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Institutional learning and change: a review of concepts and principles

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Introduction

To improve the performance of agricultural research, many international and national research organisations have embarked on impact assessment exercises. These exercises have estimated technology adoption and economic rates of return to research investments. Such exercises in ICAR have contributed to accountability, and provided evidence on whether public funds have been spent judiciously. However, for evaluation to be effective, it must encompass both accountability and learning objectives. It appears that less emphasis has been given to the latter. Hall et al (2003a) state that impact assessment efforts (in international research arenas) have not yielded desired results because of the weak diagnostic power of commonly used impact assessment techniques. These techniques fail to recognise research as a complex process of interactions shaped by the habits and practices of those involved which are critical for improving research performance.

This policy brief sets out the conceptual and empirical underpinnings of a learning-orientated monitoring and evaluation approach known as Institutional Learning and Change (ILAC) and discusses options for learning-oriented interventions and policy research. This approach is being pioneered by a number of CGIAR centres (see Watts et al 2003) and by NCAP and its partners, building on their earlier work that locates research efforts in the framework of an innovation system (see Hall et al 2003b).

The challenge faced by agricultural research

The Indian agricultural research and extension system was mainly designed to tackle food deficit problem through increased food production. Several reforms have been initiated in the recent years to change these systems. The research agenda of today and the contemporary development scenario into which it fits is altogether more complex and multi-faceted. And this new context is itself evolving very rapidly (see Box 1)

It is now widely recognized that for agricultural research to remain relevant it needs to go beyond restructuring within the

Box 1 The evolving context of agricultural research

- An increasing need to be accountable to public policy goals such as poverty reduction.
- Rapid technological change offering new opportunities, but often associated with new patterns of knowledge ownership and other institutional considerations.
- The emergence of a large number and range of organizations associated with agriculture and rural development, including the private sector.
- Expectations that working norms will be more participatory and that partnership needs to become a key way of reconfiguring research capability.
- Globalization and the need for continuous innovation to remain competitive in local and international markets
- The need to pursue both economic growth and social welfare goals

confines of the old agricultural research system model— although these may be an important starting point (Byerlee and Alex 1998). Recent analysis of agricultural research in the framework of an innovation system (see box 2) suggests adoption of a more flexible and adaptive philosophy that recognizes that habits, practices and approaches – i.e. institutional arrangements are always inherently experimental and changing incrementally through experience and learning (Hall et al 2004, Raina, 2003).

Institutional learning and change: Principles

The main contention of the ILAC approach is that institutional learning (see Box 2 & 3) is the central process through which the relevance and effectiveness of research arrangements are improved. ILAC can be defined as the process through which researchers, their partners and the systems in which they are located, change and adapt approaches, relationships and behavior through an explicit process, reflecting on experiences, progress and achievements. In this way, it concerns changing the norms, habits and conventions associated with planning, decision-making, conducting research and communicating its findings.

Box 2 ILAC in the framework of an innovation system

The innovation framework seeks to explain how, through interaction and learning, organizations create or acquire and use knowledge and build up skills to deal with changing and unknown futures. The framework recognizes that relationships and interactions between agents involve non-price relationships and that while the transaction costs theory of institutions (for example North 1990) cannot explain the dynamics of such systems, an interactive learning theory of institutions can (Lundvall et al 2002)

At its simplest, an innovation system can be described in terms of three elements:

- (1) *all* the *organizations* and *individuals* involved in generating, diffusing, adapting and using new knowledge;
- (2) the *interactive learning* that occurs when organizations engage in generation, diffusion, adaptation and new use of knowledge, and the way in which this leads to innovation (i.e., new products and processes); and
- (3) the *institutions* – rules, habits and conventions – that govern how these interactions and processes occur.

The framework can be used to reveal the nature of innovation process at the project, sector, regional and national level.

The capacity to innovate is an adaptive capacity where learning is a central process. This includes technological learning, but also learning in the sense of new approaches, new configurations of partners, new ways of achieving stated goals – referred to as institutional learning. This suggests that if research systems are to maintain their relevance to a rapidly evolving development scenario they too must learn how to adapt and reconfigure.

In other words, ILAC is a framework of principles that can be used to enable learning and change. ILAC is not one specific activity. Instead it is a set of procedures and options that can enhance learning at the level of the individual, the organization or the system. The precise nature of these options remains an empirical question and one that the authors are currently investigating. However, these options range from skills development, and the use of an action research methodology, to the deployment of more interactive policy research processes. Box 4 details some of these options.

There are three critical implications of this for initiatives that seek to pursue and promote ILAC in the research systems like ICAR and SAUs.

Firstly, 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*. Organisations should monitor this capacity development through indicators of change in decision making, research design, behaviour or any relevant habits and practices.

Box 3 Institutional learning

- The concept of institutional learning concerns the process through which new ways of working emerges. It concerns learning how to do things in new ways.
- It asks the question 'what rules, habits and conventions have to be changed to do a new task or to do an old one better?'
- The learning process is very context-specific and consequently institutional learning can lead to great diversity in approaches, partnerships, and strategies.
- Institutional learning is an inevitable and intuitive process, a fundamental property of all social systems (Hall et al 2003b). Where programmes have explicit, systematic learning objectives and procedures, research management strategies can evolve and progress rapidly (Horton 1998) .

Secondly, these ILAC initiatives need to take place not just in organizations in isolation; rather **learning capacities have to be developed at the innovation system level**. In practical terms this means that in any given context, the learning and reflection exercises should ideally include the participation of all the stakeholders relevant to a particular research and innovation task, including those involved in its outcomes.

Thirdly, traditional approaches for information dissemination are probably less valuable to ILAC initiatives as it is the **learning process and other behavioural changes that need to be promoted**. It may be useful to promote ILAC by creating or strengthening coalitions of interest around new forms of behaviour and practice. Clearly conventional information dissemination is still important. However, one advantage of networking or building a community of practice is that it builds momentum, broadens the constituency of an ILAC initiative, 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 research system like ICAR where institutional and

Box 4 Options for ILAC activities

- Skill development in learning, reflection and partnering
- Use of pilot action research projects
- Development of institutional histories
- Stakeholder reviews of projects
- Use of multi-agent policy working groups
- Foresight approach using a wider cross section of panel members from different interest groups
- External reviews
- Training in innovation systems analysis and the use of such tools in diagnosis and planning

organizational changes are generally driven from the top. In contrast an ILAC philosophy suggests the need for context specific institutional and organizational arrangements that continuously adapt to deal with changing circumstances. This sort of bottom-up, learning-based institutional development can only take place if the wider institutional and policy environment enables this sort of approach. This represents a significant challenge in institutional and policy settings that have a tradition of magic bullet, one size fits all blueprints and pro-forma organizational change where prescribed structural changes can camouflage *business as usual* and the perpetuation of old behaviours, habits and practices. Building links between practice and policy is therefore central to an ILAC initiative because without it policy learning does not take place and enabling environments will remain hostile to a bottom-up learning-based process of institutional change.

ILAC – implications for policy research

While ILAC is more in the nature of a process or intervention, policy research still has an important role to play. However, this needs to be in the form of policy research that helps bridge the gap between practice and policy and which integrates more effectively with the policy process. Current thinking on how to achieve this underscores the need to design, negotiate and implement change (e.g. new policies and institutional arrangements) with the full participation of the stakeholders involved – including those in the policy arena (Horton 2002; Horton et al, 2003; ODI 2004) This mixed approach to policy

research is referred to as **interactive policy research**. It signifies the iterative, systems nature of the approach and distinguishes it from the conventional linear policy approach critiqued by, for example, Sutton (1999).

The perspective of removing the (notional) distinction between the researched and the researchers is emerging as central to much of the debate about good practice in development (Abbot and Guijt, 1998). There is considerable literature on ways of pursuing such approaches (see Bainbridge et al. 2000). Part of the ILAC agenda is also to help policy researchers learn how to operationalize this interactive policy approach.

Ways forward and current activities

Quite clearly ILAC is a theory of change that is still in the process of developing empirical focus. By way of conclusion Box 5 gives a brief description of the types of activities that are being tried by the authors as ways of promoting ILAC in agricultural innovation.

The suggestion is not that these are a definitive set of activities that will promote ILAC, nor even that all of them will be successful. Rather these are options that are being tried in an action research framework. The purpose is to draw more general lessons about which options and indeed which combination of options - or at least starting points - could be most effectively employed to bring about the institutional changes needed to strengthen the capability of agricultural innovation systems in India.

Box 5 ILAC options currently being tried

Facilitated Capacity Development- strengthening a post-harvest innovation system by bringing together relevant actors. Recent activities have focused on building links and facilitating collaborative programmes at the Central Plantation Crops Research Institute (CPCRI), with organisations with experience in marketing value added post harvest products such as State Poverty Eradication Mission, Kerala (Kudumbasree) and an NGO Technology Informatics Design Endeavour (TIDE)

Institutional history and analysis—documenting and analyzing evolving process and institutional arrangements in innovation systems and drawing lessons. Examples include:

The development and diffusion of bio-mass based energy efficient dryers and stoves in Kerala and Karnataka by an NGO, Technology Informatics Design Endeavour (TIDE), in partnerships with entrepreneurs, local NGOs, private sector, public sector organizations, and community based organizations.

Institutional and organizational changes taking place in the medicinal plants innovation systems in response to the emergence of new markets and the corporatization of a craft based industry

The systems failure and consequent decline of the lac sector

Evolution of the watershed research in India in response to the emerging situations

Capacity Development on Rural Innovations- Organising a workshop at ICRISAT to promote the lessons from the application of the innovation systems framework in understanding the post harvest sector and planning new research projects.

Curricula Interventions-Exploring opportunities to include these new learnings in the curricula of agricultural and management training institutions

Networking- Developing a network of individuals and organisations interested to apply the innovation systems principles in their working environment.

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