Generation, adaptation and adoption of appropriate biotechnologies in the Latin America and the Caribbean Region: Concrete actions for the near future - Summary report of the ABDC-10 parallel session[1]

Before I start, I would like to send a support message to our friends in Chile. Juan Izquierdo from REDBIO/FAO, a great friend, colleague, and organizer of this session, could not make it to this meeting. He participated with us over the internet and sends his support to the results from the session.

During the Latin American and the Caribbean (LAC) parallel session over 65 people participated, including delegates and observers from within and outside the region. There were three presentations done by experts in biosafety, crop breeding and biotechnology and animal research. For the second section that was facilitated by Michelle Chauvet, an expert on Socioeconomic Impacts of Biotechnology, guidelines for the Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and priorities were provided for discussion

Mr. Rodomiro Ortiz opened the session with a summary of the relevant advances made in traditional and modern crop genetic improvement assisted by biotechnology in Latin America. He noted that Agro-biotechnology implies a direct relationship between the private sector, government, and researchers; and that human resources, technology and expertise should be shared and optimized through national and regional integration including research networks, in order to maximize the potential of the region.

Mr. Moises Burachik emphasized that biosafety regulation needs to be understood as a scientific process, and that the expertise and proficiency of human resources are essential to accomplish this task. To be strong as a region it is important to define harmonized regulatory processes that will have to include all the most relevant aspects that are within the region's best interests without overlooking our national interest, but of course some concessions need to be made. Also reaching a workable consensus before the international community and international forums as a region is as important.

Mr. Arthur Mariante concluded with the first part of the session highlighting the importance of traditional biotechnology over transgenesis in the field of animal breeding. Artificial insemination is probably the most widely used biotechnology in animal science for Latin America. Moreover, some countries have had great advances in embryo transfer and cryogenesis. But the lack of equipment, information about breeds, and trained technicians is still the greatest challenge.

During the second section the group reached to the conclusion that Latin America is (1) rich in biodiversity and natural resources (including aquatic and animal resources), (2) a world´s supplier for genetically modified (GM) seeds and food/feed crops produce, and (3) has several functioning network of experts. But on the other hand, the region (4) is still in great need of capacity development for human resources and tools, (5) the GM seeds and food/feed market is controlled by few companies and (6) the high cost of biotechnologies and the biosafety deregulation makes it difficult for poor farmers to access them.

During the session it was also noted the absence of the English-speaking Caribbean countries in the Latin American regional networks, and the debate that there is still exist over trangene flow, especially for countries that are centers of origin or mega diverse.

The group also made great emphasis that one of the greatest weaknesses in our region is the lack of coordination between the ministries of agriculture and environment. This situation makes it difficult to define a clear policy on biotechnology and biosafety, and as a clear consequence, hinders its development.

As conclusion for the session, the group decided what actions should be priorities of FAO for Latin America and the Caribbean, in order to advance in Biotechnology (the results are presented at the end of this report).

[1] This is the summary report of the parallel session organized by the Inter-American Institute for Cooperation on Agriculture (IICA), the International REDBIO Foundation and the Technical Cooperation Network on Plant Biotechnology in Latin America and the Caribbean (REDBIO) on the third day of the FAO international technical conference on Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010 (http://www.fao.org/biotech/abdc/parallel/en). An Issue paper was also prepared for this session - see ABDC-10/IICAREDBIO at http://www.fao.org/biotech/abdc/backdocs/en/

SWOT Analysis

Strengths	Weaknesses
• LAC has greater biodiversity and natural resources than other regions in the world. It is also rich in aquatic resources. • REDBIO/FAO is a consolidated network functioning in LAC. • Regional and sub regional networks in LAC are an important asset to share knowledge and expertise in genetic resources management and biotechnology. • LAC has a significant critical mass of experts in Biotechnology • The Southern region is a major supplier for GM cereals and oil seeds and food/feed produces.	• There is still a need for capacity development of human resources, and institutions working in Biotechnology. • Difficulties for performing monitoring after field release, mainly in countries that are centers of origin. • Different opinions in ministries of Agriculture and Environment, which makes it difficult to reach agreement in developing biotechnology for the region. • English Caribbean countries do not participate in most of the networks functioning in Latin America
Opportunities	**Threats/Challenges**
• There is opportunity for horizontal cooperation between countries, including South-South Cooperation. • Southern region is in a strong position to negotiate in the GM oil seeds and cereal markets. • There is an aquaculture network that can be used to explore the possibilities of using biotechnologies in aquatic resources. • There is willingness to work towards the development of Biotechnologies. • To advance in participatory communication/information of biotechnology and biosafety	• Avoiding the potential for transgene flow, especially in center of origin and mega diverse countries. • Transgenic seeds are being controlled by few companies. • High costs of the technologies make it difficult for poor farmers to acquire them. • Disagreements between the scientific community, difficult the development of Biotechnologies. • Overregulation in modern biotechnology can raise the costs or even block research and release of products done by the public sector.

Priorities

1. Strengthening existing knowledge sharing and research networks and platforms in Biotechnology.
2. Develop training programs and tools in Biotechnology and Biosafety (eg risk assessment, molecular techniques, animal breeding, molecular markers, etc.)
3. Harmonization of methodologies and legislation in Biosafety.
4. Generate and promote consultation mechanisms for decision making in Biotechnology and Biosafety.
5. Establishment of communication channels and science-based information in Biotechnology and Biosafety, that promotes ample participation and technology transfer.
6. Promote a regional position on Biotechnology and Biosafety at international fora
7. Coordinate existing Biotechnology and Biosafety databases.