
How Can NGOs Make Full Use of the CGIAR Network of Agricultural Research Centers?

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Did you know that there is a network of agricultural research centers, each specializing in just a few areas of tropical or subtropical agriculture? The network has an awkward name, CGIAR (Consultative Group on International Agricultural Research). Most of the network's members also have long names and awkward acronyms, like ICRISAT, ICRAF, and ILRI. These centers have a wealth of knowledge, genetic resources and research capability that should make them a valuable resource for organizations working with farmers.

Last November I flew to Nairobi, Kenya, to attend an international conference of leaders of the CGIAR system and their "partners." My goal was to better understand how NGOs could benefit from what they have to offer. To what extent are they interested in helping or even working with members of ECHO's network? Is this help available to both large and small organizations? How does the size or nature of your organization affect the ways the centers may be willing to work with you? What is the nature of the "treasures" that must be stored in their minds, publications and seedbanks? How can ECHO help you "mine these treasures"?

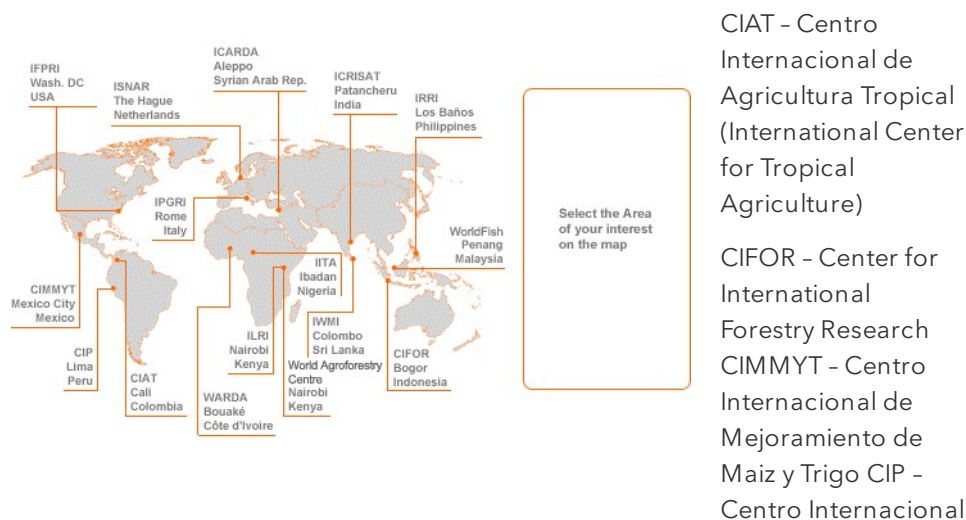
I was pleasantly surprised to find that there has been a change at the highest levels that has potential to benefit many in our network. I still have many questions and will be working to learn more. I have been familiar with the CGIAR system for almost three decades. When I was doing post-doctoral research on nutritional problems of bird-resistant grain sorghum at Purdue University in the late 1970's, one of the career options I considered (before the opportunity opened with ECHO) was to be a researcher at one of these centers.

Until a few years ago, the mode of operation of the CGIAR centers was something like the following. They would develop new varieties of crops and evaluate agricultural practices. The results would go to research stations in developing nations that were operated by national governments. Varieties and techniques that proved suited to a country would then be disseminated by the nation's own extension service. Often NGOs were able to obtain seeds and information too, but they were not to my knowledge an integral part of the plan.

In some countries this method worked well. In others, the national experiment stations were few and poorly funded. Often the national extension services did not have resources to carry results to remote parts of the country. When the system

broke down it was understandably frustrating to everyone involved, including farmers (those few who even knew about it), scientists, managers of the CGIAR centers, and donor agencies that fund these centers.

The impression I got in listening to presentations at the conference is that many donor agencies have insisted on a revised approach. Speakers talked clearly of meeting needs of the poor as their bottom line. They spoke often (and gave examples) of partnerships not only with governments but also with local and national NGO's and organizations—some very large and some surprisingly small. As an example of partnering with a large NGO, World Vision used its community network in Zambia to organize farmers to participate in large-scale evaluation of a system called "Improved Fallows." The World Agroforestry Center (the new name of ICRAF, the CGIAR Center that specializes in agroforestry) oversaw design and analysis of results—both crop yields and opinions of farmers. Local NGOs and government groups also participated. We hope to share some of the results of that work in the future.



de la Papa ICARDA - International Center for Agricultural Research in the Dry Areas
 ICRISAT - International Crops Research Institute for the SemiArid Tropics
 IFPRI - International Food Policy Research Institute
 IITA - International Institute of Tropical Agriculture
 ILRI - International Livestock Research Institute
 IPGRI - International Plant Genetic Resources Institute
 IRRI - International Rice Research Institute
 ISNAR - International Service for National Agricultural Research
 IWMI - International Water Management Institute
 WARD - West Africa Rice Development Association
 World Agroforestry Centre (formerly ICRAF)
 World Fish Center

An important area of emphasis among the CGIAR centers, an area that I had not heard about before, is helping countries recover after war or natural disaster. This especially involves restoring seed of original varieties and/or bringing in improved varieties that are suited to the region. For example, CIP has established a tissue culture facility for potato in Afghanistan. CIAT corn is yielding three times more than the local varieties in East Timor, the world's newest country. CIAT has a program called "Seeds for Hope in Rwanda." ICARDA has 1003 crop accessions from Iraq and also stores Iraq's own master collection for them. They half-seriously refer to this program as "weapons of mass restoration."

How might members of ECHO's network benefit from the CGIAR research centers?

I was encouraged a year or so ago when the International Center for Improvement of Maize and Wheat (CIMMYT) took the initiative to suggest that organizations in ECHO's network in SE Africa might like to participate in evaluating some new non-hybrid corn varieties (see EDN 80). If any of you took advantage of that offer, please write and tell me what your experience was like.

I am still trying to understand how best to advise ECHO's own network. Beyond a doubt there are plant varieties, reports, and knowledge in these centers that could help you as you assist farmers who struggle under difficult conditions. The centers are able to offer us new ideas for development projects, seeds for improved crops (introduction of most of these would need to be preceded by your own experiments to determine whether they are adapted to your particular situation, how they compare in yield and taste to local varieties, etc.), and experts who can answer questions when they are beyond ECHO's expertise.

The bottom line is that I believe there are people in many of the CGIAR centers that are willing to help, but the way has not been found for ECHO to pull together some of CGIAR's treasures into a form that you can easily use. It is not in the CGIAR centers' mandate to maintain a user-friendly shopping list of good ideas for NGOs, large and small, to consider (a list of techniques, technologies, improved seeds, etc.). I believe that is what many of you are looking for from ECHO. But short of that, there are some ways your work can be strengthened by knowing about the centers. Here are some suggestions.

1. When you write to one of the centers, write a couple paragraphs telling about your organization. What does it do? Is it a local farmers group, an NGO, a mission? If you are an agriculturalist by training with experience in doing variety trials and statistical analysis, let them know that. If you are a medical professional or a teacher wanting some seed packets of local crop species to try on a small scale in hopes of finding something that can resist a problem disease or better handle too much or too little rain, tell them that. In what way will sending you seed or information help the community? The more information they have about your goals and setting, the better they can decide what to send you.
2. If you have a really good idea to help local farmers and would like to collaborate in research with help from CGIAR scientists, write to the center that seems to have expertise related to the opportunity. Explain your idea and your capability and credentials to collaborate with them in research.
3. Get to know the centers that may be working in your country, regardless of where their home base might be (see Figure 1). Their web sites are a good place to start—links are available at www.cgiar.org. (<http://www.cgiar.org/>) If you do not have access to the web, ECHO can send you a list of addresses for the centers by postal mail or e-mail.

Collaborative Research/Development Projects

The best news is that the CGIAR centers are at times actively seeking NGO and farmer participation. It will help you understand the kind of collaborations that occur if I describe a contest in Africa in which "civil society organizations were invited by CGIAR to submit examples of ...collaborative work on adoption or

adaptation of research conducted by [national research centers] supported by CGIAR." A \$15,000 top prize was awarded at the meeting I attended in Kenya. The rest of this article is devoted to summaries of approximately half of the programs that were considered.

Vegetables grown in urban areas are sometimes avoided for fear that they may have been grown with sewer water or industrial effluent or may contain heavy metals. IPGRI went into partnership with Family Concern in Kenya with the object of matching rural and periurban [i.e. not far outside the city itself] farmers' production of African leafy vegetables with the market requirements and demands. To correct the negative attitude among city dwellers they introduced a brand name and farmers must adhere to certain quality standards and regulations.

In Ethiopia, a dairy products marketing association consisting of small farmers joined with ILRI to improve productivity and quality of products. The goal was to transform subsistence production into a market-oriented system and strengthen rural-urban linkages.

Primary schools in rural Tanzania are becoming development nodes. With support from the government, the Diocese of Central Tanganyika, the Christian Council of Tanzania, and ICRISAT, the schools are producing and selling inexpensive, high-quality seed to smallholder farmers.

In war-torn northern Uganda, about a million people are internally displaced and live in protected camps. They face destruction of crops by rebels and have limited time to work. Through a partnership between a foundation, the International Potato Center (CIP) and two organizations that we presume are NGOs (PRAPACE and NARO), a vitamin-rich sweet potato is being introduced that requires little care and produces in 3-4 months.

In East Africa, the Catholic Relief Services, KARI (the Kenya Agricultural Research Institute) and CIMMYT jointly involve farmers in extensive on-farm evaluation of experimental varieties, and help rural communities establish seed production businesses and distribution strategies.

In Uganda, traditional medicine accounts for 80% of Ugandans' primary health care. However, practitioners find it increasingly difficult to locate many of the medicinal woody plant products. A partnership between an NGO (RPWRD), ICRAF and herbalists has inventoried the medicinal species they use and targeted priority species for domestication (i.e. find whether and how the plants can be grown on small farms). Cultivation on smallholder farms increases supply and reduces pressure on wild populations.

CIAT is working with farmer research groups at plot sites in Malawi and Uganda. The desired outputs are farmers that are self-confident and capable of identifying and evaluating new market opportunities and technologies; "baskets" of technology options for crop production and soil management; and diverse new agro enterprises. Partners with CIAT and the farmers were an African highlands initiative promoting agricultural research in the region, and the NGOs Africare Uganda, Catholic Relief Services, and Traditional Irrigation and Environmental Development Organization of Tanzania.

ICRISAT partnered with Catholic Relief Services, Sasakawa Global 2000, TechnoServe and Kenya Agricultural Commodity Exchange to increase crop productivity and grain quality with new varieties and integrated pest management. They also worked on marketing to traders and processors. Returns to farmers have increased by up to 30% the first year and 3,000 farmers are involved in Kenya, Tanzania and Uganda.

Space does not permit us to summarize all of the projects described. Here are a few more with only brief descriptions of joint NGO and CGIAR projects and the lead CGIAR center. (We can send a little more information on any particular project mentioned in this article if it would be helpful.) IITA is helping to improve agro processing technologies and packaging and helping to developing agrobusiness in Africa. ICRAF is working with indigenous fruit tree domestication projects and marketing of the fruit. CARE and CIMMYT are involved in Striga control in Kenya. The World Fish Centre partners with NGOs to mobilize communities, enable fingerling production, and work on marketing strategies for production and distribution of fingerlings.