

## **Declaration of Goiania by REDBIO/FAO**

### **"Towards a biotechnology at the service of sustainable development of the Latin America and the Caribbean forestry and agricultural sectors"**

Adopted by the participants, members of the REDBIO/FAO network, to the IV Latin American Meeting on Plant Biotechnology during the closing ceremony on 8<sup>th</sup> June 2001, Goiania, Brazil.

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In Latin America and the Caribbean, in spite of the abundance of natural resources, continuous investments in agricultural development and a long run effort on agricultural research, rural poverty and food insecurity affect more than 55% of the rural population. In these countries, the productive capacity of agricultural lands will be saturated in the short term thus increasing the risk of genetic, water and soil resources degradation, and the depredation of forests and humid ecosystems of local and universal importance. The agricultural sector will have to be ready to feed an increasing population, by exercising a sustained use of resources and utilizing the knowledge at the service of the society.

Currently, the modern applications of plant biotechnology offer a wide range of possibilities for the increase of productivity, diversification and the increment in production through a sustainable agriculture, which includes the use of biopesticides, tissue culture techniques and application of advanced tools from the genomics and the genetic engineering, as indispensable complements to the conventional genetic improvement of food crops.

Nonetheless, the plant biotechnology applications must respond to the increasing demand in terms of food security, socio-economic development, international trade, as well as to the conservation, diversification and sustainable use of plant genetic resources, considering them as basic inputs to the future regional agriculture. Biotechnology should present forward concrete results, at accessible costs, for the resolution of problems and the promotion of productive innovation in the context of small and medium producers.

Beyond the progress of plant biotechnology, and its potential for genetic improvement, there exists dilemma that have divided the public opinion as a recurrent social response in front of the adoption of new technologies. This dispute implies socio-economic and ethical visions that have to reach consensus. A sustained support to the application of biotechnology for production, protection, post-harvest and transformation of crops implies that the public opinion should understand concepts linked to genetic engineering and genomics.

Positive public perception will allow understanding the need of developing resistant varieties of crops to biotic or abiotic stress and enhanced nutritional quality. Also, it will ease the development of rules related to biosecurity, which are necessary to guarantee the release under proper established risks to the human health and the environment. Without these conditions, Latin America and the Caribbean would remain far away from their potential to reach food security and socio-economic development.

The agriculture of the Region must be more competitive, internally and externally. The efforts in order to fight poverty may be complemented through the competitiveness and the generation of the appropriate technology, by direct and indirect efforts. Being competitive implies producing with efficiency and working on specific targets related to food safety and quality. Conventional technologies are not sufficient, so it is necessary to open a strategic space for the use of the new biotechnologies and make that its products be incorporated within sustainable productive systems. On the other hand, it is necessary to alleviate poverty, and part of the strategy will be maximizing the direct and indirect effects of the research technological investigation and development. An appropriate use of the biotechnology will result in the empowerment of small and medium producers, through high quality sexual and asexual seed production systems, development of bio-fertilizers and bio-pesticides, rural agro industries, improved post-harvest technology and diversification of the use of these products, which leads to auto sufficiency and competitiveness.

The efforts of the scientists in developing crops that eliminate or reduce the utilization of chemical agents in the agricultural systems must be welcomed by the agricultors and consumers within the frame of public perception of biotechnology protected by proven knowledge and in the existence of a reliable system of biosecurity for risks' evaluation and management. The public in general must be duly informed on biotechnology as a safe tool for the scientific improvement of the cultures, and that the responsible modification of plants' genes is nothing new nor dangerous; on the contrary, its use in agriculture is the key for the fight against environmental degradation, hunger

and poverty. Also, the biotechnological processes and the agricultural products derived by, must be perceived by the general public as a need more than an option in the provision of food that is safe for health and environment, nutritive, of high quality and low cost.

Since 1989, FAO, through the efforts of the Technical Cooperation Network on Plant Biotechnology, (REDBIO) is pursuing these objectives through the interrelation of laboratories from 32 countries, and by conducting related research activities, human resources training, and technical assistance to governments in subjects linked to biotechnology.

## Declaration

Scientists, researchers, participants, members of the REDBIO/FAO and members of the International REDBIO Foundation, gathered in Goiania, Goias, Brasil, as part of the activities of the IV Latinamerican Meeting on Plant Biotechnology, are alerting the civil society, governments, institutions and decision leaders about:

The lack of conscience on the seriousness of food insecurity problematic and about the level of degradation of the natural resources, specially genetic ones, water and soil, as subjects of the worldwide, regional and local development agenda for the next 20 years.

The urgency in protecting the genetic resources and the biodiversity by the use of appropriate biotechnologic techniques for their characterization, conservation and sustainable use, ensuring an adequate and transparent access.

The need for strengthening the agricultural research as a fundamental basis for the adecuation and generation of biotechnology appropriate to the socio-economic and environmental conditions in Latin America.

The special relevance and pre-requisite of training human resources with capacity of negotiation for the adecuation and implementation of biotechnologic innovations, which will allow generating more resources and employment.

The need to establish diffusion programmes at all levels, to improve the public perception of biotechnology.

The members of the IV Latin-American Meeting on Plant Biotechnology, REDBIO 2001, underlie promoting the safe and responsible application of biotechnology - specially in fragile environments and in countries of lower incomes - and encourage to maintain and increment the dialogue with all the sectors and actors to concrete the development of new biotechnologies such as molecular genomics and the genetic engineering as key elements to the sustainable use

of genetic resources, and encourage as well the application, whenever feasible, of advanced biotechnologies in the integrated management of crops within the sustainable production systems.

Considering the current and potential deep implications of biotechnology, we declare that the participation of the scientists in the public debate on the benefits and risks of the application of modern technologies must be favoured and promoted at all levels of the public and private institutions, specially of those members of REDBIO. This must take into account the need to claim and promote the assignation of financial resources appropriate for education, training and diffusion of biotechnology. This conception must be made personal by politicians, producers, processors, universities and the civil society, who at the end are those who facilitate the development of biotechnologies in the countries.

We declare that the role of the producers, as well as the consumers' one, must be strengthened and that greater emphasis should be employed for the appropriate transfer of technologies, for the sustainable application of vegetal biotechnology, including information and communication technologies. Being conscious of the socio-economic benefits of biotechnology also helps in counteracting miss-information on biotechnology. This last point justifies even more the efforts for strengthening the use of biotechnological networks such as REDBIO/FAO and stimulate its use at national and regional levels.