the UNCSTD conference, emphasized that all efforts should be made to avoid overlap and to exploit synergies between the two conferences.

Concerning the potential audience, it was decided that for optimal results the Conference would have a mixed audience including government representatives (with a scientific background), scientists and various stakeholder groups to welcome different perspectives and ensure a high level of engagement in the process and outputs. Therefore, a large number (500-600, although some people suggested up

to 1,000) of scientists, development workers, policy makers, trade experts, innovation system experts, end-users of technology including farmers and consumers, representatives of inter-governmental and non-governmental organizations as well as the private sector, donors and agencies for technology transfer would be expected to attend this open Conference.

Regarding the Conference programme layout, the SC reviewed the themes for plenary and sector-specific parallel sessions, highlighting the need for effective communication to facilitate involvement of attendees from across-the-board backgrounds (e.g. avoidance of technical jargon and organization of participatory roundtables). Numerous formats for the Conference layout were put forward by the SC with the majority approving that the keynote speakers in the morning plenary sessions would lead panel discussions introducing key issues and focusing on cross-cutting themes (including in particular technology transfer, capacity building, food safety, environment and biodiversity, consumer interest, sustainable livelihoods, food supply and, finally, regulation), followed by parallel sector-specific sessions/roundtables in the afternoon where sector specific documents prepared by the working groups would be presented and discussed, and to end each day with a final plenary session where rapporteurs would also provide summaries of the afternoon sessions.

It was noted that the Conference needed to give substantive attention to the draft Plan of Action. In order to allow thorough discussion and to receive comments from stakeholders, it was proposed that at least one day (the last day) be devoted to it. In this way, the Plan of Action could be finalized after the meeting, accounting for presentations and discussions held during the first three days of the Conference and for the specific discussions and inputs from stakeholders about the Plan of Action on the fourth day of the Conference.

The final items on the meeting agenda were the creation of a Conference website and the timeline for Conference promotion and visibility. An informative website to provide details about the Conference as well as access to the documents prepared by the SC was recommended. The advantages of using broadcast streaming for the Conference were also mentioned. It was agreed that numerous channels (e.g. through GFAR) could be mobilized for maximal participation and involvement of stakeholders such as smallholder farmers, fishers, pastoralists, civil society organizations etc.

CLOSING

Andrea Sonnino noted that the overall outcome of the SC meeting had been very positive and productive with a consensus on the major issues being reached. The proposed way forward for the future was:

- a) Prepare a report of the SC meeting.
- b) Based on inputs and discussions at the SC meeting, prepare a revised, refined and expanded concept note for the Conference.
- c) Using the revised concept note, liaise further with specific potential donors regarding additional funding.
- d) Develop a provisional program outline for the Conference.
- e) Initiate the formation of working groups and recruitment of consultants to assist in the preparation of the documents.

Agenda item 7: Closing remarks by FAO

In conclusion, Shivaji Pandey thanked the SC members for coming to the meeting and for their contributions to the stimulating discussions. He underlined that it was essential to ensure the quality and independence of the entire process and felt confident that the successful hosting of the first SC meeting was an important step towards organizing the Conference in a timely and highly efficient manner.

APPENDIX 1

LIST OF STEERING COMMITTEE PARTICIPANTS, 10-11 July 2008, FAO

INDIVIDUALS INVITED IN THEIR PERSONAL CAPACITY

Ariel Alvarez-Morales

Executive Secretary

CIBIOGEM (Comisión Intersecretarial de Bioseguridad de los Organismos Genéticamente Modificados)

San Borja 938

Col. Del Valle

Del. Benito Juárez

México D.F. 03100

John Benzie

Moana Technologies

99-1173 Iwaena Street

Aiea, HI 96701

United States of America

Eugenio Cap

Director,

Instituto of Economics and Sociology

INTA (National Institute for Agricultural Technology)

Cerviño 3101

Buenos Aires

Argentina

James Dargie

Board of ILRI

Brunnstubengasse 43

2102 Bisamberg,

Austria

Guy Van den Eede

Head of Unit "Biotechnology and GMOs" European Commission - Joint Research Centre Institute for Health and Consumer Protection Ispra (Varese) I-21020 Italy

Dominic Glover

Post-doctoral Fellow

Technology and Agrarian Development Group

Wageningen University

Building no. 201, Hollandseweg 1

6706 KN Wageningen

The Netherlands

Kathleen Jones

U.S. Food and Drug Administration Center for Food Safety and Applied Nutrition

HFS-4

Paint Branch Parkway

College Park, MD 20740,

United States of America

Shawn Kaeppler

Professor of Agronomy University of Wisconsin 453 Moore Hall 1575 Linden Drive Madison, WI 53706, United States of America

Daniel Baskaran Krishnapillay

Advisor
Forest Research Institute Malaysia (FRIM)
Director General's Office Complex
Kepong 52109, Selangor,
Malaysia

Harry Kuiper

RIKILT- Institute of Food Safety Wageningen UR; P.O. Box 230 6700 AE Wageningen; Building n°123; Bornsesteeg 45 6708 PD Wageningen The Netherlands

Anne MacKenzie

Consultant, Animal Health and Food Safety 6442 Aston Road Manotick Ontario, Canada K4M1B3

Arthur da Silva Mariante

Embrapa Genetic Resources and Biotechnology P.O. Box 02372 70770-900 Brasilia - DF Brazil

Victor Martinez

Associate Professor Animal Breeding and Genomics Faculty of Veterinary Sciences Universidad de Chile Avda Santa Rosa 11.735 La Pintana-Santiago. Chile

Manjit K. Misra

Director, Seed Science Center 102 Seed Science Center Iowa State University Ames, Iowa 50011, United States of America

CV Mohan

Coordinator, Aquatic Animal Health Program
Network of Aquaculture Centres in Asia-Pacific (NACA)
Suraswadi Building, Department of Fisheries
Kasetsart University Campus
Ladyao, Jatujak
Bangkok 10900

Thailand

E.M.Muralidharan

Scientist E1, Biotechnology Kerala Forest Research Institute Peechi, Thrissur, Kerala 680653, India

Marilia Nutti

Researcher, Human Nutrition
Brazilian Agricultural Research Corporation- Embrapa
Ministry of Agriculture, Livestock And Food Supply
Av. Das Americas, 29501
Rio de Janeiro, 23020-470,
Brazil

Susan J. Owens

Director, Trade and Science Capacity Building Division Office of Capacity Building and Development Foreign Agricultural Service 1400 Independence Ave SW Washington, DC 20250, United States of America

Olusola Oyewole

Coordinator, Mobilizing Regional Capacity Initiatives (MRCI), Association of African Universities P.O. Box AN 5744, Accra-North, Ghana

Mohammad Pourkazemi

Director International Sturgeon Research Institute P.O. Box 41635-3464 Rasht, I.R. of Iran

Kobie de Ronde

Programme Manager, Germplasm Development Agricultural Research Council-Vegetable and Ornamental Plant Institute KwaMhlanga Road, Pretoria, South Africa

Olivier Sanvido

Agroscope Reckenholz Tänikon Research Station ART Reckenholzstrasse 191 CH-8046 Zürich Switzerland

Adama Traore

Executive Secretary Comité National de la Recherche Agricole (CNRA)
Ministère de l'Agriculture
Bamako
Mali

Rajeev K. Varshney

Senior Scientist (Applied Genomics)

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

Leader, Sub Programme 2: Genomics towards Gene Discovery

Generation Challenge Programme

Applied Genomics Laboratory, GT- Biotechnology, ICRISAT

Patancheru- 502 324,

Greater Hyderabad,

India

Claire Williams

Nicholas Institute for Environmental Policy Solutions

Duke University

Box 90338

Durham NC 27708,

United States of America

INDIVIDUALS INVITED FROM INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS

BIO

Sarah Lukie

Managing Director, Global Issues and Multilateral Affairs Food and Agriculture, Biotechnology Industry Organization

1201 Maryland Avenue, SW Suite 900

Washington, D.C. 20024,

United States of America

CropLife International

Denise Dewar

Executive Director, Plant Biotechnology

CropLife International

1156 15th Street NW, Suite 400

Washington, DC 20005,

United States of America

ETC Group

Hope Shand

Research Director

Action Group on Erosion, Technology and Concentration (ETC Group)

108 E. Main St., Suite 7

Carrboro, NC 27510,

United States of America

<u>ICTSD</u>

Heike Baumüller

Adviser to the Chief Executive

International Centre for Trade and Sustainable Development

No. 39, Street 310

(P.O. Box 2621)

Phnom Penh,

Cambodia

ILSI

Marci J. Levine

Staff Scientist

International Food Biotechnology Committee

International Life Sciences Institute

One Thomas Circle, NW Washington, DC 20005, United States of America

INDIVIDUALS INVITED FROM UN AND NON-UN INTER-GOVERNMENTAL ORGANIZATIONS

CGIAR Science Council

Haruko Okusu
Agricultural Research Officer
Secretariat of the CGIAR Science Council
c/o FAO/NRDS
Viale delle Terme di Caracalla
00153 Rome
Italy

Codex Alimentarius Commission

Masashi Kusukawa Codex Alimentarius Commission Secretariat c/o FAO Viale delle Terme di Caracalla 00153 Rome Italy

GFAR

Mark Holderness
Executive Secretary,
The Global Forum on Agricultural Research
c/o FAO
Viale delle Terme di Caracalla
00153 Rome
Italy

ICGEB

Decio Ripandelli Director, Administration and External Relations International Centre for Genetic Engineering and Biotechnology c/o AREA Science Park Padriciano 99 I - 34012 Trieste, Italy

IFAD

Shantanu Mathur Officer-in-Charge, Technical Advisory Division, International Fund for Agricultural Development Rome, Italy.

ITPGRFA

Shakeel Bhatti
Secretary
International Treaty on Plant Genetic Resources for Food and Agriculture c/o FAO
Viale delle Terme di Caracalla
00153 Rome

Italy

OECD

Peter Kearns

Principal Administrator

Organization for Economic Co-operation and Development

ENV-EHS

2 rue Andre-Pascal

75775 PARIS Cedex 16

France

OIE

Elisabeth Erlacher-Vindel

Deputy Head, Scientific and Technical Department

World Organisation for Animal Health (OIE)

12, Rue de Prony

75017, Paris,

France

UNCTAD

Simonetta Zarrilli

Legal Officer

Division on International Trade and Commodities

United Nations Conference on Trade and Development

Geneva.

Switzerland

UNEP

Balakrishna Pisupati

Division for Environmental Law and Conventions

United Nations Environment Programme

Nairobi,

Kenya

UNESCO

Julia Hasler

Programme Specialist, Division of Basic and Engineering Sciences

Natural Sciences Sector

United Nations Educational, Scientific and Cultural Organization

1 rue Miollis

75732 Paris cedex 15,

France

WHO

Noriko Iseki

Technical Officer

Department of Food Safety, Zoonoses and Foodborne Diseases

World Health Organization

c/o FAO

Viale delle Terme di Caracalla, 00153 Rome

Italy

INDIVIDUALS FROM THE FAO SECRETARIAT

Preet Lidder

FAO Working Group on Biotechnology

Shivaji Pandey

Director

Plant Production and Protection Division

Rosa Rolle

Agro-industry Officer

Agricultural and Food Engineering Technologies Service

John Ruane

FAO Working Group on Biotechnology

Beate Scherf

Animal Production Officer

Animal Production and Health Division

Andrea Sonnino

Senior Agricultural Research Officer

Research and Extension Unit

Oudara Souvannavong

Senior Forestry Officer

Forest Conservation Service

Rohana Subasinghe

Senior Fishery Resources Officer

Aquaculture Management and Conservation Service

Masami Takeuchi

Food Safety Officer

Food Quality and Standards Service

Nuria Urquia

Networking officer

Seed and Plant Genetic Resources Service

APPENDIX 2

FAO International Conference (2009): The Use of Biotechnologies For Food and Agriculture in Developing Countries: Learning from the Past and Planning for the Future

First Steering Committee Meeting Provisional Agenda

Philippines Room (Room number C 277/281, Building C)
FAO headquarters
Rome, Italy
10-11 July, 2008

Thursday afternoon, 10 July, 2008 (14:00 - 18:00 hrs)

Agenda item 1. Welcome and opening remarks by FAO

Agenda item 2. Brief self- introduction by SC members

Agenda item 3. Conference rationale, objectives and expected outputs:

- Learning from the past
- Planning for the future
- Plan of Action to enable countries to successfully implement agricultural biotechnologies

16:00 - 16:30 Break

Continuation of Agenda item 3

Agenda item 4. Budget and resources for the Conference (potential donors, sponsors)

18:00 Cocktails on FAO terrace

Friday, 11 July, 2008 (9:00 – 17:00 hrs)

Agenda item 5. Course of action between the SC meeting and the Conference itself

- Establishment of working groups
- Preparation of sector-specific technical documents
- Identify principal work plan elements for the outline and layout of the Plan of Action, including background development as well as identification of gaps and needs that require intervention

10:30 - 10:45 Break

Continuation of Agenda item 5

12:30 - 13:30 Lunch break

Agenda item 6. Develop organizational structure of the Conference

Venue and date for the Conference

- Conference program layout, selection of participants, session topics, invited speakers/keynote speakers, session chairpersons, speakers per session, time limits of presentations, round tables, poster sessions, concurrent side events, etc
- Timeline for Conference promotion and visibility
- Conference website calling for abstracts and registration for participation

15:30 - 15:45 Break

Continuation of Agenda item 6

Agenda item 7. Closing remarks by FAO

17:00 Meeting closure