Monitoring and Evaluation for Learning

The ICT-KM Program Experience
Introduction

Although monitoring and evaluation (M&E) are widely regarded as useful components in program and project management, many organizations have cultures, histories or procedures that undermine their effective use for learning and reporting. The CGIAR’s ICT-KM Program has been actively applying M&E components to support ongoing learning and decision making as it implements its three-year strategy. Based on the Program’s first two years of experience so far, this paper offers suggestions for overcoming constraints to the use of M&E. The following analysis has been produced by the M&E expert contracted by the Program to assist in its monitoring and evaluation work.

Section 1 of this paper gives an outline of the ICT-KM Program, its content, contextual challenges and M&E approach; section 2 describes the M&E strategies used; and section 3 gives an overview of the results. Section 4 identifies five generic challenges program and project managers can face regarding M&E and offers suggestions, based on experiences within the ICT-KM Program, for meeting these challenges. While the first three sections provide context for the M&E learning within the ICT-KM Program, the final section covers the lessons learned, framed generically so they can be applied elsewhere.

1. The ICT-KM Program: An Outline

The ICT-KM Program was set up to identify and demonstrate new ways of generating, storing, sharing and using information within the CGIAR System. Its purpose is to help the globally dispersed CGIAR research Centers evolve into a system through which research results and development knowledge is shared “seamlessly” across Centers and among national and international partners. At its outset, the Program recognized that achieving this goal would involve introducing new information technologies and knowledge management tools as well as changing long-established organizational thinking and behavior. A set of projects was developed and implemented with the involvement of staff from most of the CGIAR Centers. The objective of these projects was to foster technical and managerial learning within specific organizational units that would eventually influence changes in the work culture throughout the CGIAR System, while at the same time improving connectivity, communications and access to information. The first phase of the Program involved projects aimed at a diverse set of changes, including:

- Establishing systems, standards and procedures for electronic publishing;
- Setting up the CGIAR-wide virtual library services;
- Using computer modeling to identify strategies for protecting agricultural crops;
- Fostering knowledge-sharing behaviors among scientific staff;
- Developing a System-wide setup for desktop video conferencing;
- Sharing training materials online;
- Setting up a virtual expert center to address issues related to agriculture in the semi-arid tropics;
- Developing a central System-wide intranet; and
- Creating Knowledge Management tools and enhancing skills relevant to their application.

The Program’s first phase was a complex web of initiatives working at different levels. It involved individuals and groups from diverse organizational entities, and targeted, as is evident from the above list, a wide range of knowledge and information management areas. In addition, it comprised seven separate teams hosted by nine Centers on five continents, making it a challenging program to manage. Adding to the challenge was the fact that the project leaders had no direct line of authority over project team members, whose primary supervisors were mostly outside the project in organizational units in their respective Centers. The same ambiguous situation applied to the supervisory relationship between
the Program Leader and the project team leaders. The latter reported within authority structures, outside the project, in their respective Centers.

An additional challenge was the Program’s intention to implement learning oriented M&E in an organizational environment where such practices are not established. The Program’s approach would have participants involved in designing the M&E system and in collecting, reflecting on and reporting performance information, a direct contrast to the long-standing CGIAR practice of internally monitoring inputs and outputs and conducting external evaluations or reviews of effectiveness and accountability. This organizational culture places high value on the competence and assumed objectivity of external reviewers and uses their judgments of performance as a basis for programming and staffing decisions and in the allocation of resources. With their futures at stake in this traditional approach, projects and programs tend to suppress errors and corrections, whereas the Program intended to be frank and open about its learning at all levels.

1.2. The ICT-KM Program’s Approach to M&E

In addition to the CGIAR organizational culture, the Program faced other constraints inherent to the realities of organizational operation. Generally, M&E are accepted by Program and project managers as important functions. Yet, in practice, they tend to be set aside while the more immediate demands of planning and implementation are dealt with. The challenges of keeping an initiative running, viable, and engaged with its key stakeholders can easily dominate the time and thinking of personnel at all levels. M&E components are easy to put on hold “temporarily”, while other, more pressing, processes are managed. These components can sit on the ‘back burner’ until the need for M&E information becomes more immediate. By then, though, it is often too late to plan, design and initiate the process of collecting good quality data, not to mention having no time to make course corrections.

To counteract the apparent tendency of initiatives to place low priority on M&E activities, organizations tend to have stringent, often heavier than necessary, M&E requirements placed on them. As a result, rather than being an intrinsic part of management and of direct benefit to the initiative, M&E functions tend to be carried out to comply with externally imposed information demands. Project personnel usually have plenty to do, and they often regard externally set M&E conditions as unnecessary extra work. At best, such a situation generates cynicism; at worst, resistance. Monitoring and evaluation can come to be perceived as superfluous and annoying impositions in which there is little comfort, usefulness or understanding.

Keeping in mind these potential pitfalls, the ICT-KM Program implemented strategies aimed at fostering attitudes and behaviors in its project teams and its senior management that would be accepting of and knowledgeable about the Program’s learning oriented M&E components. Essentially, the ICT-KM Program intended to have its project teams using M&E to:

- get feedback for improving their projects;
- generate information for reporting on progress; and
- document their learning for sharing with others.

The Program’s management team had the same expectations of itself. Ideally, it was hoped that all staff involved in the management of projects would be comfortable and competent enough to engage in M&E themselves and make efficient and effective use of outside expertise.

2. M&E Strategies Implemented by the ICT-KM Program

One of the first things the Program did was to hold a workshop with project leaders and staff from related CGIAR projects to:

- exchange ideas on how to build M&E into the Program;
• make M&E more useful and feasible; and
• provide some training on relevant methodologies.

An evaluation specialist from the Evaluation Unit of the International Development Research Centre facilitated this workshop and was subsequently contracted to help design and facilitate M&E activities and to provide feedback from an external perspective on the Program’s performance. At the workshop, the Program’s management team outlined its intentions that project and Program participants would use M&E both for reporting on their work (accountability) and for improving the performance of their activities (learning). Project teams were exposed to and encouraged to select and apply M&E tools relevant to their needs in the expectation that they would gain comfort and competence in their use.

M&E activities were implemented so as to contribute to the management functions and cycles of the Program without heavy additional costs or increased workloads. The Program saw externally generated and interpreted M&E information as a valuable ‘reality check’ to complement the information flowing to Program and project teams from their day-to-day management processes.

M&E INFORMATION FLOWCHART

Data Collection (routine & special studies, surveys) → Information assessed, reflected on by project & Program teams → Learning included in Annual Reports

Changes to programming and to monitoring & evaluation in:
ICT-KM Program, CGIAR Centers, CGIAR System & projects

Continue Monitoring → Exchange learning and experience with others

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The Program used the ‘Internally Commissioned External Review’ model in which the Program recruited an ‘external evaluator’ to guide the Program’s M&E internal activities as well as independently generate feedback on the Program’s management and results through stakeholder surveys and interviews. The figure above shows the Program’s intended flow of M&E information.

2.1. Building Ownership

Starting with the above-mentioned planning and training workshop, the Program sought to build participant ownership and participation in all M&E components. Program design, coupled with adequate budgetary provisions, was aimed at making M&E an integral part of Program implementation and reporting. To deepen ownership at the project level, project teams were invited to determine their own performance indicators and monitoring mechanisms. They could either use their own frameworks or one developed especially for the Program by the external evaluation specialist. Teams were encouraged to monitor the indicators they expected would be helpful for management of their projects. They were also able to adjust their indicators to keep them relevant as their projects progressed. M&E requirements were made as light as possible as far as additional work was concerned and were tied to cyclical management events like annual reporting, funding requests and performance reviews.

Prior to implementation, the overall M&E plan was circulated to senior managers, to elicit their input and endorsements for this approach, and then revised based on their feedback. The same was done with the table of contents for the annual progress reports. Senior managers, including Center Directors General, were also asked for their input on the annual stakeholder survey instruments and were themselves surveyed for their perceptions regarding Program direction, performance and influence. And finally, efforts were made to find champions among senior managers who would add value to and advocate the innovations being introduced through the Program.

2.2. Building Internal Capacity

Two sources of technical support for M&E were made available to participants: training sessions included in the Program’s regular workshops and meetings; and technical support on request from the external specialist. Other programs were also invited to take part, giving them a chance to participate and share their learning with the Program. As each project developed its own M&E plan and performance indicators, the external evaluation specialist gave direct, individual assistance to each of the teams. At the Program level, the evaluation specialist provided coaching and feedback to the management team on an ongoing basis.

A flexible new planning, monitoring and evaluation methodology called Outcome Mapping was explained and made available to Program participants to help them track those project and program outcomes that involved changes in behaviors and relationships. Links to organizational learning tools and resources elsewhere in the CGIAR System were also identified and made accessible.

2.3. Building Trust & Credibility

Since it is regarded as fundamental for establishing a learning-oriented M&E system, Program management sought to build trusting relationships with the project teams and with the rest of the CGIAR, particularly with the relevant senior managers. Great care was taken in the quality of its management practices, communications and reporting. In its M&E work, it sought reliability and methodological excellence. More importantly, it practiced what it preached. Program management was very open about its own learning from M&E results, modeling this for its projects and for the entire CGIAR System.
In addition to demonstrating its M&E expectations through its own actions, the Program felt it was important to build trust and credibility by ensuring that no M&E effort was wasted – all the information generated would be of good quality and used. Inspired by Patton’s utilization-focused approach, the Program made efforts to ensure that the resources expended added value to the effectiveness and viability of the Program and its projects. The minimization of the amount of additional M&E-related work demonstrated management’s intention to support and make life as easy as possible for the project teams. During the first phase of the Program, the reporting requirements and schedules were changed several times (based on events and workload) to make them better reflect realities of the Program and the project teams’ evolving capabilities.

The Program considered that the most reliable information on project and Program performance would combine both internal and external perspectives and would triangulate information from different sources. Projects were invited to combine the use of internal monitoring and external evaluators. The Program’s management team followed this pattern itself. Just as it was expected of the projects, the management team also collected and used its own monitoring information. It also contracted experts external to the program to survey project participants and other stakeholders and to analyze and assess the management, financial and programmatic performance of the Program. All findings, including successes, mistakes and corrections, were featured in the Program’s annual reports. Highlighting the high value it placed on learning, the Program’s second annual report was entitled “Learning, Adjusting, Moving Forward”. In the annual reports for both years a “Charter of Commitment” was included in which the Program documented the changes it intended to make as a result of ongoing learning. Program management was demonstrating the learning-oriented monitoring and evaluation behavior it expected from project teams and, hopefully, the CGIAR System. These expectations were articulated and reinforced through the inclusion of a “Report Card” on the collection and use of use-focused M&E information in the Program’s first annual report. The Report Card gave Program management and project teams high, medium or low scores with regard to their collection, reporting, use and sharing of data on behavioral changes. Program publications frequently reaffirm the Program’s commitment to learning and adapting and cite this approach as the key factor in its influence so far.

2.4. Using M&E Information

The utilization-oriented approach adopted by the Program was aimed at making M&E contribute directly to Program and project learning and improvement. One of the classic M&E challenges is to establish indicators that are meaningful, relative to the overall goals of an initiative, and which honestly and usefully reflect the smaller scale contributions being made as the initiative progresses. This is a predominant challenge for CGIAR Centers and programs because they tend to aim at contributing to large-scale, sustainable changes in human or ecological well-being – changes that are beyond the reach of any individual organization or initiative to achieve. In fact, ‘Impacts’, the term often used for these kinds of changes, are usually the result of synergy among many contributing interventions, actors and circumstances. Trying to single out and assign causal credit to any one in particular is, in many cases, a self-deceiving and wasteful exercise. For organizations involved in research, this is particularly evident because research is relatively far upstream from changes in well-being. Many actors and factors need to come into play to turn research results into large-scale sustainable improvements in social or ecological conditions. Although the ICT-KM Program is comprised of internal, non-research projects, it shares the same problem as the CGIAR programs and projects: how to measure results, even in the early stages of an initiative, that enable the initiative to improve and report on program performance and also enhance its understanding of its contributions to the overall purpose or goals.

The Program’s M&E system has worked to meet this challenge in three ways. First, it focused on information useful for learning and reporting. The intended use of any information to be collected was clarified beforehand – and only the information needed for specific and valued purposes was collected.
Projects were expected to use M&E findings in their annual reports, reporting on the progress of their work plans and objectives as well as on learning and changes. For accountability reporting, they were encouraged to differentiate between outputs and outcomes. Program management recognized that several projects were simply input/output initiatives aimed at producing concrete products with no intention of influencing action, behavior or relationships. The reporting requirements were flexible enough to accommodate this diversity. Second, it encouraged projects to set their own monitoring indicators and methods based on usefulness for project management, reporting and learning. The theory was that this would put M&E directly at the service of project management and that only information with concrete uses would be collected. And third, the Program introduced Outcome Mapping to help articulate its theories of change. For those projects aimed at changing organizational behavior in some way, Outcome Mapping was used to help clarify and document the early and intermediate changes to which they hoped to contribute directly. This method helped M&E stay relevant and realistic in that performance indicators were expressed as changes in the behaviors of partners or target audiences with which initiatives interacted directly. Outcome Mapping points an initiative towards finding out those people, if any, whose behavior is responsible for the initiative’s success, and then sets up data collection points to track significant, related behavioral changes.

2.5. Improving the Quality of M&E

For the purposes of this paper and to reflect the Program’s approach, monitoring is defined as an ongoing part of good management through which the status of an initiative is systematically tracked. It usually involves the periodic collection of information or feedback on ongoing or completed events or processes. Evaluation is different in that it involves the systematic collection and/or use of data to judge the merit, worth, and significance of an initiative or activity. Evaluations often utilize monitoring information, and the evaluation process usually occurs outside of and in addition to management’s routine activities.

This paper has been using the term M&E throughout because the two processes are so closely interdependent. Monitoring provides an ongoing record of progress or performance from an internal perspective. Evaluation puts additional data and resources, value judgment and often an external perspective at the service of management. Together, the two can generate reliable information for both learning and accountability, provided that relevance, technical quality and ethical standards are maintained.

As already mentioned, the Program and its projects were provided with ongoing technical support for M&E by an external evaluation specialist for its first two years of operation. To help provide rigorous, but balanced, feedback to management, the specialist applied an internationally-recognized set of Program Evaluation Standards in assessing the Program’s M&E work. This gave the Program feedback on four dimensions: utility, the extent to which the information served the needs of the intended users; feasibility, the extent to which the M&E was realistic, prudent, diplomatic and frugal; propriety, the extent to which the M&E was legal, ethical and gave regard to the welfare of those affected by the results; and accuracy, the extent to which the outputs reveal and convey technically adequate information about the merits of the Program.

Each year, the Program’s annual report included an assessment of the quality of the M&E work in the Program for that year along with suggestions for improvement. These suggestions, along with the findings of finance, management and program assessments, were reflected in the second annual report’s Charter of Commitment regarding changes the Program was planning to make based on what it had learned. This report also followed up on the commitments to improvements made in the previous year’s annual report. The annual reports documented the Program’s experimentation and its flexibility in testing and adjusting its services and procedures as needs and conditions changed.
3. What Happened With the Application of These Strategies?

This section summarizes what happened with M&E components upon the application of these strategies.

In the first year of the Program, with encouragement from Program management and assistance from the evaluation specialist, the project teams began to use M&E for both learning and reporting. About a third of the projects actively took advantage of the M&E support offered and developed approaches tailored to their needs. The rest responded more in a spirit of compliance – not as if they were seizing an opportunity or gaining a resource. They simply accepted the framework and indicators proposed by the management team rather than trying to make them more relevant and useful to their work. It was up to the teams to seek help from the M&E specialist, and most did so only when under the pressure of the progress report deadline. Overall, in the first year, engagement in M&E at the project level was based more on compliance rather than on ownership. However, important first steps were made towards enabling project teams to begin seeing M&E as a valuable management tool.

At the Program level, the commitment to using M&E was strong, and adequate levels of competence and comfort were quickly established. Using data on project and Program performance to improve the effectiveness; reporting both the data and how it was used; and sharing this learning with others – these were not established organizational behaviors. However, Program management practiced and strongly advocated for it. While encouraging participation in planning the M&E components, the Program also provided strong, flexible leadership in their application. This included openly using M&E findings for its own learning and reporting, taking advantage of the available technical support in M&E, and adjusting M&E activities so they could contribute directly to the Program’s reporting cycle requirements. For example, the initial reporting requirements were found to be more onerous than practical and these were lightened in the first and subsequent year as this became evident. The concept of behavior change as an outcome was an innovation introduced in the program, and it appears that about a third of the projects started to integrate this into their thinking about monitoring performance.

In the second year of the ICT-KM Program, there was marked improvement in the application of learning-oriented M&E. Although reporting on the use of M&E information still varied among the projects, there was an increase in reporting on things that did not go well or according to plan. Reports contained headings such as: “What Worked”; “What Didn’t Work”; “What could have been done better”; “Shortcomings and Challenges”; “Reflection & Learning”; and “Lessons Learned/ Adjustments Needed”. There was accuracy in differentiating between outputs and outcomes; most projects reported against planned objectives and identified areas of learning and reflection; and a few included the evidence on which their learning was based. Although the Program circulated a suggested table of contents for the project progress reports, the variation in M&E reporting reflects the freedom the projects had to use the approach that best fitted their needs and circumstances.

It should also be noted that the overall performance of the Program was assessed as positive at the end of its second year. Senior management has recognized and expressed appreciation for the transparent, learning-oriented management approach taken, and Program management credits the M&E system as contributing to its considerable success.

4. What Learning Can Be Drawn?

This paper outlines the ICT-KM Program’s strategies for meeting the challenges it faced in implementing its use-oriented monitoring and evaluation system. The Program sought to create a system in which:

- participants would find value and feel competent in engaging in and managing M&E activities;
- participants would trust M&E to help them be more effective in project implementation and reporting and in understanding the factors affecting project performance; and
- both short- and long-term results could be accurately and reliably documented.
There are several other important factors that influence the approach to and use of M&E in a project or program: access to resources; support from senior management; access to existing knowledge and experience; and organizational culture, policies and procedures. Program management paid careful attention to each of these contextual factors. The M&E components were planned in some detail and adequate resources were budgeted for all aspects. Care was taken at the outset and throughout the first two phases to inform and secure the support of senior managers, including several interested Directors-General, concerning the entire Program and its innovative elements. The Program utilized M&E expertise both within and outside of the CGIAR. It introduced innovations in its management style and its M&E approach, yet was careful to respect organizational policies and procedures governing management and the extent of accountability requirements. These are fundamental concerns that, in most contexts, a program or project would be expected to address in appropriate ways.

Below are summarized the more subtle challenges that a program can face along with suggestions for strategies for responding to each. In the foregoing section 2, the strategies are described in context, and in section 3, the outcomes are summarized. Finally, here in section 4, some of the crucial learning from this experience is presented in generic form for consideration by program or project managers who may need to identify and meet similar challenges in other contexts. These challenges will always present themselves in some form or other; however, identifying and planning responses to them early is highly recommended.

**Challenge #1**
Initiative participants see M&E as an extra burden that is useless to them but with which they must comply for the use or benefit of someone else.

**Risk:**
The reliability of the information gathered will suffer and potential benefits from improvements to the initiative and learning for subsequent initiatives will be lost. There is potential for higher managerial costs of overcoming reluctance and eliciting timely and adequate compliance.

**Response:**
**Build Ownership and Participation**
- Participants design their own M&E activities
- Participants help determine what will be monitored
- Participants agree on criteria to be used to track progress and performance
- Make M&E useful for managing the initiative (see Challenge #4 below)
- Technical assistance is provided or made available
- Remain flexible and responsive to needs that emerge

**Challenge #2**
Initiative participants and management treat M&E as something they, justifiably, know little about and which is best left to experts.

**Risk:**
Heavy reliance on outside expertise is costly and may yield disempowered participants and M&E activities that do not meet the initiative’s information needs. There is also potential for inadequate supervision of external evaluators and for substituting consultant recommendations for responsible managerial decision-making.
Response:

Build M&E capacity
- Review existing organizational literature on M&E
- Consult others with relevant experiences
- Dispel mysteries of M&E by exposing participants and management to short, relevant, training sessions on evaluation concepts and approaches
- Provide simple yet practical M&E tools for participants to use in the course of their work
- Make it possible for participants to access advice or expertise when they need it
- Maintain an accessible archive of useful M&E tools, guidelines and templates
- Expose teams and senior management to eminent and influential M&E experts
- Model good M&E practices

Challenge #3
Initiative participants feel threatened by M&E; that it will be used against them. Therefore, they tend to resist or subvert the process or influence the findings.

Risk:
Participants will block access to some information or try to ensure that only positive data are reported. Thus findings may be misleading or unreliable and may lead to inappropriate judgements or decisions.

Response:

Build trust and credibility
- Make it highly visible that management applies the same M&E process to its own work
- Use information generated by M&E for the purposes intended; do not let it be abused
- Listen to and make changes in response to participant suggestions and concerns
- Seek feedback (anonymous, if necessary) and use it to improve performance
- Give balanced, helpful feedback on both strengths and needed improvements
- Admit mistakes and indicate corrections openly
- Maintain quality of M&E activities (see challenge #5 below)
- Seek senior level management support for these practices

Challenge #4
M&E findings are generated but seldom used. This may be because they are not relevant, timely or credible.

Risk:
Participants and others become cynical about M&E and see the money spent on it as wasted. Opportunities for learning and improvement are lost; and funding agencies and senior management gain a false sense of what is being achieved.

Response:

Make sure M&E is used
- Annual reports include sections on M&E findings and learning
- Include sessions on M&E in meetings & events
- Maintain quality & reliability of M&E findings (see Challenge #5 below)
- Maintain a current and accessible archive of evaluation reports
- Coordinate M&E with management and reporting routines and events
- Follow up and report on actions in response to previous learning
Challenge #5
Reports on M&E findings can vary greatly in relevance and quality

Risk:
M&E outputs lose credibility; are not used to their full potential. M&E expenditures largely wasted; activities devalued and scaled back to accountability auditing.

Response:
Maintain the quality and integrity of M&E outputs
- Build the M&E capacity of the initiative participants (see Challenge #2 above)
- Make sure M&E is used. (see Challenge #4 above)
- Collect data bearing directly on the initiative's achievable intentions
- Provide balanced feedback on M&E reports.
- Make a variety of M&E tools and methods available for different needs and purposes
- Encourage experimentation and innovation in all initiative activities
- Carry out periodic quality assessment of evaluation reports using program evaluation standards
  (for examples, see: http://www.wmich.edu/evalctr/jc and http://www.eval.org/EvaluationDocuments/progeval.html)