

# cg iar News

Nourishing the future through scientific excellence

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## Robert S. McNamara Seminar Highlights Critical Role of Agriculture

“Over the next fifty years food demand will double as a result of population increases and changes in dietary habits. This demand, combined with decreasing soil fertility and falling water tables will create a major crisis. We must increase our focus on agriculture and increase agricultural productivity if we are to have any hope of meeting these challenges” said Mr. Robert S. McNamara speaking at a seminar named in his honor.

Mr. Robert S. McNamara, a founding father of the CGIAR and former President of the World Bank was speaking at the 2nd Robert S. McNamara seminar hosted by the Japanese Ministries of Agriculture, Forestry and Fisheries, Foreign Affairs, and Finance and CGIAR with support from the World Bank Tokyo Office. Over 200 participants came to hear Mr. McNamara’s remarks and the keynote speech presented by former Prime Minister Ryutaro Hashimoto, as well as to engage in a panel discussion with CGIAR Directors General.

Mr. Yoshio Yatsu, former Minister of Agriculture, Forestry, and Fisheries and Member of the House of Representatives and Ian Johnson, CGIAR Chairman and World Bank Vice President for Environmentally and Socially Sustainable Development, opened the meeting and welcomed participants. Mr. Yatsu was a driving force in ensuring the second seminar reached new levels.

A panel discussion featured three Directors General — Adel El Beltagy of ICARDA, Joachim von Braun of IFPRI, and David Kaimowitz of CIFOR — and was moderated by Francisco Reifschneider, CGIAR Director.

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**CGIAR Chairman**

Ian Johnson

**CGIAR Director**

Francisco Reifschneider

**CGIAR Members**

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World Bank



# Message from the Chairman and Director

Dear Colleague:

We are pleased to present you with "CGIAR News," the summer edition. For your convenience, an e-version is also available at [www.cgiar.org](http://www.cgiar.org)

This issue provides a snapshot of events (past and upcoming), reports on research successes at the Centers, and progress on Systemwide activities and partnerships.

Foremost among the upcoming events is the 2003 Annual General Meeting (AGM03), plans for which are moving well. The customary booklet containing information and registration material is enclosed with this mailing. If you are planning to attend AGM03, the CGIAR website ([www.cgiar.org](http://www.cgiar.org)) will be the principal source of updated information.

This issue seeks to provide readers with a flavor of the discussions and progress being made in returning agriculture to the front and center of the international development agenda. We are pleased that interest in the CGIAR remains high, and is being matched by increased investments from key donors. The entire CGIAR family can feel proud that the Group of Eight's Evian Communiqué gave special recognition to genetic resources, science and technology for sustainable development, and CGIAR's role in these important themes (see excerpt on p. 4).

Looking ahead, by the AGM03 we expect to announce the new Science Council. The range and pace of activities between AGMs has increased since the initial phase of reform was launched, an indication that the first phase of reform is helping give the System an even stronger sense of purpose and direction.

We hope you have a restful summer and we look forward to being in touch with you before AGM'03. Comments are welcome and may be sent to [cgjar@cgiar.org](mailto:cgjar@cgiar.org)

Cordially,

**Ian Johnson**  
CGIAR Chairman

**Francisco Reifschneider**  
CGIAR Director

# ICARDA entrusted with “Blackbox of Biodiversity”



Iraqi researchers and Dr. Kamil Shideed (standing third from right) participated in an ICARDA-IFPRI workshop on policy and property rights in 2000.

In 1996, Iraqi agricultural researchers wanting to safeguard Iraq's plant genetic resources entrusted ICARDA with a “Black Box,” a kind of genetic time capsule to safeguard biodiversity. The box has never been opened, and its contents — 200 accessions of 28 different crops grown in Iraq — is stored at -10° Celsius, and maintained in viable form.

Seen in the backdrop of the war and given the uncertainty that surrounds the fate of Iraq's national genebank, Abu Ghraib, these actions were prescient.

Even if the genebank survived, it is likely that its holdings were destroyed or looted. Fortunately, in addition to the “Black Box,”

ICARDA scientists have collected more than 1,000 accessions of cultivated and wild species of Iraq's most important crops during the 1980s and 1990s for safekeeping. These accessions will play an important role in rehabilitating Iraqi agriculture.

ICARDA's partnership with Iraq goes back more than 20 years, an effort that saw the introduction of modern crop varieties and improved water and live-stock management practices. “What we hope to do in the near future is bring to bear the expertise of the CGIAR system on Iraqi agriculture,” says Adel El-Beltagy, Director General, ICARDA. The priority will be to offer Iraq a package of services and technology that includes policy reforms, land and water systems, and assistance in rebuilding the national agricultural research system.”

Dr. Kamil Shideed, one of Iraq's key agricultural scientists is working with ICARDA to develop a reconstruction plan for Iraq's agricultural research system. Nearly 350 Iraqi scientists have been trained in plant breeding and crop and animal management at ICARDA since 1977.

War, successive droughts, and economic sanctions have adversely affected agriculture in Iraq. The country is in urgent need of substantial humanitarian, rehabilitation and reconstruction assistance. Agriculture must be revived to regain food security.

“The Black Box literally contains Iraq's agricultural heritage,” says William Erskine, Assistant Director General for Research, ICARDA. “These are the seeds of plants that Iraqi experts decided were their most important holdings that needed to be safeguarded at all costs. The Black Box belongs to the Iraqi people, and will be treated as such until it can be repatriated.” 🌱

For more information, visit [www.icarda.org](http://www.icarda.org)

## Announcements

### Events

25th Anniversary Celebrations and Agroforestry Science Forum, World Agroforestry Centre, Nairobi, November 1–5, 2003 (for details, click on [www.worldagroforestrycentre.org](http://www.worldagroforestrycentre.org))

Challenge Program on Water and Food — Baseline Conference, led by IWMI, November 2–6, 2003 (for details, [www.cgiar.org/iwmi](http://www.cgiar.org/iwmi))

### Welcome to New Board Chairs

**ICARDA** Margaret Catley-Carlson has been appointed Chairman of ICARDA's Board of Trustees, succeeding Robert Havener.

### Honor Roll

**CGIAR** Dr. Keiji Kainuma, formerly with Technical Advisory Committee (TAC) was awarded Japan's national decoration (Shiju-ho-syou) by the Emperor for excellent scientific achievements.

Vangimalla Reddy, Research Leader at the USDA-ARS Alternate Crops and Systems Laboratory, Beltsville Agricultural Research Center, USDA, recently on assignment with CGIAR Secretariat, was selected as Fellow, Crop Science Society of America.

**CIMMYT** Bent Skovmand, Head, Wheat Genetic Resources Program, was awarded the Knight's Cross of the Order of Dannebrog by Princess Benedikte of Denmark for lifelong achievements in wheat research and the conservation of wheat genetic resources.

**CIP** Luis Salazar, CIP, received the 2003 ATSE-Crawford Fund Derek Tribe Award for his work on potato and sweet potato pathogens.

**ICRISAT** William Dar was awarded an honorary Doctor of Science by the Mariano Marcos State University (MMSU) in Batac, Ilocos Norte, Philippines. In a related development, he was elected Chairman of the Future Harvest Foundation.

**IRRI** V. Balasubramanian, Agronomist, received the 2003 International Award from the International Fertilizer Association for developing a leaf color chart (LCC) that helps rice farmers apply nitrogen fertilizers more efficiently.

David Dawe, Economist, was named one of 20 Asian heroes by TIME magazine's Asian Web site.

Peter Fredenburg, Editor, Rice Today, won the Gold Award of ACE (Agricultural Communicators in Education) for his feature, “Lost Horizons Restored.”

Kong Luen Hoeng, Scientist, won the prestigious Charles A. Black Award from CAST (Council of Agricultural Science and Technology), for expanding understanding of rice ecology and making it useful to farmers.

Juan Lazaro and Gene Hettel won the Silver Award of ACE for the cover graphic design of the 3rd edition of the Rice Almanac.

Hei Leung, Plant Pathologist, was selected as a Fellow of American Phytopathological Society.

Tom Mew, Head of the Entomology and Plant Pathology, was given the Achievement Award from Philippine Phytopathological Society.

## From CBC/CDC

The Committees of Board Chairs (CBC) and Center Directors (CDC) met at ISNAR in May to discuss issues arising from restructuring of the CGIAR System, including ways in which to better coordinate and harmonize Centers' efforts in areas ranging from the System Office to improved Center collaboration through the Challenge Programs.

A joint statement from the two Committees was produced, tabled and shared with the CGIAR Executive Council in Paris (to view statement, click on [http://www.cgiar.org/exco/Final\\_Joint\\_CBC-CDC\\_Statement.pdf](http://www.cgiar.org/exco/Final_Joint_CBC-CDC_Statement.pdf)). The main points included:

- During its meeting in February, the CDC drafted a Code of Conduct for the CDC and the Challenge Programs to help clarify roles and optimize synergy between the Centers.
- In an effort to streamline work in a more cooperative and collaborative fashion, the Centers agreed to pursue further the idea of a Centers Alliance, to provide the necessary oversight and coordination of Center programs, including the joint work underway within the System Office, as part of the reform program.
- The Committees stressed the importance of a strong and independent Science Council that could speak to the scientific and programmatic work of the Centers, and emphasized the need for a strong selection process.
- Discussion also centered on the work of the Executive Council and its committees, particularly the role of the Program Committee and its eventual interaction with the Science Council. The Committees emphasized that ExCo was not created to function as a decision-making body.
- The potential impact of the Challenge Programs on the work of the Centers (and a lack of new funding) was also discussed. Specifically the potential impact of maintaining Centers' mandates and reversing the decline in funding levels for core activities was emphasized.
- The CGIAR Annual General Meeting (AGM) was discussed and a need identified to enhance the dialogue between the membership and the Centers during future meetings. The Centers gave preliminary discussion to the establishment of a scientific symposium (held every one to two years) that could be initiated to ensure maximum exposure to the work and activities of the Centers and its stakeholders.
- The review processes for the System were addressed on several levels — including preliminary discussion for codes of conduct for operation and management issues, including the benefits of unified program and management reviews. The recent restructuring report for ISNAR received special attention.
- Public awareness efforts and resource mobilization was also discussed, in follow-up to the external review of the Future Harvest Foundation, with a new strategy for the System going forward to further complement and align the work of the Centers by AGM '03.

John Vercoe, Chair, CBC  
Adel El-Beltagy, Chair, CDC

## G-8 Communiqué

Excerpt from Science and Technology for Sustainable Development — A G8 Action Plan Section

3.1, "Agriculture and Biodiversity"  
Where the Heads of State of G8 Nations, meeting at Evian-les-Bains in the French Alps, June 1–3, 2003 agreed to:

### **Promote the conservation and sustainable use of genetic resources for food and agriculture:**

"Support the International Treaty of Plant Genetic Resources for Food and Agriculture by concluding negotiations over a standard material transfer agreement that facilitates access to plant genetic resources for agricultural research and development and equitable sharing of benefits arising from their use."  
"Support efforts to ensure funding for genetic resources conservation in the framework of the priorities set up by the Food and Agriculture Organisation Commission on Genetic Resources."

### **Help developing countries improve their agricultural productivity in a sustainable manner:**

"Support the Consultative Group for International Agricultural Research's vital role in disseminating agricultural research, as well as the Global Forum for Agricultural Research and other regional and national agronomic research organisations and North-South and South-South research partnerships." 

# Agriculture is Back, but Science Must be Mobilized for Development

“Linking Research and Rural Innovation to Sustainable Development” was the principal theme of the Global Forum on Agricultural Research (GFAR) General Conference held in May in Dakar, Senegal.

Over 400 participants attended the Dakar conference representing major agricultural research stakeholder groups: regional and sub-regional fora of developing country national agricultural research systems, the private sector, NGOs, farmers’ organisations, scientists from advanced research institutes (ARIs), universities, CGIAR Centers, and donors.

The conference was opened by His Excellency Abdoulaye Wade, President of Senegal. Presenting the keynote address, Ian Johnson, CGIAR Chairman and World Bank Vice President spoke about the renewed focus on agriculture thanks to the United Nations summits held in Monterrey, Rome, and Johannesburg. Professor Wiseman Nkulhu, Chairman, Steering Committee, New Partnership for African Development (NEPAD) spoke about the emerging global issues in sustainable development and NEPAD’s role and response in meeting the challenges.

“Scientific advances, particularly in the fields of natural resources management, information and communication, and biotechnology must be mobilized for sustainable development,” said Mohammad Roozitalab, Chairman, GFAR and Vice President, Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA). “Our challenge is to ensure that these advances benefit all stakeholders in an equitable manner.”

GFAR was established in October 1996 to facilitate exchange of information, access to knowledge, cooperation, and research partnerships among a broad spectrum of stakeholders involved in agricultural research and sustainable development. A highlight of the conference was a civil society workshop in which 33 NGOs and 15 farmers’ organizations participated to discuss and exchange information on important developments in the agricultural research-for-development arena. 🌱

For more information, visit [www.egfar.org](http://www.egfar.org)

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## Annual General Meeting 2003 Program Highlights



The Ministry of Agriculture, Kenya, will host the CGIAR’s 2003 Annual General Meeting in Nairobi, Kenya.

October 27: Members Day is an opportunity for meetings, discussions, and dialogue between CGIAR Members and Centers; an official reception will be held in the evening.

October 28: Stakeholder field visits to farmers, community projects and research institutes.

October 29–30: CGIAR Stakeholder meeting commences at United Nations Office in Nairobi (UNON) Conference Center:

- IFPRI’s Biennial Report, State of the World’s Food
- The Hon. Susan Whelan, Minister for Int’l Cooperation, Canada presents Crawford Lecture
- Innovation Marketplace.
- Ministerial Roundtable and presentation by Jeffrey Sachs
- CGIAR Science Awards
- CGIAR Business Meeting (attendance by invitation only, commences at 2 pm on Oct 30)

October 31: CGIAR Business Meeting continues (attendance by invitation only). 🌱

For registration and program information, visit [www.cgiar.org](http://www.cgiar.org)



*With cassava production projected to grow at a steady 2.9 percent per year, controlling the cassava brown streak virus is critical for ensuring food and livelihood security for millions in Sub-Saharan Africa.*

## Responding to a Persistent Villain: Cassava Brown Streak Virus set to play havoc in Sub-Saharan Africa

Cassava is vital source of food and livelihoods for millions of people in Sub-Saharan Africa. A staple crop, it tolerates drought and is able to thrive in marginal soils making it one of Africa's most reliable food crops.

Cassava production is projected to grow at a steady 2.9 percent per year, due to area and yield expansion. Current African production is expected to double by 2020, with major producers being the Democratic Republic of Congo, Ghana, Madagascar, Mozambique, Nigeria, Tanzania and Uganda. Direct consumption of cassava is expected to reach 85 million tons in the year 2005. Use in animal feed is also expected to grow at an annual rate of 1.3 percent to the year 2005, largely due to the expansion of the live-stock sector.

But there is a flip side to this rosy picture. A devastating virus, responsible for causing the cassava brown streak disease (CBSD) is gaining in severity, threatening food and livelihood securities for millions of farmers and cassava consumers in Sub-Saharan Africa. The virus belongs to the family Potyviridae, genus Ipomovirus. CBSD causes a dry necrotic rot in the storage roots, decimating yields, or worse still, leading either to complete spoilage or significant reductions in quality. Current estimates show that CBSD causes economic losses in excess of \$100 million annually.

Recognizing the severity of the threat, IITA is beginning a major, proactive emergency program to combat the disease and stabilize production of this important food crop. Activities will focus on developing diagnostic tools for the virus, using conventional and genetic transformation methods for developing high-yielding, CBSD-resistant varieties of cassava, and developing an array of integrated pest and crop management options suited for small-holder agriculture.

A campaign to obtain funding has been launched. IITA and its partners (including NGOs, community-based organizations and scientists in national agricultural systems and advanced research institutions) hope to mitigate the pending disaster, and do it in a manner that contributes to the stability and growth of the food sector in a wide swath of countries in Sub-Saharan Africa. While the impact of this poorly understood disease is most devastating in the coastal areas of East Africa (including Kenya, Tanzania and Mozambique) it is also a major problem in Malawi, Uganda and Zambia. 🌱

For more information, visit [www.iita.org](http://www.iita.org)

# Improving Knowledge Sharing in the CGIAR: An investment plan for shared platforms, tools and systems

Knowledge related to food, fisheries, forestry, livestock and policies is increasingly recognized as a fundamental element of the global public goods the CGIAR generates. Harnessing the potential offered by the new advances in information and communication technology (ICT) and knowledge management (KM) practices and tools offers unparalleled opportunities for maximizing development impact. A new information and knowledge initiative of the CGIAR is set to significantly improve the way the CGIAR centers share their knowledge, link with partners and deliver their public goods.

The three-year strategy and work plan, adopted by the Center Directors Committee, proposes investments in a new series of information networks and knowledge tools. The goal is to change the way the CGIAR works by creating a CGIAR without boundaries, giving all researchers access to high performance computing and communication, and better managing the CGIAR's global public goods to make them easily accessible to partners and users worldwide.

"This is a unique approach for the system," says Enrica Porcari, CGIAR Chief Information Officer. "By developing the strategy through our communities, we encourage more integration and reduce competition between the centers in this

key area where there has been much duplication of effort in the past. The end result will be a series of CGIAR-wide information tools, knowledge platforms and practices."

The strategy was developed by the CGIAR ICT-KM Advisory Group which brings together representatives of the key professional communities in the system: research, marketing, library and information management, information and communication technologies, training and education specialists, deputy directors and directors general.

The strategy presents a number of priority areas for investment, identified by the communities as critical areas for investment in ICT and KM. The science community organized an internal call for proposals, with all research groups (not Centers) in the system encouraged to respond.

The strategy is organized around three main thrust areas: ICT for Tomorrow's Science, Content for Development, and CGIAR Without Boundaries.

The ICT-KM strategy and program are being finalized. At AGM 2003, projects will be proposed for adoption with a investment plan kick-off scheduled for early 2004. 

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## Genetic Resources: Interim Material Transfer Agreement Approved

The International Treaty on Plant Genetic Resources for Food and Agriculture promises to revitalize international germplasm exchange by establishing internationally agreed standards.

But given the contentious nature of the debate surrounding sharing of genetic resources, the process has been difficult and protracted. "Many steps have already been completed, but there are still many more to go," says Ruaraidh Sackville Hamilton, Head, Genetic Resources Center, IRRI.

"The latest step is the implementation of the interim Material Transfer Agreement (MTA) for the distribution of in-trust germplasm."

When the Treaty was adopted in 2001, it was agreed that a new standard MTA should be developed by the future governing body of the Treaty. However, progress has been slow. It was therefore agreed that the Food and Agriculture Organization (FAO) Commission on Genetic Resources for Food and Agriculture should revise the

old MTA to produce a more acceptable MTA in the short-term, to be used until the new standard MTA is ready. The interim MTA is the result.

In 2002, IRRI's Board of Trustees approved the use of the interim MTA. Subsequently, all CGIAR genebanks have started to use it beginning May 1, 2003. IRRI has taken the proactive step of informing their national partners, including the Council for Partnerships on Rice Research in Asia (CORRA), about this new development. 



Yellow corn at Fatumaca

*“Getting more produce from the land, through the new varieties introduced under the program, will also create space for diversification into agroforestry and livestock.”*

## Seeds of Life Cast a Golden Hue

The village women sit cross-legged, patiently shelling corn; production-line workers filling woven baskets with tumbling grain. Ordinarily there would be nothing to differentiate this moment from countless others in the seasonal cycle of life and work in the foothills outside Baucau on East Timor’s central, north coast.

The crop has been harvested, the women, young and old, are now doing what they have always done — yet the whole scene depicts a farming revolution. The grain, being prized off the cobs by a blur of callused thumbs is yellow. Plus there’s a lot more of it.

This new, high-yielding yellow maize is one of the more visible changes beginning to pervade a way of life that has effectively been unchanged in East Timor’s rural areas for hundreds of years.

Independence has opened the door to modern agriculture — something that is going to be crucial for food security and for the country’s long-term aspirations for sustainable agriculture.

The new yellow maize is being grown on a farm run by an Italian priest, Father Locatelli. The farm, at Fatumaca, near Baucau, is attached to an agricultural high school run by the Silesian missionary order. It has proved the ideal site for crop trials being undertaken by a former CSIRO researcher, Dr Brian Palmer. Already his yellow maize, provided by CIMMYT, is yielding up to six tonnes a hectare of ‘corn’ compared with the indigenous white maize’s average 1.5 tonnes.

If these high yields can be replicated across the country for staple crops like maize it will free up land for more com-

mercial ventures such as vanilla, soybean, peanuts and candle nut (for oil).

Significantly, much of the terrain is similar to Australia’s far north-west and prone to erosion so higher yields will also reduce the need to farm unsuitable land.

This is one of the crucial elements behind Palmer’s work as project leader for the \$1.2 million ‘Seeds of Life’ program set up by the Australian Centre for International Agricultural research (ACIAR).

He is determined to help East Timorese farmers avoid causing long-term environmental damage as they respond to the urgent need to not only increase basic food production, but exportable surpluses.

“Getting more produce from the land, through the new varieties introduced under the program, will also create space for diversification into agroforestry and livestock,” says Palmer.

The new high-yielding crops include beans and cassava from CIAT, sweetpotato from CIP, rice from IRRI, maize from CIMMYT, and groundnut from ICRISAT.

Palmer says his main focus has been to take the germplasm provided by the research centres and improve the selection for East Timor’s four main ‘agro-ecological’ zones.

“Once we feel we have the lines that are well adapted to East Timor we then have to determine if they are acceptable to the farmers. For example the new high-yielding maize is yellow, which has a different taste and texture to the traditional white maize.”

He believes the key to farmers adopting new varieties and farming methods is 'participatory planning'.

"To me this means offering them (the farmers) technically sound options from which they can choose. Some aid organisations simply want me to give farmers what they ask for. Well until they've been exposed to a range of viable alternatives that's not giving them the options to move forward."

He particularly rankles at outside pressure being put on East Timor farmers to go 'organic' and not to use the chemical fertilisers that he advocates.

Palmer says the nature of the landscape and soil profiles makes fertiliser essential if higher yields are going to be sustained.

At his trial sites he applies a small dressing of nitrogen, phosphorous and potassium: "At the end of the day it doesn't really matter whether farmers use chemical or organic fertiliser. The issue is which is the most economic.

"The amount of fertiliser we're using equates to the cost of two or three packets of cigarettes or a bet at a cockfight — in other words a cost of about A \$3.38 per 100 square metres — so it's an accessible choice. It still might be too much for some farmers, but it has to be weighed up against the time and labour needed to produce the volume of equivalent compost."

Contrary to the pessimism that some observers have expressed about East Timor's economic progress, Palmer is confident the country will achieve food self-sufficiency and in the longer-term establish a sustainable agricultural

economy — regarded by the government as crucial to its future.

"The progress we have already made and the willingness of the international agricultural science community to be involved makes me pretty optimistic," he says.

The Seeds of Life program, overseen by an Australian agronomist Dr Colin Piggin, is now changing from a humanitarian operation in 1999 to an agricultural extension program focussed on sustainable production and the development of commercial crops.

The program's genesis was in the unrest after East Timorese voted for Independence in September 1999. Much of the seed for the next harvest was either burned or stolen. The ACIAR contacted the world's five leading crop research centres for suitable seed and

by December the first crops were being sown, averting a potential famine.

Brian Palmer was in the first wave of helpers to go to East Timor and has been there ever since: "I had spent 20 years as a research scientist. Now was a chance to put it to real use," he explained, showing off to a group of admiring farmers a plump bunch of groundnuts. 🌱

By Brad Collis

*CGIAR News thanks the author for contributing this feature article.*

Brian Palmer and local farmer at Fatumaca, East Timor



# Forest Conference: Balancing development and conservation

More than 300 forest experts from international organizations, civil society, industry, government and the media from over 40 countries met in May for CIFOR's "International Conference on Rural Livelihoods, Forests and Biodiversity" held in Bonn.

Opened by Erich Stather, State Secretary of the Federal Ministry of Economic Cooperation and Development (BMZ), the conference analyzed the role of forest research in reducing poverty and protecting biodiversity. Mr. Stather said the German Government placed considerable emphasis on helping to ensure tropical forests remain a vital source of both livelihoods and biodiversity, with support for the Bonn conference being just one example of that commitment.

In his keynote speech, Ian Johnson, CGIAR Chairman and World Bank Vice President for Environmentally and Socially Sustainable Development, said the Bonn conference would ultimately contribute to the well-being of hundreds of millions of people who depend in varying degrees on forest resources by guiding "a new generation of public policies that can better reconcile the needs of people with forest conservation." He highlighted the need to move beyond the ideological divide separating those supporting forest production and those supporting forest protection.

These sentiments were echoed in the closing address by David Kaimowitz, Director General, CIFOR, who noted the simple rationale for organizing the conference: "People working on poverty tend not to appreciate biological limits and global biodiversity concerns. Likewise, most biodiversity specialists do not fully understand or appreciate livelihood issues," Kaimowitz said.

A panel discussion chaired by leading German TV environmental presenter, Ranga Yogeshwar was a highlight of the conference. Panelists included Achim Steiner of World Conservation Union (IUCN), Sunita Narain of India's Centre for Science and the Environment, Claude Martin of WWF, Juan Mayr, former Environment Minister of Colombia, and El Hadji Sene, Director of Forest Resources, FAO.



Participants at the panel discussion (from left to right) Claude Martin (WWF), Sunita Narain (CSE), Ranga Yogeshwar (moderator), Achim Steiner (IUCN), El Hadji Sene (FAO) and Juan Mayr (Colombia). Picture by Eric Lichtenscheidt.

The conference was a successful model of cooperation among CGIAR Centers and key CGIAR members such as Germany. CIFOR and World Agroforestry Centre worked closely with InWEnt, the German Federal Ministry of Economic Cooperation and Development (BMZ), and the German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)) to produce one of the leading forestry events for 2003.

Other featured speakers at the conference included Henri Djombo, the Republic of Congo's Minister of Forestry, Ulrich Popp, Director, InWEnt (Capacity Building International-Germany), Pekka Patosaari, Head of the U.N. Forum on Forests, Phrang Roy, Assistant President, IFAD, Dennis Garrity, Director General, World Agroforestry Centre, and Alberto Chinchilla who represented grassroots forestry associations in Latin America.

Forest researchers presented 50 technical papers, and the technical sessions focused on key themes such as forests as safety nets; non-timber forest products and rural livelihoods; the contribution of plantations and agroforestry to rural livelihoods; improving livelihoods and protecting biodiversity; forest certification and rural livelihoods; international dimensions of forestry and rural livelihoods; and community forestry and rural livelihoods.

The outcomes of the conference will be presented to the United Nations Forum on Forests to be held in 2004. In wrap-up remarks David Kaimowitz noted that the conference was successful in bringing together disparate views on forest use and conservation, and helped develop a pro-poor policy agenda for sustainable management of the world's dwindling forest resources. 🌿

For more information, visit [www.cifor.org](http://www.cifor.org)

# From More Food to Better Food: Biofortification Challenge Program meeting held in Cali

Seventy-five scientists and practitioners from five continents, eight CGIAR Centers, and 40 partner and stakeholder organizations across nine disciplines met at CIAT in June to strengthen the alliance that constitutes the Biofortification Challenge Program.

“Breeding staple foods to reduce malnutrition is not a challenge any single discipline or institution can address on its own,” said Howarth Bouis, Biofortification Program Director. “Shifting the paradigm from more food to better food, linking agriculture and nutrition, takes partnerships and uncommon commitment...a commitment to the overall vision, a commitment to respecting the per-

spectives and contributions of partners with different skills and responsibilities, and a commitment to communicate across disciplinary and institutional boundaries.”

The agenda for this first planning meeting was designed to capture synergies and further develop the challenge program’s management framework, reach a common understanding on program agreements and principles, ensure that program obligations dovetail with the institutional objectives of the various collaborators, plan outreach strategies, and to design optimum communication tools and strategies. The meeting provided an opportunity for partners to learn from one another to make the

breeding and dissemination of nutrient-dense staple foods a reality.

“We are engaging in an effort that is both monumental and historic,” said Joachim Voss, Director General, CIAT. “We have succeeded in assembling the ingredients to make biofortification happen in a way that will improve the diets and livelihoods of the poor.”

This initial program-wide meeting set the stage for individual crop team meetings to be held in September and October that will involve a wider group of collaborators and stakeholders. In anticipation of full start up of the challenge program in January 2004, detailed work plans are being developed. 

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## World Bank—CGIAR Collaboration Gains Momentum

Fostering broad-based economic growth in rural areas is a central element of the World Bank’s renewed Rural Development Strategy, Reaching the Rural Poor. Over the past year, the World Bank’s Agriculture and Rural Development Department held strategy consultation workshops at six CGIAR Centers (CIP, CIAT, ICARDA, IITA, ILRI, and IRRI). The objective of these workshops was to better define the role of CGIAR system in implementing the new strategy and to articulate the contribution of international agricultural research to rural development. A special session was also held at IFPRI.

In June 2003, a special workshop was held to conclude the consultation process, develop a synthesis report, and launch an action plan. The CGIAR was well-represented, including four Directors General (ICARDA, IFPRI, IITA, and ILRI), their deputies, and science program leaders.

In opening remarks, Ian Johnson, CGIAR Chairman, set the stage by highlighting the changing development environment, focusing on the Millennium Development Goals, shifting toward a programmatic approach, and the resulting opportunities for partnership.

Participants agreed that there was a range of areas for enhancing and strengthening the World Bank/CGIAR partnership. Specific areas include:

- Knowledge management
- Common advocacy platform (e.g. Global Platform for Rural Development)
- Staff exchange
- Partnerships to fill gaps in areas outside CGIAR’s mandate (e.g. linking farmers to markets, support to high value crops)
- New research agendas (e.g. linking health and agriculture)
- Intellectual property rights
- Farmers as environment managers (e.g. through carbon farming)

A Framework Document and Action Plan has been drafted and will be submitted to the World Bank after being cleared by the Center Directors Committee (CDC). 

For more information, visit [www.worldbank.org/rural](http://www.worldbank.org/rural)



## Ensuring Women Farmers Get the Water They Need

Irrigation agencies often operate on the premise that all farmers are men, leaving women farmers with unequal access to water and no recourse for addressing the resulting imbalance.

This old problem is being addressed by a new tool. IWMI and partners have developed the "Gender Performance Indicator for Irrigation (GPII)" that can help reduce gender imbalances in irrigation management decisions. Developed with support from the Swedish International Development Agency (Sida), Ford Foundation and the Government of the Netherlands.

Ensuring women farmers have access to resources and to decision-making forums such as Water Users Organizations, is increasingly being recognized as vital not only for women's livelihoods but also for the viability of many irrigation schemes.

"There is still a big gap between good intentions and effective action," said

Barbara van Koppen, a gender and water expert at IWMI. "Policy makers and change agents need new tools to help diagnose gender issues in irrigation schemes and design appropriate interventions."

GPII measures inclusion/exclusion at three different levels:

- Women's and men's access to water and irrigated land at farm level
- Inclusion in irrigator's network in which rules for infrastructure construction, operation and maintenance are set and enforced
- Eligibility and election for leadership positions and women's capacity to function well in these roles

To successfully address exclusion of women, irrigation interventions need to take into account the role women already play in agriculture. In some well-intentioned cases, attempts to improve the situation have done so by forcing blanket gender-inclusive-

ness onto farming systems where women do not traditionally participate, except in specific tasks such as weeding or harvesting.

"Blanket measures seldom achieve anything beyond window dressing," asserts van Koppen. "Trying to ensure all women participating in farming get equal access to irrigation water, without regard to the type or level of participation, is unrealistic and in the end fails to reach even those women whose livelihoods depend on having equal access."

GPII addresses such situations by distinguishing between women who are farm decision-makers and women who participate only in specific farming tasks. This difference is often overlooked in the formulation of 'gender-sensitive' projects and interventions, with the end result that these fail to address the true needs of women farmers. 🌱

For more information, visit [www.iwmi.cgiar.org](http://www.iwmi.cgiar.org)

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## Ending the Cycle of Hunger and Poverty in Ethiopia

A staggering 12.5 million Ethiopians, or one-fifth of the population, currently face starvation. Yet, last year, Ethiopian farmers had produced more grain than they could sell locally, with a national surplus of more than half a million tons. What happened?

After two years of bumper crops, the rains failed in 2002, leading to a substantial drop in agricultural production. But the roots of the food crisis run much deeper. Millions of subsistence farmers are almost entirely dependent on the weather. Poverty is extreme and widespread, land and soils are severely degraded, markets don't function, and the country's communications and transportation infrastructure are among the least developed in the world.

Despite these problems, IFPRI research on the environment, production technology, and markets suggests that future food crises can be avoided.

In the highlands of northern Ethiopia, studies show that investments in roads, technical assistance, credit, education and other services are improving conditions. Increasing people's incomes is also crucial. This can be accomplished in part by investing in research and extension to assist farmers in producing a diversity of crops and livestock, including high-value products.

"To be effective, development investments must be tailored to local conditions," says John Pender, Senior Research

*Continued on page 15*

# Mekong Delta: Building fisheries research capacity for the benefit of people

International efforts to develop fisheries research capacity in Cambodia received a boost with the founding of a new research institute, the Inland Fisheries Research and Development Institute (IFReDI) in Phnom Penh. The WorldFish Center, in partnership with the Government of Cambodia, Asian Development Bank and Danida helped set up the new institution which is charged with developing a long-term aquatic resource management strategy for the Mekong region.

“IFReDI is born in both exciting and challenging times,” said Meryl J. Williams, Director General, The WorldFish Center. “We are honored to be involved in helping make the Cambodian vision for a fisheries institute a reality.” In June, The WorldFish Center opened an office in Phnom Penh to set up and develop the research program of IFReDI.

The Mekong River and Tonle Sap Lake create a vast freshwater system covering 1.8 million hectares — the world’s fourth largest inland fishery. Every year during the rainy season, floods in Cambodia submerge vast areas of forests and paddy fields. Three-quarters of the freshwater species in the Lower Mekong Basin migrate to these flooded areas to spawn, feed, and grow.

Fisheries play a key role in the lives and livelihoods of poor people who live in the region. Cambodia’s inland fisheries produce an estimated 300,000 to 400,000 tons of fish annually, with a value of up to \$500 million. Yet for many landless families in Cambodia, the average daily income from fishing is only about \$1.80 and even less from the sale of aquatic plants (\$ 0.97).

The new research institution has a key role to play. Its mission is to compile and analyze information, including data for the management of Cambodia’s inland fishery resources. In addition, IFReDI aims to provide socio-economic and institutional support for the sustainable development of living aquatic resources. Research leading to a better understanding of the value of aquatic resources to the livelihoods of the poor is essential and helps policy-makers design and choose appropriate strategies for sustainable management of fisheries. 🌿

For more information, visit [www.worldfishcenter.org](http://www.worldfishcenter.org)



*Every year during the rainy season, floods in Cambodia submerge vast areas of forests and paddy fields. Three-quarters of the freshwater species in the Lower Mekong Basin migrate to these flooded areas to spawn, feed and grow. Fisheries research is key to achieving balanced development.*

## CGIAR Science Awards: Call for nominations

Call for 2003 CGIAR Science Awards Nominations. Each year, the CGIAR recognizes the work of its scientists, support teams, research partnerships and communicators, emphasizing novelty, relevance, applicability and development impact. Nominations for outstanding performance in the categories of Scientist, Promising Young Scientist, Scientific Support Team, Partnership, Scientific Article, Journalism, and Communications are requested through August 31, 2003.

For more information, visit [www.cgiar.org](http://www.cgiar.org)

# New Study Assesses CGIAR Priorities and Strategies

CGIAR's research priorities and strategies are anchored in a common objective of improving food and livelihood opportunities for poor farmers while sustaining the natural environment. To ensure relevance and maximum development impact, these must continually be revised to be in lockstep with new knowledge and changing realities.

In a first step toward designing a priorities and strategies framework that will guide the formulation of future CGIAR research programs including Challenge Programs (CPs), the Interim Science Council (iSC) has launched a broad-based e-consultation to seek the views of CGIAR stakeholders. The iSC undertook this task in response to a request from the Group at AGM02. The iSC's Standing Committee on Priorities and Strategies (SCOPAS), chaired by Alain de Janvry, backstopped by Amir Kassam of the iSC Secretariat, are managing the exercise.

Their starting point was the new CGIAR vision and strategy, and the stated CGIAR goals. The panels were asked to identify and prioritize critical issues that require attention by the CGIAR and its partners in a bid to reduce poverty and hunger, and to enhance sustainability of resource use in agriculture, forestry and fisheries. Stakeholder views were tapped through five panels (Global, Sub-Saharan Africa, Asia, CWANA for Central and West Asia and North Africa, and Latin America) established by iSC, and selected in consultation with the CGIAR CDC/CBC and GFAR. Each panel consisted of some 20 members drawn from national agricultural research institutes, government ministries, Centers, NGOs, farmers and producers organizations, the private sector, regional organizations, regional development banks, foundations, and donors.

Panelists drew on an updated and expanded database of information, including regional priorities established by

the Global Forum on Agricultural Research (GFAR) and regional organizations, Millennium Development and World Food Summit Goals, and international Conventions and Agreements. They also benefited from 35 position papers commissioned by the iSC and written by experts on core issues such as poverty, science, natural resources, and public policies.

The initial results are illuminating.

Stakeholders support holistic approaches for developing solutions to complex poverty and agro-ecological problems, have called for an increased emphasis on upstream research, and better coordination of research efforts between CGIAR and its partners.

In an excellent example of using modern communication technology, the consultations were conducted in virtual mode, and managed by Julio Berdegué of RIMISP, a Chilean NGO.

The panels' assessments were then made the subject of a broad electronic discussion in which more than 10,000 stakeholders were invited to rank the lists of issues prepared by the panels and make additional suggestions on priority themes through a dedicated website [www.rimisp.org/cgi-ar-ps](http://www.rimisp.org/cgi-ar-ps).

A synthesis of views that emerged from the discussion will feed into Step 2, in which scientists, from both the CGIAR and the broader scientific community, will translate the Step 1 outputs into research and capacity-building projects for the CGIAR and its partners that have the greatest chances of success. The initial results were presented at the triennial meeting of the Global Forum on Agricultural Research (GFAR) held in Senegal in May 2003. 

The panels' allocations of scores out of 100 per theme is illustrated below:

Themes	Latin America	Africa	CWANA	Asia	Global	System
Germplasm conservation and improvement	36	47	25	37	31	35
Production systems and natural resources	29	26	61	24	40	36
Policy and institutions	35	26	15	39	30	29

## Robert S. McNamara Seminar continued

The overarching theme — How can agriculture and agricultural research be given priority in the design of public policies for generating growth in post-disaster situations? — was addressed by the panelists.

Participants were briefed about ICARDA's experiences in Central and West Asia, including ongoing efforts to rehabilitate agriculture in Afghanistan. Citing the example of conflicts over forest resources, David Kaimowitz noted that Asia was home to 56 percent of the world's population and only 15 percent of its forests. Small farmers with access to land and markets are well-positioned to meet growing demand for charcoal, medicinal plants, pulpwood, poles, and construction wood. Policies that give communities and small farmers rights over forests and degraded land can help them take advantage of these opportunities. Joachim von Braun cautioned that worldwide, agricultural growth fell from an annual average of 2.5 percent in the 1980s to 1.4 percent in the 1990s, and in low-income countries the decline was from 3 to 2.5 percent. The consensus emerging from the meeting was that agriculture is critical for growth, and for communities devastated by conflicts and natural disasters rebuilding agriculture is a first step both for recovery and for laying the foundations of durable peace.

In conjunction with the seminar, Yukio Yoshimura, World Bank Vice President and Special Representative to Japan, chaired a high-level meeting to support coordinated dissemination of New Rices for Africa (NERICAs). Kanayo Nwanze, Director General, The Africa Rice Center, addressed the meeting

Participants from the World Bank, Japanese Ministries of Finance, Foreign Affairs, Agriculture, Forestry and Fisheries, the Japan International Cooperation Agency and Japan International Research Center for Agriculture Sciences (JIRCAS) and UNDP agreed on next steps for coordination of this special effort. A follow-up meeting is planned for September 12 prior to the opening of Tokyo International Conference on African Development (TICAD-3). The Government of Japan has a long tradition of supporting rice research.

A well-attended breakfast meeting with Japanese Parliamentarians and successful "Friends of the CGIAR" lunch ensured that the discussion of the importance of agriculture and agricultural research reached the highest levels.

In a significant development, the Comprehensive Africa Agricultural Development Program of the New Partnership for Africa's Development (NEPAD) has identified NERICAs as an example of "best practice" in science-for-development efforts. "NEPAD sees the large body of knowledge and technologies available from Japan as a source of Africa's hope for the future" said Richard Mkandawire, Agriculture Advisor, NEPAD.

The McNamara Seminar, originally planned as a solo event, has grown both in stature and scope. It is an opportunity to increase focus and generate dialogue and reach out to many levels of Japanese society. 🌱

For more information on CGIAR, visit [www.cgiar.org](http://www.cgiar.org)

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## Ending the Cycle of Hunger continued

Fellow, IFPRI. "Ethiopia is comprised of 18 distinct agro-ecological zones, and no one-size-fits-all strategy will work in all areas. In drought-prone regions, for example, it makes more sense to invest in water and soil conservation measures than fertilizer."

But even in areas where excellent harvests can be achieved using high-yielding seeds and fertilizers, farmers cannot sustain a livelihood if they are unable to get their grain to market. In the 2001–2002 season, some farmers recorded bumper maize crops. But with poor roads, lack of market information, and no access to credit, traders were sorely challenged to buy food from farmers and sell it where it was needed. A glut of grain concen-

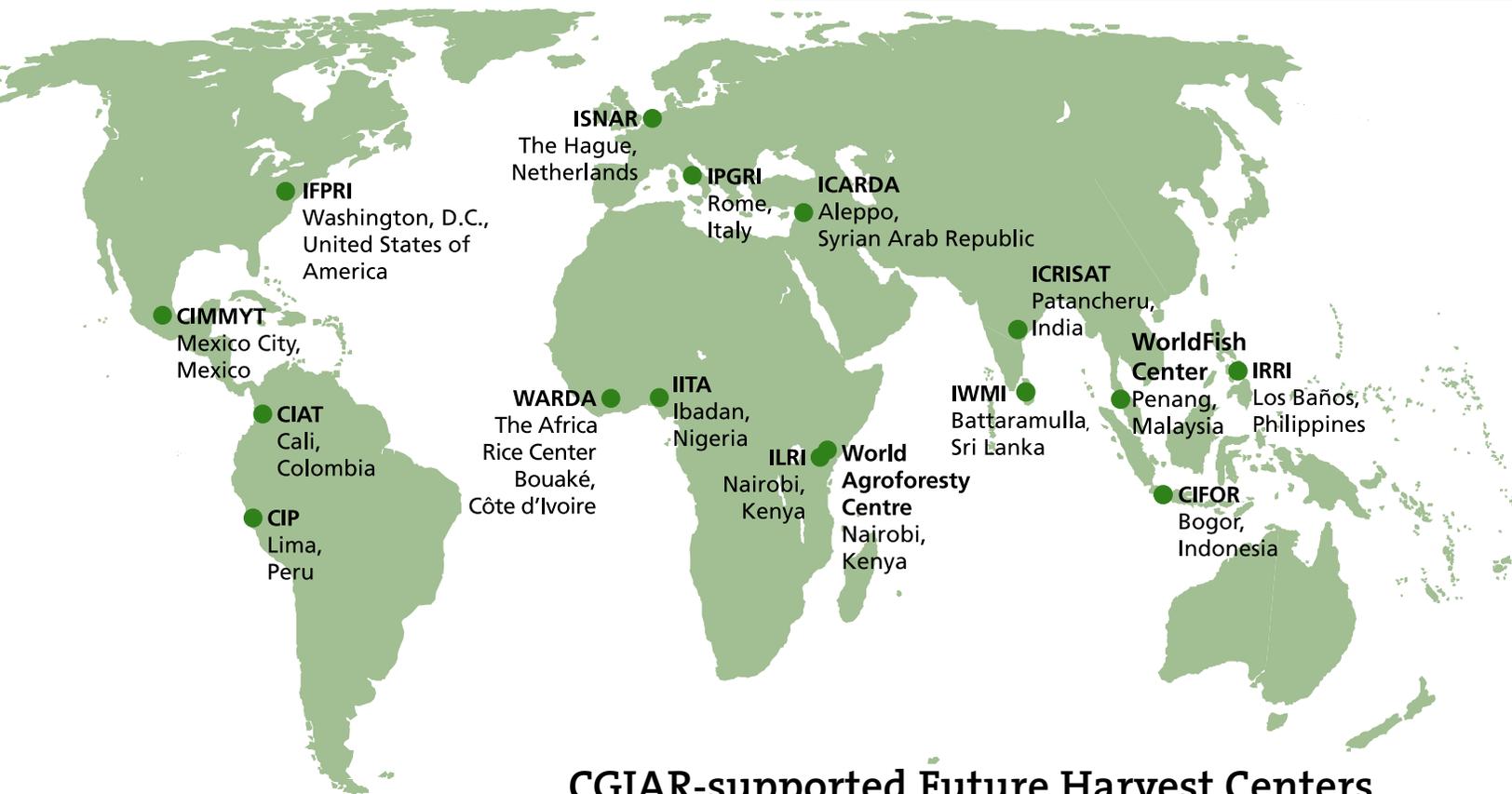
trated in small areas caused prices to plunge by as much as 80 percent, even as other parts of the country experienced severe food shortages.

This tragic outcome was caused by Ethiopia's weak marketing system. An IFPRI study shows that most grain traders operate small-scale businesses with very few assets, and trade only with people they know, over very short distances. According to Eleni Gabre-Madhin, IFPRI research fellow, two-thirds of Ethiopian traders cannot get bank loans, only 6 percent own a vehicle, and less than half have a telephone or permanent storage facilities. When prices collapsed, traders did not have the financing to buy and store

grain in large quantities. Lacking buyers, some farmers simply abandoned grain in the fields. Everybody lost, from bankrupt farmers to starving consumers.

To make markets work, IFPRI research indicates that the Ethiopian government and its donors should support the private sector, invest in roads and telecommunications, and create institutions to deliver financing, information, and legal enforcement.

With appropriate policies and wise investments that address both the supply and demand side of food security, Ethiopia can end its cycle of hunger and poverty. 🌱



## CGIAR-supported Future Harvest Centers

International Center for Tropical Agriculture (CIAT)  
[www.ciat.cgiar.org](http://www.ciat.cgiar.org)

Center for International Forestry Research (CIFOR)  
[www.cifor.org](http://www.cifor.org)

International Maize and Wheat Improvement Center (CIMMYT)  
[www.cimmyt.org](http://www.cimmyt.org)

International Potato Center (CIP)  
[www.cipotato.org](http://www.cipotato.org)

International Center for Agricultural Research in the Dry Areas (ICARDA)  
[www.icarda.org](http://www.icarda.org)

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)  
[www.icrisat.org](http://www.icrisat.org)

International Food Policy Research Institute (IFPRI)  
[www.ifpri.org](http://www.ifpri.org)

International Institute of Tropical Agriculture (IITA)  
[www.iita.org](http://www.iita.org)

International Livestock Research Institute (ILRI)  
[www.cgiar.org/ilri](http://www.cgiar.org/ilri)

International Plant Genetic Resources Institute (IPGRI)  
[www.ipgri.org](http://www.ipgri.org)

International Rice Research Institute (IRRI)  
[www.irri.org](http://www.irri.org)

International Service for National Agricultural Research (ISNAR)  
[www.isnar.cgiar.org](http://www.isnar.cgiar.org)

International Water Management Institute (IWMI)  
[www.iwmi.cgiar.org](http://www.iwmi.cgiar.org)

West Africa Rice Development Association—The Africa Rice Center (WARDA)  
[www.warda.org](http://www.warda.org)

World Agroforestry Centre (ICRAF)  
[www.worldagroforestrycentre.org](http://www.worldagroforestrycentre.org)

WorldFish Center  
[www.worldfishcenter.org](http://www.worldfishcenter.org)