



CGIAR NEWS

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH ■ JANUARY-MARCH 2002

BUILDING A PLATFORM FOR COLLABORATION

The first steps towards strengthening the CGIAR by creating a System Office were taken forward at a workshop held in Washington March 13–14. It brought together participants from all eight units that would initially comprise the CGIAR System Office. The meeting was facilitated by consultants from McKinsey and Company and the

Training Resources Group, Inc.

“Generating and sharing knowledge that addresses the myriad problems faced by poor farmers is the *raison d'être* of the CGIAR,” says Ian Johnson, CGIAR Chairman, in welcoming remarks. “A decentralized, demand-driven, service-oriented, and responsive

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ICLARM

MAN OF VISION TO LEAD CIMMYT

Dr. Masa Iwanaga, currently Director of the Biological Resources Division, Japan International Research Center for Agricultural Sciences (JIRCAS), has been appointed CIMMYT's next Director General. He will succeed Timothy Reeves.

“CIMMYT has an impressive record in improving the livelihoods of hundreds of millions of poor people,” said

Masa Iwanaga on accepting the appointment. He pledged to “build on CIMMYT's strong mission to end hunger and poverty in the developing world through clearly focused research on maize and wheat.”



Dr. Masa Iwanaga

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CIMMYT

STOP PRESS: SEEDS OF HOPE REACH AFGHANISTAN

As CGIAR News was going to press, news came that a convoy of 200 trucks carrying some 3,500 tons of wheat seed was on its way from Pakistan to Afghanistan. This massive shipment will help lay the foundations for agricultural revival in Afghanistan and help jumpstart growth to sustain the Afghani economy.

The shipment is part of the seed relief effort implemented by the ICARDA-led Future Harvest Consortium to Rebuild Agriculture in Afghanistan. Improved, high-quality wheat seed is being distributed to farmers in 11 priority provinces. Relief efforts were widely reported in the media, including the prestigious journal *Science*.

The shipment could not have come sooner. “The spring planting season has almost passed in the lower altitudes,” says Tony van Gastel, Head of ICARDA's seed unit. “But there are still opportunities at medium and higher elevations.” Van Gastel and Mahmoud Solh, ICARDA's Assistant Director General for International Cooperation, were joined by Ray

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FUTURE HARVEST CONSORTIUM
TO REBUILD AGRICULTURE IN
AFGHANISTAN
(See page 3)

VIETNAM MOVES TO QPM

Using quality protein maize (QPM) lines from CIMMYT, Vietnam released “HQ-2000,” a yellow maize grain hybrid that yields as much or more than the leading Vietnamese maize hybrid, LVN-10.

“Researchers in Vietnam note that HQ-2000 also has good drought tolerance, a key trait desired by farmers who grow maize in the dry winter season,” says Surinder Vasal, Maize Breeder, CIMMYT. “Using community seed production methods, we produced enough seed of the new hybrid



CIMMYT

In Vietnam, maize is sown on more than 700,000 hectares, and hybrids are used on 60 percent of that area.

to sow nearly 6,000 hectares in 2002.”

The Government of Vietnam strongly supports the QPM effort and has appointed a special director for the Vietnamese QPM Program. The country plans to use QPM in feed to fatten piglets for export markets in neighboring countries. Vietnamese researchers have also identified a white grain QPM hybrid derived from

CIMMYT materials that they hope to release for use in mountain regions.

QPM looks and tastes like normal maize but contains nearly twice the amount of lysine and tryptophan found in normal maize. These amino acids are essential for protein synthesis in humans and monogastric animals. In addition, QPM has a balanced amino acid content that greatly enhances its nutritive value, increases yields, and results in equal or superior disease and pest resistance.

For the past two decades, CIMMYT has actively supported Vietnam's efforts to increase maize production. “About 70 percent of the improved maize grown in Vietnam is related, in one way or another, to CIMMYT breeding materials,” says Tran Hong Uy, who directs Vietnam's National Maize Research Institute.

CIMMYT's work on quality protein maize received the 2000 Millennium World Food Prize. The prize was awarded to Surinder Vasal and Evangelina Villegas for three decades of dedicated research efforts to produce more wholesome corn. 🌿

For more information, please visit www.worldfoodprize.org

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MAN OF VISION AT CIMMYT *Continued from page 1*

Dr. Iwanaga, a Japanese national, received a Ph.D. in plant breeding and genetics from the University of Wisconsin. He possesses more than two decades of research and management experience in international development. Having worked at CIP, CIAT, and IPGRI, he has strong links with the CGIAR.

“CIMMYT was fortunate in having had more than one very well qualified candidate to become its new Director

General,” says Alex McCalla, Chairman of the CIMMYT Board of Trustees. “Dr. Iwanaga is a man of vision with a proven record as a leader and manager, and we selected him for his broad international experience in a variety of institutional settings, experience that will be critical to determining CIMMYT's future direction in the global context.”

Masa Iwanaga will take up his new position at CIMMYT in July 2002. 🌿

FUTURE HARVEST CONSORTIUM TO REBUILD AGRICULTURE IN AFGHANISTAN

ICARDA's Central Asia and Caucasus program in Tashkent, Uzbekistan, was the launch pad for a major meeting that gathered an international coalition to help rebuild agriculture in Afghanistan. The meeting, supported by USAID and IDRC, brought together 34 organizations, including 10 Future Harvest Centers, CGIAR, non-governmental organizations, British and Canadian bilateral aid agencies, United Nations agencies, and Afghanistan's Ministry of Agriculture.

The Consortium aims to multiply and deliver quality seed to Afghan farmers, build an effective regulatory system, and implement a strategy for CGIAR technical assistance (in cooperation with partners) for the development of seed systems and sustainable agricultural production systems in Afghanistan at

the central, regional, and local levels.

"Agriculture in Afghanistan is going to need a lot of help," says Adel El-Beltagy, Director General, ICARDA. "Our mission is to ensure that agricultural reconstruction efforts are based on the best practices science has to offer." El-Beltagy and Raymond Morton, Senior Policy Advisor, USAID, launched the Consortium.

The Tashkent meeting developed a

work plan for a 12-month project on seed systems and a framework for longer-term activities in crop improvement; soil and water management; livestock, feed, and rangeland improvement; horticulture; and national capacities building. A dominant theme was the need to involve Afghan partners in the project, strengthening those partners' sense of project ownership and capabilities while ensuring

that the realities of the Afghan situation are fully reflected in the plan.

The international development community has commended CGIAR's ability to respond proactively and promptly. The Consortium's work has garnered extensive media coverage in North America and developing countries.

 For more information on the Consortium, please visit www.futureharvest.org




A key challenge in rebuilding Afghanistan's agriculture is to restore the health of croplands and rangelands. Livestock are an integral component of the farming systems, but rangelands are severely degraded and exposed to desertification.

STOP PRESS: SEEDS OF HOPE REACH AFGHANISTAN Continued from page 1

Morton and Larry Paulson of USAID in Pakistan and Afghanistan in facilitating the project. The World Food Program arranged the transportation.

"We are hopeful that, given the improved, high-quality nature of these

seeds, we will see higher than average crop yields this autumn," says Adel El-Beltagy, Director General, ICARDA. "By adding fertilizer, another recent USAID donation to help Afghan farmers, we might actually see a doubling of wheat production."

In May, the Consortium, in partnership with Afghanistan's Ministry of Agriculture, FAO, and civil society organizations will host a workshop in Kabul to develop a "code of conduct" for seed production and distribution. 



CONFERENCES AND SEMINARS

IRRI Co-Hosts Asian Regional Consultation on Reaching the Rural Poor

Seventy-five percent of the world's poor live in rural areas. The World Bank's new rural development strategy, "Reaching the Rural Poor," was discussed at a consultation jointly organized by IRRI and the World Bank, in cooperation with the Government of Vietnam. H.E. Mr. Le Huy Ngo, Minister of Agriculture and Rural Development of the Socialist Republic of Vietnam, opened the workshop, and Dr. Bui Ba Bong, Vice Minister of Agriculture and Rural Development, chaired the plenary session.

Keeping in view the realities and needs of client countries in the Asian region, workshop participants recognized the need to promote science and technology as an integral component of rural development and poverty reduction strategies, along with the need to link country and regional strategies with the global concern for poverty reduction and natural resources management. National rural development experts from Bangladesh, China, India, Indonesia, Philippines, Thailand, and Vietnam lead the roundtable discussions and provided valuable comments on implementing the new strategy. Scientists from 10 Future Harvest Centers (CIAT, CIP, ICARDA, ICLARM, ICRAF, ICRISAT, IPGRI, IRRI, ISNAR, and IWMI) attended and gave presentations at the consultation. Representatives of the Asian Development Bank, Asian Vegetable Research and Development Center (AVRDC), Australian Centre for International Agricultural Research (ACIAR), FAO, IFAD, and bi-

lateral aid agencies also participated.

A special session on the World Bank's strategy for supporting science and technology was led by Shawki Barghouti, Adviser in the Agriculture and Rural Development Department. The consultation was successful, helping to cement new partnerships. In addition, it provided an opportunity for the client countries of the World Bank and CGIAR to offer their insights and perspectives on how the poor can be reached better. Consultations such as the one organized in Hanoi are helping strengthen CGIAR-World Bank links and improve strategies. The next consultation will be held in the Africa Region; IITA will play a lead role in organizing and hosting the event.

CIMMYT Hosts Conference on Impact Assessment

Assessing impacts in a scientifically rigorous fashion was the principal theme of an international conference held in San José, Costa Rica, February 4-7, and sponsored by CIMMYT's Economics Program and the CGIAR Standing Panel on Impact Assessment (SPIA). The conference, provocatively titled "Impacts of Agricultural Research and Development: Why Has Impact Assessment Research Not Made More of a Difference?" assembled a leading group of researchers to look anew at the state of impact assessment research and explore its relevance to scientists, policy makers, donors, investors, and the public.

"Impact assessment research has multiple uses," says Prabhu Pingali, Director, Economics Program, CIMMYT.

"It can generate support, raise awareness, improve accountability, improve research management, and help in priority setting. Most importantly, our research must have positive, meaningful impacts on the lives of the poor."

The conference covered a wide range of issues, from the conceptual to the practical. It drew more than 150 participants, including representatives from 14 Future Harvest centers and other key CGIAR stakeholders. A dominant theme was the need for multi-disciplinary impact studies that explore many impacts, not only those that are easily quantified and valued. Participants felt that case studies must examine successes and failures; understanding of the reasons that projects fail will lead to better project design. Barbara Rose, Executive Director, Future Harvest, addressed a special panel on the role of media, noting "a real openness to rethinking how impacts assessment is done within the CGIAR System and at the Future Harvest Centers." The panel touched on the need for researchers and scientists to 'shed their inhibitions' and reach out to people outside their disciplines.

For more information on the conference and the papers presented at it, please visit

www.cimmyt.cgiar.org/Research/Economics/impacts/index.htm

Biotechnology and Sustainable Development: Voices of the South and North

ICARDA and the Government of Egypt, in partnership with CGIAR and others, organized a major conference



on biotechnology at the Bibliotheca Alexandrina, the Library of Alexandria, in Egypt, March 16–20. The conference attracted a stellar cast of speakers from developing and industrialized countries, including representatives of the public and private sectors, civil society, and scientific and farmers organizations.

Launching the conference, Gordon Conway, President, The Rockefeller Foundation, called for “re-prioritizing biotechnology to help the poor.” Plenary sessions addressed in-depth the state-of-the-art in life sciences, challenges in feeding the world, the role of genetic resources and biotechnology, regulatory implications of the new life sciences, intellectual property rights, societal dimensions, and new partnerships.

Conserving genetic resources is a challenge for humanity. Without genetic resources from plants, we lose one of our greatest tools to alleviate poverty, provide food security, fight disease, and protect the environment.

– Ismail Serageldin

Ismail Serageldin, Librarian of Alexandria and former CGIAR Chairman, played a key role in conceptualizing the conference and addressing participants. Adel El-Beltagy, Director General, ICARDA, gave a keynote speech on crop improvement in arid lands and biotechnology’s potential to improve agriculture in some of the driest and harshest ecologies of the world. Other speakers included representatives of The

World Fish Center, ILRI, and IPGRI.

A new initiative, The Global Conservation Trust, aims to create a \$250 million endowment to build and maintain into perpetuity a global system for the conservation of agricultural biodiversity. This includes the more than 530,000 accessions held at 11 CGIAR genebanks, in trust, for the benefit of all humanity. In closing remarks, Serageldin noted, “Conserving genetic resources is a challenge for humanity,” adding that “Without genetic resources from plants, we lose one of our greatest tools to alleviate poverty, provide food security, fight disease, and protect the environment.”

CIP Hosts Seminar on Biotechnology for the Andean Countries

Advances in biotechnology are offering new opportunities in the fight against hunger, poverty, and environmental degradation. CIP hosted a three-day seminar to review and increase awareness about what Andean countries are doing in the field of biotechnology. Participants discussed next steps in applying these innovative developments in Peru and the Andean region.

More than 100 scientists, government representatives, and academics from Andean countries, North America, and Europe attended the meeting, noting the urgent need to promote secure and responsible application of biotechnology for the benefit Andean nations, particularly countries with fragile environments such as Peru. “Conferences like these are important because they help establish bridges of communication and a better understanding among scientists, regulators, and policymakers,” says Marc Ghislain,

head of the CIP’s Molecular Biology Lab. “This seminar has helped increase confidence among non-scientists about the potential benefits of biotechnology while reducing their apprehensions of the new technologies.”

An important outcome of the meeting: Peru’s Vice Minister for Agriculture has tasked the Peruvian Agriculture and Fishery Research Institute to draft a strategic plan for research in biotechnology.

CGIAR Information Finder Workshop

Imagine a one-stop shop where CGIAR knowledge is available at the click of a button. Imagine having an agricultural version of Ask Jeeves that would search the entire universe of CGIAR Web pages and CGIAR online publications and provide quick answers. Thanks to a collaborative project between FAO’s World Agricultural Information Centre (WAICENT) and information management professionals from Future Harvest Centers, Future Harvest, and the CGIAR Secretariat, a new Web-based search tool has been developed that will provide easy access to CGIAR research at the click of mouse button.

With support from FAO and CGIAR, IFPRI hosted a three-day workshop, March 18–20, to finalize work on the CGIAR Information Finder. Of the more than 35 participants, a majority (28) were from the Centers. Plans are underway to launch the CGIAR Information Finder at the World Food Summit: Five Years Later to be held in Rome, June 10–13.

The CGIAR Information Finder is available by visiting
www.waicent.fao.org/cgiar



GOING WITH THE GRAIN: CGIAR EXAMINES ROLE IN THE INTERNATIONAL TREATY

Adoption of the FAO International Treaty on Plant Genetic Resources for Food and Agriculture in November 2001 marked a major step forward in global efforts to promote free exchange of plant genetic material. The CGIAR was an active partner in the negotiations, providing technical assistance and advice. This is the first international treaty that specifically recognizes the importance and relevance of CGIAR genetic resources; it contains a full article about the establishment of a multilateral system based on the genetic resources held in trust by the CGIAR.

IRRI, in partnership with IPGRI, hosted a three-day workshop in Los Baños, February 18-20, to discuss the implications of the Treaty for the work of CGIAR-supported Centers and their partners, and the next steps needed before the Treaty takes effect. Participants included Directors General, senior managers, members of Boards of Trustees, genetic resource conservationists and intellectual property scientists from 12 Centers, as well as representatives of FAO, and interim Science Council. The workshop was co-sponsored by the Genetic Resources Policy Committee, Systemwide Genetic Resources Program, Central Advisory Service on Intellec-




Conservation and sustainable utilization of plant genetic resources is essential for food security, poverty eradication, and environmental renewal.

tual Property, and CGIAR Secretariat as a system office unit. Workshop sessions featured in-depth discussions of critical treaty provisions such as the call for agreements with Centers concerning the in-trust collections of plant genetic resources, the need for a new material transfer agreement until the Treaty come into force., and the importance of CGIAR-NARS partner-

ships in treaty implementation. The principal outcomes of the workshop were the following:

- a draft agreement between the Governing Body of the Treaty and CGIAR Centers as a basis for further discussions with FAO and within Centers;
- a draft Material Transfer Agreement (MTA) which is intended to serve as a transitional MTA under the present FAO-CGIAR “in trust” agreements until the treaty is ratified and becomes effective; and
- Consensus to host regional workshops to inform and assist policy makers and others in their consideration of the treaty during the ratification period.

The next meeting of the FAO Commission on Genetic Resources for Food and Agriculture will be held in October 2002, where the interim MTA will be presented. As debate on genetic resources intensifies, the CGIAR will continue to participate proactively in the discussions and fulfill its trusteeship and treaty obligations. 



COLLABORATION *Continued from page 1*

system office will equip the CGIAR to better achieve its development goals.”

Workshop facilitators emphasized that the CGIAR is a complex organization. A model of development cooperation, its strengths are the voluntary nature of association and decisions made by consensus. Discussions were animated, ideas flowed, and many a flip chart quickly filled to capacity. The vision for the system office is to serve and facilitate the functioning of the CGIAR as a well-integrated, cost-effective, and responsive learning system implementing a compelling vision, mission, and strategy.


“Science, by definition, is a collaborative enterprise,” said Emil Javier, Chairman of the interim Science Council. “The proposed system office, operating in virtual mode wherever possible, will help develop a solid platform for collaboration, increasing the quality and impact of CGIAR science.”

The workshop provided an opportunity for leaders of the eight units of the proposed system office—Association of International Agricultural Research Centers (AIARC), Internal Audit Group, Gender and Diversity Program, Central Advisory Service for Intellectual Property Rights, Future Harvest Foundation, Science Council Secretariat, Chair and Executive Secretary of the Center Directors Committee, and the CGIAR Secretariat—to come together for the first time. An integrated business plan is being developed. Efforts to recruit a CGIAR chief information officer are nearing completion. Operating from ICLARM-The World Fish Center, the CIO would represent the ninth unit of the strengthened system office.

“Our consultants have shown us some excellent examples of best prac-

tices in global public-sector alliances,” says Meryl Williams, Director General, The World Fish Center, and current chair of the CGIAR Center Directors Committee. “We need to replicate these practices quickly, keeping in view the special circumstances of the CGIAR that have been outlined at the workshop.” Meryl did double duty at the workshop, representing the Gender and Diversity Program as well as the Center Directors Committee.

“The workshop helped us to follow-up on the CGIAR’s recommendation and advance that recommendation by developing key elements of the integrated business plan, a sound ‘business case,’ and unit operating plans for serving the system better,” concluded Francisco Reifschneider, Director, CGIAR. “To capture synergies and optimize resources, we must move ahead in implementing agreed on actions speedily.”

In terms of next steps, McKinsey and Company will conduct interviews with CGIAR stakeholders, including Center directors and members of the Executive Council. An integrated business plan will be presented to the CGIAR Executive Council in September and at the Annual General Meeting in October. Implementation of the plan will begin January 1, 2003. 

Honor Roll

Rajendra (Raj) S. Paroda, Coordinator of ICARDA’s Regional Program for Central Asia and the Caucasus (CAC), was elected Foreign Member of the Georgian Academy of Agricultural Sciences and Academician of the Academy of Agricultural Sciences, Republic of Armenia.

Mustapha El Bouhssini, ICARDA, won the 2002 Bassil Award for work on integrated

Uganda-CIP Partnership Strengthened

The Republic of Uganda ratified an agreement recognizing CIP’s legal status as an international organization. The agreement was signed in Lima by Mr. Kisamba Mugerwa, Ugandan Minister of Agriculture, Livestock and Fishing.

Uganda joins Bolivia, Canada, Denmark, Ecuador, Egypt, Netherlands, Peru, Sweden, and Venezuela, all of which have signed similar agreements. In addition, FAO and UNDP have signed related agreements. These agreements are helping facilitate CIP research activities worldwide.

VAVILOV-FRANKEL FELLOWSHIPS

IPGRI welcomes applications for the Vavilov-Frankel fellowships to commemorate the unique contributions to plant science of academician Nikolai Ivanovich Vavilov and Sir Otto Frankel. The fellowships encourage the conservation and use of plant genetic resources in developing countries by helping outstanding young researchers conduct relevant, innovative research at an advanced research institute outside their own country for three months to a year.

For more information, contact e.clancy@cgiar.org, or visit

www.ipgri.cgiar.org/training/vavilov

pest management of chickpea leafminer (with Khaled Mardini of the Directorate of Scientific and Agricultural Research, Aleppo Center, and Adnan Babi, University of Aleppo, Syria).

Tendayi Mutimukuru, CIFOR researcher, was awarded the Claude Ake Memorial Award for her research proposal “Managing Conflicts for Sustainable Forest Management: Lessons from Mafungautsi Forest in Gokwe Communal Area.”



CGIAR

Women make significant contributions for maintaining the health of the world's fisheries in Africa, Asia, and Latin America.



CGIAR

Worldwide, fish catches are declining - improving management of aquatic resources is essential for balanced development.

WHERE ARE THE WOMEN IN FISHERIES?

More than 120 million people depend on fisheries for their incomes, and fish are a major source of protein in the diets of one billion people. As global fish consumption rises, and fish catches decrease, few consumers stop to reflect on the fact that fisheries constitute the world's largest remaining food harvest from the wild. For a majority of people in Africa, the Asia-Pacific region, and Latin America, fish and fisheries are a vibrant part of cultural, economic, and social traditions.

In many developing countries, the work of women fishers remains mainly within the informal sector or subsistence economy, in which incomes are low, and there is little job or social security.

"The international community is paying more and more attention to

women and their role in maintaining the health of the world's fisheries," says Meryl Williams, Director General of The World Fish Center. "Until recently the macho image of the fisherman colored much of our thinking, but that image is changing fast."

Most women in fisheries lack access to physical and capital resources; a voice in decision-making; and access to leadership positions, training, and formal education. "To succeed in a world where privatization is on the rise and subsidies for fishing are disappearing, women will need a lot of extra help," cautions Williams. "Until now, however, the very groups that you would expect to provide support have literally missed the boat."

The World Fish Center works to improve the productivity, manage-

ment, and conservation of aquatic resources for the benefit of users and consumers in developing countries. The Center conducts cooperative research with institutions in developing countries, supporting information and training activities and raising awareness by hosting international conferences, seminars, and symposia.

The issues discussed above were raised at the meeting Women in Fisheries: Toward a Global Overview, which was held in Kaohsiung, Taiwan, November 2001. 🌿

For more information, please visit www.iclarm.org and www.futureharvest.org




WARDA'S NEW AFRICAN RICE INITIATIVE LAUNCHED

A New African Rice Initiative to promote complementary technologies to improve soil fertility and make rice farming more sustainable in the fragile uplands and ecologies of sub-Saharan Africa was inaugurated by H.E. Mr. Pascal Affi N'Guéssan, Prime Minister of the Republic of Côte d'Ivoire.

In a strong signal of host-country support to WARDA, Prime Minister N'Guéssan represented President Laurent Gbagbo of Côte d'Ivoire at a well-attended ceremony held at the Felix Houphouët-Boigny Foundation for Peace in Yamoussoukro.

A ringing endorsement for WARDA came from H.E. Mr. Theophile Nata, Minister for Agriculture, Animal Husbandry and Fisheries of the Republic of Benin, who chairs WARDA's Council of Ministers: "After 30 years, WARDA has matured and we in Benin look forward to achieving rice self-sufficiency by 2005." Professor N. Lindsay Innes, Chairman of WARDA's Board of Trustees, highlighted the importance of partnerships, both in current achievements and in the future success of the new initiative.

The surest test of the effectiveness of research efforts is measurable impacts on the lives of the poor. WARDA's partnership approach in developing the New Rices for Africa (NERICAs) is already having significant positive impacts. NERICAs offer the prospect of expanding rice cultivation by 35 percent in the sub-humid and humid savanna zones in Nigeria, boosting food security and incomes in large farming tracts. Increases in rice production will translate into \$10 million in rice import savings for Guinea. 



Technologies to improve soil fertility and make rice farming more sustainable in sub-Saharan Africa offer the prospect of expanding rice cultivation by up to 35 percent, helping to reduce crippling rice import bills.

CGIAR



“BEST BET” APPROACHES FOR SUCCESSFUL FARMING

Mallam Galadima has good reason to smile. “I really learned the value of the ‘Best Bet’ approach this year,” says Galadima, a farmer in Badume Village, Bichi, in northern Nigeria. “Farmers who grew the traditional varieties saw total crop failure.”

The Bichi area, not far from the Nigerian city of Kano, had a very strange growing season. The rains came in abundance then suddenly stopped altogether. In total, rainfall was normal for the season, but because it came all at once much of it was unavailable to crops and was wasted. So how did Galadima prosper when his neighbors faced a long hungry period?

Mallam Galadima is one of the original participants in the evaluation of the “Best Bet” holistic farming system approach. It was developed by

researchers from IITA, ILRI, and ICRISAT, and their national partners, working together with IITA at the Kano research station. With “Best Bet,” the research team has demonstrated that even in the difficult farming conditions of the dry savanna, the land can provide abundant, sustainable harvests, and smallholder farmers can prosper.



CGIAR

Mallam Galadima has benefited from “Best Bet” approaches — he is an enthusiastic adopter of the technology, and is actively promoting it for the benefit of other farmers.

Galadima didn’t join the research program without hesitation. He was indifferent about the trials at first. Like his neighbors, he had always grown the traditional varieties of sorghum and cowpea in a one-to-one ratio, at low density. He also kept sheep. He was

successful last season because he grew early maturing, higher-yielding sorghum and dual-purpose cowpea using the “Best Bet” approach. That

approach combines new cultural practices—planting sorghum and cowpea in a dense system of two rows of sorghum alternating with four rows of cowpea—with manure and animal management techniques developed by the research team to improve soil nutrients and provide better feed for sheep. “We have security in food supply not enjoyed by our neighbors,” Galadima says.

Galadima’s success has had an unexpected benefit, reinforcing the value of the “Best Bet” approach. “The new system has worked so well that I feel like an extension agent!” Galadima says. “Other farmers in the area come to me all the time for seed and advice on how to use the technology.”

Thanks to farmers like Galadima who dispense advice and seed freely, “Best Bet” approaches are spreading fast. The new approach has spread by word of mouth from a pioneer band of 11 “official” farmer-participants to hundreds of farmers in the region. 🌿

For more information on IITA’s research, please visit www.iita.org

SOMETHING FOR (ALMOST) NOTHING IN KALIMANTAN

In west Kalimantan, Indonesia, CIFOR researchers found that local villagers are producing valuable charcoal from trees that grow untended in abandoned areas. *Vitex pubescens*, a tree that springs up on grasslands after fires or abandoned farming, yields a product that is as good as mangrove charcoal. The tall, sturdy *Imperata* grass can be used for thatching, and cattle eat the new shoots. But rice does not thrive well on such land, and farmers find weeding the rough fields too labor-intensive. Establishment of small, local industries based on the use of *V. pubescens* for charcoal offers a way of making the lands productive again.

The technology needed to produce the charcoal is a relatively simple and inexpen-

sive kiln. After four years, one hectare of *V. pubescens* has the potential to yield up to 18 tons of charcoal, providing farmers with several hundred dollars when sold to charcoal factories in Pontianak. The activity is also highly appropriate for farmers practicing swidden agriculture in West Kalimantan because it can be pursued alongside regular agriculture, using limited labor. Another advantage of *V. pubescens* is that it tolerates fire much better than many other tree crops, thereby reducing the risk that farmers will lose their investment.

“We picked up the idea that originally came from a local NGO,” says Wil de Jong, CIFOR researcher. “We worked with Yayasan Dian Tama (YDT), and it involved the local

Tanjungpura University in Pontianak to explore how the local farmers can best profit from these grasslands. The collaboration capitalizes on the strengths of each partner to multiply its impact.”

The collaboration has a wider than regional appeal. “These grasslands are common in Indonesia and other countries, so the results of this work will have wider benefits,” concludes de Jong. YDT performs research in collaboration with the university; CIFOR provides scientific input. CIFOR has been approached by development agencies in New Zealand to apply the this process more widely. 🌿



NEW STRATEGIC ALLIANCE TO COMBAT SOIL DEGRADATION

Global efforts to halt tropical soil degradation have a new but familiar ally: the Tropical Soil Biology and Fertility Institute (TSBFI), formed through a strategic alliance between CIAT and the former TSBF Program. The new institute will be hosted by ICRAF.

“Arresting soil degradation is an integral part of CIAT’s global research program,” says Joachim Voss, Director General, CIAT. “The TSBF Institute will enhance our efforts to promote ecologically sound farming throughout the tropics.”

“Our research approach will be based on the concept of integrated soil fertility management,” adds Mike Swift, Director, TSBFI. “This approach recognizes that soil is not just an inert body passively receiving inputs and giving outputs, but a complex living system that requires knowledge-based stewardship.”

The alliance was a natural outcome of complementary research activities. Whereas CIAT focused on identifying and applying basic principles and practices to overcome soil degradation, TSBF concentrated on improving soil fertility through the use of soil biodiversity. “By combin-

“Soil is not just an inert body passively receiving inputs and giving outputs, but a complex living system that requires knowledge-based stewardship.”

—Mike Swift, Director, TSBFI.

ing the two approaches, soil scientists at the TSBF Institute have created a potent force for combating soil degradation,” says Douglas Pachico, Research Director, CIAT. “This initiative will help strengthen research net-

works in sub-Saharan Africa, South Asia, and Latin America.”

Soil fertility problems are said to be the single most important constraint to achieving food security in Africa. The alliance is moving ahead with an active research program to address these problems. A three-day strategy development workshop held at The Rockefeller Foundation’s Bellagio Study and Conference Center produced an action plan “Soil Fertility Degradation in Africa: Lasting Solutions to a Long-Term Problem.” The alliance is building a “virtual college on soil biology” that will promote and accelerate South-South exchange of knowledge and sharing of best practices. 🌿

For more information, please visit www.ciat.cgiar.org/news/tsbf.htm



New, science-based approaches are urgently needed for tackling soil erosion, the bane of farmers’ lives in developing countries.



CGIAR Chairman

Ian Johnson

CGIAR Director

Francisco Reifschneider

Cosponsors

Food and Agriculture Organization of the United Nations

International Fund for Agricultural Development

United Nations Development Programme

The World Bank

CGIAR Members

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, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Portugal, Romania, Russian Federation, South Africa, Spain, Sweden, Switzerland, Syria, Thailand, Uganda, United Kingdom, United States of America

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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, The World Bank

CGIAR-SUPPORTED FUTURE HARVEST CENTERS

- **International Center for Tropical Agriculture (CIAT)**
Cali, Colombia
Phone: (57-2) 4450000
www.ciat.cgiar.org
- **Center for International Forestry Research (CIFOR)**
Bogor, Indonesia
Phone: (62-251) 622 622
www.cifor.org
- **International Center for the Improvement of Maize and Wheat (CIMMYT)**
Mexico City, Mexico
Phone: (52-5) 804 2004
www.cimmyt.org
- **International Potato Center (CIP)**
Lima, Peru
Phone: (51-1) 349-6017
www.cipotato.org
- **International Center for Agricultural Research In the Dry Areas (ICARDA)**
Aleppo, Syrian Arab Republic
Phone: (963-21) 2213433
www.icarda.org
- **The World Fish Center (ICLARM)**
Penang, Malaysia
Phone: (60-4) 626-1606
www.iclarm.org
- **International Centre for Research in Agroforestry (ICRAF)**
Nairobi, Kenya
Phone: (254-2) 524000
www.icraf.org
- **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**
Patancheru, Andhra Pradesh, India
Phone: (91-40) 3296161
www.icrisat.org
- **International Food Policy Research Institute (IFPRI)**
Washington, DC, United States
Phone: (1-202) 862-5600
www.ifpri.org
- **International Institute of Tropical Agriculture (IITA)**
Ibadan, Nigeria
Phone: (234-2) 2412626
www.iita.org
- **International Livestock Research Institute (ILRI)**
Nairobi, Kenya
Phone: (254-2) 630743
www.cgiar.org/ilri
- **International Plant Genetic Resources Institute (IPGRI)**
Maccarese (Fiumicino) Rome
Phone: (39-06) 61181
www.ipgri.org
- **International Rice Research Institute (IRRI)**
Los Baños, Philippines
Phone: (63-2) 8450563
www.irri.org
- **International Service for National Agricultural Research (ISNAR)**
The Hague, The Netherlands
Phone: (31-70) 3496100
www.isnar.cgiar.org
- **International Water Management Institute (IWMI)**
Colombo, Sri Lanka
Phone: (94-1) 867404
www.cgiar.org/iwmi
- **West Africa Rice Development Association (WARDA)**
Bouaké, Côte d'Ivoire
Phone: (225) 31634514
www.warda.org