

A Project Proposal Submitted to the CGIAR's ICT-KM Program*

1. Project Title – Fostering a Learning-Oriented Knowledge Management and Sharing Culture in the CGIAR

2. Abstract

Against a background of rapid change in international agriculture and in the needs of partner organizations, it is imperative that the CGIAR centers and system as a whole build a strong culture of knowledge management and sharing (KM/S). This will complement other efforts to create more of a learning orientation in the CGIAR that should better enable the centers to improve their performance, based on lessons learned from collaborative research with partners.

Through the Organizational Change Program (OCP) and the more recent Institutional Learning and Change (ILAC) initiative and ICT-KM Program, the CGIAR has taken important steps in that direction. But in order for the effort to be sustainable, it is essential to draw and apply lessons from the experience to date, generate commitment to KM/S among center directors and human resource managers, and strengthen the capacity of center staff to develop and implement KM/S strategies.

The project proposed here will foster a learning-oriented, knowledge-sharing culture in the CGIAR that improves its performance in strengthening food security, reducing poverty, and preserving natural resources in developing countries. Toward this end the project will organize workshops designed to review past experience with KM/S and generate commitment to the approach; support the development and implementation of KM/S strategies in CGIAR centers, center programs, and cross-center programs; and facilitate access to KM/S tools and techniques throughout the CGIAR.

A half-time senior scientist with ample knowledge and experience of KM/S, institutional learning, impact evaluation, and related topics will coordinate the project. This person will be contracted by the International Center for Tropical Agriculture (CIAT), which will lead the project in close collaboration with six other centers, which have expressed strong interest in this work.

The project will initially be for 1 year, in the expectation that funds can be obtained for a second and third year. The cost of the project in this first year will be US\$400,000.

3. Background

What is the problem?

International agriculture is being transformed by economic globalization, the spread of new information technology, and other global trends. The CGIAR system thus faces an increasingly complex and rapidly changing environment as it works to reduce hunger, poverty, and environmental degradation in developing countries. This, in turn, requires that the CGIAR centers respond rapidly to the evolving needs of R&D partners. At the same time, they must provide donors with solid evidence of success in generating useful knowledge through collaborative research with diverse partner organizations.

* This project proposal was prepared by Daniel Shaul (TRG), Nathan Russell (CIAT), and Doug Horton (ISNAR), with key contributions from Edith Hesse (CIAT), Jacqueline Ashby (CIAT), Ajit Maru (ISNAR), Jamie Watts (IPGRI), and Masaru Iwanaga (CIMMYT).

To meet those challenges, the international centers and the CGIAR as a whole must build on the lessons learned from research by incorporating them into future activities and by making new knowledge more readily available to others. In other words the centers must become learning organizations, able to gain from both successes and failures and fully aware that the knowledge they help generate will reduce poverty and preserve the environment only if it gets into the heads and hands of those who need it.

Scale/Importance of the Problem? Why is it a problem?

The huge intellectual capital and tremendous good will generated by CGIAR scientists constitute a valuable resource that must be made more widely available to meet the demands of a more knowledge-intensive agriculture. Improved knowledge management and sharing (KM/S), both within the CGIAR and with its stakeholders, is thus essential if the CGIAR's intellectual capital is to contribute significantly to the reduction of hunger and poverty and to environmental preservation in developing countries.

Knowledge resides in people's minds and in an organization's culture. Knowledge transfer goes beyond merely sharing information or data. Only a small portion of what we know is codifiable or "explicit." Most knowledge is "tacit" and uncodifiable. Accessing the wealth of knowledge that is stored in people's minds is a daunting task. Thus, to encourage improved KM/S in the CGIAR will require fundamental changes in the behavior of researchers and other staff as well as in the centers' policies and procedures.

Background: How did this problem come to be a problem?

In search of more effective strategies for combating hunger, poverty, and environmental degradation in the developing world, the CGIAR has widened its web of connections with national agricultural research systems (NARS) and other partners, such as NGOs and the private sector. The CGIAR centers have also sought better ways to share knowledge, for example, through document management systems, best-practices databases, and published reports.

Traditional approaches to fostering collaboration through knowledge sharing have focused on managing information flows and capturing codified knowledge. Though important, these approaches are not sufficient for dealing with the rapidly changing environment and complex problems that researchers face today. To meet those challenges—using the kind of cross-center multidisciplinary research that increasingly characterizes the CGIAR's work—requires an approach by which researchers can quickly grasp development challenges and identify potential solutions, based on knowledge gained and lessons learned from shared experience.

The CGIAR has taken important steps toward achieving this goal through the Organizational Change Program's (OCP) KM efforts and the more recent Institutional Learning and Change (ILAC) initiative and ICT-KM Program. The creation of a group focused on learning from experience and facilitating institutional change within the CGIAR is a necessary step toward improving the centers' performance.

The OCP, a 3-year effort funded by the Ford Foundation, laid the groundwork within the CGIAR for creating and maintaining collaborative alliances with a variety of stakeholders. The OCP also helped the CGIAR explore knowledge management (KM) approaches, aimed at creating an environment that would be more conducive to knowledge flow. In doing so the program stressed the importance of tacit knowledge and people-centered approaches in the CGIAR. Specialists were recruited to present the latest KM approaches; conferences were conducted for KM center champions; and communities of practice (CoPs) were initiated. The OCP also funded the development of KM strategies at two centers, IWMI and ICARDA, and supported other KM activities at CIP and in the System-wide Livestock Program convened by ILRI.

At a conference of the CG centers' KM champions, they decided to use the term "knowledge sharing" (KS) rather than knowledge management, because they felt that this term better reflected the CGIAR's needs. But since the term KM is actually broader than KS and figures so importantly in the management literature, it may be preferable to combine the terms as follows—KM/S. In any case that is the usage we follow in the remainder of this proposal.

Various lessons were learned from the KM activities facilitated by the OCP:

1. Knowledge is a valuable asset of the CGIAR, equal in importance to human and financial resources, and its management therefore requires a significant investment of time and resources.
2. CGIAR center and system leadership must assign KM/S initiatives high priority if they are to succeed.
3. Although introducing concepts and practices is important, center leadership and human resources staff must be closely involved to create a culture in which KM/S is considered a vital part of daily business.
4. KM/S is not easy, and it is a mistake to underestimate the time and energy required to bring about cultural change resulting in effective KM/S.
5. It is often best to start with a KM/S strategy or framework and then identify simple pilot opportunities for introducing KM/S processes and practices.
6. New information technology can enable KM/S, by improving information management, but it should not be the starting point for a KM/S initiative.
7. To create a KM/S culture and to build the capacity of staff to use KM/S practices and tools requires a sustained effort. Such activities must be supported at all levels to encourage the ongoing interaction that leads to sharing of tacit knowledge.

In addition to these lessons learned, the KM activities of the OCP produced a number of successes. CoPs were created to provide a common ground for discussing issues and seeking creative solutions. A CoP of center information management professionals, for example, identified opportunities for achieving significant savings. And a number of initiatives in individual centers credited KM/S with reducing the timeframe of the research cycle, helping build rapport with local government officials, and increasing the flow of knowledge needed for research on complex systems. The OCP also helped build a knowledge base about KM/S, prompting the CGIAR to hire a chief information officer (CIO) to support, not only the use of information and communications technologies in the centers, but KM/S initiatives as well. These successes and lessons learned from the OCP underscore the need for sustaining and expanding the CGIAR's efforts in KM/S. The challenge is to make KM/S an integral part of how the CGIAR operates.

Why does this apply system-wide?

The knowledge generated by the CGIAR centers, based on a wealth of technical and nontechnical expertise and experience, is embedded in the minds of staff throughout the centers and in their relationships with numerous research partners. According to the Strategic Plan of the CGIAR's ICT-KM Program, "current efforts to move the CGIAR . . . to a program and institute-based system built around 'global challenges' demands broader teamwork, collaboration, knowledge sharing and a change in culture." To achieve this end, the centers need to become more learning-oriented organizations; they need to capitalize more fully on what their technical and nontechnical staff and partners know; and they must be able to share that knowledge more effectively. These changes must occur throughout the CGIAR system, within and across centers and with a wide variety of partners, in order for scientific knowledge to have maximum impact in developing countries.

How will this activity address the problem? Who will benefit? How will they benefit? Why should the CGIAR do this project?

The Strategic Plan of the CGIAR's ICT-KM Program envisions "a CGIAR without boundaries, an internationally distributed, unified, and open knowledge organization." Toward this end the program emphasizes the physical connectivity and organization required to share information across the CGIAR system.

Within the broader ICT-KM Program, the project proposed here deals more with the cultural and behavioral changes that the CGIAR needs in order to improve KM/S practices and build support for such an approach among centers and partners. KM/S has the potential to put people, information, processes, and tools together in such a way that CGIAR scientists can collaborate more closely and make better decisions, leading to improved performance in terms of efficiency, effectiveness, relevance, and financial sustainability. But collaborative tools, while contributing to improved performance, cannot by themselves ensure successful partnerships, collaboration, or teamwork. To make significant gains requires major changes in organizational culture and individual behavior. Only through better understanding and application of KM/S principles and approaches can the CGIAR system make its organizational culture one of continuous learning and knowledge sharing.

Enhancing KM/S in the CGIAR will permit more effective and efficient use of knowledge not only within the CGIAR, but among partners and stakeholders, especially NARS. Thus, beyond its benefits for individual researchers, centers, and the CGIAR in general, the KM/S project will help meet the pressing needs of stakeholders.

Many of the KM/S techniques that could be of value to the CGIAR have been applied in the for-profit corporate world with success. A key task for this project, then, is to achieve wider application in the CGIAR of lessons learned about KM/S in the corporate world, from the OCP, and from recent research.

Synergies with other activities

The KM/S Project proposed here will complement other initiatives in the CGIAR, including other projects of the ICT-KM Program, particularly the Content Management, Intranet, and Evaluation Projects. Improvements in those areas will support learning and knowledge sharing and vice versa. Likewise, the KM/S Project will reinforce the efforts of the Gender and Diversity Program and other initiatives aimed at promoting a more open, learning-oriented and knowledge-sharing culture in the CGIAR.

The KM/S project will also have strong links with ILAC. This emerging initiative seeks to make agricultural research more effective at reducing poverty by developing and introducing innovative ways for individuals, groups, and organizations to learn from the experience of previous and current R&D efforts and to improve their performance, based on the results of this learning. Drawing inspiration from various fields, including sociology, the management sciences, systems research, and innovation policy, ILAC could provide a broad framework within which KM/S would play a crucial role. In operational terms the ILAC initiative will work to raise awareness, knowledge, and skills through action research and reviews of innovation processes. It will also support the reorientation of management processes, particularly those concerned with planning and evaluation. These activities will complement the KM/S Project, with its emphasis on tools and techniques and on the creation of a supportive culture, and a deliberate effort will be made to integrate the two initiatives, whenever possible, to improve results and leverage funds.

4. Objectives

General Objective:

To foster a learning-oriented, knowledge-sharing culture in the CGIAR that improves its performance in strengthening food security, reducing poverty, and preserving natural resources in developing countries.

Specific Objectives:

(a) Review Past Experience with KM/S and Generate Commitment to the Approach

The project will work with middle and high-level management in the CGIAR, its centers, and programs to assess current KM/S practices, to draw conclusions and lessons from past experience with a view to improving those practices, to achieve sustained application of KM/S in the CGIAR, and to identify priorities for future work in this area.

(b) Support the Development and Implementation of KM/S Strategies

The project will support the development and implementation of KM/S strategies in selected centers, center programs, and cross-center programs or initiatives.

(c) Facilitate Access to KM/S Tools and Techniques

The project will seek to improve the skills and capacity of individuals and teams in knowledge management and in sharing that knowledge with partners and other stakeholders.

5. Methodology

The CGIAR centers and system as a whole must continually encourage, support, and reward learning and knowledge sharing, thus permitting these activities to become the normal way of operating within and among centers as well as with partner organizations. The activities described below represent an important start toward achieving that end. But since fundamental cultural changes take time, the KM/S initiative is envisioned as a multiyear effort, though the project proposed here is for 1 year only.

(a) Review Past Experience with KM/S and Generate Commitment to the Approach

One key lesson from the OCP is that the commitment of center leadership is vital in order for a KM/S activity to succeed. Leaders must understand the connection between KM/S and the results of the centers' scientific research. Leadership plays a key role in ensuring that KM/S becomes an integral part of the centers' daily activities, a way of interacting that is more habit than choice. Initial steps for creating and strengthening a culture of knowledge sharing within the CGIAR will include the following:

1. A workshop near the outset of the project, designed to review KM/S experiences in the CGIAR, to draw lessons from the experience, and to identify areas for improvement
2. A workshop at the end of the project's first year for center directors, deputy directors, and human resources managers

(1) Reviewing past experience with KM/S

One limitation of the OCP was that it did not include funding for a full evaluation of the KM/S activities it supported. Thus, to permit a proper transition between the OCP and the project proposed here, a workshop will be held soon after the project begins to review experiences related to the OCP as well as other KM/S experiences, to identify lessons learned, and to define a way forward for this work. The workshop will also represent an important first step toward creating a sustainable capacity in the CGIAR to evaluate, learn from, and improve KM/S initiatives.

Involving mainly middle-level managers in the CGIAR, this event will be designed and professionally facilitated to accomplish the following key tasks:

- Exchange information and experiences with the OCP and KM/S initiatives in various centers through brief papers and presentations.

- Identify the main results of the OCP and KM/S initiatives in participating centers and programs.
- Identify the main strengths and weaknesses of the OCP and KM/S initiatives.
- Extract the main lessons learned from the work carried out to date and determine the implications for the KM/S Project.

In their presentations participants will be requested to address the following questions:

- What was the overall value of the KM initiative to the center or program?
- What specific knowledge and information was shared, and what were its sources?
- What was the value of this knowledge sharing to participants, and can this be expressed in terms of funds or time saved?
- What were the critical success and failure factors of the initiatives?

The proceedings of the workshop, emphasizing lessons learned and other key outcomes, will be widely circulated in the CGIAR.

(2) Generating commitment to KM/S

Center directors, deputy directors, and human resources (HR) staff are critical players in any organizational change process. Only with their active support and leadership will the CGIAR centers become learning organizations that support and reward knowledge sharing.

To continue generating such support, a workshop will be held at the end of the project's initial year to help center directors, deputy directors, and HR staff better understand the role of CGIAR leaders in supporting KM/S concepts and processes. This event will also help KM/S champions begin building a common framework for planning and decision making related to KM/S approaches and techniques.

Through the workshop CGIAR leaders will become more aware of the need to create organizational systems and cultures that foment learning and change and support the use of knowledge-sharing tools and practices. Center directors and deputy directors will also have the opportunity to develop a common understanding of KM/S, identify basic requirements for the success of this approach, examine why the CGIAR should be committed to it, study common KM/S tools, look at the strategic role of KM/S within the system, and identify specific steps needed to bring about changes. In addition, the workshop will enable center directors and deputy directors to meet KM/S experts, who can provide insights into the role of leadership in supporting knowledge sharing and organizational learning in the CGIAR.

The workshop will also focus on the critical role HR plays in creating an environment that supports knowledge sharing and the emergence of learning organizations. Specifically, it will cover the development of action plans for achieving changes in the HR systems of specific centers and of the CGIAR as a whole that support desired organizational changes. The workshop will thus mark the beginning of a process whereby the HR system can contribute to the creation of a knowledge-sharing culture in the CGIAR. Consultations with individual HR staff will focus on changes in policies and procedures aimed at supporting organizational change.

In preparation for this workshop, it will be highly desirable if an audit of human resources practices can be conducted in participating centers, with a view to characterizing the current situation and identifying good practices already in use. This would provide a sound basis for dealing with concrete problems and opportunities and for designing action plans.

Both workshops will be designed by representatives of TRG and Bellanet with the KM/S Project coordinator. The design team will seek assistance from ILAC representatives to ensure that synergies between KM/S and ILAC are highlighted and understood by CGIAR leadership.

(b) Support the Development and Institutionalization of KM/S Strategies

This activity will follow up on the efforts of the OCP to develop center-specific KM/S strategies by:

- Assisting centers with participatory development and implementation of KM/S strategies through consultation and training in the project's initial year, to be followed (assuming funds are available) by further assistance during the second year.
- Identifying and sharing lessons learned from the knowledge-sharing efforts of center-related programs or cross-center programs.

Given limitations in the project's resources during its initial year, it will have to make difficult choices as to the specific centers and programs in which it can help develop and implement KM/S strategies.

Within centers it is vital that senior leadership be committed to improving KM/S and have a clear idea how this will improve performance. For centers and programs, individuals must have been identified who will champion and lead the KM/S effort.

Here are a few additional suggested criteria for choosing centers or cross-center programs to receive KM/S support:

- Importance of the program for the CGIAR and its stakeholders, especially clients and donors, in terms of the value of its results and outputs.
- Degree of trust among program members and their commitment to common goals.
- Probable contribution of KM/S to the program. Is poor KM/S really a problem? Would improvement in this area improve the program's performance?
- Potential for drawing lessons from the program's experience that might be valuable to others. Are program participants open to learning? Is the program in some sense representative?
- Degree of interconnectedness within the program and the extent of information and knowledge flows.
- Cost considerations. Are complementary funds or other resources available? Does the KM/S Project have enough resources to really make a difference?

A final set of decision criteria would be developed by the KM/S Project coordinator in close consultation with KM/S leaders in participating centers as well as with TRG and Bellanet.

(1) Process for developing center-specific participatory KM/S strategies

- **Review** the results of center strategies prepared under the OCP program to identify successes and lessons learned from previous work (CIAT/TRG/Bellanet/ILAC).
- **Identify** centers that have the political will and commitment to participate in the development of a KM/S strategy and match other criteria defined as described above (CIAT project manager/TRG/Bellanet).
- **Organize** consultation by TRG and Bellanet team (CIAT project manager).

A simplified process for developing a KM/S strategy in a center can be outlined as follows:

1. Upon arrival the team will brief the center director, HR manager, and other key leaders on the scope of the effort.
2. The team will conduct a half-day participatory workshop in the center with interested staff and managers (scientists and others) to explain the purpose of

- the strategy and to introduce KM/S concepts and techniques and describe how they could be used to create a learning organization.
3. Consultation and knowledge/relationship mapping, done through individual and group interviews, will allow staff to see how knowledge is generated and shared in their center. It will also help identify existing KM/S processes and tools, ideas about opportunities and constraints, and potential KM/S champions.
 4. The team will carry out a knowledge-gap analysis, identifying opportunities, strengths, and challenges based on the data collected.
 5. The results and findings will be documented in a draft strategy paper, which will be discussed with the center director, HR staff, and others and distributed to all staff and managers.
 6. A workshop will be organized near the end of the consultation to allow staff and managers to discuss the suggestions and identify specific actions they will take to implement the strategy.
 7. Debriefing sessions will be held with the center director, HR manager, and other key managers on their role in efforts to implement the KM/S strategy.
 8. The team will prepare a final report containing data, analysis, and feedback from the consultation as well as an action plan and terms of reference for implementation.

Following development of the strategies, the KM/S Project team could, if requested, provide additional assistance to facilitate implementation of KM/S strategies as well as to monitor and evaluate the outcomes.

(2) Process for participatory development of KM/S strategies with center programs or cross-center programs:

- **Agree** on programs to support, based on the criteria established as described above (CIAT project manager, consultants, and other CG representatives to be identified)
- **Meet** with programs leaders and KM/S champions to discuss the program's problems and needs and opportunities for improving performance through KM/S.
- **Interview or survey** program staff to get their thoughts on the program's strengths, need for improvement, and opportunities for introducing KM/S techniques.
- **Design and convene** a reflective and intensive lessons-learned workshop that will include representatives from the programs. Building on outcomes of the lessons-learned workshop held at the outset of the project, this workshop will inquire into policies, mechanisms, processes, and interactions that have helped achieve success or, to the contrary, posed obstacles. The outcome of the consultation will be a compilation of critical lessons learned, which would be developed into guidelines to be used in the CGIAR when initiating future cross-system programs.

The process for developing KM/S strategies for center programs or cross-center programs would be similar to that for centers, as described above.

(c) Facilitate Access to KM/S Tools and Techniques

Access to knowledge resources will be enhanced through two main activities:

- Pilot train-the-trainers course on knowledge-sharing techniques
- Access to practical guides and best practices

(1) Pilot Training Course on KM/S Techniques

A pilot course would be designed to build knowledge and skills around several basic knowledge-sharing techniques.

One technique mentioned earlier, CoPs, has been used effectively in highly competitive research areas, such as the pharmaceutical industry. CoPs are informal groups that often excel at knowledge sharing because of the unique characteristics of the group. They influence organizational strategy by encouraging knowledge transfer across hierarchical levels within an organization. CoPs help break down institutional hierarchies by bringing people together around a particular knowledge domain. CoPs often extend beyond a single organization, sharing expertise and experience from different perspectives, and they help participants build capacity by developing shared resources.

In addition to CoPs, the training will cover basic facilitation skills and various other KM/S techniques, some of which are summarized below from a document prepared by Ajit Maru of ISNAR:

- **Mapping and Social Network Analysis:** Sometimes used in connection with knowledge audits, knowledge mapping aims to identify an organization's knowledge needs and gaps and to determine both how knowledge flows and what prevents its flow. Social network analysis may be defined as "the mapping and measuring of relationships and flows between people, groups, organizations, computers, or other information/knowledge processing entities." These flows may differ from those defined by organizational hierarchies. Such analysis may thus help identify "thought" leaders, key knowledge brokers, and experts that may be "invisible" in the organization.
- **Intranets and Extranets:** An intranet, from the KM/S perspective, is a place within the corporate body for sharing data, information, and knowledge, using ICTs. An extranet similarly is a place where the organization can share and exchange such data, information, and knowledge with partners, clients, and customers. The intranet and extranet offer exciting opportunities, such as the use of secure shared spaces, directories, help desks, groupware and collaboration tools, scheduling, calendaring, and dynamic workflows that contribute significantly to KM/S in an organization.
- **Peer Assists:** These involve a process whereby a team working on a project or activity calls a meeting or a workshop to seek knowledge or insights from other teams. The idea is to use in-house knowledge rather than reinventing the wheel. Though hardly a new technique in most organizations, its formalization can be new. Peer Assists promote learning between teams and develop strong networks among people in an organization.
- **Before, During And After Methods:** This is a rather common-sense approach to KM/S. It aims to find out what people knew in an organization before an event, what happened during the event, and what was collectively learned after the event.
- **After Action Review:** These were developed and are extensively used by the US Army. Individuals involved in an event learn what happened in the event, what went well, what needed improvement, and what lessons were learned. Searching for blame is conspicuously avoided. The learning is documented and shared with a wider audience.
- **Knowledge Bases:** These are dynamic, growing entities that enable someone to independently start an activity similar to that already undertaken by another individual or organization independently but in less time, lower costs, and better quality. In addition to providing information, knowledge bases must share an individual or organization's experience.

The course will represent an important start toward enabling CGIAR staff to conduct their own training initiatives. Training materials will be developed and made available to all staff, using an approach that enables trainers to easily modify and adapt the materials to the needs of specific user groups. Each course will be limited to 20-25 participants to ensure an engaging and interactive learning environment.

(2) Access to Practical Guides and Best Practices

The CGIAR centers and their partners will gain access under this project to a wide range of useful information resources on KM/S. In addition to the helpful materials already available, this project will identify and document further lessons learned and good practices. These can be made available both in print form and via the CGIAR intranet for intergroup communications. The Tips and Tools documents on Knowledge Management and Collaborative Alliances, created under the OCP, provide a good starting point. Those materials are currently available as PDF files on the TRG website (<http://www.trginc.com/orgchange/>).

Members of the CGIAR system office are also producing materials that may be of interest to center staff, and these could also be linked to the CGIAR intranet. For example, the CGIAR Gender and Diversity Program has just released a new publication entitled *Working with Diversity in Collaborations: Tips and Tools*. Many other helpful materials should be developed and made available in the future.

CGIAR staff would have access to the information available on these Web sites at no additional cost.

5.1 Assumptions, Risks, and Sustainability

The KM/S initiative is based on a number of assumptions. First, the CGIAR will embrace KM/S as a means of promoting collaborative learning, of sharing knowledge with research partners (especially NARs), and of capturing new funding sources. Second, KM/S will become a standard way of operating in the CGIAR. The centers will develop a culture that values, actively promotes, supports, and rewards behaviors associated with KM/S, thus ensuring that the approach is sustained after the project ends. Third, since to create a culture that supports KM/S will require sustained effort, it is assumed that this 1-year project will lead to a multiyear effort. The project must therefore assign high priority to obtaining funds to continue the work for a minimum of 2 or 3 more years. It is assumed that CIAT, as project coordinator, will take the lead in fund raising.

A number of other assumptions relate to specific activities and funding for the project's first year.

- To make the best use of its funds, we assume that centers will share some of the costs of project activities, particularly travel. One of the lessons from the OCP was that sharing costs not only maximizes resources but represents an important first step toward long-term center support for KM/S.
- It is also assumed that the HR initiative would include follow-up in years 2 and 3 of the KM/S Project and that resources would be available to review current HR policies and recommend policy revisions aimed at making rewards systems support the adoption of KM/S approaches.

Risks:

- The main risk is that, for lack of additional funding, the project may be unable to follow up on activities begun in its first year, leading to disillusionment and fatigue among staff. They might see the effort as just another organizational upheaval that does not take root and flourish. And this will cast doubt on the CGIAR's commitment to implementing KM/S approaches.

Sustainability:

- The ultimate success of this project depends on the commitment of centers, center programs, and cross-system programs to developing KM/S strategies and to identifying lessons learned from these experiences.
- The sustainability of the KM/S initiative depends on follow-up and continued support through a multiyear effort to bring about cultural changes in the CGIAR. It also depends on creating a capacity within the CGIAR to continuously promote those changes by supporting the development and implementation of KM/S strategies, by learning from such experiences, and by sharing and acting on the lessons learned.
- To help ensure sustainability, the TRG/Bellanet consultants would be available to advise KM/S champions in the centers and senior management who are identified during the project's first year. This support would be provided virtually for the most part but could include face-to-face meetings in conjunction with other events.

5.2 Communications Strategy

CIAT will coordinate the KM/S Project and propose mechanisms for consultation with the various centers that have expressed a strong interest in taking part in this work. It is essential that the project be seen as an important activity for the CGIAR centers. The project coordinator located at CIAT will be responsible for developing appropriate messages on KM/S activities, linked to the mission of the CGIAR, and for ensuring that these messages are widely disseminated. Workshop leaders will share a summary report on each of the workshops with the KM/S Project coordinator at CIAT for dissemination to selected groups. Finally, the project coordinator will be responsible for identifying participants to attend the train-the-trainers course.

5.3 Monitoring and Evaluation

As mentioned above, this project is intended to be a multiyear effort to bring about lasting institutional and cultural changes in the CGIAR. In the project's first year, milestones for each project activity will be set; each project event will be evaluated by participants; and midterm and final reports will be prepared.

Assuming that the KM/S Project continues beyond its initial year, a midproject review will be conducted around the middle of the second year. This review will be organized by the KM/S Project coordinator and the director of the CGIAR's KM/ICT Program, with inputs from external specialists at TRG, Bellanet, or other organizations.

Near the end of the third year, a full project evaluation will be conducted that includes the following components:

- Preparation of a comprehensive final project report.
- Organization of a final project-review workshop, in which activities and results will be systematically reviewed by project participants and external stakeholders in the presence of an external evaluation team.
- Preparation of an external evaluation report, based on components 1 and 2 and selected field visits.

The evaluation process will follow a predetermined set of guidelines, based on the *Guidelines for Review of Programmes Supported by the Ecoregional Fund*.

In all monitoring and evaluation activities, a "utilization-oriented evaluation" approach will be used to enhance the benefits and uses made of evaluation processes and reports.

5.4 Reporting

CIAT and the KM/S Project coordinator will take the lead in reporting to the CGIAR's CIO. The project coordinator will report on a semestral basis on the status of project activities and will prepare reports on specific activities. These reports should be readily available throughout the CGIAR.

6. Outcomes

The outcomes described below are for the project's first year. As mentioned above, the program is intended to be a multiyear effort, resulting in the adoption of best KM/S practices across the CGIAR and in the development of a sustainable KM/S culture.

(a) Review Past Experience with KM/S and Generate Commitment to the Approach:

- A comprehensive review of experiences related to the OCP as well as other KM/S experiences, aimed at identifying lessons learned and defining a plan for moving forward with KM/S in the CGIAR. This will be an important first step toward creating a sustainable capacity in the CGIAR to evaluate, learn from, and improve KM/S initiatives.
- Senior CGIAR center leaders will be exposed to KM/S specialists and to successful global organizations, with a view to obtaining the leadership commitment that is vital for strengthening KM/S and institutional learning.
 - Concrete support by senior management for ongoing adoption of KM/S approaches to achieve significant cultural and behavioral changes in the CGIAR, as indicated by alignment of resources with KM/S activities in the center.
 - Demonstrated interest on the part of senior managers in developing center-specific strategies or activities.
- Center human resource managers will develop a thorough understanding of KM/S and its benefits for the CGIAR and of their own role in promoting a KMS culture within and across centers. Also, they will begin developing policies and approaches for promoting appropriate organizational culture, involving incentive systems, performance appraisals, staff development policies, and mentoring.
 - Greater awareness of the leadership role that HR managers play in shaping organizational culture as well as improved skills in developing policies and practices that promote adoption of KM/S.
 - Identification of best practices for KM/S in the centers.

(b) Support the Development and Implementation of KM/S Strategies:

- Center level – Center-specific KM/S strategies will be developed in a participatory manner with staff, leading to a blueprint for action by which the center can better address its KM/S needs.
- Center level – HR managers will revise policies, performance appraisals, and incentive systems, thus enabling staff to adopt KM/S approaches.
- Center program/cross-center program – KM/S strategies will be developed, and best KM/S practices will be identified and documented, based on broad consultation with center programs and cross-center programs involving the CGIAR.

(c) Facilitate Access to KM/S Tools and Techniques:

(i) Pilot Training Course on Knowledge-Sharing Tools

- A course will be offered to 20-25 participants, with the aim of creating a core group of CGIAR staff possessing the basic skills required to apply KM/S methodologies within their centers.
- Center-specific workshops carried out by the participants in the above-mentioned workshop, with support from the CIAT KM/S Project coordinator, as needed.

(ii) Access to Practical Guides and Best Practices

- CGIAR staff will have easy access to a comprehensive set of KM/S tools and techniques, which they can then use to strengthen the KM/S culture of their centers, programs, and CoPs.
- These tools will be refined, based on feedback from centers, programs, and CoPs.

7. Institutional Aspects

7.1 Lead Administrative Center

The International Center for Tropical Agriculture (CIAT), Cali, Colombia

7.2 Project Coordinator and Qualifications

Nathan Russell will be responsible for the project on an interim basis until CIAT is able to hire a half-time consultant to serve as project coordinator. Nathan is head of the Center's Communications Unit and also manages its Information and Communications for Rural Communities (InforCom) Project. He has been with CIAT for more than 10 years and has also worked at CIMMYT and IITA. The half-time consultant will be someone who is well versed in KM/S concepts and approaches or in the related area of institutional learning and change and who is experienced in promoting these approaches with international organizations.

7.3 Key Project Personnel and Their Roles

The KM/S Project coordinator will play an active role in preparing and implementing the project work plan, in designing workshops and other activities, in communicating the main outcomes and messages of project activities, in raising funds for the project's second and third years, and in project administration and reporting. In these tasks the project coordinator will receive support from a CIAT committee consisting of the following persons:

Joachim Voss, Director General
 Jacqueline Ashby, Director of the Rural Innovation Institute
 Edith Hesse, Head of the Information and Documentation Unit
 Carlos Meneses, Head of the Information Systems Unit
 Boru Douthwaite, Technology Policy Analyst, Participatory Approaches Project

The main purpose of this committee will be to provide the project coordinator with overall guidance in project administration, including strong support in building mechanisms for project collaboration and coordination with other centers and partners.

7.4 Collaborating Centers' Roles

Six centers—CIFOR, CIMMYT, ICRISAT, ILRI, IMWI, and IPGRI—have expressed strong interest in taking part in the KM/S Project. All will be involved in the selection of specific centers,

center programs, or cross-center programs to be evaluated and supported by the project. They will also participate in key project activities, such as workshops and KM/S strategy development. Representatives from each center will be asked to form an advisory group on KM/S for the CGIAR.

7.5 Coordination Mechanisms

The project coordinator will be mainly responsible for creating these mechanisms, with support from the KM/S Project committee at CIAT and from the Advisory Group made up of participating center representatives.

7.6 Support from Senior Management Team of Lead Administrative Center

Senior management at CIAT have shown an active interest in this project since it first arose, and they will actively support its implementation in the first year as well as fund raising for further KM/S initiatives in a second and third year.

7.7 External Partner Organizations

The project will make use of the services of TRG and Bellanet. Both have actively supported KM/S initiatives in the CGIAR during recent years. Specialists from these organizations will contribute importantly to the evaluation of KM/S initiatives, identification of lessons learned from these initiatives, design and implementation of key project activities, and sharing of KM/S tools and techniques. The project will also collaborate closely with participants in the ILAC Initiative, who can share experience with reflective learning and organizational change in various centers.

8. Timeline

The KM/S Project will initially be for 1 year, in the expectation that funds can be obtained for a second and third year. The project will begin around the end of March. The timing of project activities will be as indicated below:

	1	2	3	4	5	6	7	8	9	10	11	12
Objective A												
Workshop to review past experience												
Workshop to generate commitment												
Objective B												
Center-specific KM/S strategies												
KM/S strategies for programs												
Objective C												
Training on KM/S techniques												
Access to KM/S guides												
Evaluation												
Reporting												

9. Budget for 2004 (in US\$)

Line item	Project funds from ICT-KM	CIAT in-kind contribution	TOTAL
Staff	65,000	50,000	115,000
Consultants	122,000	—	122,000
Hardware/software	—	—	—
Travel	72,000	—	72,000
Training	48,000	—	48,000
Meetings	13,000	—	13,000
Communication	5,000	—	5,000
Miscellaneous	8,000	—	8,000
Overhead	67,000	—	67,000
TOTAL	400,000	50,000	450,000

Note: Prioritization of project activities—Should it be necessary to scale back project activities by 30%, the number of participants in the two workshops and the train-the-trainers course would be reduced, and the number of KM/S strategies developed and implemented would be reduced. The proposal currently envisages support for the development and implementation of four strategies in centers and programs at an estimated cost of \$32,000 each.

10. Budget Notes

Staff: A half-time senior staff member will be contracted to coordinate the project. In addition, five CIAT senior staff will contribute varying proportions of their time (with an estimated value of \$50,000) to key project activities.

Consultant: The project will call on KM/S specialists from within and outside the CGIAR to take part in workshops and training and to support the development and implementation of KM/S strategies for one center and up to four center programs or cross-center programs. The cost of their services is assumed to be an average of \$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 two workshops—one lasting 5 days to review KM/S experiences and a 3-day event for center directors, deputy directors, and human resource managers—and a train-the-trainers course on KM/S techniques.

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.

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