

Knowledge Sharing for Collaborative Learning and Innovation in the Centers and Partnerships of the Consultative Group on International Agricultural Research (CGIAR)

*A concept note submitted to the CGIAR's Information and Communications
Technology – Knowledge Management (ICT-KM) Program¹*

Executive Summary

Over the last 18 months, four CGIAR centers have been actively involved in testing knowledge sharing (KS) approaches and tools through the KS Project of the ICT-KM Program. Under pilot initiatives supported by the project, each center has successfully incorporated KS principles and approaches into high-profile events, which have served as entry points for promoting change in the centers' institutional culture. Specifically, the events have demonstrated how centers can plan, conduct, and evaluate their work with greater efficiency by drawing more fully on the collective knowledge of their staff. The project received valuable support through a partnership with the Bellanet International Secretariat, located at the International Development Research Centre (IDRC) in Canada.

In addition to achieving concrete outcomes through the pilot initiatives and a series of complementary activities, the KS Project created a core team of KS specialists in the CGIAR, who possess the skills and motivation necessary to move this work forward. To build on the interest and gains generated by the project, the four centers involved propose a new initiative, or second phase of the KS Project, which will pursue three main lines of action over a 3-year period.

First, each of the four centers will develop and implement a plan for extending within the organization the lessons learned from the KS pilots and other project activities. These centers will also work collectively through the ICT-KM Program to mainstream KS in other centers.

Second, the project will foster further development of the new but robust community of KS practitioners in the CGIAR, expanding it to involve professionals from all areas of the centers' work, including research, capacity building, research support, and management.

Finally, and perhaps most important, the project will identify and pursue opportunities to enhance collaborative learning and innovation in major CGIAR partnerships through the use of KS approaches.

The first two actions should go a long way toward making centers more efficient in planning, conducting, and evaluating their work, while the third should improve the effectiveness of selected center partnerships in delivering research results and development outcomes.

Background

The 15 centers supported by the CGIAR and their many national partners are together creating a wealth of knowledge that can help rural communities in developing countries build sustainable livelihoods. They are also doing much to ensure this knowledge is widely shared. Yet, formidable

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obstacles to knowledge sharing remain, both within centers and between them and their partners, and these reduce the effectiveness of our R&D efforts.

One obstacle is the persistence of a supply-driven “pipeline” approach to technology development and transfer, together with a “service and product delivery” approach to capacity building. These models are ill suited for developing and scaling out the sorts of knowledge-intensive R&D methods needed to meet the complex challenges of reducing poverty and preserving natural resources. The CGIAR centers and their partners need to shift to a more demand-driven, interactive approach, in which such methods are developed collaboratively through a shared process of learning and innovation. A key requirement for achieving this shift is that knowledge sharing should no longer be a mere afterthought in research. Instead, it must become an integral part of the whole research process, involving all stakeholders.

Toward a knowledge sharing and learning culture: The centers have already taken important steps in that direction. The International Center for Tropical Agriculture (CIAT), for example, is entering into a series of regional “learning alliances,” through which participatory methods for linking small farmers to markets are devised, applied, and evaluated collaboratively with major NGOs, and their numerous local partners. The Center for International Forestry Research (CIFOR) was, from its inception in 1993, conceived as a “center without walls” committed to learning through collaborative research. And in keeping with this vision, CIFOR has built its programs around diverse partnerships. Likewise, under its new strategy, the International Maize and Wheat Improvement Center (CIMMYT) is giving major emphasis to improved knowledge sharing through global innovation networks, and it has created a new program responsible for pursuing that end. Finally, the International Water Management Institute (IWMI) has created and is implementing a comprehensive knowledge sharing strategy for the center and for the CGIAR’s Water and Food Challenge Program, which IWMI coordinates. Specifically, through its pilot project on knowledge sharing in research, IWMI is identifying, monitoring, analyzing, and documenting innovative methods and practices for use by institute researchers and their partners in knowledge sharing and communication.

Similar developments are under way in other CGIAR centers as well, with growing numbers of positions and projects focused on aspects of knowledge management or sharing.

The Knowledge Sharing Project: Against this background, it is no coincidence that the four centers mentioned above have played an active role in a recent initiative aimed at fostering knowledge sharing (KS) in the CGIAR (see the project Web site at www.ks-cgiar.org). Funded by the World Bank through the CGIAR’s ICT-KM Program, the project has focused on incorporating KS principles and techniques into high-profile center events under pilot initiatives led by each of the four centers, with project support. The pilot initiatives at CIAT and CIFOR resulted in a new way for the centers to organize and conduct their annual staff meetings, while that at CIMMYT contributed to the formation of a well-integrated team of scientists who share knowledge and information and work towards common goals. At IWMI, the pilot initiative centered on a workshop designed to launch the Institute’s pilot project on knowledge sharing in research.

By creating opportunities for large numbers of center staff to connect with one another through KS approaches, the pilots have helped identify practical ways for each participating center to

enhance the efficiency of its work.² Here is a sample of comments from center staff about the pilot initiatives:

- ✓ “This has been an experiment. Like any experiment; some things worked well and some not so well. Now we can take the best of what we’ve learned this week and apply it in the future” – *Joachim Voss, Director General, CIAT*
- ✓ “The Peer Assist session has enhanced my capacity for future actions. I really appreciate the exercise.” – *Jean Claude Rubyogo, Seed Systems Specialist, CIAT-Africa*
- ✓ “[In the knowledge fair] there were plenty of things to do, and that generated a sense of high energy and excitement.” – *Moirra Moeliono, Scientist, CIFOR-Governance Program*
- ✓ “We’ve broken the mold – we’ve changed the way in which meetings have been traditionally run within CIMMYT. That’s a huge leap forward.” – *Dave Hodson, Head, GIS laboratory, CIMMYT*

The pilot initiatives were complemented by several other activities. The KS Project joined forces with the CGIAR Institutional Learning and Change (ILAC) Initiative to offer training on the facilitation of group decision-making. The objective of the course was to build participants’ facilitation skills for conducting meetings, working with teams, managing conflict, and building consensus. Participants in the first training workshop, held in February 2005, found the training extremely useful, and many are applying their new skills in their daily work:

- ✓ “I would like to give this workshop the strongest endorsement I can. I felt, and I think others felt, that it was the most useful event they’d attended since joining the CGIAR.” – *Paul O’Nolan, Head, IT Services, IRRI*

The KS Project and the ILAC Initiative also carried out a joint study on the role of human resources policies and practices in fostering KS and organizational learning to gain a better knowledge of the issues and to identify key areas for future intervention. The study examined six CGIAR centers as well as six other organizations that are regarded as leaders in KS and organizational learning. In addition, the project has developed a Web-based “toolbox” (www.ks-cgiar.org/toolbox) for KS practitioners in the CGIAR, which presents a selection of methods and approaches. Short descriptions of each tool are drawn from the most relevant sources, and step-by-step guidelines are provided for their use. The toolbox also includes links and references to more information as well as to stories relating different individuals’ and organizations’ experiences in the use of particular tools. Finally, the toolbox offers contact information for persons who have used specific tools and are willing to share their experience and expertise.

One especially significant development in the life of the KS Project was the start of active participation in the KM4Dev community – a network of development practitioners who share their experiences on knowledge management through on-line communication and annual meetings. Staff of the KS Project contributed importantly to the community by guest-editing the second issue of its peer-reviewed, on-line *KM4Dev Journal*. The theme of this journal issue, to which the KS Project also contributed a case study, was “approaches to promote knowledge sharing in development organizations.”

² For further information on two of these pilot initiatives, see: Staiger, S., A. Hewlitt, D. Horton, N. Russell, and G. Toomey. 2005. Major meetings as entry points for knowledge sharing. *KM4D Journal* 1(2): 47-60. www.km4dev.org/journal

As a result of that experience, the four centers involved in the KS Project are now well positioned to confront further challenges through the new 3-year project proposed in this document.

Aims and Outputs

Building on the interest and gains created by the KS Project, this new initiative will move forward in three main directions.

First, each of the four centers will develop and implement a plan for extending within the organization lessons learned from the KS pilots and other project activities. These centers will also work collectively through the ICT-KM Program to mainstream KS in other centers.

Second, the project will foster further development of the emerging community of KS practitioners in the CGIAR, expanding it to include professionals from all areas of the centers' work, including research, capacity building, research support, and management.

Finally, and perhaps most important, the project will identify and pursue opportunities for incorporating KS approaches into CGIAR partnerships. This is vital for ensuring that KS can have a profound effect on the way the centers contribute to collaborative learning and innovation through their R&D partnerships.

Goal

To promote collaborative learning and innovation in the CGIAR and its R&D partnerships.

Purpose

To support effective use of KS approaches and tools throughout the CGIAR and in its R&D partnerships.

Expected outputs

- ✓ *KS approaches integrated into center activities:* Field-tested strategies for ensuring widespread use of KS approaches in CGIAR centers and programs
- ✓ *A vibrant KS community:* A dynamic and expanding community of KS practitioners in the CGIAR and its partner organizations
- ✓ *Partnerships strengthened:* Proven approaches for achieving more collaborative learning and innovation in CGIAR partnerships through the use of KS

Activities

To deliver those outputs, the project will coordinate and support the collective efforts of participating centers through the activities outlined below.

Integrating KS into center activities

The KS project, mainly through its four pilot activities, has demonstrated the potential of KS approaches for increasing centers' efficiency in planning, conducting, and evaluating their work. It has also sown the seeds for significantly expanding the use of those approaches in the CGIAR. We now need to build on the excitement and momentum created by the successful use of major meetings in four centers as entry points for institutional change.

In doing so, it is crucial that we promote KS, not as an additional activity that increases our burden of work, but as a different way of working that greatly improves performance. To bring about organizational change, we need to do more than simply familiarize colleagues with a set of tools and techniques. We must also create opportunities for staff to participate in activities that motivate and prepare them to adopt more collaborative attitudes and employ KS approaches habitually. The project will work toward that end in eight CGIAR centers by:

- ✓ Helping incorporate KS approaches into important center events, drawing on lessons learned from previous KS activities, drawing on the facilitation skills of KS practitioners, and promoting use of the KS toolkit.
- ✓ Carrying out four pilot initiatives in selected centers to introduce KS approaches into such activities as strategic planning, impact assessment, project evaluation, business process reengineering, and ICT-related projects and documenting these pilot initiatives creatively to facilitate sharing of effective practices across centers.
- ✓ Forming partnerships with Human Resource Units in the CGIAR and working with them to establish more effective policies and practices that promote internal communication and offer incentives for KS and organizational learning. 2 case studies on instructive experiences, emphasizing useful concepts and practical advice, will be developed and actively shared with other centers to encourage cross-center exchange between human resource professionals.
- ✓ Promoting the incorporation of KS approaches, including virtual KS tools, into center capacity building activities and initiating a KS capacity building program to expand our pool of skilled practitioners.
- ✓ Supporting the efforts of the ICT-KM Program to promote collaboration and teamwork around the use of the CGIAR's global public goods.

These activities will represent 30 percent of the project's overall effort and budget.

KS community

The first phase of the KS Project was carried out by a group of committed center staff through a strategic partnership with the Bellanet International Secretariat at IDRC. Together, they managed to create a core team of KS specialists in the CGIAR, who possess the skills and motivation necessary to promote the mainstreaming of KS. Even so, this group is still small, and overall, KS expertise within the CGIAR is still limited.

In the second phase of the project, we will seek to strengthen the KS community, expand it to include a minimum of 30 professionals throughout the CGIAR, and enhance its relationships with external partners. The result will be a network of KS practitioners capable of helping all centers enhance the efficiency and effectiveness of their internal operations and collaborative efforts. The project will support the KS community by:

- ✓ Building KS capacities, creating strong links between individual practitioners in the CGIAR, and promoting active networking between staff generally (e.g., KS "champions" could invite counterparts from other centers who possess desired experience and expertise to assist them with new KS initiatives).
- ✓ Reviewing the job descriptions of community members and including their KS profile to reinforce the message that KS is not some additional task but rather an integral part of their work.

- ✓ Expanding and intensifying training through mentoring programs, focusing specifically on the facilitation of participatory decision-making, including on-line facilitation.
- ✓ Through active facilitation of the KS toolbox's on-line platform, encouraging active exchange of experience with KS to promote learning from successes and failures.
- ✓ Proactively working to expand the pool of KS practitioners to include professionals working in research, capacity building, research support, and management.
- ✓ Providing continuous support to the community through a strategic partnership with Bellanet.
- ✓ Drawing on the experience of likeminded CGIAR initiatives, such as the Gender and Diversity Program, the Strategic Advisory Service for Human Resources, and the ILAC initiative.
- ✓ Tapping external sources of expertise, including the KM4Dev community and KS-oriented organizations, such as Community at Work and Full-Circle Associates.

These activities will represent 20 percent of the project's overall effort and budget.

Strengthening R&D partnerships

As mentioned earlier, many staff in CGIAR centers and partner organizations are convinced that we need to shift to a more demand-driven, interactive approach, in which knowledge-intensive methods and tools for R&D are devised collaboratively through a shared process of learning and innovation.

Active knowledge sharing is an important factor in the success of such processes. To improve the performance of centers and their partners, the project will work closely with scientists who are open to incorporating KS approaches into new or ongoing collaborative R&D initiatives.

By focusing on pilot activities in the KS Project's initial phase, we were able to generate much interest among the centers involved and create a core group of KS practitioners. This approach was also successfully applied in IWMI's pilot initiative on KS in research.

In the project's second phase, we will build on this model by implementing KS pilot activities in six major R&D partnerships. An inception workshop will be held, in which KS practitioners work with selected project partnerships to accomplish the following:

- Create a shared sense of purpose, vision, and direction for the work on KS in R&D partnerships
- Exchange experience with KS practices currently used in these and other partnerships
- Reach a common understanding of KS concepts and of the potential for using them to enhance the effectiveness of R&D.
- Facilitate the development of concept notes and work plans for the pilot initiatives.

The pilot initiatives will encompass activities across the entire project cycle, including proposal development, partnership formation, research-for-development activities, project monitoring and evaluation, and the documentation and communication of outcomes. The KS project will support those activities by:

- ✓ Using planning meetings with partners to build relationships that provide a basis for effective collaboration.

- ✓ Supporting the use of collaborative tools in R&D partnerships to complement face-to-face interactions.
- ✓ Supporting the facilitation of effective R&D networks and communities of practice.
- ✓ Introducing KS tools (e.g., knowledge fairs, after action reviews, peer assists, chat shows, and so forth) into specific R&D activities.
- ✓ Offering easy access to facilitation training (including online facilitation) and to other KS capacity building activities, organized as part of the project's effort to foster an active and expanding community of KS practitioners in the CGIAR.
- ✓ Validating the use of KS approaches in high-profile areas of R&D, such as high-value agriculture and disaster relief.
- ✓ Promoting active exchange of experiences between pilot initiative teams to maximize learning across centers.
- ✓ Carry out a study aimed at helping us better understand and learn from the successes and failures of R&D networks and partnerships in the CGIAR and other international organizations. Together with the outcomes of the pilot activities, study results will take the form of a printed guide and Web-based document, made widely available to CGIAR researchers and partners.

This part of the project will account for 50 percent of its overall effort and budget

Monitoring and Evaluation

Soon after project approval, a workshop will be convened for key stakeholders to develop a work plan, including a plan for monitoring and evaluating project activities and results. The actions described below will be proposed to stakeholders:

1. Each major project event will include a session to review the project's progress and to update the work plan. Results of this session will be documented and posted on the project Web site.
2. After action reviews will be conducted at each major project event and the results documented and posted on the project Web site.
3. A thorough midterm review of the project will be conducted in mid-2007. It will include a participatory review and planning workshop involving key project participants and stakeholders as well as one external evaluator. A report will be prepared and posted on the Web site that includes results of the participatory review plus an independent commentary by the external evaluator.
4. Near the end of the project (late 2008), a thorough project evaluation will be conducted involving (a) preparation of a comprehensive project report by the coordination team; (b) a participatory evaluation workshop; and (c) an external evaluation by a panel of three experts, who will base their work on a review of project documents, interviews with key stakeholders, and participation in the workshop mentioned under point (b).

Project Coordination

Responsibility for project administration will be undertaken by a single center, to be determined by project partners in consultation with the ICT-KM Program. The center selected will provide a full-time coordinator, who will play an active facilitating role in the KS community, as members prepare and implement the project work plan, design workshops and other activities, communicate the main outcomes and messages of project activities, and handle project administration and reporting. The coordinator will also be responsible for setting up mechanisms of collaboration within the KS community.

The four centers that were involved in the KS Project – CIAT, CIFOR, CIMMYT, and IMWI – have all expressed strong interest in taking part in a second phase. Representatives from these centers as well as Bellanet and the ICT-KM Program will form a steering committee responsible for collective governance of the project. Committee members will also participate in key activities, such as workshops and product development. Implementation of project activities will be decentralized to participating centers to take full advantage of in-house expertise.

Budget (in US\$)

Line item	Project funds from ICT-KM
Staff	200,000
Consultants	160,000
Hardware/software	—
Travel	180,000
Training	150,000
Workshops	80,000
Communication	40,000
Miscellaneous	30,000
Overhead	150,000
TOTAL	990,000

Budget notes

This tentative budget is based generally on experience in the project's first phase.

Staff: Covers the cost of a full-time project coordinator (research fellow) and half-time secretary for 3 years.

Consultant: The project will call on KM/S specialists from within and outside the CGIAR to take part in pilot activities, workshops, and training and mentoring. The cost of their services is assumed to be in the range of \$500-\$1,000 per day.

Hardware/Software: It is assumed that centers or programs interested in taking part in the project have already paid for collaborative software or will chose low-cost or free options.

Travel: This item includes airfare and per diems for CGIAR staff and consultants. CGIAR participants in workshops and training will receive a travel subsidy of \$1000 each, with the remainder to be paid by the respective centers.

Training: Includes consultancy fees, travel, and other costs related to workshops.

Meetings: Includes project coordination, meetings with prospective donors, and meetings related to ongoing project activities.

Communication: Includes telephone conferences, videoconferences, and use of international courier services, as well as the production of communication products, such as magazines, Web sites, posters, and so forth.

Miscellaneous: Additional costs related to the work of the coordinator and to the organization of project activities.