



**CGIAR**

**Consultative  
Group on  
International  
Agricultural  
Research**

## The CGIAR: Facing Tomorrow's Challenges Today

**T**he 20th century has seen great changes sweep across much of the world. Rich and poor alike have been affected. Despite great advances by the human family, daunting challenges endure as the 21st century approaches. In the 47 “least developed” countries of the world, 10 percent of the world’s population exists on less than 0.5 percent of the world’s income. Some 40,000 people die from hunger related causes every day. Over a billion people live on less than a dollar a day. The world’s environment and ecosystems are under siege. These conditions pose sobering challenges to the human family. Population growth that is averaging 90 million persons a year adds a new dimension to this inventory. Ninety-five percent of this growth will be in the poorest countries.

The challenges ahead have to be confronted today. Delay would make them more difficult to overcome. Agriculture, including forestry and fisheries, is at the heart of an effective response to these challenges, because in most developing countries most people depend on agriculture for a livelihood. To meet these challenges, agriculture has to be transformed to produce more, but produce differently, without harm to the environment. Agricultural transformation involves not just *production*, but also *access* for the poor; not just *output*, but also *process* of production; not just *technology*, but also *policy*; not just *global* issues, but also *national* circumstances; not just *national* balances, but also *household* conditions; not just *rural* poverty, but also the *urban* poor; and not only the *amount* of food produced, but also *nutrition*.

Agricultural change has to come from new, environmentally friendly technologies, not by expanding the land already under cultivation. The application of new technologies has to be linked with appropriate policies. Research is the means by which the world’s knowledge of agriculture is increased and new agricultural technologies are created. Agricultural research, conducted to help the world’s poorest people make lasting improvements in their lives,





**Global agricultural production must more than double over the next 30 years, even as the supply of water and productive land declines. Doubling production while protecting the natural resources upon which agriculture depends is one of humanity's most pressing challenges.**



**The CGIAR stresses a pro-poor, pro-conservation strategy based on increasing agricultural productivity. Particular emphasis is placed on an integrated approach to agricultural production and environmental conservation, increased collaboration among centers and with partners, and a bottom-up, participatory approach.**

---

and in the lives of their children, is, therefore, critical to human progress. The Consultative Group on International Agricultural Research (CGIAR) is the only entity that exists solely to mobilize the best in agricultural science on behalf of the world's poor and hungry.

## At a Glance

The CGIAR, created in 1971, is an informal association of fifty-six public and private sector members supporting sixteen international agricultural research centers. The World Bank, the Food and Agricultural Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP) are cosponsors of the CGIAR.

The CGIAR system is a loosely connected network that consists of the Consultative Group (the Chairman, cosponsors, and other members), CGIAR committees (standing, advisory, impact evaluation, partnership, and *ad hoc*), international agricultural research centers and center committees, and a central service unit, the CGIAR Secretariat.

The mission of the CGIAR is to contribute, through its research, to promoting sustainable agriculture for food security in the developing countries. Productivity research to help alleviate poverty, and natural resources management, are the twin pillars of CGIAR research on food crops, forestry, livestock, irrigation management, aquatic resources, and policy; and in its services to national agricultural research systems in developing countries.

The CGIAR is characterized by the following:

**Informality.** The CGIAR has no constitution, no statutes, no regulations, and no membership laws. The Group meets twice a year to review policies, assess the impact of research, exchange views with centers and partners, adopt a research agenda for the following year, and pledge funds in support of that agenda. It reaches decisions by consensus, not by voting.



**Leadership.** The CGIAR Chairman, a Vice President of the World Bank, provides the system with intellectual and managerial leadership, helps to harmonize policies and programs among multiple actors within the system, and fosters linkages between the system and its partners.

**Autonomous centers and supportive members.** CGIAR centers are autonomous institutions, each with its own charter, international board of trustees, director, and staff. Center scientists are drawn from all over the world. Centers are supported by CGIAR members whose contributions are entirely voluntary. Members contribute because they are dedicated to fulfilling the mission of the CGIAR. Each member contributes to the center(s) of its choice. All contributions are grants.

**Public goods.** The products of CGIAR-supported research are international public goods, unconditionally available to poor farmers and other users.

**Focus.** The CGIAR agenda is totally focused on agricultural research. Coupled with this is a commitment to hold fast over the long-term, recognizing that it can take up to twenty years to move a research result from laboratories to farmers' fields.

**Excellence.** Scientific excellence is the hallmark of the CGIAR system. The quality of work at the centers is maintained by the commitment to excellence of center scientists, by the strategic guidance of a Technical Advisory Committee, as well as by regular external reviews and

impact assessment. Special awards for scientific excellence were inaugurated in 1996 to encourage young scientists and the research partners of CGIAR centers.

**Impact.** The impact of CGIAR-supported research is widely recognized. Norman Borlaug, the originator of the high-yielding wheat that sparked the green revolution, is a Nobel laureate. The CGIAR as a whole was awarded the King Baudouin Inter-





**The CGIAR centers have a special contribution to make in the global effort to promote sustainable development. They can, while conducting cutting-edge science for the benefit of the world's poor, serve as platforms for the exchange of ideas and the development of new technologies.**



**With all humility we can draw strength from the achievements of the CGIAR. They are real, have made a difference in the lives of countless people, and are so recognized. The success of past efforts challenges us to mobilize again to meet new challenges.**

**—Ismail Serageldin**

national Development Prize. Six out of ten World Food Prize laureates are from the CGIAR. An Impact Assessment and Evaluation Group keeps the impact and potential impact of CGIAR research under continuing assessment.

## **Strength from Achievement**

The sixteen international agricultural centers are the active, full-time research units of the CGIAR system. All but three of the centers are located in developing countries—four in Africa, three in Latin America, five in Asia, and one in the Middle East. The results of their research include the following:

**Importance of agricultural research affirmed.** The CGIAR has kept agricultural research on the front burner of public interest. As a very significant consequence, national agricultural research in developing countries has grown in stature and recognition.

**Increased productivity made more food available.** Globally, one of the greatest achievements of this century has been the phenomenal increase in agricultural productivity through the adoption of science-based technologies and, thereby, greatly increased food production.

**Intensive production preserved land and biodiversity.** By being able to feed many more people from each hectare of land cultivated, many hectares of environmentally sensitive land have been saved from use. The land saved internationally by the intensive use of new technologies is some 300 million hectares—equivalent to the total arable land of the United States, Canada, and Brazil combined.

**Lower food prices and increased incomes made more food accessible to more people.** The impact of increased access to food on poverty alleviation is manifest in many countries of Asia and Latin America. The poor benefited greatly because they spend a higher proportion of their income on food than do others.



**The contribution of agriculture to growth led to overall economic advances.** Thriving agriculture has almost invariably led to overall economic growth and increased employment. An increase of 1 percent in agricultural growth is associated with a 1.5 percent increase in the non-agricultural sector in developing countries.

**High rates of return.** Several independent studies have established that rates of return on investment in agricultural research are consistently high; for example, 191 percent on maize research in South America, 65 percent on rice in India and Indonesia, 60 percent on cowpea in Senegal, and 50 percent on wheat in all developing countries.

## **Renewed for Progress**

In May 1994, the CGIAR launched an eighteen-month program of renewal, to prepare itself to confront the challenges of the present and future. A key event of the renewal program was a Ministerial-Level Meeting held in Lucerne, Switzerland in February 1995, at which participants adopted a *Declaration and Action Program* that serves the CGIAR as a road map to the future.

**The composition of the Group has changed.** The CGIAR today has a strong South-North identity. Ten Southern countries joined the CGIAR during and after the renewal program. Nineteen CGIAR members are from the South, up from zero in 1971, and twenty-two are from the North.

**A culture of partnership has grown.** A Global Forum links the CGIAR system with partners in a developing global agricultural research system. The CGIAR has established partnership committees with the NGO community and the private sector.

**Poverty alleviation is the guiding impulse of CGIAR-supported research.** Its effectiveness will be judged by the extent of its contribution toward reducing poverty.





Effective institutions cannot be satisfied with the status quo. They have a creative energy that periodically needs to be replenished and unleashed. The CGIAR sought and secured that replenishment in its program of renewal. Since then, the CGIAR has opened itself to new partnerships, new influences, and a whole new way of doing business.



**The countless new developments taking place in the fields of biotechnology and information technology offer unprecedented opportunities for harnessing new resources on behalf of the poor. This cannot be achieved by any organization single-handedly. All must work together to win together.**

**Nurturing the environment is a key priority.** Special emphasis is placed on soil and water management, forestry/agroforestry, and the application of research directed at reducing the use of chemicals in agriculture.

**Biodiversity remains a major concern.** The CGIAR holds in trust for the future one of the world's largest *ex situ* collections of plant genetic resources, containing over 600,000 accessions of more than 3,000 crop, forage, and pasture species. Duplicates of these materials are freely available to researchers around the world so that new gene combinations can be used to increase productivity sustainably.

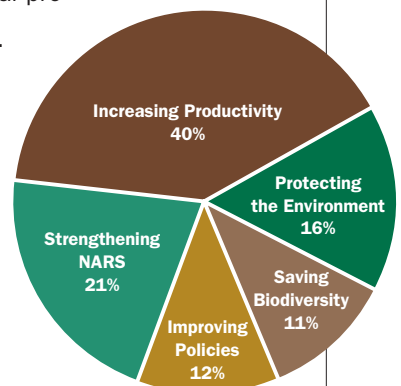
**Biotechnology will be mobilized through research alliances.** This will ensure that it can contribute to more sustainable agricultural growth in developing countries, with special care devoted to issues such as ethics, safety, and the access of developing countries to biotechnology products.

**Governance mechanisms have been strengthened.** Decisionmaking has been streamlined to ensure dynamism and a greater sense of participation by stakeholders.

**The system's finances are robust.** Annual funding of the research agenda grew from \$236 million in 1993, on the eve of the renewal program, to \$304 million in 1996 and \$325 million in 1997.

Looking to the year 2000 and beyond, the CGIAR centers will work with a broad range of partners, all engaged in five major undertakings: increasing productivity, protecting the environment, saving biodiversity, improving policies, and strengthening national research. The division of effort among these undertakings in 1996 is illustrated in the chart.

Now more than ever, the CGIAR is ready to mobilize the best in agricultural science to meet new challenges on behalf of the world's poor and hungry.



# Consultative Group on International Agricultural Research

## Sustainable Agriculture for Food Security in Developing Countries

### CGIAR Secretariat

Mailing Address:  
1818 H Street, NW  
Washington, DC 20433 USA  
Telephone: (1-202) 473-8951  
Fax: (1-202) 473-8110  
E-mail: CGIAR@cgnet.com or  
CGIAR@worldbank.org

### CGIAR Chairman

Ismail Serageldin, Vice President, Environmentally and Socially Sustainable Development, World Bank

### Cosponsors

Food and Agriculture Organization of the United Nations (FAO)  
United Nations Development Programme (UNDP)  
United Nations Environment Programme (UNEP)  
World Bank

### Cosponsor Representatives

FAO	Henri Carsalade
UNDP	Roberto Lenton
UNEP	Franklin Cardy
World Bank	Michel Petit

### CGIAR Executive Secretary

Alexander von der Osten

### Technical Advisory Committee (TAC) Chair

Donald Winkelmann

### TAC Secretariat Executive Secretary

Shelleemiah Keya

### Finance Committee Chair

World Bank

### Oversight Committee Chair

Andrew Bennett

### Genetic Resources Policy Committee Chair

M. S. Swaminathan

## Impact Assessment and Evaluation Group Chair

James Peacock

## NGO Committee Chair

Miguel Altieri

## Private Sector Committee Co-Chairs

Andreas Buchting  
Alejandro Rodriguez Graue

## Countries

Australia, Austria, Bangladesh, Belgium, Brazil, Canada, China, Colombia, Côte d'Ivoire, Denmark, Egypt, Finland, France, Germany, India, Indonesia, Iran, Ireland, Italy, Japan, Kenya, Korea, Luxembourg, Mexico, The Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, The Philippines, Romania, Russian Federation, South Africa, Spain, Sweden, Switzerland, Syria, Thailand, United Kingdom, United States of America

## Foundations

Ford Foundation, Kellogg Foundation, Rockefeller Foundation

## International and Regional Organizations

African Development Bank, Arab Fund for Economic and Social Development, Asian Development Bank, European Commission, Food and Agriculture Organization of the United Nations, Inter-American Development Bank, International Development Research Centre, International Fund for Agricultural Development, Opec Fund for International Development, United Nations Development Programme, United Nations Environment Programme, World Bank

## Regional Representatives

Burkina Faso and Zimbabwe  
Malaysia and Nepal  
Estonia and Slovenia  
El Salvador and Paraguay  
Egypt and Syria

August 1997

♻️ Printed on recycled paper



**CIAT** Centro Internacional de Agricultura Tropical (International Center for Tropical Agriculture)

**CIFOR** Center for International Forestry Research

**CIMMYT** Centro Internacional de Mejoramiento de Maíz y Trigo (International Center for the Improvement of Maize and Wheat)

**CIP** Centro Internacional de la Papa (International Potato Center)

**ICARDA** International Center for Agricultural Research in the Dry Areas

**ICLARM** International Center for Living Aquatic Resources Management

**ICRAF** International Centre for Research in Agroforestry

**ICRISAT** International Crops Research Institute for the Semi-Arid Tropics

**IFPRI** International Food Policy Research Institute

**IIMI** International Irrigation Management Institute

**IITA** International Institute of Tropical Agriculture

**ILRI** International Livestock Research Institute

**IPGRI** International Plant Genetic Resources Institute

**IRRI** International Rice Research Institute

**ISNAR** International Service for National Agricultural Research

**WARDA** West Africa Rice Development Association

**CGIAR Secretariat**

**1818 H Street, NW**

**Washington, DC 20433 USA**

**Telephone: (1-202) 473-8951**

**Fax: (1-202) 473-8110**

**E-mail: [CGIAR@cgnet.com](mailto:CGIAR@cgnet.com) or**

**[CGIAR@worldbank.org](mailto:CGIAR@worldbank.org)**