

# The CGIAR System: Roles in International Agriculture and Opportunities for Collaboration in Research, Education and Outreach

Robert M. Goodman  
Cook College/NJAES  
January 30, 2006  
*execdean@aesop.rutgers.edu*

# What is the CGIAR?

Consultative Group for International Agricultural  
Research

Brief History

The CGIAR is a strategic alliance of members, partners and international centers that mobilizes science to benefit the poor.

**The CGIAR is a strategic alliance of countries, international and regional organizations, and private foundations supporting 15 international agricultural centers.**

**The centers work with national agricultural research systems and civil society organizations, including the private sector.**

**The alliance mobilizes agricultural science to reduce poverty, foster human well being, promote agricultural growth and protect the environment.**

**The CGIAR generates global public goods that are available to all.**

**The primary institutions in the System are:**

**the CGIAR (the Group)**

**the Science Council**

**the 15 International Agricultural Research Centers (IARCs)**

**CDC**

**CBC**

**CGIAR System institutions are interdependent.**

**Executive Council of the System**

**Partners**

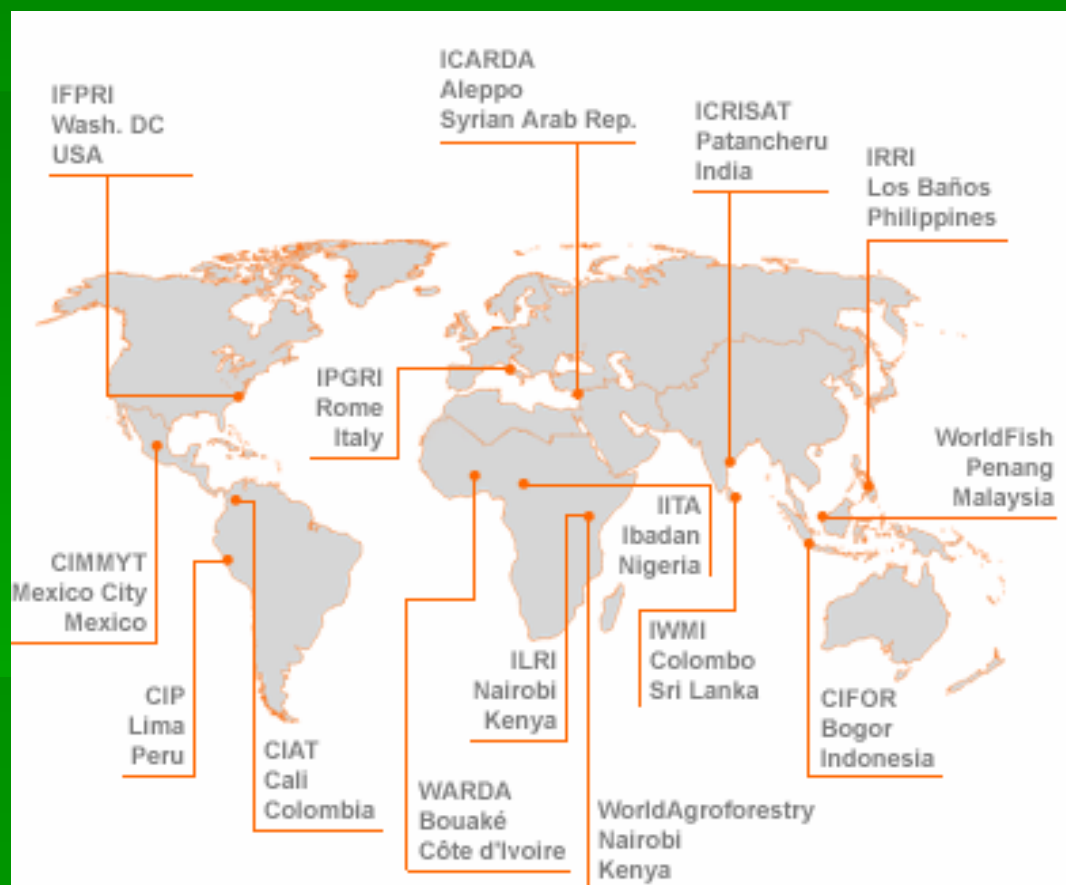
**Standing Committees**

**System Office (a "virtual" cluster of service units)**

**Chair of the CGIAR, usually a Vice President of the World Bank**

**Director of the CGIAR is Chief Executive Officer (CEO) of the CGIAR and heads the CGIAR Secretariat.**

# CGIAR International Research Centers



# Africa Rice Center (WARDA)

- Africa Rice Center (WARDA) is an autonomous intergovernmental research association of African member states.
- It is the leader in rice research and development (R&D) in sub-Saharan Africa. It also serves as a hub for the rice R&D network across the sub-continent.





# Centro Internacional de Agricultura Tropical Internataional Center for Tropical Agriculture

*Solutions That Cross Frontiers*

**CIAT has the global mandate for research on beans, cassava, and tropical forages**



**CIAT has a regional mandate for research on rice and tropical fruits that targets Latin America and the Caribbean.**

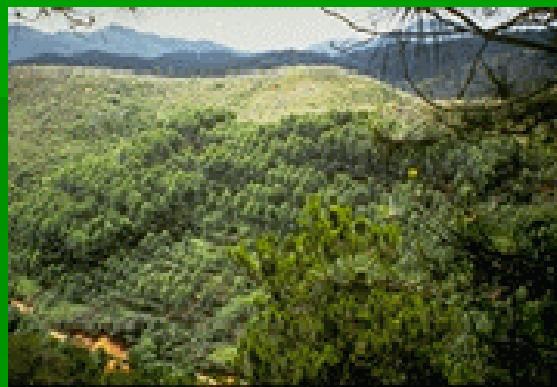




# Center for International Forestry Research

**CIFOR's research programs address the needs of the rural poor as well as environmental concerns:**

- Environmental services and sustainable use of forests
- Forest governance
- Forests and livelihoods



# International Maize and Wheat Improvement Center (CIMMYT)

- CIMMYT aims “to help alleviate poverty by increasing the profitability, productivity, and sustainability of maize and wheat farming systems”
- Research is organized into five areas; maize, wheat, economics, natural resources, and biotechnology



Photo courtesy CIMMYT



# Centro Internacional de Papa (CIP)

- CIP seeks to reduce poverty and achieve food security on a sustained basis in developing countries through scientific research and related activities on potato, sweet potato, other root and tuber crops, and on the improved management of natural resources in the Andes and other mountain areas



# International Center for Agricultural Research in the Dry Areas (ICARDA)

- ICARDA's mission is to improve the welfare of poor people through research and training in dry areas of the developing world by increasing the production, productivity and nutritional quality of food, while preserving and enhancing the natural resource base.



# International Crops Research Institute for the Semi-Arid Tropics

- ICRISAT's vision to 2010 is the continued improvement of the well-being of the poor living in the semi-arid tropics through agricultural research for impact
- To help the poor of the semi-arid tropics through increased agricultural productivity and food security, reduced poverty, and protection of the environment in semi-arid production systems



# International Food Policy Research Institute (IFPRI)

- IFPRI's mission is to provide policy solutions that cut hunger and malnutrition.
- Two key premises underlie IFPRI's mission:
- Sound and appropriate local, national, and international public policies are essential to achieving sustainable food security and nutritional improvement
- Research and the dissemination of its results are critical to raising the quality of the debate and formulating sound and appropriate food policies.



# International Institute of Tropical Agriculture (IITA)

- IITA's mission is to enhance the food security, income, and well-being of resource-poor people in sub-Saharan Africa by conducting research and related activities to increase agricultural production, improve food systems, and sustainably manage natural resources, in partnership with national and international stakeholders.

# International Livestock Research Institute (ILRI)

- The ILRI works at the crossroads of livestock and poverty, bringing high-quality science and capacity-building to bear on poverty reduction and sustainable development for poor livestock keepers and their communities.
- The potential of livestock to reduce poverty is enormous; livestock contribute to the livelihoods of more than two-thirds of the world's rural poor and to a significant minority of the peri-urban poor.



Photo courtesy ICARDA

# International Plant Genetic Resources Institute (IPGRI)

- IPGRI's mission is to advance the conservation and use of genetic diversity for the well-being of present and future generations.
- IPGRI has sponsored over 550 germplasm collecting missions in 136 countries.



# International Rice Research Institute (IRRI)

- IRRI's main goal is to find sustainable ways to improve the well-being of present and future generations of poor rice farmers and consumers while at the same time protecting the environment.
- IRRI's research activities began in 1962 and are now estimated to have touched the lives of almost half the world's population.

- IWMI's research agenda is organized around four priority themes covering key issues relating to land, water, livelihoods, health and environment.
- The Institute concentrates on water and related land management challenges faced by poor rural communities.
- The immediate target groups of IWMI's research include the scientific community, policy makers, project implementers and individual farmers.

# World Agroforestry Centre (ICRAF)

- The ICRAF has invigorated the ancient practice of growing trees on farms by using innovative science to transform lives and landscapes
- ICRAF research focuses on four global themes: land and people, environmental services, strengthening institutions and trees and markets

# The WorldFish Center

- The WorldFish Center's mission is to reduce poverty and hunger by improving fisheries and aquaculture
- Its vision is to be the science partner of choice for delivering aquaculture and fisheries solutions in developing countries



**Today, more than 8,500 CGIAR scientists and staff are working in over 100 countries**

**Work is done in five major areas:**

- **Sustainable production**
- **Enhancing National Agricultural Research Systems**
- **Germplasm Improvement**
- **Germplasm Collection (the CGIAR holds in public trust one of the world's largest seed collections available to all)**
- **Policy (fostering research on policies that have a major impact on agriculture, food, health, spread of new technologies and the management and conservation of natural resources)**

# CGIAR impact on prices, production, land use and trade

Without CGIAR contributions,

- World food production would have been 4–5% lower
- World food and feed grain prices would have been 18–21% higher
- In developing countries, per capita food consumption would have declined by 5% on average, and up to 7% in the poorest regions
- Some 13–15 million more children would have been malnourished, predominantly in South Asia, where incidence of hunger is highest.

# CGIAR Changes with the Times



New priority areas, new technologies, new research

# CGIAR's Millennium Development Goals

Five new research priority areas:

- Sustaining biodiversity for current and future generations
- Producing more and better food at lower cost through genetic improvements
- Reducing rural poverty through agricultural diversification and emerging opportunities for high-value commodities and products
- Promoting poverty alleviation and sustainable management of water, land, and forest resources, and
- Improving policies and facilitating institutional innovation to support sustainable reduction of poverty and hunger



# International Food Policy Research Institute

*sustainable solutions for ending hunger and poverty*

Development Strategy and Governance (DSG)

Environment and Production Technology (EPT)

Food Consumption and Nutrition (FCN)

International Service for National Agricultural Research (ISNAR)

Markets, Trade and Institutions (MTI)

Communications

Global Food System Functioning

Global and National Food System Governance

Food System Innovations

Communications and Capacity Strengthening



**HarvestPlus is an international, interdisciplinary, research program that seeks to reduce micronutrient malnutrition by harnessing the powers of agriculture and nutrition research to breed nutrient-dense staple foods.**