INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty
Supported by the CGIAR

ILAC Working Paper 1
IFPRI Impact Assessment Discussion Paper No 18

Institutional Learning and Change in the CGIAR
Summary Record of the Workshop held at IFPRI, Washington, DC, February 4-6, 2003

Ronald Mackay and Douglas Horton (editors)

2nd Edition

October 2007

This paper was originally published by the International Food Policy Research Institute (IFPRI) and reformatted to comply with the style of the ILAC Working Paper series. Reproduced with permission from the International Food Policy Research Institute www.ifpri.org. This paper is also available online at http://www.ifpri.org/impact/iadp18.pdf.

Institutional Learning and Change (ILAC) Initiative - c/o Bioversity International
Via dei Tre Denari 472°, 00057 Maccarese (Fiumicino), Rome, Italy
Tel: (39) 0661181, Fax: (39) 0661979661, email: **ilac@cgiar.org**, URL: **www.cgiar-ilac.org**

The ILAC initiative fosters learning from experience and use of the lessons learned to improve the design and implementation of agricultural research and development programs. The mission of the ILAC Initiative is to develop, field test and introduce methods and tools that promote organizational learning and institutional change in CGIAR centres and their partners, to expand the contributions of agricultural research to achievement of the Millennium Development Goals.

Citation: Mackay, R. and Douglas H. (eds.) (2007) (2nd Edition) *Institutional Learning and Change in the CGIAR: Summary record of the workshop held at IFPRI, Washington, DC, February 4-6, 2003*. ILAC Working Paper 1, Rome, Institutional Learning and Change Initiative.

Originally published by the International Food Policy Research Institute (IFPRI) as:
Mackay, Ronald, and Douglas Horton, eds. 2003. *Institutional learning and change in the CGIAR: summary record of the workshop held at IFPRI, Washington, DC, February 4-6, 2003*. Impact Assessment Discussion Paper 18. Washington, D.C.: International Food Policy Research Institute.

Table of Contents

Institutional Learning and Change in the CGIAR
Summary Record of the Workshop held at IFPRI, Washington, DC, February 4-6, 2003

Ronald Mackay and Douglas Horton (editors)[1]

October 2007

Abstract

This report summarizes the papers presented and the discussions that took place at the workshop on *Institutional Learning and Change in the CGIAR* held at the International Food Policy Research Institute (IFPRI) in Washington, D.C. from February 4–6, 2003. The workshop brought to together researchers, donors, and practitioners to develop a strategy for promoting a culture and set of practices conducive to institutional learning and change (ILAC) within the Consultative Group on International Agricultural Research (CGIAR) system. The objectives were:

- to familiarize participants with the meaning of and different approaches to ILAC;
- to discuss ideas for operationalizing ILAC in the CGIAR system and develop recommendations; and
- to plan for additional studies of the impact of agricultural research on poverty in developing countries.

Workshop participants included researchers who have been involved in a previous round of studies of the impact of agricultural research on poverty and others who have knowledge and experience related to ILAC or impact assessment. They included individuals from CGIAR centers, the Standing Panel on Impact Assessment (SPIA) of the CGIAR Science Council, university groups, donor agencies, and consultancy firms.

The report is organized as follows: Section 2 presents background information on the workshop, its origins and objectives. Section 3 summarizes the presentations made at the workshop on ILAC. Sections 4 and 5 summarize discussions that took place in working groups, which focused on a set of impact case studies carried out to date and on the design of future impact studies, with a broadened focus on issues of institutional learning and change. Section 6 presents the main points of discussions that took place in plenary sessions during the workshop. Sections 7 and 8 present highlights of presentations and discussions on future activities.

Keyword: Learning, Change, CGIAR, Impact Assessment, Evaluation.

[1] Ronald Mackay, Professor Emeritus, Department of Education, Concordia University, Montreal, Canada, and Douglas Horton, Former Senior Researcher, International Service for National Agricultural Research, The Hague, Netherlands

List of Acronyms

ASARECA	Association for Strengthening Agricultural Research in Eastern and Southern Africa
AVRDC	Asian Vegetable Research and Development Center
CAPRi	Systemwide Initiative on Collective Action and Property Rights
CGIAR	Consultative Group on International Agricultural Research
CIAT	International Center for Tropical Agriculture
CIFOR	Center for International Forestry Research
CIMMYT	International Center for Maize and Wheat Improvement
DfID	Department for International Development
DG	Director General
EARSAM	Eastern Africa Regional Sorghum and Millet Network
EPMR	External Program and Management Review
GTZ	German Technical Cooperation Agency
IA	Impact Assessment
IARC	International Agricultural Research Center
ICRAF	World Forestry Center
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDS	Institute of Development Studies
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IIRR	International Institute for Rural Reconstruction
ILAC	Institutional Learning and Change
INIBAP	International Network for the Improvement of Banana and Plantain
IPGRI	International Plant Genetic Resources Institute
IRRI	International Rice Research Institute
iSC	Interim Science Council
ISNAR	International Service for National Agricultural Research
M&E	Monitoring and Evaluation
NARS	National Agricultural Research System
NGO	Nongovernmental Organization
ODI	Overseas Development Institute
PRSP	Poverty Reduction Strategy Paper
R&D	Research and Development
R4D	Research for Development
SC	Science Council
SIDA	Swedish International Development Agency
SL	Sustainable Livelihoods
SPIA	Standing Panel on Impact Assessment
TAC	Technical Advisory Committee
USAID	United States Agency for International Development

1. Introduction

This report summarizes the papers presented and the discussions that took place at the workshop *Institutional Learning and Change in the CGIAR* held at the headquarters of the International Food Policy Research Institute (IFPRI) in Washington, D.C. from February 4–6, 2003.

The report was prepared by Ronald Mackay (Professor Emeritus, Department of Education, Concordia University, Montreal, Canada) and Douglas Horton (ISNAR, The Netherlands). We would like to thank all who participated in the workshop, particularly those who provided us with notes on the sessions and summaries of their presentations.

The report is organized as follows: Section 2 presents background information on the workshop, its origins and objectives. Section 3 summarizes the presentations made at the workshop, on institutional learning and change. Sections 4 and 5 summarize discussions that took place in working groups, which focused on a set of impact case studies carried out to date and on the design of future impact studies, with a broadened focus on issues of institutional learning and change. Section 6 presents the main points of discussions that took place in plenary sessions during the workshop. Sections 7 and 8 present highlights of presentations and discussions on future activities. Annexes to the report present the workshop program and the list of participants.

Additional information on the workshop, including papers and presentation overheads, is available on the web site: ftp://ftp.cgiar.org/ifpritemp/ILAC.

2. Background

Background to the Workshop — Michelle Adato

The CGIAR's positive contribution to world food production is well established. What is less well understood is the extent to which the world's poor have benefited. Poverty reduction is now one of the ultimate aims of the CGIAR. There is, therefore, a pressing need for the system to better understand the conditions under which agricultural research can help to reduce poverty so that research can be targeted to the changing needs of the poor. There is a second need: to demonstrate through impact assessments whether the desired results are, in fact, being achieved.

The CGIAR has undertaken impact assessment since the 1970s. Its concerns have evolved from crop management research to include returns to investment, equity consequences, spillover effects and sectoral linkages in the 1980s, and gender, health, and the environment in the 1990s (Pingali 2001). The dominant tradition within which this impact assessment has taken place has been economic evaluation, supplemented by peer and external review by expert panels. Social and environmental impact assessment and participatory evaluation have been minor branches of evaluation (Horton 1998).

In recent years, the economic paradigm has been criticized, not only for a linearity that misses important noneconomic factors and paths of explanation, but also because it does not take into account the institutional context of research, how this influences the research process, and the implications this has for social and economic outcomes (Hall et al. 2002). As a consequence, crucial factors and pathways that help to explain impacts are missed, and responses that would require change within the research institutions are not identified.

The workshop reported on here examined ways to promote institutional learning and change (ILAC) within the CGIAR, with the aim of increasing the impact of its research on poverty.

Poverty reduction became explicit in the mandate of the CGIAR in the 1990s. However, it was not a focus of impact assessment until 1999, when IFPRI and the CGIAR's Standing Panel on Impact Assessment (SPIA) undertook a new systemwide initiative to study the impact of agricultural research on poverty. This is important because while the contribution of the CGIAR and national agricultural research centers to food production is well established, the extent to which the poor have benefited from agricultural research remains more controversial.

In Phase 1, completed in 1999, a literature review was undertaken on the links between agricultural research and poverty and potential methodologies were developed for CGIAR impact studies on poverty. In Phase 2, five case studies were carried out, involving four CGIAR centers (Table 1). These cases are collectively referred to as "Wave 1" in the SPIA poverty impact studies on:

- rice technology in Bangladesh;
- fish and vegetable technology in Bangladesh;
- soil fertility replenishment technologies in Kenya;
- high-yielding maize in Zimbabwe; and
- "creolized" maize in Mexico.

Table 1. Poverty impact case studies

Country	Technology	Lead CGIAR center	Case study leader	Collaborator affiliations social analysis
Bangladesh	Modern rice varieties	IRRI	Mahabub Hossain	Dept. of Social Policy, London School of Economics; SocioConsult
Bangladesh	Polyculture fishponds Improved vegetables Modern rice varieties	IFPRI	Kelly Hallman	Dept. of Social Policy, London School of Economics; Centre for Social Studies, University of Dhaka
Kenya	Soil fertility management	ICRAF	Frank Place	Dept. of Rural Sociology, Wageningen University; Institute for Development Studies and Dept. of Sociology, University of Nairobi
Zimbabwe	Modern maize varieties	IFPRI	John Hoddinott	Dept. of Rural Sociology, Wageningen University; Dept. of Sociology, University of Zimbabwe
Mexico	Creolized maize varieties	CIMMYT	Mauricio Bellon	Dept. of Anthropology, Escuela Nacional de Antropologia e Historia

The key features shared by these studies are their common use of the sustainable livelihoods conceptual framework, the cross-cutting themes they address (dissemination pathways, social differentiation, assets, institutions and processes), and the use of interdisciplinary research with mixed methods.

The objectives of Phase 2 were to:

- test methods for assessing the impact of agricultural research on poverty in a variety of different contexts and settings; and
- develop a conceptual framework to help CGIAR centers orient their impact assessment work and to guide priority setting and technology design to increase the impacts on poverty.

By accomplishing these objectives using interdisciplinary and mixed-method approaches, it is expected that impact assessments would be more convincing and enlightening than traditional studies. Furthermore, by presenting the donor community with a new form of impact assessment — one that engenders greater credibility and usefulness — the CGIAR expects to acquire increased funding for agricultural research.

Phase 2 of the SPIA Poverty Impact Study is almost complete as of September 2003. The five Wave 1 case studies are in the process of being finalized. The results will be disseminated at conferences and as reports and publications in international professional journals.

As these studies near completion, many important findings have emerged with respect to direct and indirect impacts of the technology and dissemination processes on different aspects of poverty. Many of these findings are positive with respect to the technology and nature of the intervention, and many are critical. Important lessons have also been learned about approaches to impact assessment and the use of social analysis and mixed research methods. Furthermore, an important experiment in ILAC began:

- It is now recognized that conventional use of economic analysis and quantitative methods as initially proposed for the studies were inadequate, and that the institutions needed to be pushed (in this case by DfID) and later assisted (by IFPRI and its social analysis collaborators) in order to alter their approach, making inroads into an institutional culture where impact assessment had previously meant economic evaluation.
- Participating researchers have learned about the added value of opening one's eyes and methods toolbox to greatly differing perspectives.

Issues and Challenges

How to formulate, refine, and disseminate the lessons learned from these five poverty impact studies is a major issue, as is how to use what we have learned to help improve CGIAR and center practices.

As these reports are being finalized, a second wave of poverty impact studies is proposed in Uganda (led by IPGRI/INIBAP), Kenya and Rwanda (CIAT), and India (ICRISAT). One of the most important challenges the study teams face is how best to design these new studies so as to facilitate institutional learning and change within all of the partner organizations that are part of the process.

While the study findings and project experiences are significant to the researchers, farmers, and others involved, the crucial question emerges as to what will be the impact of these findings on the way the respective CGIAR centers approach their work in the future. The studies were designed not only to understand ex post the impact of the technological intervention, but just as important, to serve as a learning ground for how CGIAR centers can approach their future work. Will lessons be learned from these studies, and will the institutions attempt to change their practices to achieve a greater impact on poverty? Or will the institutions remain unchanged and repeat mistakes? How will this experience inform the work of other CGIAR centers?

These questions are part of a much broader debate emerging within the CGIAR. In February 2002, CIMMYT and SPIA organized an international conference to address the question, "Why has impact assessment not made more of a difference?" The dominant paradigm for answering this question was still economic evaluation. However, a smaller group of papers raised a different set of questions — those linking impact to institutional learning and change. This struck a chord among a number of researchers and donors at the conference, including the IFPRI researchers managing the SPIA poverty impact assessments. About to embark on a second set of case studies, the IFPRI team decided it was important to develop a better understanding of ILAC before proceeding. This could significantly affect the design of new studies as well as the influence of the Wave 1 experience. IFPRI has since followed up with other interested researchers within the CGIAR system and other institutions.

Ideas and Assumptions About ILAC

Learning processes are context-specific, and institutional learning can involve great diversity of approaches, partnerships, and strategies (Hall et al. 2002). Nevertheless, a number of underlying assumptions and ideas about ILAC can be identified:[2]

1. R&D is embedded in social, political, and institutional contexts, which have important consequences for outcomes. Technical and social processes cannot be separated. "Context" refers to both the context of the research institution and the context of communities receiving the intervention. Institutional context itself can be a research variable.
2. An appreciation of institutional context and institutional learning is central to an "innovation systems" perspective (Hall et al. 2002). In an innovation systems framework, actors, their roles and relationships (including power asymmetries) are identified and analyzed, organizational culture is considered, and reflections on process and learning are key elements of success. Analysis of change within an innovation system framework can systematically provide research managers with critical institutional lessons concerning ways of improving research and innovation processes.
3. Analysis of institutional stasis and change may examine institutional mandates, incentives, professional staff mandates, staff culture, institutional culture, accountability structures, bureaucratic and administrative arrangements, technical capacities, and political context.
4. The concept of institutional learning refers to behavioral changes and their institutional underpinnings. It concerns learning how to do things in new ways. It asks what rules and norms have to be changed to do a new task or to do an old one better. Learning derives from reflection on both successes and failures. Identifying failures or mistakes should reflect positively on the institution. This is sometimes called "embracing error" or "failing forwards."
5. It is necessary to depart from the research-extension-user institutional hierarchy and the linear model of innovation that it implies. Institutional learning can lead to new stakeholder-driven ways of setting technical research priorities. A model of agricultural innovation is needed in which interactions between actors are multiple, iterative, and evolving. Learning can occur through more collegial and face-to-face contact between farmers and researchers.
6. Two frontiers of change have opened up in the development field: institutional change to become adaptive learning organizations, and personal and participatory self-critical

[2] These are drawn from Chambers (2002), Hall et al. (2002, 2002), and Adato (1999).

reflection, learning, and change. These are increasingly seen as two complementary ways to improve performance. Learning can occur through involving scientists and other professionals in research planning, including the reflection and learning dimension. Researchers and staff scientists can conduct retrospective and critical analysis of processes including beliefs, insights, behaviors, and influences that generated the technology and dissemination approach.

The ILAC Workshop

The workshop on ILAC reported on here was convened by IFPRI at its headquarters in Washington, D.C. from February 4–6, 2003. The workshop brought to together researchers, donors, and practitioners to develop a strategy for promoting a culture and set of practices conducive to ILAC within the CGIAR. The objectives were:

- to familiarize participants with the meaning of and different approaches to ILAC;
- to discuss ideas for operationalizing these ideas in the CGIAR and develop recommendations; and
- to plan for Wave 1 follow-on and Wave 2 studies.

Participants included researchers who have been involved in the poverty impact studies and others who have knowledge and experience related to ILAC or impact assessment. They included individuals from CGIAR centers, SPIA, university groups, donor agencies, and consultancy firms.

The workshop aimed to produce three outputs:

1. The present workshop report;
2. Three to four research proposals, comprised of Wave 1 follow-on studies and Wave 2 new studies that incorporate ILAC objectives and approaches as developed in the workshop; and
3. A document proposing next steps for institutionalization of ILAC approaches in the CGIAR, including the role of SPIA, based on workshop participants' recommendations.

3. Presentations on Institutional Learning and Change

Individuals with diverse experiences related to ILAC were invited to give presentations on the first day of the workshop, as follows:

- Institutional learning and innovation: Origins and implications — *Andy Hall, Rasheed Sulaiman, and Rajeswari Raina*
- Evaluation, learning, and change: Concepts, experiences and implications for the CGIAR — *Douglas Horton, Viviana Galleno, and Ronald Mackay*
- Institutional learning and change to deal with an expanded poverty agenda: ICRISAT's experience in eastern Africa — *H. Ade Freeman*
- Reflections on ILAC — *Robert Chambers*
- SIDA's experience with participatory action learning groups in Stockholm and Nairobi — *Garett Pratt*
- A managerial perspective on institutional learning and learning organizations — *Ursula Blackshaw*
- Institutional learning in impact assessment: Lessons from SPIA's benefit-cost meta-analysis of the CGIAR — *David Raitzer*
- Comments on ILAC – *Peter Matlon*

Institutional Learning and Innovation: Origins and Implications — Andy Hall, Rasheed Sulaiman, and Rajeswari Raina

Definitional clarity in relation to ILAC

The terms "institution" and "organization" are sometimes used to mean different entities and sometimes refer to the same entity. Different meanings are assigned to these concepts in different professional and disciplinary contexts, but there is a tendency within the CGIAR to use them interchangeably. This inconsistency can lead to misunderstandings. The term "institutions" in this presentation means norms, routines, habits, ways of doing things, and behavior and is not a synonym for "organizations."

Learning is being used in this presentation to refer to adaptive, interactive processes of changing norms through new knowledge on ways of doing things. Learning is viewed as a way of creating new behaviors.

Institutional learning is about the process through which new ways of working emerge. It is therefore central to any discussion about ways of improving the impact of agricultural research.

It would be helpful to the advancement of ILAC within the CGIAR if the current ambiguous or loose use of terms were addressed thus allowing greater clarity in the communication of concepts and approaches.

Multiple, Disciplinary Origins of ILAC

There is a long and disciplinary-diverse history associated with the theory and practice of learning. Some of the influences come from:

- evolutionary economics (implicit in pre-neoclassical economics and remerging in the 1980);
- organizational learning (1970s);
- systems thinking (1930s, but remerging in the 1980/1990s through work of Checkland and others);[3]
- action research (1960/1970s);
- capacity development (1980s);
- program evaluation (1970s);
- participatory learning and action and monitoring and evaluation (1980/1990s);
- agricultural research management perspectives that recognize the multiple sources of agricultural innovation (1990s); and
- innovation systems (1980/1990s).

All of these perspectives implicitly and explicitly recognize the evolutionary nature of social systems. These systems are characterized less by the pursuit of an optimal blueprint or model than by adaptive behavior and slow, cumulative change. Learning is therefore not only a fundamental property of such systems, but it is also the driving force for dealing with changing circumstance and improving performance and effectiveness.

Innovation Systems Perspectives on ILAC

Since our perspective as presenters is that of *innovation systems,* we will explain in brief how this conceptualization deals with institutional learning and change. We believe its value to the ILAC initiative in the CGIAR is that it deals directly and explicitly with the institutional

3 For example, Peter Checkland, Systems thinking, systems practice (Indianapolis, Indiana: Wiley, 1981).

context of research and recognizes the evolutionary nature of the systems in which research is embedded. It thus provides a more nuanced, fine-grain account of the way techno-economic change takes place, providing insights into ways of improving this as a process. The following points provide a useful introduction to the principles of innovation system thinking:

- It focuses on innovation (rather than research) as its organizing principle. The concept of innovation is used in its broad sense of the activities and processes associated with the generation, production, distribution, adaptation, and use of new technical, institutional, organizational, or managerial knowledge.
- By conceptualizing research as part of the wider process of innovation it helps identify the scope of the actors (including public, private, research, enterprise, civil society organizations, technology users sectors) involved and the wider set of relationships in which research is embedded.
- Because it recognizes the importance of both technology producers and users and that their roles are both context specific and dynamic, it breaks out of the polarized debates of technology push versus demand pull theories. Instead, it recognizes that both processes are potentially important at different stages in the innovation process.
- It recognizes that the historical and institutional context of the organizations involved and particularly that the wider institutional environment governs the nature of relationships, promotes dominant interests, and shapes outcomes of the system as a whole. This aspect is enormously important for introducing a poverty focus. The framework provides a lens to examine and reveal which agendas are being promoted, highlighting the arena in which the voice of the poor can be promoted.
- It recognizes this as a social system. In other words, it focuses not only on the degree of connectivity (partnerships) between the different elements, but also on the learning and adaptive process that make this a dynamic evolutionary system. Institutional learning (learning to do things in new ways or learning to do things more effectively) is therefore a central process that policy and practice interventions can strengthen.
- Collective learning among partners or by coalitions of interest breeds a cycle of advocacy.
- It encourages new ways of doing things, the emergence of new demands or priorities, and new learning (new practices or methods). Learning and change, therefore, must take place concurrently at the innovation system level and at the level of the organizations that make up the system.
- The innovation system concept is only a framework for analysis and planning, and as such it can draw on a large body of existing tools from economics, anthropology, evaluation, management and organizational sciences, and so forth.

"Hidden Histories" of Science and the "Legitimate Narrative"

Technical and institutional innovations coexist, but whereas the former are generally reported, the latter tend not to be. This practice of selective reporting can lead to "superstitious learning." Such is the case with the reporting of the Green Revolution in India being about improved varieties of rice. In practice, the links between Indian research programs and international NGOs such as the Rockefeller Foundation also played a very important role and represented a new way of doing science in India. Similarly, institutional innovations in marketing systems, input subsidization and price support, and procurement arrangements were a major change that helped promote new varieties.

We raise this point in the context of ILAC partly to draw attention to the importance of more holistic accounts of innovation and the perspective this gives of the role of research and new technology in this wider process. But we also raise this point because scientists and social

scientists are learning, developing new competencies, and innovating approaches as a routine outcome of their research and their interaction with partners and colleagues. The question then arises as to why the learning and institutional innovations do not spread, diffuse, and influence wider practice.

Two stories serve to illustrate this learning process:

ICRISAT's sorghum and millet improvement program in Southern Africa. This 20-year program was established to build capacity in sorghum and millet research in public agencies in southern Africa and to develop and release new varieties. The scientists' own concerns about the effectiveness of this public agricultural research and extension-driven model led them to experiment with partnerships with private enterprises and civil society organizations. Even when this approach was (successfully) employed more widely to achieve the impact targets specified by the donor, monitoring and reporting of the achievement of the program neglected to explore and report the underlying institutional changes that were taking place. Success tended to be reported (partly at the insistence of the donor) in terms of spread and adoption of varieties. Only relatively recently has ICRISAT invested in an investigation of the institutional learning emerging from this experience.

Watershed research at ICRISAT. The narrative discussing this work in formal settings in ICRISAT concentrated on disciplinary details of soil, water science, and agronomy, but it substantially ignored the institutional learning that took place in and around partnerships. Triggering this had been the need for scientists to move their on-station work to a more participatory, on-farm approach. This had forced them to seek new partners and to engage in the realities and complexities of rural situations. The presenter suspects that the scientists involved hold enormous amounts of knowledge on processes and approaches that have relevance to improved impact, but which rarely see the light of day in a "scientific" organization.

These stories help to illustrate what might be called "clandestine learning" about institutional change — changes in the norms and routines governing research and inter-organizational relationships — as opposed to what is sanctioned as the legitimate narrative which is about the technical and scientific aspects of projects. Similarly, it concerns the way project outcomes are reported and what is viewed as legitimate (variety adoption rates and so forth) and the perceived value outputs concerning intuitional innovations.

Impact on Learning: The Road Traveled and the Baggage We Bring

The history of impact assessment in the CGIAR has caused us to focus on a particular type of impact assessment. This type of impact assessment is arguably more about measuring than it is about learning; more about accountability than changing the way things are done. A pertinent question is, "For whom and why is impact assessment carried out?" Even scientists agree that the credibility of impact assessment is not high. In light of that limited credibility, we need a more nuanced account of impact. Beyond measuring outcomes of research we need to focus on learning how impacts are brought about by the interaction of research and production technologies ***and*** changes in institutional behavior. Moreover, all the impacts need to be examined — not just those on the poor, but also those that affect the scientists involved as well. The stories above amply demonstrate that scientists are impacted by the research they do and by the relationships they build in this process, and that this causes them to learn and innovate the way they conduct research.

We believe the agenda of impact assessment is raising new and important challenges. The fundamental questions facing this group are how the impact assessment process can be made more pro-poor and how we can go about gaining a better understanding of how learning and

change take place. The "technology pipeline" — where all that is believed to matter is how much comes out of the end of the research pipe — does not correspond to reality. We need a different mental set. To continue the metaphor, we need to ask what the pipe is made of and how it changes during the innovation process. Ultimately, we are all part of the pipe! And therefore we need to reflect back upon our own norms and procedures and how we conduct our research.

Where Are the Scientists? And the New Role of Social Scientists

In the past, social scientists, particularly economists, have been assigned the role of legitimizing scientific practice and behaviors. The new focus on learning about how agricultural research can contribute to poverty alleviation suggests a change in this role. It encourages social scientists to examine the nature of the research and innovation process. It also suggests that if this is a task concerning learning and devising new ways to work effectively towards impact on the poor, the social scientists cannot act as surrogates for the scientists who will actually have to change their professional behavior. The role of the social scientists therefore needs to expand to include facilitating learning, i.e. a much more proactive role in the ILAC agenda.

The presenter's own personal experience is that writing research papers on institutional change, while perhaps important for a disciplinary audience, cuts very little ice with the day-to-day practices of scientists. The presenter's other experience is that scientists from his own organization actively seek his assistance to help them think about partnerships and ways of making their own research more relevant. The presenter's richest professional experiences have emerged from these kinds of interactions.

While this all suggests that scientists in CGIAR organizations need to be part and parcel of any ILAC initiative, the innovation systems concept introduced earlier suggests that learning has to include others from outside our home organizations. Ways have to be found to reflect and learn in consensual ways with our partners. It clearly makes no sense to reflect on ways of working with the private sector without including the private sector in the discussion. Equally, discussing ways of making research more pro-poor with out involving representatives from poor communities stands little chance of success. Social scientists have an important role in ensuring that learning activities take account of different perspectives, agendas, and interpretations of what is effective, useful, and desirable.

Real Time Learning and the Need for an Interactive Methodology

ILAC marks a distinct departure from impact assessment as it is generally conceived in the CGIAR. It implies a different conceptualization of the innovation process that is characterized by broad-based partnerships and evolutionary processes. It concerns learning to change and do things in new ways in response to changing circumstances and demands. And it is not another form of accountability to donors. A central implication is that institutional lessons that emerge from the research process routinely, but are often not exploited, recorded, synthesized, or promoted have been undervalued as a way of improving the impact of agricultural research.

There is a role for documenting institutional innovation as one way of promoting institutional learning. Important questions exist about how partnerships emerge and evolve and how learning takes place through these arrangements. Answering these questions through research on the research and innovation process is valuable both for our disciplinary understanding of how learning takes place, as well has helping develop general principles that can promote institutional learning and change.

Being taught is not a substitute for learning. Learning is a real-time event arising through the *process of becoming*, through *learning by doing*. Certainly learning can be facilitated. And certainly there are skills, policies, and institutional arrangements that will promote learning and change. However, learning needs to be highly contextual —organizations and groups of partners need to work out how to change to suit local circumstances, histories, skills and opportunities. Pro-forma organizational change, e.g. structural changes in the organization, can camouflage the perpetuation of old behaviors so we need to pay attention to broad principles and beware of magic bullet blueprints.

There are three critical implications of this for initiatives that seek to pursue and promote ILAC in the CGIAR.

First, *research and other ILAC initiatives need to be carried out in such a way that there is a strong capacity development emphasis.* In particular, such initiatives should strengthen the individual and organizational process of *learning to learn*, and monitor this capacity development through behavioral change indicators.

Second, *ILAC initiatives should not be limited to organizations in isolation; learning capacities have to be developed at the innovation system level*. In practical terms this means that any learning and reflection exercises need to include the participation of all the stakeholders relevant to the conduct of a research and innovation task, including those involved in its outcomes.

Third, *traditional approaches to information dissemination are less valuable for ILAC initiatives, as ILAC involves learning processes that go beyond the dissemination of lessons and principles.* We would argue that a more useful way of promoting ILAC is through networking and the development of coalitions of interest around new forms of behavior and practice. Clearly, conventional information dissemination is still important. However, one advantage of networking or building a community of practice is that it creates momentum; it broadens the constituency of ILAC, increases ownership of new practices and approaches, and, if managed effectively, can aid the communication of these ideas between practice and policy. This last point might be particularly important in legitimizing ILAC in a system such as the CGIAR where institutional and organizational change has tended to be driven from the top. An ILAC philosophy suggests something quite different!

Evaluation, Learning, and Change: Concepts, Experiences, and Implications for the CGIAR — Douglas Horton, Viviana Galleno, and Ronald Mackay

The CGIAR is under strong pressure to enhance its capacity to learn and change. The direction CGIAR centers and the system as a whole need to pursue for learning and change will require the right blend of central guidance (e.g., from the Science Council and the Executive Committee) and center-led self-evaluation and change initiatives. Over time, the external bodies and External Program and Management Reviews (EPMR) should become focused on the integrity and quality of internal evaluation and quality assurance systems within individual centers. The success of system governance and management mechanisms will ultimately rest on the degree to which they help build and complement the centers' own internal evaluation systems and strengthen the capacity of the centers to become learning organizations that employ sound self-evaluation and self-improvement practices.

Interest in the use of evaluation for learning and change is emerging against a background of rapid change and demands for improvements in the performance, governance, structure, and management of the CGIAR. Many kinds of evaluative activities are undertaken within the

CGIAR. But only one, economic impact assessment has so far been considered "real evaluation." External program and management reviews, center-commissioned external reviews, stripe reviews, and internal program reviews have not traditionally been seen as "evaluation."

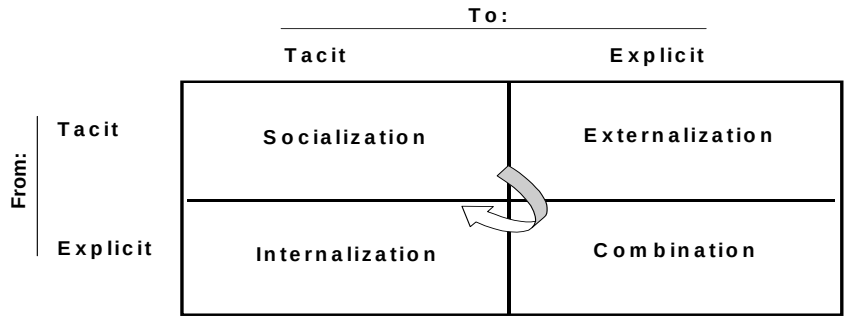
This narrow perspective has constrained the CGIAR system from using evaluative inquiry as a means of promoting organizational learning and change. While there are still controversies surrounding what "good" practice is, the broader evaluation community has evolved towards an emphasis on use, sensitivity to context, and mixed methods. The CGIAR, on the other hand, remains focused on scientific rigor, generalization, and the quest for the single best method.

Concepts and Terms

Some novel concepts and terminology must be dealt with. *Organizational knowledge* is a metaphor for the knowledge possessed by the organization in its members' minds, documents, databases, procedures, and work routines. Knowledge itself can be viewed as justified belief that increases the organization's potential for effective action. The level of action can be at the personal, group or team, or the organization as whole — in other words, at the level of any unit through which work is accomplished.

Knowledge can exist in *tacit* or *explicit* forms. *Tacit knowledge* is personal, intuitive and context-specific. *Explicit knowledge* has been codified and so is easily communicated and shared. For *organizational learning* to occur, the tacit knowledge possessed by individuals and groups must be made explicit and widely shared so that it can be used to improve work routines and performance. A "learning organization" is one that is able to use its experience to accumulate, synthesize, refine, disseminate, and use new knowledge (Figure 1).

Figure 1. Four modes of knowledge creation



Source: Nonaka and Takeuchi, 1995.

Knowledge Creation

An organization can learn in two ways (Figure 2). *Single-loop learning* occurs when a simple error is detected and corrected without questioning or altering the underlying goals, strategies, or values of the organization. *Double-loop learning* occurs when errors are corrected by examining the governing assumptions and realigning the processes and activities as necessary. *Double-loop* learning involves individuals and groups acting together to uncover and resolve fundamental as well as simple problems in order to accomplish the mission driving the organization.

Conditions for Learning and Change

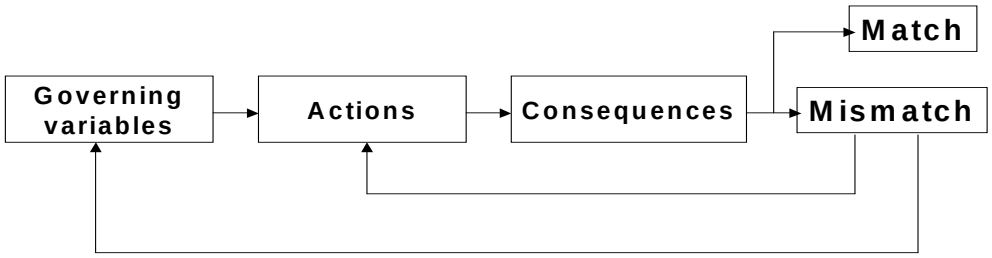
Learning is facilitated in organizations by the presence of leaders who support and model knowledge creation, multiple and accessible communication channels, and a culture that supports reflection on lessons learned and their practical application. *Organizational change* that leads to improved performance is often promoted by external forces. It is most likely to occur when it is supported and led by senior managers, embraced by a critical mass of staff, and provided with resources, including time, resource persons, and innovative management technologies.

Role of Evaluation

Evaluative inquiry has a major role to play in organizational learning and change. Evaluation *findings* can be used both directly and indirectly. Involvement in *evaluation processes* can aid participants in:

- learning to learn;
- developing work-related networks;
- forging common understandings; and
- boosting morale and confidence.

Figure 2. Single-loop and double-loop learning



Source: Argyris, 1977.

Evaluative inquiry is most effective if it follows a cycle from individual and team learning through to the application of new knowledge at the organizational level for performance improvement. It requires a facilitator who can encourage constructive discussion, reflection, questioning, clarification of values, beliefs and assumptions, and the creation of new insights and knowledge.

Implications for CGIAR Evaluators

- Design evaluations that focus on the target audience's questions (as opposed to those that interest the evaluator).
- Select methods that answer these questions and that make the inquiry understandable and useful for the organization's members and stakeholders.
- Employ procedures that maximize the involvement and learning of organizational members and stakeholders.
- Be proactive about communicating rather than assume that recipients will read and understand reports.
- Design and execute evaluations as learning exercises, to help participants acquire the discipline of evaluative thinking and expertise in conducting evaluations.
- Explore the complex ways in which organizational levels (individuals, groups, projects, programs, systems) are interrelated.

- Be attentive to differences between goal attainment and mission fulfillment. Projects and programs may accomplish their goals and be relatively effective while their contribution to fulfilling the organizational mission is relatively modest.

Implications for CGIAR Managers

- Ensure that the internal evaluators have a clear and formal mandate to support organizational learning, not just to undertake an evaluation and produce a report.
- Use evaluations to engender leadership development. Rather than merely add an evaluation unit to the organization, leaders at all levels need to learn how to incorporate results-based management into their projects and programs.
- Establish overall responsibility for the use of evaluation results and lessons at the level of senior management and board of trustees.

Institutional Learning and Change to Deal with an Expanded Poverty Agenda: ICRISAT's Experience in Eastern Africa — H. Ade Freeman

ICRISAT established a research program in eastern Africa based in Nairobi in the early 1980s. The Eastern Africa Regional Sorghum and Millet Network (EARSAM) was established in 1986 and the Pigeonpea Improvement Project for eastern and southern Africa was established in 1992. The focus of these early efforts was research and technology development with the core research teams comprising mainly biophysical scientists (breeders, pathologists, physiologists, and entomologists). The research program evolved into a research for development (R4D) program around the mid-1990s with greater emphasis on impact and innovation. This changed emphasis was also reflected in the composition of the core research team, which comprised a physiologist/breeder, a technology transfer specialist, and an economist.

The key issues in the evolution of institutional arrangements at ICRISAT in eastern Africa are:

- a shift in focus from technology development (R&D) to a broad development focus (R4D);
- the importance of a broader range of partnerships involving new and conventional partners;
- the shift from "blue-print" to learning approaches; and
- the emphasis on learning and innovation.

The new institutional arrangements to address the expanded poverty agenda in eastern Africa can be described in terms of the following specific issues.

Systems Features

The team recognizes the value of a broad range of partnerships involving new and conventional partners. This new patterns of partnerships includes different NGOs with comparative advantage in different areas (farmer organization, enterprise development, etc.), the private sector (traders, exporters, service firms, etc.), and NARS. The focus is on strategic partnerships defined as partners who contribute skills, experiences, and resources that are complementary to those of the team. Partnership relationships are more consultative and less hierarchical with greater emphasis on the use of tools such as situation analysis, stakeholder analysis, and joint planning. The source of institutional innovation and learning derives mainly from the changed policy environment that emphasizes impact and poverty focus,

previous regional experience with a narrow technology focused agenda, and the entrepreneurial approach of the team.

Role of Different Actors

The desire to exploit complementarity among partners implies that different actors perform different roles. These roles are highly contextual and relate to specific tasks that are necessary to achieve impact. For example, the private sector supplies information and helps to strengthen market linkages. NGOs are involved with farmer organizations, extension, seed multiplication, enterprise development, and market linkages. NARS undertake technology development, on-farm trials and demonstrations, and technology evaluation. ICRISAT is involved in technology development and market research. It also provides overall coordination and technical backstopping for program and project activities, facilitates interaction, and collects and disseminates information.

Governance

Donors such as USAID and the Rockefeller Foundation provide project funds, while ICRISAT provides management oversight and the infrastructure for research. Planning, priority setting, and implementation of activities are more consultative. Specific systems have been put in place to account to donors, ICRISAT management, and partners. Donors receive quarterly reports on project status and annual reports on lessons learned. At ICRISAT, accountability is embedded in established procedures for reporting during annual and mid-year global planning processes. Project partners are involved in joint planning as well as mid-year and annual reviews where progress towards achieving project activities are reported and lessons reviewed. The core team at ICRISAT critically reviews project activities at its monthly meetings. When necessary, specific stakeholders are invited to participate in these meetings. The vision and goal of the team is research for development. This is development and poverty focused and encompasses technology development, technology dissemination, market institutional innovation, and capacity building.

Wider Institutional and Policy Context

Regional planning and priority setting of the ICRISAT program in eastern Africa is closely aligned with the strategic priorities of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA). Program priorities are less embedded in national policy frameworks such as Poverty Reduction Strategy Papers (PRSPs) that are being developed by governments in the region.

Capacity Building

Capacity-building activities relating to strengthening producer associations and other market intermediaries are embedded in project activities. However, much of the capacity building activity involves the development of skills in networking and partnering.

Poverty Focus and Impact

The team has not conducted ex-post impact analysis to formally assess impact. Much of the impact is anecdotal and derives from monitoring of impact targets in the project strategy. The program has, however, developed and institutionalized mechanisms to access the poor. This includes stronger partnerships with development organizations, emphasis on the use of situation analysis and stakeholder analysis to integrate user perspectives, and beneficiary assessments.

The project team is learning some very important lessons from the new institutional arrangement in agricultural research for development. First, program and project activities are more client based and poverty focused. This implies new ways of doing things. For example, project managers were hired to implement project activities leaving scientists to focus on technical details but interacting very closely with the project manager. Also, meetings with the private sector are organized as evening dinner meetings to fit with private sector schedules. Second is the importance of learning and local institutional innovations. While project partners reach broad agreement on interventions, the specific arrangement for implementation may differ in different local contexts. Third, capacity building has evolved from conventional disciplinary training to training in systems capacity. Finally, ICRISAT now needs to play multiple roles.

Reflections on ILAC — Robert Chambers

Paradigms, Words, Meanings

We are talking about change, which is paradigmatic in the sense of linked concepts, words, values, methods, behaviors, and relationships. Its dimensions are personal, professional, and institutional. Part of this is the new context into which we are moving in which power, relationships, and networks are more significant and more widely recognized to be significant. This is reflected in words now common in development — *empowerment, partnership, ownership, participation, accountability, and transparency* — which all imply changes in power and relationships.

ILAC is part of this movement into new space and relationships. It may be a good thing that it is not currently explicitly defined, but is a conjuncture of words — Institutional, Learning, Change. Sustainable livelihoods began like this, as two words put together for which many people then developed meanings. This had the advantage that people defined and owned the evolving concepts. The same could happen with ILAC in the CGIAR system.

Other words used as ILAC evolves are important. What should the initiating actors be called? And what should be their roles? Catalysts? Facilitators? Even therapists? Action learning has much to recommend it, with action learning as the description of the processes of ILAC. And action learning is what it is about.

Wave 2?

As in Wave 1, the overarching goal is reduction of poverty, to be achieved by learning about how research and dissemination can have bigger and better effects, and what personal, professional, and institutional changes are needed for this to occur. Building on the experience of the Wave 1 case studies, Wave 2 might include these features among others:

- *Who takes credit?* Initiators not trying to take credit, but seek to facilitate participatory processes that others take on as their own.
- *Action learning*. Make this explicit and link it with action learning experience and practices.
- *Inclusive stakeholders/participants*. Involve a range of stakeholders and participants from the beginning, including scientists, farmers, poor people, managers, and diverse other actors.
- *Lead time*. Allow for long enough lead times. Funders could be a problem here, wanting to go too fast. Evolving and negotiating objectives, approaches, methods, and assuring joint ownership all take time. Those who take part in the research should have the opportunity to make it their own. It is not just a question of handing over the

stick. It is more a matter of jointly evolving the stick that is then held and used by the researchers.

Participatory approaches and methods. Use participatory methods, as in Wave 1, but go further, with more flexibility. This might include making more use of participatory methods to generate numbers. There was some of this in Wave 1. There is often scope for replacing questionnaires with participatory methods.

Learning and Changing

Learning and changing could now cover some or all of the following shifts and activities, which could be components of Wave 2:

- *Retrospectives*. Reflection and analysis on how technologies were evolved, what influenced perceptions, priorities, and decisions, and what lessons can be learned for the future (also for some of Wave 1).
- *Monitoring*. Focus on monitoring, supporting a continuous process of learning and changing, rather than evaluation with its implications of assessment, which is ex post.
- *Reflective retreats*. Make time for these.
- *Participatory review and reflections*. Similar to ActionAid's Accountability, Learning and Planning System, by which stakeholders meet, review what has happened, learn from that, and plan for the next steps. Reports are minimal and notes largely confined to what has been learned.
- *Learning opportunities*. Learning from leads and directions that have not proved fruitful, turning failures into learning successes, describing and treating them as "learning opportunities," and rewarding them when shared with others.[4]
- *Field living experiences.* Living with farmers and poor people, even for a short time, can be transformational.
- *Reflective diaries.* Keep them throughout the process.
- *Writeshops* (as developed by the International Institute of Rural Reconstruction, or IIRR, in the Philippines), in which participants (for example, scientists who have been involved in developing a technology) go into a brief retreat to write up the experience.

High-Yielding Methodologies (HYMs): Comparative Advantage and Responsibility of the CGIAR

The idea here is that the prestige of the CGIAR gives it a comparative advantage (responsibility?) in the development and spread of high-yielding methodologies (HYMs). This includes methodologies for ILAC. This could include making tacit knowledge explicit. A big spin-off from ILAC-related research could be its adoption, adjustment, and refinement by national organizations, not just by CGIAR centers. The centers could "make the narrative of ILAC legitimate." The scale of impact of ILAC could thus be multiplied. The long-term impacts on poverty could be very significant.

A Community of Practice

People who are minorities in organizations can come together and communicate as informal communities of practice. The original Farmer First Conference in 1987 (co-funded by the Rockefeller Foundation) was like this. Some 50 natural and social scientists who were isolated or minorities in their organizations met and gained encouragement from kindred

[4] I recollect, for example, a scientist who had worked in Northern Nigeria on cotton saying heroically that he had wasted 20 years of his life breeding for high yield at the best time for planting, when farmers always planted their cotton "late," after they had gotten their food crops in. This was a big lesson learned for others also.

spirits. Is the situation with ILAC similar? That was the sense at the SPIA/CIMMYT conference in Costa Rica in February 2002, where there was a parallel, minority stream of papers concerned with issues of ILAC. The potential here is for mutual support and exchanges, learning from and helping one another, in different CGIAR centers, national organizations, and elsewhere.

SIDA's Experience with Participatory Action Learning Groups in Stockholm and Nairobi — Garett Pratt

This paper presents a practical example of an effort within a development organization to involve staff members in reflection, learning, and change. The Institute of Development Studies (IDS) of the University of Sussex and SIDA collaborated on a process in which participatory action learning groups were formed in two places within SIDA, one at the headquarters in Stockholm and the second in the Development Cooperation Section of the Embassy of Sweden in Nairobi. Both groups were formed with the aim of exploring a common theme, namely the role of SIDA as a bilateral donor in supporting participation. The process in both places drew on methodological ideas from cooperative inquiry and action learning but the groups varied in many respects.

There are a few basic elements to the methodology that was followed. A small group met repeatedly over a period of months to explore the same issue — participation — as it arose in their ongoing work. The groups had outside facilitation from IDS and also had researchers to support the group members in their inquiry. The workshops were times for shared reflection and building shared knowledge. The group members would then reenter their roles in the organization and take forward the ideas and insights they had gained in the group reflection, then meet in the next workshop to share lessons and progress and plan next steps. The process was participatory in the sense that knowledge was built through reflections on experience, and decisionmaking from meeting to meeting over how the process of inquiry into participation would be pursued.

I will give details on the group in Nairobi, where I acted as facilitator. The group in Nairobi was initiated with the agreement of the counselor for development co-operation who encouraged his staff to join. The group started with five members, but there was high staff turnover over the course of the seven workshops, which were held over a period of nine months. The group composition gradually changed. In the workshops, there would be a combination of activities around the participation theme:

- conceptual inputs on participation by the facilitator;
- group discussions and exercises on shared issues, such as the style of decisionmaking within SIDA, the history of participation in Kenya, or the way participation was practiced in an ongoing project that involved several staff members; and
- discussion of the individual learning project that staff members were taking up in relation to their ongoing work, such as how to take account of participation in designing a midterm evaluation, or how SIDA's funding mechanisms were affecting the relationships of NGOs and communities they work in. Program officers would report on their progress and receive coaching and feedback from their peers.

Between meetings, the SIDA staff would continue with their routine duties, but with some added insights about participation gained through the time for reflection in the workshop. The facilitator and a Kenyan researcher would make their own observations of the various

programs funded by SIDA, and meet individually with program officers to discuss their process. One program officer set up parallel learning groups together with selected staff members of two NGOs funded by SIDA in order to explore their understandings of participation.

There were many challenges during the process in Kenya. Whereas the group in Stockholm was drawn from a large pool of interested SIDA staff members who had to compete to join the inquiry group, there was much less choice about joining in Nairobi. Members started with varying levels of interest. There was a long time at the outset when we all felt unclear about exactly how the process would progress and this was frustrating for the program officers. Staff turnover exaggerated this lack of clarity, as the group would start to form, then membership would change and it would begin to reform. All of the group members had to struggle to make time for the workshops, with a high level of success, but it was not easy given the heavy workload facing SIDA staff.

The process had many positive outcomes. Individually, some staff members became aware of areas where they would like to change their own approach to their work in ways that would encourage more participation by their counterparts in decisionmaking. The group members also felt they had more insight into different dimensions of participation at an analytical level. The group members felt that the spirit of reflection and teamwork in the regular workshops spilled over into their normal work practice. They felt that they thought slightly longer over routine decisions and were more likely to pause to ask colleagues for advice. The experience contributed to team building in the embassy. In some cases, the process improved mutual understanding of participation between SIDA staff and their counterparts in partner organizations. The observations made by the facilitator and supporting researcher are the basis for documentation of different examples of the realities of participation in SIDA programs, which can serve as a basis for further learning.

This group-based, participatory action learning approach may be relevant to the CGIAR. Dealing with participation issues as a bilateral donor agency is similar to the challenge of agricultural researchers seeking to improve their impact on poverty. The task is complex, the objective is a matter for debate, and the best approach may be highly contingent on the context. Involving CGIAR staff in an ongoing reflection on the way they work and whether it is likely to have a positive impact on poverty or not may lead to many insights and small practical improvements. It may lead to questioning of routine practices, and a willingness to try doing research differently.

Thus, the experience from SIDA poses questions for those designing a second wave of impact assessment studies for the CGIAR. How can CGIAR staff, including scientists, and managers as well as social scientists, be involved in reflecting on the links between their approach to agricultural innovation and the impact of their work on poverty? Will CGIAR staff be included in the studies as people who are interested in and willing to learn and change their own practice in order to have a better poverty impact? Do staff members see improving their poverty impact as a question of central concern and thus would they be interested in participating? If not, for whom are these studies being prepared?

A Managerial Perspective on Institutional Learning and Learning Organizations —Ursula Blackshaw

Two practical dimensions of the institutional learning and change concept are highlighted: the manager's role in creating incentives and facilitating individuals' learning, and the

organizational framework that informs decisionmaking and planning and facilitates review and lesson-learning at the organizational level.

What is Institutional Learning and Change?

Institutional learning and change is "*the process of reflection and reframing of knowledge that results in changed behavior and improved performance*."[5] The keywords in this definition are "changed behavior" and "improved performance." Learning is a means to an end. The "learner" (individual, team, or organization) makes practical use of that learning by changing how they work to improve performance *in ways that further their goals*. The crucial managerial question is therefore "*How do we change behavior in ways that will enhance performance and the achievement of goals?"*

Stages in Institutional Learning and Change

This four-stage cyclical process begins with the quantitative and objective collation of factual information, comparable to the usual monitoring processes that are carried out to determine the results of experimental work.

The *second stage* is concerned with the conversion of information to knowledge: understanding the characteristics, influences, and processes leading to a particular outcome. Participatory processes are commonly used, and opinion has equal weight with observable measurements.

The *third stage* is the learning stage, characterized by deeper levels of analysis, involving dialogue between various actors. Individual and collective inquiry and reflection methods will be used to bring experience, expertise, and analytical and creative skills to bear. This stage is characterized by exploring complexity, questioning assumptions, and attempting to generalize lessons from the specific experience for wider application, and may be seen as the interface between practical experience and conceptualizing.

The *final stage* is the action stage. The learner(s) must decide to apply their learning in future activities. The magnitude of the change may be a small change in skills or methods (for example, organizing documents or conducting meetings in a different way) or large change in systems or strategies (for example, abandoning an existing project, or beginning a new one).

The *process must be seen as iterative*: When new learning is put into practice a further process of knowledge gathering, reflection, and learning from the new experience begins.

Bottom-up Institutional Learning and Change: The Learner-centered Perspective

This perspective suggests that learning begins with the individual, and that if individuals move through the learning cycle, then their learning will be shared with and benefit "clusters." Cluster members will thus be encouraged to move through the cycle in their own right, and learning and action for behavior and performance change will be shared with the organization as a whole. The organization will thus "learn" by a process of absorption of the lessons from its subgroups.

There is a presumption, especially in knowledge organizations, that this model is effective, and individual-mediated learning and change is potentially highly creative and innovative. It involves thinking "outside the box" and willingness to embrace a high degree of risk. In the early stages such individual-mediated learning is highly dependent on the interest and commitment of the initiators to overcome inertia and resist the temptation to follow

[5] Adapted from various discussion papers and personal communication with Kath Pasteur of IDS.

precedents. As the process continues, however, progress depends on the resilience and confidence of those same individuals to persist with their ideas in the face of challenges, obstacles, and skepticism.

Individual-mediated change invariably carries a higher risk of resistance both from other individuals, and from checks and balances in wider organizational systems. This is to be expected since individual-mediated change will not necessarily be consistent with policies or strategic priorities at the cluster, organizational, or institutional levels.

The Managerial Perspective on Institutional Learning and Change

In contrast to the "bottom-up" approach described above, managers and organizations *tend* to have a more ordered, "top-down" perspective that institutional learning and change must take place within a strategic context. A hierarchy of objectives and a decisionmaking structure is viewed as essential to ensure that efforts to innovate and learn are focused on the needs of the organization. This approach places the onus on managers to design and operate organizational systems that facilitate and encourage learning and change.

Organizations that adopt a "*learning and change culture*" commonly employ some or all of the following strategies:

Strategy	Activity Examples: "Learning-friendly"	Impacts at:
Strategic Change	• Revised policies and mission statement • Priorities and resource allocation • Appropriate organizational structures and systems (e.g., matrix management, internal markets, etc.)	Institutional/Organizational
Managerial and Leadership	• Objectives and performance targets • Human resource management systems • Planning and monitoring systems	Organizational/Clusters
Continuous Improvement	• Appraisal systems • Management by objectives • Performance-related pay	Clusters/Organizational
Learning and Development	• On- and off-the-job education & training programs • Personal development strategies • Mentoring • Action learning and action research groups	Individual/Clusters

Reviewing experiences of applying these strategies to research organizations is instructive:

- *Redefining the organization's " values" alone is insufficient*. For example, despite efforts to place high-quality research at the heart of academic performance, those who are "research active" remain so, and those who are not do not alter their behavior.
- *Restructuring alone is insufficient* to establish new groupings or encourage multidisciplinary approaches. Researchers continue to pursue their personal disciplines regardless of the unit, department, or faculty in which they are placed.
- *Targeted voluntary retirement programs* for those who are not research active, coupled with recruitment of active researchers, provide managers with more responsive personnel whose interests are aligned with current research priorities.
- *Strong training and development, and appraisal and performance management systems* are the hallmark of a "learning organization." However, their long-term effectiveness is still unproven.

Organizational learning and change is an iterative process. An opportunistic approach that exploits a number of avenues for change in parallel and addresses hard and soft reforms simultaneously offers the best chance for success. Nevertheless, managers (and the managed) should be prepared to make frequent mistakes and to learn from them.

Institutional Learning and Change: Winning the Support of Researchers

In addition to the individual and organizational dimensions of learning and change described above, knowledge organizations, such as research institutions, need to give particular consideration to matching the interests of researchers with the requirements of the organization. Case studies yield useful lessons for managers of researchers and research institutions, who must recognize that researchers look primarily to their own disciplines for professional leadership, status, and advancement. This is more important to an individual researcher than the organization in which he or she is employed at any given moment. This means that researchers will not be enthusiastic about activities that do not contribute to their standing in their discipline, and explains, for example, why biological scientists are often unenthusiastic about participatory or other qualitative methodologies, which may be regarded as "unscientific" by their peers.

Partnership with other disciplines will often be inherently unattractive to scientists who perceive that high transaction costs associated with planning and coordinating efforts with other disciplines are not necessarily reflected in "high quality" research output (as this would be assessed from the standpoint of their pure discipline). Perhaps most important of all, multidisciplinary outputs are difficult to place in high-impact, peer-reviewed journals, which can mean that researchers will see little personal impact (in terms of reputation or status) from these activities. Learning and change aimed at transforming research methodologies must strike a balance between stakeholder and organizational needs and the interests and expectations of researchers themselves.

Institutional Learning in Impact Assessment: Lessons from SPIA's Benefit-cost Meta-analysis of the CGIAR — David Raitzer

In the present workshop, a primary focus has been on facilitating institutional learning as a result of promulgating "lessons" derived from impact assessment, particularly "Wave 1" of the SPIA-IFPRI poverty case studies. However, if it is expected that institutions should be able to adapt in response to evaluative findings, one should also expect that impact assessment methods have adapted in response to evolving "best practice" recommendations. The present analysis turns the institutional learning debate around, and asks whether large-scale economic impact assessment, arguably the most conspicuous evaluative process in the CGIAR, embeds "learning" processes. Such insights are derived from review processes incorporated in a forthcoming SPIA-commissioned study, which synthesizes benefits estimates derived from published economic ex-post impact assessments (IAs) for some of the most outstanding individual innovations of the CGIAR System.

The Benefit-cost Meta-analysis

The meta-analysis derives estimates for five different benefit-cost scenarios by setting aggregate documented benefit values against total investments in the CGIAR. Economic impact studies for inclusion in the meta-analysis were selected based on a literature survey of publications databases, examination of reference lists from prior studies, and scrutiny of center publications. A minimum cut-off value of $50 million was used, due to the significant value of the total CGIAR investment to date, as benefit estimates below this level have little impact upon the aggregate benefit-cost ratio.

Only studies published after 1989 were included in the initial document pool, as lag periods between impacts and data collection (often three to four years), as well as between research activities and impacts (commonly more than a decade), mean that there has not been enough time for the effects of CGIAR activities to have become evident for studies prior to this year. Since impact assessment has been pursued in a largely decentralized manner, standards and approaches differ significantly among studies, and hence a critical review process is necessary for determining the reliability of generated results. To develop the conceptual grounding for such a review, best practices are identified for economic impact assessments.

Two overarching principles for evaluating study reliability — transparency and demonstration of causality — as well as accordant criteria and indicators are developed from the identified best practices. Transparency is represented by three criteria: (1) clearly derived key assumptions, (2) comprehensive description of data sources, and (3) full explanation of data treatment. Demonstration of causality is represented by five criteria: (1) representative data set utilized, (2) appropriate disaggregation, (3) adequate consideration of mitigating factors, (4) plausible counterfactual developed, and (5) precise institutional attribution.

Using these criteria, five benefits scenarios were developed. These include (1) a scenario only including highly rated studies that empirically attribute benefits to specific activities of the CGIAR, rather than arbitrarily partitioning benefits from efforts in collaboration with partners; (2) a conservative scenario of only highly rated "significantly demonstrated" studies; (3) a selection of "plausible studies meeting minimum standards" scenario for the criteria described above; (4) a "plausible, extrapolated to the present" scenario in which benefits for the crop genetic improvement studies are assumed to continue from the study period to the present; and (5) a "plausible, extrapolated to 2011" scenario, which assumes that the products of current research will continue to be realized at present rates until 2011.

Against an aggregate investment of 7.12 billion 1990 U.S. dollars (inclusive of relevant pre-CGIAR costs), all scenarios produced benefit-cost ratios in substantial excess of one, indicating investment efficacy. Including only "significantly demonstrated" studies that empirically attribute CGIAR-derived contributions to collaborative efforts results in a ratio of 1.94, while if all "significantly demonstrated" studies are considered, with assumed attributive coefficients applied, the ratio rises to 3.76. The "plausible" scenario results in a ratio of 4.74, while when extrapolated to the present this rises to 8.98, and extrapolated to 2011, this becomes 17.24. Since costs were distributed over the benefit period, and many benefits peaked in the early 1990s, the discount rate applied only significantly affected generated ratios in the extrapolative scenarios.

Reflections on "Learning" in Economic Impact Assessment

It has often been claimed that impact assessment in the CGIAR is reflective of a broadening agenda, and that such assessment has been progressively incorporating a growing range of considerations and study foci. Pingali (2001) typifies such claims stating that "over the past three decades contributions by the CGIAR economists and other scientists to the science of impact assessment have in many cases been groundbreaking."

Was a learning process incorporative of "state-of-the-art" methodologies reflected in the reviewed studies? In a similar vein, is impact assessment in the CGIAR indeed reflective of learning processes?

Almost all large-scale "plausible" impact assessments (12 out of 15) reviewed were in the realm of crop breeding, and half of these 12 dwelt with rice and wheat. In addition to these studies, only two biocontrol projects and a single instance of policy assistance were covered by the remaining assessments. Furthermore, 93 percent of reported "plausible" benefits came

from three research topics — cassava-mealybug biocontrol, wheat breeding, and rice breeding. Clearly, the overall large-scale economic-impact agenda has not become extremely broad.

On the other hand, what about the individual studies? Did they incorporate increasing methodological sophistication and a broadening range of relevant considerations? To answer this question, some representative statements from "good practice" literature will be cited, against trends in the reviewed studies. Although these citations are relatively recent, the cited statements have been articulated in a similar manner previously, and groundbreaking research should arguably set the "good practice" trends.

According to Baker (2000), "[T]o ensure methodological rigor, an impact evaluation must estimate the counterfactual ... [as] determining the counterfactual is at the core of evaluation design." Many other manuals rearticulate the importance of the counterfactual element of IA, as deriving a "without scenario" is requisite for staking a claim of the benefits derived from an output. However, few studies (six out of 15) incorporated an explicit counterfactual, and those that did often did so on very simple terms.

Maredia et al. (2000) recommend "us[ing] economic prices that are appropriately adjusted to reflect policy distortions in the output market." In addition, Alston et al. (1995) recommend that "total benefits [when accompanied by externalities] are given by deducting the amount of the increased external cost from producer benefits." Thus, significant conversion may be required so that financial prices become social and economic values. Yet, financial prices were almost solely used. No large-scale study attempted to incorporate aggregate environmental externalities, and few attempted to include any external effects. The only externalities considered pertained to reduced profitability for non-adopters.

Transparency is generally requisite for good science. Similarly, Maredia et al. (2000) stress that "most importantly, make explicit the assumptions applied, so that others can transparently assess the analysis." However, the reviewed studies often suffered from significant opacities, as data sources were often not cited, and key details of methods used, such as survey sample sizes, were often omitted.

Reliable data sources are a key component of a credible study. Maredia et al. (2000) recommend that impact assessments "combine technical, scientific, and economic information from a number of sources." Furthermore, "estimates of research benefits should be disaggregated by commodities, production environment, or geographical basis if the parameter estimates are different for different components of a research programme." Yet the reviewed studies appeared to incorporate extensive reliance on expert opinion (in some cases for adoption, areas of production, yield improvement effects *and* prices). In addition, many studies did not disaggregate according to agroecological conditions.

Conclusion

Why has little learning been apparent in these assessments? IA is currently undertaken as a supply-led research activity — generating extensive data for statistically significant results does not pay off in this context, as coverage of a new topic may be sufficient for publication. Thus, the benefits from IA must be more immediately apparent to foster additional investment necessary for methodological improvement.

One potential way to link impact assessment and potential improvements in accountability and programmatic efficacy is what may be termed "demand-led" IA. For accountability, this means stakeholder-defined standards and priorities for impact claims. For learning, this means IA developed in concert with priority-setting procedures, so that IA produces the

information considered in such (contrary to a supply-led conception of learning, in which IA insights would attempt to change priority-setting processes).

Comments on ILAC — Peter Matlon

My comments focus on what distinguishes ILAC from the most common approaches to impact assessment and evaluation (or evaluation for short) used by many CGIAR centers. What is the added value of using an ILAC orientation? In my view, there are at least five key differences, which relate to objectives, methods, users of results, institutional home, and follow-up.

Objectives

There is a range of possible objectives for conducting impact assessment and evaluation:

- *Resource mobilization.* This is a public and donor relations function aimed at demonstrating the value of an institution's work.
- *Informing the field.* This is a more scientific and research-oriented purpose aimed at testing hypotheses of whether there were positive results, examining their nature, and estimating their value.
- *Internal accountability.* This objective aims at holding programs and staff responsible for efficient resource use.
- *Improving research quality and efficiency.* This objective aims at providing decisionmakers with the information needed to improve future programming based on past performance.

ILAC is most closely associated with the latter, higher order objectives, especially the fourth. It is important to note that these different objectives in fact present themselves as a nested hierarchy. This means that, in general, the information provided by meeting the higher order objectives usually already satisfies each of the lower order objectives, but not vice versa.

Methods

Selection of cases. There is a range of possible approaches to case selection, but I will focus on two extremes. At one extreme, impact assessments and evaluations often select known or probable "winners;" that is, cases in which the research has been a success and is already known, perhaps anecdotally, to have had significant positive on-farm impact. The objective that follows, as per the discussion above, is to demonstrate the value of the research investment by estimating the value of net benefits. At the other extreme, and one that is more closely associated with ILAC is the selection of a broad portfolio of research projects or programs that includes a representative selection of research activities, both winners and losers. Here the objective is more oriented to test hypotheses on the nature and value of impacts.

Questions asked. I will again distinguish between two extremes. Traditional impact assessment and evaluation approaches are associated with asking "what" questions:

- What is the rate of adoption?
- What are the levels of productivity change?
- What is the benefit/cost ratio or internal rate of return?

In an ILAC approach to impact assessment and evaluation, we would also ask "what" questions, but then go further to ask "why" questions as well. That is, we would try not only to understand what works, but also what does not, where, under what conditions, and why. Of

course, this would require in-depth analyses of causal relationships that underlie the levels, distribution, and nature of observed impacts.

Note that within case selection and questions asked, there are once again nested hierarchies, with higher order ILAC methods automatically including the lower order cases and data requirements, but going further. Thus, ILAC approaches will generally be more data demanding and therefore more costly.

Users

Here we ask who are the target groups for the results of impact assessments and evaluations? To simplify, we can cite at least three: donors, fellow researchers, and research managers.

Given what I have already said, it follows that the primary target group for ILAC-oriented evaluation is research managers, followed by the more general research community. Basically, research managers need information to improve research relevance, effectiveness, and efficiency. This includes information to help research managers to prioritize crops, traits, agro-ecologies, etc., and to make resource allocation decisions. It also includes information needed to determine and improve the effectiveness of research methods to better address the needs and constraints of resource poor farmers.

Evaluations can provide valuable information for research managers to help guide priority setting and methods improvement by analyzing patterns of technology adoption (full, partial, modified) and, as important, non-adoption. To meet management needs, ILAC-oriented evaluations focus their analyses on factors that explain variable adoption and performance in the broader farm population.

Institutional Home

Can the effectiveness of evaluation units to conduct ILAC-oriented studies (addressing higher order objectives) be influenced by their institutional home? I believe the answer is a resounding *yes*. If an evaluation unit is just one among many research units competing for the attention of research management, and if its results are given no more weight than the claims and arguments of other research units and programs, it is unlikely that results will lead to adequate learning within management and be adequately empowered to bring about real institutional change. This suggests that evaluation units that pursue authentic ILAC should have a direct line to the locus of research oversight and decisionmaking — i.e., they should be housed in the office of the research director, or perhaps better, in the office of the director general. This would help ensure management buy-in to the ultimate results.

Follow-up for Change

The set of issues here concern how results of impact assessments and evaluations are actually used. Simply publishing results does not guarantee that the lessons contained within them will be adequately derived, considered or applied. For ILAC, research managers must use the outputs of evaluations to guide internal learning and change processes. Management must take full responsibility for the successful follow-up to evaluation studies by deriving the implications for institutional strategies and methods, and by getting involved themselves in guiding and ultimately implementing any needed changes. In short, ILAC goes well beyond good research, and must embrace management behavior. A comprehensive approach to ILAC must obtain management commitment up front, and explicitly address and resolve institutional constraints to change.

How might this be done? Let me conclude with three suggestions. First, it might be useful to begin the design of impact assessment and evaluation studies with a clear formulation by

management of the strategic and tactical questions that the study is intended to address, and with a statement of the types of management decisions that might follow, depending on the outputs of the evaluation studies.

Second, follow-up could be facilitated by institutionalizing the use of evaluation results as inputs into centers' strategic and medium-term planning processes.

Third, successful implementation can be greatly aided by creating an institutional culture in which learning is valued and which offers incentives for recognizing and analyzing research dead ends and failures honestly as legitimate learning opportunities.

4. Reflection on the Wave 1 Case Studies[6]

ICRAF: Soil Fertility in Western Kenya — Frank Place

The ICRAF study was on the potential of improved fallows and biomass transfer technologies on poverty (through their impact on soil fertility) in the western Kenya highlands. In western Kenya, the percentage of households in poverty is very high — over 50 percent. The technologies had been disseminated only since 1997. The case study looked not only at the impacts of technology, but also examined the extent to which adoption and impact might be affected by different dissemination approaches, through different partners.

The study used both quantitative and qualitative research methods. In the pilot village area, where ICRAF took the lead in dissemination, a large amount of quantitative baseline data was available. But although ICRAF's relation with people within the villages was good, respondents may not have always been honest with their responses, especially in the qualitative section. Thus, communities were also selected from outside the pilot project area, though for these communities, no baseline information existed.

The study found that adoption rates were good, especially among the poor and female-headed households. Further, yield impacts were significant and noticed by farmers. However, because the average size of improved fallows and biomass transfer plots was low, the welfare impact at the household level was low. Impact was assessed using indicators such as expenditure, assets, consumption, nutrition, and income.

One useful methodological approach was to look at a range of options for addressing soil fertility aside from agroforestry. Thus adoption of fertilizer, manure, and compost was also examined. The study looked at target groups of poor people in different ways too, such as their self-perception, wealth levels, and perceptions of enumerators. Households may be classified as poor under one measure, but not another. The approach was to be broad and flexible rather than fixing on one definition, which can lead to conflicting or ambiguous results. For instance, using one definition, one may find a significant relationship between wealth and adoption, but from another perspective it was not necessarily significant.

Was anything learned from the process of the project? In stakeholder meetings, it was especially the outsiders who learned about the interventions. We learned about one another's methods through sharing of preliminary results. For the economist, the case study write-ups showed how powerful sociological methods can be. The team wanted an arm's-length relationship with the respondents so that the research was not identified closely with ICRAF. So students undertook much of the quantitative data collection (and analysis). The

[6] Note: This section presents results of discussions in working groups and plenary sessions.

sociologists entered the village without any support from ICRAF and started their work with general discussion moving into agroforestry only later on. We did not document the learning process because we did not conceive the project to do that — our internal process was documented very briefly in the end, but there is not a lot.

Suggestions for the future: look for opportunities for learning through the process. You could have two different reports, one with the empirical results on impact, the other noting how the process went and how it might be improved in the future. In this case, the process section is getting the short end of the stick.

One process is to follow through with the results, and the other is to think about the lessons from the process and how to get that into our activities.

ICRAF is going through a change, and the new director general talks about learning teams, etc. ICRAF has a task force on organizational change, one looking at our culture and the other at system evolution with teams. I am on all these committees and thus am well connected. I would need to engage the interest of other members in order to influence these processes. Our management would be receptive. ICRAF likes to organize its thinking around "problems" — so the problems being addressed by an ILAC approach would need to be articulated. This should not be difficult to do. Could the problem be posed as having these good findings and not having a way to take them up from here? ICRAF does not do much formal ex-ante impact assessment, so we may have an opportunity to influence increased attention to that.

The monitoring system varies a lot, we do not have a process at the institutional level — instead the regions implement their own approaches, which follow the formats desired by donors. Results-based management (developed by the International Development Research Center) is the direction that the institution is heading.

The knowledge learned from this experience is tacit knowledge at this point. There is significant ILAC at ICRAF if one considers all the "smaller" examples. For instance, from one trial, there are changes in the next trial and there is a lot of learning at that point. A major institutional change within ICRAF occurred when it formed a development division. This came out of a general feeling that we are not having the impact we would like and should be forming more strategic partner relationships. This did not arise out of any formal study, however. The research and development divisions were involved in this study and were interested in the results when presented in a seminar.

More systematic ILAC processes might emerge in the center, but not as a result of this study. It may result from a collection of studies and their implications. There is an opening to think about how impact assessment is going to be located in the institute and how it can then have more influence in the institute. The institute is quite decentralized; we have to balance between allowing it to emerge in the regions and prioritizing impact assessment research at the institutional level.

IRRI and IFPRI: Rice in Bangladesh — David Lewis

The following are key lessons from discussions on the two Bangladesh case studies — Number 4 (on fish and vegetables, carried out by the WorldFish Center and the Asian Vegetable Research and Development Center [AVRDC]) and Number 5 (on rice, carried out by IRRI):

1. The importance of seeing these studies as being about researching institutions (such as land rights, law, etc.) and organizations (such as NGOs, public extension agencies,

etc.) alongside more conventional research on agricultural technologies in a technical sense and examining whether or not they were adopted and the resulting "impact."

2. The importance of the DfID "sustainable livelihood framework" as a strategic tool for drawing attention to noneconomic dimensions of poverty, and the wider processes that govern both the reproduction of poverty and the strategies people use to overcome it. However, there were also problems with the framework — some natural scientists found it too complex and unwieldy, some anthropologists found it too simplistic (!).
3. The importance of noneconomic outcomes of small-scale adoption often not picked up by the more economic adoption studies — such as informal neighborly exchange of vegetables to build social capital among the poor.
4. Integration of quantitative and qualitative research is difficult and needs careful planning (do not just bolt one, normally the qualitative [!], on to the other) and there is a need to respect each other's methods for this to work. But it was shown to add considerably to impact studies if well done. In Case Study 4, this respect was generally higher than in Case Study 5.
5. We still need to clarify what is done for the follow-up and find ways to establish these lessons within the research organizations. A key problem is that the main researchers are not based in country so follow-ups are more challenging. One idea is to do follow-up retrospective work with agricultural researchers — this is the missing link so far since other stakeholders on the ground were surveyed. Why did they do what they did? The difficulty would be finding the key people who made decisions. We would attempt individual interviews, focus groups looking at timelines, and the paper trail about procedural and decisionmaking issues. We would invite reflection on learning from these past experiences.

We will need to check on the level of interest from the centers — what is the priority of the center, is there some champion there, whom can we interest in this work? For AVRDC, where our case was positive, they may want to have a follow-up and learn more. But for the WorldFish Center, there were some tensions over whether we picked the "right" sites so some bridge-building will be needed. David knows ICLARM and may be able to do this.

CIMMYT: Maize in Mexico — Mauricio Bellon

The project, "The impact of improved maize germplasm on poverty alleviation: The case of Tuxpeño-derived material in Mexico," was implemented by a team of researchers from CIMMYT and IFPRI in two contrasting regions of tropical Mexico with a high incidence of extreme poverty. The goals of the project were to document how farmers in these regions use improved maize germplasm and to determine how its use contributes to the well-being of poor small-scale farmers. The project used a combination of qualitative/ethno-graphic and quantitative methods, and the sustainable livelihoods approach as a framework. It was mainly traditional research in the sense of obtaining information from farmers rather than trying to modify any of their conditions. The project, however, returned knowledge to the communities involved as a token of appreciation.

The research was undertaken on a tight schedule and with little funding. These factors constrained both what could be done in the field and the ability to engage the farmers and other stakeholders involved. One of the strengths of the project is that it included a strong technical component on maize farming, which contributed to a better understanding of the issues faced by farmers. An external study may not have been able to accomplish this. This component also facilitated interaction with farmers, providing opportunities to discuss practical issues of importance to them. An additional strength was the project's focus on poverty, an angle rarely addressed by CIMMYT quite so explicitly. This will contribute to a

better and more adequate understanding within the institute of the implications of conducting research on poverty.

This study was output-oriented. No major attempt was made to involve many stakeholders in its planning or execution and to this extent it was weak in terms of process. Only partners that were already known and trusted were involved to any great extent due to the need to implement the project quickly. There is great interest within CIMMYT in the results of the study. It is therefore important to have results that are credible to scientists from other disciplines at the institute. Given the constraints faced by the study, a more process-oriented project might have compromised the timing and quality of the outputs that had to be produced. There is a trade-off between "process research" on the one hand and "output-oriented research" on the other. Process-oriented research requires time. Even within the given time limits and financial constraints, the project succeeded in integrating qualitative and quantitative methods and results.

An issue identified during the discussion is the trade-off in objectivity. While outsiders may be perceived as having more objectivity, they may lack the inside knowledge required to better understand the issues and results. Furthermore, research carried out by insiders provides an opportunity for them and the institution to learn hands-on from the research and from the methods applied. The optimum balance between insider and outsider participation in the research depends upon whether process is emphasized over results or *vice versa*. At the end of the day, these trade-offs need to be negotiated with understanding by all the partners and other stakeholders (clients). Finally, lots of tacit knowledge develops within even a small group doing "traditional" research. If we could ensure, in projects like this, that the process and the lessons learned by the group were made explicit and written up in a systematic way, this would go a long way towards providing new and useful information. Someone with the requisite skills would have to facilitate this process, however, within the centers.

Lessons from Wave 1 Studies

The following lessons were drawn from the discussion:

Use of Sustainable Livelihoods (SL) framework. The SL framework provides a cross-disciplinary language that allows for the articulation of an integrated research design. While quite comprehensive, the SL framework does not provide guidance as to the major direct relationships among variables.

Integration of qualitative and quantitative methods. For most of the research questions, it is clear that qualitative and quantitative methods can complement one another. The integration has been useful for understanding different types of information — the quantitative results led to the identification of general patterns and the qualitative results have helped an understanding of the processes of information flows and technology use.

Because the quantitative research already had a baseline as a guide, data collection was determined. The qualitative research, because it was entirely new, was less restricted in its scope.

Teams have not always been able to spend sufficient time to analyze the research results jointly. Some reports, therefore, are compartmentalized into sections using different research methods and presenting different results.

Dialoguing across different institutions and stakeholders. In some cases, a key aspect of the research process has been the stakeholder meetings, which have helped participants plan and review the research.

Regular meetings of research team members and other stakeholders were also helpful to plan specific components of the research and to provide primary information or triangulation of information.

Arm's-length data collection. Some fieldwork was undertaken by persons not attached to the project team. For example, the social analysis researchers were not part of ICRAF. As a result, appreciation for social analysis increased within ICRAF, but the center's capacity to undertake such analysis did not increase.

Viewing poverty from multiple perspectives. Some teams were forced to come to grips with how to assess the poverty levels of different groups. Rather than devising a single qualitative or quantitative classification, they were open to alternative views and ways of comparing poverty levels across households. By looking at only one of the dimensions of poverty, important changes or effects could be missed.

Getting and disseminating useful results. The "technology" intended to deliver the impact must be viewed within a broader context. For example, in the ICRAF study, the context was "affecting poverty through soil fertility management." Any specific technology enjoys only a limited institutional interest. ICRAF looked both at the technology and various approaches to the effective dissemination of the technology. This perspective engendered a wider interest across ICRAF's two divisions.

It was found useful to bounce results off key research team members and revisit assumptions that were made at the outset of the studies.

Creating *powerful slides* of graphs and key numbers can be critical. These slides are what the directors eventually use in much of their work and presentations. Hence they not only internalize the key points but also advertise them to the world.

The focus of *seminars* should be on the big poverty and process questions that the research addressed.

5. Considerations for the Design of Wave 2 Projects[7]

Conventional Case Study Approaches vs. Learning Approaches

- Conventional IA or learning approach? We need a conceptual distinction between these two approaches. A learning approach would contribute more to the poverty agenda.
- Product versus process. In action learning projects, the process is perhaps more important than the product.
- Need to distinguish between an impact focus and learning focus. The "pipeline mentality" does not apply in ILAC.
- Learning can occur at any point in the process, as long as monitoring is occurring throughout the process, rather than waiting to see the end of something and then looking back.
- Four options were discussed:
- Provoke a choice between approaches. The CGIAR Science Council could be informed, make a strategic decision, and become aware of the potential for moving forward with this area of work. Either that or find alternative means of support for

[7] Note: Five groups of issues were identified in group and plenary discussions.

the ILAC work, beyond SPIA, which was established to deal with the traditional types of impact assessment.

- Follow two distinct paths simultaneously: one group would pursue more IA studies using traditional approaches, and another group would do some parallel work focused on ILAC.
- Do some mega-studies that incorporate dimensions of both traditional IA and ILAC. These would, of course, be more complicated and costly.
- A "light," participatory version of IA combined with ILAC. Here, considerable methodological experimentation would be needed, in an iterative process of learning by doing.

The Proposed Studies

INIBAP/IPGRI Project

New banana varieties have been bred and introduced into East Africa (Uganda and Tanzania). They were released about 10 years ago through NGO, commercial, extension, and other dissemination mechanisms. Study is broadened to include a quantitative assessment, qualitative assessment of sociological aspects. There are also questions as to feedback to breeders and policymakers. A lot of institutions involved, IPGRI, NARS of Uganda and Tanzania, NGOs. All have been learning and contributing information. What is envisaged is to look at different communities and institutions. What is being learned along the way is ways to enhance the work. Trying to integrate ILAC into new proposals and projects as a way of internalizing the concepts within the organizations. We also wanted to see if the SL framework could be used and how it might be relevant to IPGRI more broadly.

Eldad Karamura (INIBAP) and Jamie Watts (IPGRI) reported that a concept note has been prepared for the INIBAP study and an initial planning workshop was held in Uganda in November 2002. Funding has been secured from USAID for the economics dimension and there is funding interest from Rockefeller and the International Fund for Agricultural Development (IFAD) for other components of the project. The ILAC meeting has provided more insight into how to incorporate the ILAC approach into the existing proposal, and the project team and IPGRI/INIBAP management are committed to doing so.

CIAT Study, Beans in Africa

Since the mid-1980s, over 90 new bean varieties have been introduced from original research in Rwanda (participatory research). A couple of adoption studies have been done, so we know this. We do not understand the broader impacts on livelihoods. Simultaneously, we have been involved in participatory research to facilitate project learning. A lot of learning occurs within projects but does not go beyond the project level. We want to investigate how to move beyond the project level, how to put mechanisms for broader learning in place and how to know if learning has taken place. Also looking at strategic decisions that will be needed by the bean program. A learning process is a real time thing. We must link what we learn from what has already occurred with what we need to know now. SL is there, but not necessarily as a key component.

Nina Lilja (CGIAR Systemwide Program on Participatory Research and Gender Analysis) and Nancy Johnson (CIAT) indicated that they want to fundamentally rethink their case study in the light of the ILAC discussion during this workshop and remain part of the "community of practice." One idea is to look into learning alliances forming at CIAT. Several "ILAC friendly" projects are probably more important than one ILAC project per se.

ICRISAT Project

The ICRISAT project was intended to present evidence to document changes and dynamics of poverty, mechanisms, and elements. Highlight evidence of successes at the same time learning from failures with the objective of redirecting research. Why did investments not produce desired results? More constraints seen in NRM and this technology are evolving, so this is why this project was selected. Tracking the build-up of social capital, what processes happened, empowerment of community actually led to the success realized. We want to distinguish between output and process. We want to build a case that the process of monitoring can be and should be institutionalized. SL framework key.

Cynthia Bantilan reported that ICRISAT is committed to undertaking a study and will embed lessons from this workshop because there is no learning component in the project as yet. They plan to move from looking at technological impact on the poor in the semi-arid tropics to a more learning-oriented approach. This change has been motivated by the need to improve the position of the poor and to identify learning opportunities. The groundnut case in Maharashtra was documented as a failure in the 1990s but is now seen as a success — why? This suggests that learning within ICRISAT now needs to be documented.

CIMMYT Project

Michael Morris reported that CIMMYT seeks to carry out a careful study of the reasons for the lower than expected rate of adoption of improved maize varieties among the poor in several countries of Southern Africa. The researchers want to explore if the causes can be attributed to a failure of organizational incentives for distribution of improved seed or shortcomings in the maize germplasm itself, or to a combination of these and other factors. Mauricio Bellon cautioned that Wave 2 studies need to avoid rushing the qualitative work, as the Wave 1 studies in some ways tended to do. The Oaxaca case study demonstrated that in-depth work at the community level brings high-quality results. Even students living in the villages for a month can add to the insights.

The maize project would be used to test new and different institutional mechanisms to make germplasm more available to them because we know that many poor farmers do not have adequate access to seed.

Do We Need More Studies on Poverty Impacts?

- The original intention was to represent different types of interventions in different contexts. Do the Wave 2 proposals complement and add value to Wave 1? Do they really address the question/intention that was raised three years ago? If we are not satisfied by the existing Wave 1 studies, will a few more studies satisfy the needs? What is the marginal value of a few more studies?
- If we look at the work from the perspective of whether or not they are representative, we must answer "*no*." Are the objectives that we set out at the start still important? Some feel that these objectives still are important because this is key to the mission of the CGIAR. It is possible that this question could be posed to CGIAR managers to get their inputs and as a means of engaging them in a discussion of the issues. Who is demanding this information and is it still needed?
- Doing things differently to address poverty is the important thing.
- Can we do both things simultaneously (IA to measure the effects on poverty and ILAC to find how to do things better)? Doug Horton warned of the complexity of attempting to do these two things together. But Peter Matlon feels it could be done, by "looking beyond the 'what' questions to include also the 'why' questions." He feels this could be very useful for learning and improvement.

- We are talking very different languages still among our group as to what can be accomplished and how to measure poverty.
- A contribution from SPIA is unlikely. New funding priorities are coming up and a new SPIA chair will be coming on. New projects would need to go out and seek their own funding. This means that the new projects would be done as research projects. The following steps are essential, now:
- Complete Wave 1 studies.
- Analyze conclusions of Wave 1 studies.
- Present findings to donors and managers and discuss their needs and interests, as well as the learning issues.
- It is important to know the interests of donors and CGIAR managers in order to focus an ILAC effort. But it would be difficult to get this information prior to the Annual General Meeting of the CGIAR in October 2003.

What would be Different About an "ILAC Approach"?

- What is an "ILAC approach"? A lot of work needs to be done here. We have not built a strong case as to how this might serve as an alternative approach to traditional IA and how it might be relevant to the CGIAR. This case should be built.
- If we adopted an ILAC methodology, what would we do differently?
- What level of interest do we have from donors? And what kind of resources might be available to carry them out? (DfID and GTZ).
- Coming up with assumptions underlying the logic model of projects is useful. Are they reasonably valid and do you have acceptance and buy-in from multiple stakeholders? This approach can be used even at an early stage in the process.
- Do we want to measure learning as a part of these processes in addition to measuring the impact on the poor? Is this a necessary step in order to say that learning is important in actually improving impact on the poor? We need to be careful and pragmatic about this in terms of its feasibility for our organizations. Robert Chambers said that it could be quite light actually. What have we learned and what difference has this made to our actions? It is necessary to identify some indicators of learning.
- We need to learn from both success and failure, and use this for priority setting.
- We need to document and assess processes.

What Are We Proposing?

What are we proposing in essence? What name or title can we use? The labels that we use are important at this stage. Talking about Wave 2 means talking about "add-ons" to a traditional approach. We need to think about calling it something different to recognize that we are talking about something different. Perhaps "action learning projects/processes."

General Discussion[8]

There are at least four key questions to be addressed:

1. *What is the effective demand for Wave 2 IA case studies from SPIA and donors and are there funds to undertake them?*
2. *How is the information from these studies to be used and by whom? What would signal to us that it is being used or not?*
3. *Are the studies intended to feed into a larger process of CGIAR reform and if so what role would Wave 2 studies play in this process?*
4. *Who will be the focal point and take the lead for future coordination of this initiative?*

Peter Matlon

Concepts and Terminology

Institutional Learning and Change (ILAC). The terms "*institution*" and "*organization*" are sometimes used as synonyms and sometimes to refer to different concepts. This can result in confusion.

Andy Hall used "institutions" to mean "norms, routines, habits, ways of doing things, behavior," and not as a synonym for "organizations." Doug Horton supported this and distinguished the terms as follows: organizations are formal structures with designated roles and purposes. Institutions are formal and informal rules and their enforcement mechanisms that shape the behavior of individuals and organizations in society.

Ursula Blackshaw defined ILAC as "the process of reflection and re-framing of knowledge that results in changed behavior and improved performance."

Robert Chambers suggested using "*apt illustration*" as an appropriate term when drawing on qualitative data to exemplify a point or principle. One main advantage is that it does not carry the negative connotations of the term "anecdote," which can alienate scientists.

Jamie Watts pointed out that the concepts of "standards of practice" or "good-practice guidelines" for evaluation studies have not yet been addressed within the CGIAR, whereas many professional groups have formulated these in the interests of ensuring professional standards.

There is a tendency within the CGIAR to restrict the term *impact assessment* to refer to preferred methods that measure the economic effects of research. In the broader evaluation community, impact assessment is a term that includes a much wider variety of methodologies.

Ruth Meinzen-Dick suggested that less emphasis could be placed on the term "attribution" of results in studies like this and the methodological problems that proving attribution poses. Greater attention might be paid to the "contributions" of various parties to the overall results.

Process vs. Product

Traditional studies write up the results of an initiative as a report. Studies with an ILAC focus or component are interested in understanding the processes involved in agricultural research projects designed to reduce poverty. The questions asked are what happened, how and why did it happen, what can we learn from our improved understanding?

[8] Note: Discussions occurred throughout the workshop. Many of the themes were visited more than once. In order to make the proceedings easier to read and more logical, the strands of discussion have been organized under broad themes and grouped together in this section of the workshop report.

The challenge is to undertake good research and also to use the research *process* to understand and change the behaviors of all participants in the direction of improving the outcomes.

Mauricio Bellon pointed out that *trade-offs* must be made in order to arrive at a balance between a process focus and an output or product focus in any given project. The trade-offs should be made from as informed a basis as possible and with the participation of all principal stakeholders.

It was stressed that lessons can be learned from negative cases as well as from positive ones. Dead ends help to direct the future efforts of centers into more productive paths and processes. This needs to be acknowledged and rewarded in a formal way; otherwise reporting will be skewed toward positive cases only. The studies should look not only for technologies that succeed or fail but also address the processes by means of which results are brought about.

For the case studies to deliver the maximum opportunity for learning to occur, a balance between research skills and facilitation skills is required in these projects.

Ursula Blackshaw

Use of Inside vs. Outside Researchers

Mauricio Bellon drew attention to the pros and cons of using insiders vs. outsiders to study poverty impacts. Outsiders may bring greater objectivity but insiders' knowledge of the context and other critical elements can be invaluable. Insiders also learn and change institutions[9] (what M.Q. Patton refers to as "process use" of evaluation). Studies that combine the use of insiders and outsiders can capture the strengths of both.

Issues of Participation

The issue of participation in the case studies was a recurrent theme. It was pointed out that within the CGIAR many case studies have been carried out over many years prior to the initiation of the Wave 1 case studies. Most of these case studies were carried out in a familiar way in which the methodology is led and employed by the researchers themselves in order to produce a research product — the case study.

In contrast, the Wave 1 case studies were intended to go beyond and do much more than that. They were intended to engage all stakeholders in a participative, learning process. This is something that has seldom happened in the past. They were intended to serve as opportunities to focus on and learn about the processes by means of which the poor come to benefit from agricultural research projects.

In the Wave 1 case studies, the scientists' role was not simply the traditional one of delivering a product, but one in which they became facilitators of a participative learning process involving a wide range of stakeholders.

Michael Morris pointed out that engaging the desired level of collaboration and participation of managers, scientists, social scientists, farmers, and other intended beneficiaries has not been easy. The level of participation of each of these groups has varied greatly from project to project.

[9] Michael Q. Patton calls this "process use" of evaluation; see his Utilization-focused evaluation: The new century text (Thousand Oaks, California and London: Sage, 1997).

Some case studies find themselves, at the final stages of the process, still trying to get buy-in from stakeholder groups who should have been participating and collaborating actively from the very beginning.

Wave 2 studies should be concerned not only with "selling" the results, findings and lessons to center managers, scientists, and others. They should, fundamentally, also be about participative and collaborative learning from the earliest stages of conceptualization through all project phases to the termination of the project. Wave 2 studies should be demand-driven. But in some cases the optimum level of demand is not being demonstrated by certain categories of stakeholder, including managers and scientists within the CGIAR itself.

Why is it so hard to interest the biophysical scientists in using the case studies as an occasion for learning and change?

Michael Morris

The incentives for them to step outside their traditional frame of reference are unclear – ILAC methods may not contribute to their standing in their discipline.

Ursula Blackshaw

The challenge of promoting engagement at all levels of the CGIAR system was frequently discussed. It is not clear to participants, for example, how committed the CGIAR is, as a system, to learning and change. Change can threaten vested interests and comfortable routines that have evolved over years and so change is not always welcomed with open arms.

In the case of SIDA, one of the external cases presented at the workshop, there was recognition within SIDA itself of the problem and concrete actions taken to address it. It was frustration within SIDA itself regarding its own resistance to implement change that led to the participatory research in the Nairobi and Stockholm offices. And this was supported at the highest levels.

The benefits of participation are not immediately evident or easily explained to some groups, e.g. scientists, and so they tend to be less willing to become engaged and to devote time and effort to engagement with the evaluation studies.

Based on our experience, we were very intimidated by the idea of operationalizing ILAC at first. But our fears were eased when we become involved with case studies near to our hearts.

Ade Freeman

Engaging management should not only be about getting their permission and support for the studies. It should also be about managers' direct involvement with the organizational learning and change resulting from the studies. Managers need to see their participation as a legitimate demonstration of their responsible leadership within their organizations.

The Role of SPIA

The role of SPIA in the case studies is not clear. The initiative of the Wave 1 studies was channeled through SPIA and the donors in order to collect a particular type of information — information that would enlighten us on the ways that agricultural research benefits the poor.

Peter Matlon confirmed, after speaking to Hans Gregersen, that SPIA is indeed interested in ILAC and offers the case studies moral support. Hans Gregersen was quoted as saying that Wave 1 poverty case studies are important, and as much as possible should be learned from them. He was less sure of the effective demand — or financing available — for Wave 2 case

studies. In his view, the primary effort should be invested in drawing out the lessons and implications of Wave 1 studies and making these widely available.

The Role of ILAC in the CGIAR System

ILAC is receiving attention within the CGIAR as a desirable goal for centers and for the system as a whole. It has been heralded as a "good thing" in recent CGIAR documents. It is still not very clear, however, how the CGIAR plans to take ILAC on board.

> *ILAC needs a face. Maybe a concrete example of how ILAC has been operationalized in one center would provide a real idea of where to go from here.*
>
> David Raitzer

How to Maximize Learning from Wave 1

Knowledge-generation and lesson-learning components can occur during the execution of the studies and after the studies are completed. Learning during the execution of the studies is a process in which all actively engaged stakeholders are able to participate and benefit. The stakeholders include:

- center staff, especially managers and the scientists and social scientists engaged in the case studies;
- partner organizations and their members who participate in the studies; and
- The "poor" — those with and for whom the projects are being undertaken.

Learning lessons after a study has been completed can provide the same categories of stakeholders with new knowledge, and also serves donors and other individuals who were not directly involved in the execution of the studies.

The second point raises the issue of institutional constraints on what those closest to the poverty impact case studies can say and what the CGIAR and the centers are willing to hear. It is clear that the case studies can provide information that implies the need for change within the CGIAR system, but change is never universally welcomed or wholeheartedly embraced and the potential exists for the system to present a deaf ear to some findings.

> *What are the lessons for the centers from Wave 1 studies? What has been done with the results? Can we point to a good example of CGIAR impact research actually changing the way things are done?*
>
> Michael Morris

For each of the Wave 1 case studies, several products are envisioned:

- A complete report;
- A journal-length article;
- A chapter-length report, to be included in a book presenting the methodology, the ILAC approach, the cases, and the lessons learned;
- Conference presentations; and
- A briefing paper.

A high-level workshop may be held (e.g., at IFAD) where senior CGIAR managers would discuss the results of the Wave-1 studies.

A writeshop would be a highly cost-effective way of synthesizing the lessons that can be learned from the Wave 1 studies and getting them into a written form ready for dissemination.
Robert Chambers

Have we learned all we can learn from the Wave 1 case studies about how poverty alleviation occurs? How can this inform the Wave 2 studies?
Michael Morris

Synergy Between Wave 1 and Wave 2 Studies

It remains to be clarified whether the poverty case studies are intended to be part of a larger process of CGIAR reform. If they are, then what role will Wave 2 studies play in this process? If there is not a larger process, then Wave 2 may be "just another set of studies" with a slightly different design from Wave 1. Case studies by their nature may remain isolated one from another. Can synergism be developed between studies taking place in the same regions?

Coordination of ILAC

IFPRI was forced to make a tough decision not to continue to coordinate a second wave of studies. The current meeting was convened by IFPRI before it relinquished coordination, to assist those centers that want to move forward. A dynamic, proactive focal point is essential to keep this initiative alive. Options such as e-conferences do not really work unless there is someone driving them. ISNAR, with its institutional strengthening mandate, is the logical candidate to be focal point for this ILAC initiative.

Practical Steps for Moving Ahead

Documenting current arrangements. It would be valuable to know more about the existing arrangements for evaluation within each of the 16 CGIAR centers. It seems that there is little in the way of standardization. Some centers have professional evaluators. Some have evaluation units that are more-or-less close to the public awareness function or to the management function. To date, there is no documentation on the range of practices and arrangements for evaluation within the centers.

Resources. There is an interest among the donors in learning how agricultural research benefits the poor and the processes that are involved. It is likely that these donors would be interested in continuing to support this initiative into Wave 2. Andy Hall volunteered to prepare the first draft of a concept note to keep the impetus going. It was suggested that the training resources within centers might be able to play a part in the learning aspects of ILAC work.

The challenge is two-fold: first to find a cost effective way of moving forward and second to uncover the means of delivering benefits to poor people.

Robert Chambers

The mandate for the Wave 1 studies came from SPIA and was endorsed by the donors. So, direct follow-up from these studies needs to come from SPIA.

Michael Morris

Our focus remains on poverty, and we would like to enhance this focus with the institutional learning and change acquired from the Wave 1 studies.

Cynthia Bantilan

A Word of Caution

We should be careful about what we are able to deliver through these studies. Miracles should not be expected. The studies should be demand- rather than supply-driven. As to whether the demand is at the level of the center or the system as a whole, it was suggested that the Wave 1 Studies were never thought of as a way of changing the entire CGIAR. Nevertheless the purpose of these studies is to generate new knowledge that can help to change behaviors within the CGIAR.

*There is the ever-present danger in these studies of doing things **for** managers and scientists instead of doing things **with** them.*

Rajeswari Raina

6. Where Do We Go From Here?

Ursula Blackshaw, Douglas Horton, and Robert Chambers made brief statements on possible future directions.

Ursula Blackshaw

The Case Studies should be viewed as knowledge generation activities for ILAC in the CGIAR. The Wave 1 case studies can be seen as contributing to ILAC by extending beyond traditional impact assessment, which provides "information" and delivers broader and deeper "knowledge," enriched with opinions as well as objective facts, and casting light on the processes by which impact was achieved, as well as quantifying the impact.

There is scope for the Wave 2 case studies to extend this by adopting processes which are conducive to learning, by encouraging deeper levels of analysis, individual and collective inquiry on reflection, and by exploring complexity and questioning assumptions.

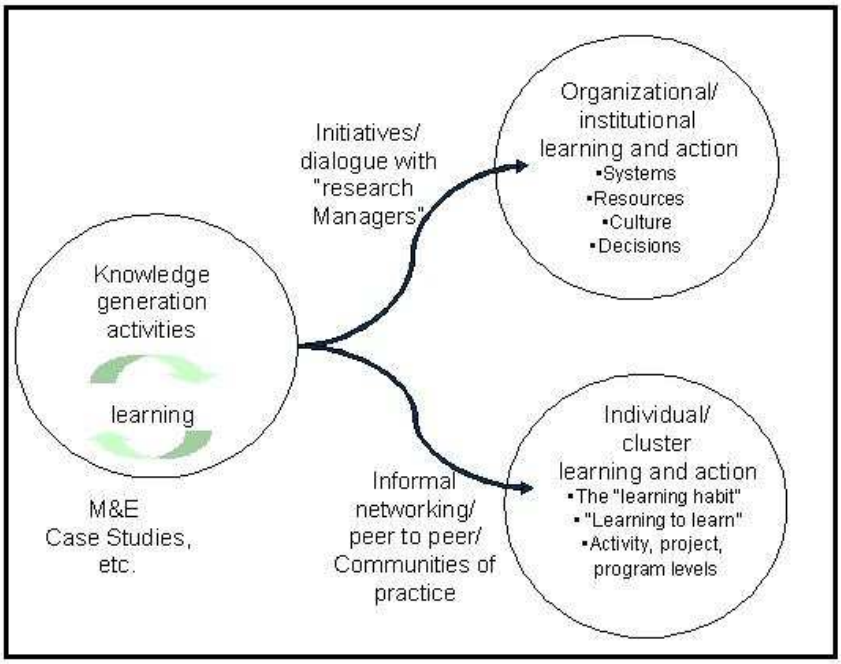
This approach can deliver high-quality knowledge to CGIAR institutions and other stakeholders, which they can then use as part of their own institutional learning and change processes. The Wave 2 case studies should therefore be seen as high-quality external reviews as an aid to learning. However, as shown in Figure 3 below, these and other knowledge generation activities are simply one part of the framework for ILAC in the CGIAR.

Figure 3 suggests that knowledge generation activities (including monitoring and evaluation [M&E] activities, case studies, and a wide range of other activities) are one part of a broad framework for ILAC. These activities lie within the mandate and competence of the "ILAC Group" as currently constituted and can contribute to ILAC by feeding high-quality knowledge into individual, cluster, organizational, and institutional learning and action.

Other activities are also required to move from sharing knowledge to wider learning and change. While the ILAC Group per se has no formal mandate for these other activities, individual members of the group will have a mandate within their own centers, which will allow them to engage research managers at all levels in utilizing the knowledge directly, and (more importantly in the long run) in building systems to facilitate organizational learning.

The momentum for a culture of organizational learning can also be enhanced through more informal outreach from the ILAC Group, encouraging peers to adopt good learning practice in their normal activities.

Figure 3. Characteristics of high quality knowledge generation activities



There are no special characteristics of "ILAC" as opposed to conventional knowledge generation, other than what would already be regarded as good practice for learning. Key characteristics of good practice would include:

- Appropriate selection of areas for study, including ensuring that: (a) demand for knowledge in this area exists; (b) ownership of the process of generating knowledge is shared, and includes decisionmakers; and (c) the organizational climate will encourage (or at least not present obstacles to) openness for learning purposes.
- Establishment of an explicit commitment that the methodology will include exposure of, and opportunities for reflection on, the processes employed for knowledge generation as well as on the "content" of the study.
- Ensuring that a significant proportion of the knowledge generation methodologies adopted can be inclusive of potential learners, rather than relying on extractive approaches.

- Ensuring that negotiated agreement on the knowledge generation activity includes explicit definition of the kind of things (distinct from the topics) which the "stakeholders" want to learn and why (i.e., what use do they hope/expect to make of the knowledge).
- Designing sufficient time, "checkpoints," and processes for internal reflection and learning into the knowledge generation workplan.
- Obtaining agreement that the knowledge generation workplan and methodologies are flexible and can be adapted to take account of emerging lessons throughout the process.
- Documenting lessons learned as an integral part of the knowledge generation activity.

Knowledge generation activities designed to take these characteristics into account will, by definition, be contributing to institutional learning and change in two senses:

- The individuals/clusters who are engaged in carrying out the knowledge generation activity will learn and act on their learning throughout the process; and
- The knowledge generated will be relevant, and when delivered to receptive "learners"/"decisionmakers," will contribute to wider learning and action in the organization.

Doug Horton

It is important to think seriously about the questions: *"Why is the knowledge generated in evaluations and other studies so seldom used to improve organizations and their performance?"* One important reason is that few organizations have anything like an "evaluation culture" or institutional mechanisms to promote institutional learning and improvement. For concrete steps in the direction of creating this type of culture and mechanisms, I would like to reemphasize the suggestions put forward in the final section of the paper we prepared for this workshop:

Implications for evaluators:

- Design evaluations that focus on the target audience's questions (as opposed to those that interest the evaluator).
- Select methods that best answer these questions and that optimize the relevance of the inquiry to organizational members.
- Employ procedures that maximize the involvement and learning of organizational members and stakeholders.
- Be proactive about communicating, rather than assume that recipients will read and understand reports.
- Design and execute evaluations as learning exercises, to help participants acquire the discipline of evaluative thinking and expertise.
- Explore the complex ways in which organizational levels (individuals, groups, projects, programs, system) are interrelated.
- Be attentive to differences between goal attainment and mission fulfillment. Projects and programs may accomplish their goals and be relatively effective while their contribution to fulfilling the organizational mission is relatively modest.

Implications for senior managers:

- Ensure that the internal evaluators have a clear and formal mandate to support organizational learning, not just to undertake an evaluation and produce a report.

- Use evaluations to develop leadership. Rather than merely add an evaluation unit to the organization, leaders at all levels need to learn how to incorporate results-based management into their projects and programs.
- Establish overall responsibility for the use of evaluation results and lessons at the levels of senior management and the board of trustees.

A cautionary note: There are many proposals for organizational and institutional learning, but few accounts of how these proposals have been put into practice. Hence, in ILAC we are entering uncharted waters and we will need to proceed with more social experimentation than social engineering.

Robert Chambers

The marginal benefits to be gained from additional efforts on Wave 1 studies are very high. The stories from these studies could have very big effects, especially if they get repeated. Much more can still be said about the methodologies used. Learning from these studies would be neither expensive nor time consuming. To move forward, we need four things:

- A report on the proceedings of this meeting. How that report is disseminated will be important.
- A weeklong writeshop where we can come together and write up what has been learned from the cases. Writeshops like those organized by IIRR are a good way of converting tacit knowledge into explicit knowledge and are extremely cost-effective. A letter could be written to all CGIAR center directors general (DGs) to invite participation, to see whether opportunities for support and interest might be forthcoming.
- Some sort of CGIAR network (like the systemwide initiative on Collective Action and Property Rights, or CAPRi).
- A champion who will take on the cause of ILAC and act as coordinator. It is hard to know who can do this. Without a coordinator, I fear this initiative will tail off into sporadic unopened e-mails.

7. Planning Session for Wave 2 Studies

The third day of the workshop was dedicated to planning future studies of the CGIAR's impact on poverty, with an ILAC perspective. Garett Pratt (IDS) facilitated a brainstorming session to help participants begin thinking about directions for moving forward.

Key issues that require action:

- A statement of the value-added of ILAC.
- Workshops with researchers.
- Outside facilitators as catalysts.
- Meetings with middle management to clarify objectives.
- Research questions based on dialogue.
- Find resources and support persons with experience in ILAC, to support people who need practical advice.
- Scenario building with "what ifs."
- Building a vision of how the proposed activity fits with ILAC.
- Mapping the system of actors/levels that will be the unit of analysis.
- Formalizing time commitments, roles, and principles.

Points still to be negotiated:

- Spell out aspects of the work that are explicitly about learning processes rather than just information outputs.
- Identify explicit learning goals and methods to build new cultures of science.
- Set aside regular time to discuss issues.
- Establish an external advisory committee for oversight.
- Invite external stakeholders to project meetings.
- Get relevant individuals to commit to "learning contracts."
- Ask for organizational commitment and support to individuals engaged in the studies.
- Treat the problem of two levels — that of changing individual cultures of science and that of the organizational level — in a balanced way.
- Get "permission to play" from senior people, even if they are not committed at this early stage. On the other hand, permission without engagement may be less than effective.
- The ideas of "champion," "buy-in," and "awareness" are all crucial points of entry for this process. But it then needs to become a normal leadership function, going beyond the simple idea of a series of "add ons" to traditional studies.
- The need to get people interested in the principles guiding ILAC, but also getting on with activities, so that results can be produced and communicated to get senior managers interested.
- Letters to DGs on exploratory ideas.
- Think about a course/training for people involved, to develop a vision and share useful tools.
- Make sure that process and content resource persons are combined.
- Vertical slice idea to convene groups that straddle the chain of users-participants-learners.

Points raised about the Wave 2 case studies:

- We need to present people with what the problem is at the start in quite precise terms. What is the problem that is leading us to undertake these studies? Impact on the poor is part of the story, but starting with the assumptions of researchers in relation to local beliefs and testing their validity is another.
- One solution is to build a story about the problem so that it is "owned" by those involved. In Nairobi, the story that was told said, "*You are all capable people who have a commitment to participation but there are human and process factors that get in the way of doing it better. Our task is to try to overcome these obstacles.*"
- Stories can be crucial. It can be hard to get breeders interested in private-sector participation because they may feel threatened, but in the ICRAF study the story emerged that markets can support poverty reduction and breeders were encouraged to send out their own varieties, and so they became interested. Also, the private sector showed interest when it became clear it was good *for their business* to take part, not just something to do with "doing good" or "working for the poor."
- Studies can put people in unfamiliar situations or roles that get them thinking about new situations and issues, and this challenges their boundaries.
- We should provide some training for communities (as Mauricio Bellon described) so that something is "put back" into the pool of human capacity, instead of merely giving people baseball caps or T-shirts. In Mauricio's example, an explanation of the biology of maize production — which was not well understood by poor farmers — was given. They were interested and always remembered this provision of information later on

when CIMMYT staff made other field trips. People were hungry for knowledge and appreciated the idea of participating in the research in the future.

- It can be very difficult to communicate within decentralized organizations when participants are scattered across a number of different locations. With low budgets it is hard to get people together for face-to-face contact, which is crucial for some of this kind of work. A forum at other meetings to reflect on research might help build a culture of ILAC.
- We still need to think seriously about the question, *"Why is ILAC needed?"* The Wave 2 case study is a pilot of sorts, which needs to show results based on a learning approach to win support.
- Staff development and leadership training that is well done encourages participants to think more widely — "out of the box." If it is not labeled as learning/ILAC you might get better ownership and good knock-on effects and synergies.
- At the moment, staff development is a low priority across the board within the CGIAR. So there is a culture and system problem for getting this kind of thing started. The strong "expert" and "center of excellence" culture within the CGIAR system may be important barriers to learning and change.
- Recent research suggests that most learning from development projects takes place in the field, and least learning takes place at the level of top management, where risks of admitting errors are higher and may have important political and budgetary repercussions. So we cannot necessarily expect support from the top early on. Support may need to spread from smaller initiatives lower down in the organization.
- It is usually possible to get permission from the higher levels, but commitment beyond that may be more difficult to come by.
- Field immersion may be one of the keys to getting learning going among managers and scientists because the common goal in the CGIAR is poverty reduction. Few managers and scientists know much about the realities of poverty.

The importance of a concept note:

Andy Hall will produce a draft immediately. Doug Horton will contact Peter Matlon at the Rockefeller Foundation to keep him informed about what is going on. Ruth Meinzen-Dick and Michelle Adato will briefly report to Peter Matlon post-workshop about what happened.

All participants in the workshop will be sent the draft concept note on February 15, 2003. They will respond within a week. Other relevant CGIAR members will be drawn in informally on the basis of comments on the concept note in order to build support (or build this into the concept note idea). Doug Horton and Andy Hall will then arrange to send the final version to Peter Matlon.

Other activities that could contribute to a wider ILAC initiative include:

- Prepare an analytical description of the role of evaluation in the CGIAR and the individual centers. What kind of evaluation is going on? How is it staffed and resourced? Comparisons could be made with other organizations.
- Develop evaluation standards and good practice guidelines for the CGIAR. Such standards are common in the wider evaluation community.
- An inclusive Wave 2 initiative with Ursula Blackshaw to launch a project-level ILAC briefing.
- Another workshop to take stock of what has been achieved.

- Identifying other relevant and on-going initiatives within the CGIAR system that might be linked with ILAC. The CGIAR institutional change initiative is an obvious candidate.
- A summary of this workshop for DGs in the form of a briefing paper of three pages or so to build familiarity, support, and credibility (Michelle Adato, Doug Horton, and Ron Mackay to discuss and clarify).
- Obtain resources to support a mentoring role for the case studies, involving both backstopping and coordinating, in order to keep people in touch.
- Produce a background paper on ILAC concepts.
- Start a resource library. ISNAR would be a logical home. Doug Horton will look into this. He reports that it seems to build logically on the recently completed ISNAR project on Evaluating Capacity Development (http://www.isnar.cgiar.org/ecd/index.htm). This does not preclude activities by other CGIAR centers and projects.
- Establish An "ILAC Community of Practice." This may be part of the "springboard" initiative, and we would support them at the start.

A year could be the duration for such activities to determine if they are the start of something useful.

It was pointed out that the process of documenting and sharing the changes in perceptions among researchers and managers is important. Brock and McGee's *Knowing Poverty*[10] is worth reading. The methodological innovations suggested there (and elsewhere) should be given serious consideration. For example, under certain circumstances, experience has shown that there are much better ways to generate insights than using questionnaires.

Mining Wave 1 Studies

Participants continued to stress the vital importance of extracting as much information and knowledge as possible from the Wave 1 Case Studies. In particular, the following points were made:

- Pull out high-quality lessons by discussing them with a range of stakeholders. This may be a big initiative with a potentially high cost.
- Mount a "writeshop" to extract high quality lessons learned which could contribute to institutional learning issues. This would represent a lighter touch than the previous point and require fewer resources. It would capture the change in focus over time from a poverty focus towards an institutional learning focus. The utility of such a report would be highest if it was short.
- New activities could be undertaken such as the retrospective histories and engagement with scientists for the WorldFish Center and the AVRDC technologies. There is much to be learned from what is now known.
- What has been learned from the Wave 1 case studies should be used as a springboard for the Wave 2 studies. Wave 2 studies could then continue with an event of some kind with an outside facilitator.

[10] K. Brock and R. McGee, Knowing Poverty: Critical Reflections on Participatory Research and Policy (London: Earthscan, 2002).

References

Adato, M. 1999. From infrastructure construction to social reconstruction: Transforming institutional identity in South African public works programs. International Food Policy Research Institute, Washington, DC (Draft).

Alston, J. M., G. W. Norton, and P. G. Pardey. 1995. *Science under scarcity, principles and practice for agricultural research evaluation and priority setting*. Ithaca, NY: Cornell University Press in cooperation with the International Service for National Agricultural Research.

Argyris, C. 1977. Double-loop learning in organizations. *Harvard Business Review* 55 (5, Sept-Oct): 115.

Baker, Judy L. 2000. *Evaluating the impact of development projects on poverty: A handbook for practitioners.* Washington, DC: The World Bank.

Chambers, R. 2002. Memo to IFPRI, May 15.

Hall, A., N. Clark, S. Taylor, and R. Sulaiman V. 2001. Institutional learning through technical projects: Horticulture technology R&D systems in India. Network Paper No. 111. London: Overseas Development Institute Agricultural Research and Extension Network.

Hall, A., R. Sulaiman V., N. Clark, and B. Yoganand. 2002. From measuring impact to learning institutional lessons: An innovation systems perspective on improving the management of international agricultural research. Paper presented to the International Conference on "Agricultural Research and Development: Why has Impact Assessment not Made More of a Difference?," San José, Costa Rica, February (Draft).

Horton, D. 1998. Disciplinary roots and branches of evaluation: Some lessons from agricultural research. *Knowledge and Policy* 10 (4).

Maredia, Mywish; Derek Byerlee; and Jock Anderson. 2000. Ex-post evaluations of economic impacts of agricultural research programs: A tour of good practice. Paper presented to the workshop sponsored by the Standing Panel on Impact Assessment (SPIA) of the Technical Advisory Committee of the CGIAR on "The Future of Impact Assessment in CGIAR: Needs, Constraints, and Options," Rome, May 3-5.

Nonaka, I., and H. Takeuchi. 1995. The knowledge-creating company. New York: Oxford University Press.

Pingali, P. L. 2001. Milestones in impact assessment research in the CGIAR, 1970-1999. Special Report. Mexico: Standing Panel on Impact Assessment, Technical Advisory Committee of the CGIAR.

Annex 1. Workshop Program

February 4, 2003

9:00-9:30 Introduction and overview of the workshop
Introduction of participants

9:30-10:15 **Panel 1: Approaches to ILAC and thoughts on institutionalizing ILAC in the CGIAR:**

"Institutional learning: Origins, concepts and experiences," Andy Hall, ICRISAT
"Evaluation, learning and change: Some experiences and implications for the CGIAR," Douglas Horton, ISNAR
"Institutional Learning and Change to deal with an expanded poverty agenda: ICRISAT's experience," Ade Freeman, ICRISAT

10:15-11:00 Discussion
11:00-11:30 Coffee
11:30-12:15 **Panel 2: Experience with ILAC in non-CGIAR institutions and relevance to the CGIAR**

"Ideas for ILAC," Robert Chambers, IDS
"SIDA's experience with participatory action learning groups in Stockholm and Nairobi," Garrett Pratt, IDS
"A managerial perspective on institutional learning and learning organizations," Ursula Blackshaw, consultant

12:15-1:00 Discussion
1:00-2:00 Lunch
2:00-2:30 **Panel 3: Further perspectives on ILAC in the CGIAR**

"Institutional learning in impact assessment: Lessons from SPIA's benefit-cost meta-analysis of the CGIAR," David Raitzer, SPIA and CIFOR
"Comments on ILAC," Peter Matlon, Rockefeller Foundation

2:30-3:00 Discussion
3:00-3:30 Coffee
3:30-5:00 Brainstorming exercise on ILAC in the CGIAR. Facilitator: Garett Pratt
5:00-5:15 Discussion of following day's activities and organization of working groups

February 5, 2003

9:00-9:30 Discussion of results of Day 1 and of the program for Day 2
9:30-11:00 Working groups on ILAC project design. Resource persons assigned to work with case study leaders.

Group 1: Wave 1 case study researchers
Group 2: Wave 2 case study researchers

11:00-11:30 Coffee
11:30-12:00 Wrap up of working groups
12:00-1:15 Report back of Group 1 and discussion
1:15-2:15 Lunch
2:15-3:30 Report back of Group 2 and discussion
3:30-4:00 Coffee
4:00-5:00 Where to go from here (Commentators and Facilitators: Douglas Horton, Andy Hall, Robert Chambers, Ursula Blackshaw)
5:00-5:15 Wrap up

February 6, 2003

9:00-2:00 Case study researchers work on proposals for Wave 2 studies

Annex 2. List of participants in the ILAC workshop

Participant	Affiliation	Email Address
Adato, Michelle	IFPRI, USA	m.adato@cgiar.org
Bantilan, Cynthia	ICRISAT, India	c.bantilan@cgiar.org
Bellon, Mauricio	CIMMYT, Mexico	m.bellon@cgiar.org
Blackshaw, Ursula	Consultant, United Kingdom	ublackshaw@compuserve.com
Chambers, Robert	IDS, United Kingdom	r.chambers@ids.ac.uk
Echeverría, Ruben	SPIA, USA	rubene@iadb.org
Freeman, Ade	ICRISAT, Kenya	h.a.freeman@cgiar.org
Hall, Andy	ICRISAT, India	a.hall@cgiar.org
Horton, Douglas	ISNAR, The Netherlands	d.horton@cgiar.org
Karamura, Eldad	Regional Coordinator for Eastern and Southern Africa, INIBAP/ IPGRI, Uganda	e.karamura@inibap.co.ug
Johnson, Nancy	CIAT, Colombia	n.johnson@cgiar.org
Lewis, David	London School of Economics, United Kingdom	d.lewis@lse.ac.uk
Lilja, Nina	CIAT/Participatory Research and Gender Analysis, USA	n.lilja@cgiar.org
Mackay, Ronald	Consultant, Canada	r.mackay@cgiar.org
Matlon, Peter	Rockefeller Foundation, USA	PMatlon@rockfound.org
Meinzen-Dick, Ruth	IFPRI, USA	r.meinzen-dick@cgiar.org
Morris, Michael	CIMMYT, Mexico	m.morris@cgiar.org
O'Leary, Chris	IFPRI, USA	c.oleary@cgiar.org
Place, Frank	ICRAF, Kenya	f.place@cgiar.org
Pratt, Garett	IDS, United Kingdom	g.pratt@ids.ac.uk
Raina, Rajeshwari	National Institute of Science Technology and Development Studies, India	rajeswari_raina@yahoo.com
Raitzer, David	SPIA and CIFOR	raitzer@dsr.kvl.dk
Sulaiman, Rasheed	National Centre for Agricultural Economics and Policy Research, India	nagma@bol.net.in.
Watts, Jamie	IPGRI, Italy	j.watts@cgiar.org