

**Report on the International Consultation on the Role of Agricultural Science and
Technology in Reducing Hunger and Improving the Quality of Life for the Rural
Population in Latin America
April 7-8, 2003**

A consultation sponsored by the World Bank was held in the International Potato Center in Lima, Peru, for the purpose of recommending guidelines for the assessment of the contributions of agricultural science and technology to reducing hunger and improving the quality of life for the region's rural inhabitants.

The consultation was attended by 46 representatives of 34 governmental, nongovernmental and international organizations, universities and the private sector, and rural leaders. It was held on April 7 and 8, 2003, and was co-organized by the World Bank, the International Potato Center (CIP), the International Center for Tropical Agriculture (CIAT) and the Inter-American Institute for Cooperation for Agriculture (IICA).

The consultation took the form of presentations in plenary sessions and working groups, which discussed the following topics: need for the assessment, regional science and technology requirements and management of the assessment.

The main conclusions were:

1. The group supports the preparation of the international assessment of the role of agricultural science and technology, for the following reasons:
 - a. Poverty in Latin American has continued to increase and rural poverty is a more serious problem than urban poverty. It is recognized that the mounting pace of urbanization in the region is also the result of migration from the countryside into the cities.
 - b. Investment in agricultural science and technology generates positive social, economic and environmental impacts, as is demonstrated by the findings of research conducted by international agricultural research centers and their members.
 - c. The investment made by the region in scientific and technological research and innovation to benefit agriculture and forestry has declined to dangerously low levels. This is creating a situation of technological dependence on the developed countries with the further problem that much of this technology is not directly applicable for lessening the poverty of farmers and of the rural poor.
 - d. The assessment will be a valuable tool for creating awareness among the region's decisionmakers concerning the need to boost investment in science and

technology as a means for reducing poverty and hunger and protecting the environment.

2. For the purposes of the assessment due note must be taken of the wide variety of ecosystems and types of farming in the region, which is itself subdivided into very clearly differentiated subregions: Mexico and Central America, the Caribbean, the Andean region and the Southern Cone. There are also similarities and differences within these sub-regions, which means that the needs and opportunities at the local, national and sub-regional levels have to be identified together with their connections with the globalized world.
3. The region has great potential based on its natural resources, especially those connected with biodiversity. Many plant and animal species are native to the region and could form the basis for the poverty reduction strategies to be applied.
4. Biotechnology and other disciplines offer opportunities for increasing agricultural productivity without stepping up the use of inputs (e.g., pesticides) that could be harmful to the environment.
5. A key element of the assessment and of the strategies to be followed is ensuring the participation of the poor, for which purpose the adoption of participatory, holistic and multidisciplinary approaches (such as those used in agricultural research employing the systems approach) is recommended.
6. One topic to be considered is that of farm subsidies and regulations governing the entry of agricultural products into the developed countries, since they limit the competitiveness of the region's agriculture.
7. The approaches followed in scientific and technological research and innovation must consider the understanding and development of opportunities along the entire length of the food chain. Efficiency in the different links and equity in the distribution of costs and benefits must be key elements for reducing poverty.
8. The topic of science and technology generation must not be treated separately from that of innovation and transfer. In many cases the two have been considered separately, which has meant that on a number of occasions the technology and knowledge generated have not been used by farmers and poor producers.
9. If the investments in agricultural science and technology are to have an impact in poverty reduction, the context in which poverty occurs must be understood and the constraints to be overcome in terms of policies, technologies and market opportunities must be known.
10. There are successful instances in the region of how the private sector has helped create opportunities for export-oriented agroindustries (flowers, coffee, asparagus, grapes, certain tropical fruits, crawfish, etc.). However, these normally involved better-capitalized commercial producers and the benefits hardly reached poor producers. The

public sector should therefore increase investment designed to generate and transfer knowledge and technologies available for public use and geared to poverty reduction, such as promotion of agroindustries and nonagricultural development opportunities (e.g. agroecotourism) capable of generating employment and demands at the local level.

11. Ways and means must be sought for recognizing and making optimum use of local knowledge as a starting point for research and development opportunities. This expertise, complemented with scientific knowledge, constitutes the foundation for more solidly based development.
12. The need was recognized to strengthen technology generation and transfer capacities in the region, which have been affected by an “institutional aging” process that must be reversed by training new professionals but employing appropriate approaches and focused more specifically on the target population.
13. The management of the assessment of the role of agricultural science and technology in reducing hunger and improving the quality of life for the rural population in Latin America must incorporate the following features and approaches.
 - a. Participation and inclusiveness.
 - b. Transparency, credibility and experience of the experts.
 - c. Contact with the reality of the producers’ world and of the institutional context, and actual experience in the practice of development-targeted research.
 - d. Support should be sought from the Consultative Group on International Agricultural Research and its network of institutional contacts.
 - e. Broadest possible participation of decisionmakers. The focus should not be exclusively on institutions dealing with agricultural issues; institutions with responsibilities in regard to planning and the national economy, natural resource management, and those involved in rural development (education, health, infrastructure) should be included.
14. A mixed management is recommended, in which United Nations agencies (UNDP, FAO) participate, together with regional agencies (IICA, ECLAC, CONDESAN), governments and representatives of civil society and international agencies directly involved in the generation of knowledge and technology, such as the international agricultural research centers and their members.