

International Rice Research Institute [IRRI]

Background paper

GO-FAU Consultations of Stakeholders with the Bill & Melinda Gates Foundation

Nov 1-2, 2007

Background

Rice has a crucial role to play in achieving the eight United Nations' Millennium Development Goals. Improvements in rice farming help not only farmers, farm workers and their families, but also the millions of poor who are totally dependent on rice. Without effective delivery to farmers of technologies developed by rice research, improvements to livelihoods are difficult to come by. Two Millennium Development Goals in particular — eradicating extreme poverty and hunger, and ensuring environmental sustainability — depend heavily on continued and strengthened research efforts reaching farmers and helping them grow rice more efficiently, profitably and in a sustainable manner. *Training@IRRI* assists NARES partners to achieve a greater, sustainable impact from current and past research.

Training@IRRI, coordinated by the Training Center, works with NARES partners in Asian, and now southern and eastern African countries to achieve two objectives:

- 1) develop the next generation of rice scientists and technicians, and
- 2) improve the impact of research by delivering the new knowledge to farmers.

Training@IRRI assists NARES partners:

“To build the next generation of rice scientists and technicians through its scholars' program, and face-to-face and e-learning training courses, and provide development partners with validated knowledge to improve farming practices by articulating IRRI's rice science and rice farming knowledge.”

IRRI has conducted and continues to conduct research that produces many technologies which improve rice farming and, hence, the livelihoods of farmers, farm workers and the rice consuming poor. These technologies are disseminated as part of their development through training conducted by IRRI scientists. The research agenda of IRRI also provides opportunities for scientists and technicians to work at IRRI on research projects or to attend internships/on-the-job training in the IRRI laboratories. These capacity building activities give rise to two outputs of *Training@IRRI*:

“Creating the next generation of rice scientists

The next generation of rice scientists and technicians are developed through an academic, cultural and administrative environment for scholars and trainees that equips them to be effective advocates for rice science.”

and,

“Capacity building

The capacity of NARES and other development partners is improved through the effective and efficient delivery of state-of-the-art training by IRRI scientists both at headquarters and in country.”

In addition, there remains a significant potential for many more farmers to utilize the research and improve their food security and incomes. To realize this potential and improve livelihoods further, the effective transfer of the wealth of relevant technologies to farmers is increasingly important. Effectively moving technologies from research to farms is vital in achieving sustainable impact and moving countries closer to achieving the UN Millennium goals. To obtain sustainable impact from research, knowledge must be captured in a form that is comprehensive, immediately useful to the farmer, and that promotes sustainability. This leads to final output of Training@IRRI:

“Knowledge for farmers
Equitable access to all of IRRI’s validated knowledge for improving rice farming
is articulated to meet farmer needs and provided to them through their
intermediaries: NARES, NGOs, universities and the private sector.”

This output is focused on the delivery of articulated knowledge to the farmer – knowledge in local language or dialect in a form that is immediately useful to the farmer. The transfer of technologies to farmers through in-country partners uses existing channels and identifies new channels for delivery: A network of development partners has been formed that energizes rice farming capacity building by transferring IRRI knowledge effectively through the wider extension community to farmers.

IRRI and Content Development

Based on IRRI’s validated research and the expertise of its scientists, differing levels of courses are devised for different audiences – scientists, technicians and extension officers. As a content provider for different audiences it is important that the content is selected and articulated for the audience and presented using an appropriate learning theory – generally, constructivist, student-centered and activity-based. Especially for farmer materials which are developed in conjunction with development communication expertise which we acquire from partner universities.

Although the vast majority of our clients access training through face-to-face courses, seminars or workshops, IRRI has found it beneficial to capture training e-learning format. Capturing the training in this format ensures that the content is carefully selected to meet objectives, organized appropriately and embodies the learning approach that is most successful. This approach also includes activities and assessment. This ensures easier transfer to in-country partners to enhance local training programs. Although IRRI has used sophisticated e-learning authoring tools, our current use of e-learning is centered on PowerPoint which is much easier for in-country partners to modify for language and enhance with local examples, pictures, etc. The e-learning product can be used as online e-learning but, in many instances, the e-learning is delivered on CD-ROM or used as a lecturer resource for a face-to-face course.

Training of content providers for different audiences has been a significant part of IRRI’s activity with the science and extension communities ensuring that research is well articulated for the intended audience. This has been associated with training for partner NARES in knowledge management that bridges the gap between research, extension and the farmer.

IRRI and GO-FAU

At any one time IRRI has over 100 MSc/PhD students in residence and the aim is to double this number. Some students come to IRRI and complete their course work at the University of the Philippines, Los Banos and their research under the supervision of the IRRI scientists. Many students, however, choose to do their research at IRRI and complete their course work and get accreditation from their local university or from a European or US university. With all of these students, IRRI strives to provide an academic, professional and social environment that not only equips the students with their academic qualification but also makes them effective professional advocates for rice science.

GO-FAU modules, developed by IRRI or others, could support research training and the provision of the broader professional curriculum that scholars need to be well-rounded, effective scientists. The broader professional training ensures that students are aware of the major issues facing rice farming and research and are abreast of the latest research techniques – IRRI could develop these courses and modules as GO-FAU content. Similarly, for IRRI's interns/O-J-Ts GO-FAU modules that cover the associated learning prior to placement could be developed.

For the downstream distribution of research and capacity building training, modules have been developed for extension methodology and technical training. These extension modules are also often articulated further for the farmer community. Perhaps there is a role somewhere in GO-FAU plans for this level of training which provides specific accreditation for the extension community.

IRRI and Innovative Developments

Two areas of innovation are being researched at IRRI; developing new extension/farmer materials in all media including radio/TV/DVD, etc, and developing 'intelligent conversations' in which users can input their local conditions to acquire more tailored advice. These areas require more research which will be conducted as resources become available.