Learning Alliances with Development Partners: A Framework for Scaling Out Research Results

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Introduction

How can research findings be translated into effective development outcomes that improve the livelihoods of the rural poor on a broad scale? Questions like this are often raised regarding international agricultural research, and the Consultative Group (CG) centers in particular, given their global mandates of food security, improved livelihoods, and sustainable resource management. In the case of the International Center for Tropical Agriculture (CIAT, the Spanish acronym), the internal debate about how best to move from research to development outcomes through "going to scale" or "scaling out" was the subject of the Annual Review in December 2002. This chapter forms part of that debate.

In the past, CG centers sought to disseminate their research through scholarly publications, seminars, and training sessions targeted towards national agricultural research systems (NARS). Many of these efforts used a traditional Transfer of Technology (ToT) approach in which it was assumed that technological advances generated by a CG center could be transferred through training or publications to NARS scientists who would, in turn, deliver these improved practices to the farmers. Although important advances were made—most notably the productivity gains of the Green Revolution-the ToT model has been widely criticized. As a result, the CG has identified, developed, and to varying degrees adopted a more nuanced approach using tools such as farmer participatory research (FPR) to better identify farmer needs and adapt technological solutions to myriad local conditions. However, FPR also faces limitations when the issue of scale is brought into play. To be effective, participatory approaches require a high level of interaction between researchers and farmers, and while millions of small-scale farmers exist throughout the developing world, the number of CG scientists engaged in FPR is limited. Thus, only a small

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fraction of the rural poor can be reached directly through these methods (Gonsalves, 2001).

While some centers invested in strengthening NARS' capacities to carry out participatory research, international policies of lean government and reduced public sector spending have reduced both the capacity and quality of NARS in large parts of the developing world. This is clearly the case in most of Latin America and parts of Africa, where some NARS have been abolished completely to be replaced by private sector technical assistance firms.

At the same time, international donor agencies that support agricultural research have begun to demand concrete development outcomes from the centers they support. These demands tend to focus on ex post impact evaluations and often seek to justify, using cost/benefit analysis, monies invested in agricultural research. Within a context of weakening NARS, persistent global problems, and limited staff, many CG centers have difficulties showing the quality and quantity of impacts that are increasingly requested of them. While few question the quality of the science, many ask about its appropriateness for the rural poor and whether the results are actually reaching these populations. How can research best serve them?

This chapter describes work by CIAT's Rural Agro-enterprise Development Project to forge a stronger link between research and development (R&D) outcomes through the promotion of Learning Alliances (LAs) with international development agencies. Such alliances seek to:

- Feed research outputs into existing or proposed development activities,
- Track use, adaptations, improvements, and adoption of methods and tools by users over time,
- Identify and document development outcomes influenced by CIAT's work more clearly, and
- Foster long-term, collaborative inter-organizational relationships that improve overall collaboration and effectiveness, both of development practitioners and researchers.

The chapter includes a review of key inputs that led to the idea of LAs, a section describing the concept in more detail, a comparison between LAs and Learning Selection processes, two brief case profiles, and conclusions and further research questions.

Inputs to the Process

The LA approach is the result of a mixture of journal articles and CIAT's institutional history driven by a long process of personal reflection about how to generate better development outcomes from a research perspective. This section seeks to provide the reader with an overview of that process in

the hope that it will contribute to a greater understanding of the LA approach in practice.

A great deal has been written about the idea of scaling out or going to scale. For the purposes of this chapter, we can understand the process of scaling up as one that "leads to more quality benefits to more people over a wider geographic area more quickly, more equitably, and more lastingly" (Gonsalves, 2001). This process has important temporal, spatial, institutional, economic, technological, and equity components that should be viewed as complementary to one another. Hence the goal of scaling can be understood to be one of augmenting the reach of lasting, positive development outcomes across space, populations, and time. The question then becomes, how can a research organization best achieve this in an environment of weakening traditional partners, limited funding, and global mandates?

Denning (2001) proposes eight areas of intervention and investment to support processes of scaling up from the perspective of a CG center. These include linking to policymakers, higher education institutions, basic education institutions, seed supply systems, community organizations, product marketing systems, extension and development organizations, and research institutions. In sum, this is a more systemic focus where the research center seeks to effectively cover the continuum from basic science to downstream development outcomes. Of particular interest here is the importance given to working in partnerships with extension and development organizations. As Denning (2001) notes, "by directly engaging in the development process through strategic partnerships with development institutions, the impact of research will be realized more quickly and on a greater scale than with classical technology transfer approaches". The challenge here is for research organizations to re-think their role, organizational structure, values, and final goals in such a way that they can meaningfully engage with development agencies in confronting challenges at a global scale.

Achieving successful collaboration, however, is easier said than done. Although the potential for positive synergies is apparent, diverse institutional value and reward systems need to be negotiated. As Roper (2002) discusses, researchers and development practitioners differ in their perspectives on learning. While researchers value the development of theory for its own sake, academic credentials, and complex research methods, development workers seek practical solutions to pressing problems, respect field experience and results, and tend to favor simple, effective methods for their work. A successful collaboration between the two camps requires a common language that acknowledges these differences and, at the same time, identifies common ground or purpose, complementary skills, or strengths, and invests in the creation of personal and organizational trust among participants. Initial transactions costs and investments for these relationships are high. As a result, the selection of adequate, long-term partners is essential for positive results. However, once established, these relationships create new knowledge and improved practice. There is no end product as such; rather, there are processes, a series of products, and various configurations of relationships that are ongoing, fluid, and adaptable to the needs of the moment (Roper, 2002).

Finally, in a positive relationship established between researchers and development practitioners, results will include not only improved development outcomes, but also processes of institutional learning and change. Solomon and Chowdhury (2002) identify various factors that facilitate learning and contribute to effective partnerships. These include (1) an orientation towards learning and change, (2) adequate planning and resources, (3) positive collaborative experiences and relations of mutual respect, (4) a shared paradigm of evaluation for learning, and (5) clear links between learning and action. These factors also must be considered when collaboration with development partners is discussed.

This brief review suggests that effective processes of scaling out between research organizations and development agencies require clearly defined roles and responsibilities based on trust and mutual respect. These relationships can be long-term, flexible, and evolutionary in nature, and include an important learning component. Finally, given the transaction costs involved in their creation and the limited capacity of research organizations, it would seem that a few high-quality relationships would be preferable to many low-quality ones. Processes of scaling out achieved in this fashion would contribute to improved livelihoods for larger numbers of the rural poor.

How is CIAT as a CG center positioned to participate in the kind of scaling out process described above? What strengths or previous experience can CIAT bring to the table? Previous CIAT experience with training as a tool for scaling out provides another important input for the LA approach.

The Center ran a complete training program from its inception until the mid 1990s. This program included in-house training carried out at CIAT headquarters in Cali, Colombia, as well as in-country training carried out with NARS partners in various parts of the tropics. The major thrust of this program was to build scientific capacity of partner organizations through training in CIAT methods and tools. As such, this process can be considered a knowledge transfer. This paradigm suffered some changes during in-country training sessions where tools were adapted to local needs, but the focus remained on teaching NARS scientists how to replicate what CIAT knew how to do. Benefits from this program included wide geographic coverage, and strong personal and professional relationships with a generation of NARS scientists who have now become decision makers. Less attention was paid to how the scientists used what they learned and what were the results from their work.

The training program was abandoned in 1995, only to be resurrected the following year with a focus on capacity building for natural resource management (NRM) and the production of a series of guides for trainers. Over 400 participants from nongovernmental organizations (NGOs), universities, and NARS received instruction in the use of these training tools in Colombia and Central America from 1997 to 2000. While this marked a departure from an exclusive focus on NARS as engines for scaling out research results, limitations to the "training of trainers" approach were found. Lessons learned from this work include:

- Post training follow-up is needed to move from book knowledge to applied and locally relevant knowledge.
- Large organizations make better partners due to greater autonomy, and capacity to implement training results.
- CIAT research outputs, when translated into training materials, are widely accepted.
- There is no "one size fits all" ideal mix of training materials. Clients need a menu to choose from, depending on their needs at the time of training.
- It is important to move from a focus on training to one of capacity development, from short-term, one-off actions to long-term relations based on dialogue and collaboration.

Formal and informal consultations with development agencies, some of which had received training in the NRM guide series, complemented academic and institutional sources of information. During a series of meetings in Honduras, important complementarities between CIAT and international NGO staff, skill bases, funding, reach, and roles came into focus (Table 1).

 Table 1. Complementarities between international non-governmental organizations (NGOs) and research organizations.

Areas	International NGOs	Research organization
Staff and skills	Large staff with skills focused on specific rural development processes. Strong field presence and capabilities. Informal in-house learning processes with limited flow across projects or countries. Diffusion dependent on personal knowledge and contacts.	Small, specialized staff with highly developed research skills. Limited field presence and capabilities. More formal and systematic in-house learning capacity focused on extracting basic principles for use by others. Diffusion through mainly academic channels.
Funding and reach	Medium to large development projects with coverage at the sub- national, regional, and international levels. Potential to reach hundreds of thousands of farmers.	Small, focused research projects limited to pilot sites in selected countries. Potential to reach hundreds of farmers.
Role	Implement development projects that seek improved rural livelihoods. Increasing shift towards the facilitation of local processes rather than direct project execution.	Implement research projects that increase knowledge about how to contribute to improved rural livelihoods, reductions in poverty, and sustainable resource management.

In addition, these agencies expressed interest in exploring a new way to work together with researchers that went beyond the traditional scope of training. Topics included research focused on their needs and those of their final beneficiaries, documentation and learning from experiences, the promotion of policy dialogue with municipal to national governments, and the development of joint R&D projects. From the point of view of development practitioners, an international research organization such as CIAT is well positioned to support such relationships not only through the provision of existing scientific findings, but also by facilitating processes of documentation and learning at various scales.

The need for increased, effective, and sustainable development outcomes, and a revision of limitations encountered in training and consultations with development agencies, provided the basis for the formulation of a new, partnership-centered approach between a research organization and development agencies. This approach strives to provide a framework to link R&D organizations, understand how knowledge flows between them, capture adaptations made to methods and tools, as they are adapted to diverse situations, and begin to bridge the gap between research agendas and development needs. The following section provides an overview of the idea of LAs.

Learning Alliances as a Vehicle for Scaling Out

In the context of this chapter, an LA can be understood as a process undertaken jointly by R&D agencies through which research outputs are shared, adapted, used, and innovated upon. This is done to strengthen local capacities, improve the research outputs, generate and document development outcomes, and identify future research needs and potential areas of collaboration.

The LA process begins with the identification of research outputs or development outcomes susceptible to scaling out by partners. It is followed by one or many adaptation and learning cycles, and is completed with the detection of new research demands, which feed back into the research process, and contribute to the generation of improved livelihood or policy outcomes. Figure 1 shows the LA process.

Several key issues need to be managed for an LA to be successful, as outlined below.

Clear objectives

Clear objectives based on the needs, capacities, and interests of the participating organizations and individuals must be defined. What does each organization bring to the alliance? What complementarities or gaps exist? What does each organization hope to achieve through this collaboration? Answers to these questions, and an overarching cooperative agreement are helpful first steps. In the real world, however, clarity on these issues is often only achieved through practice.

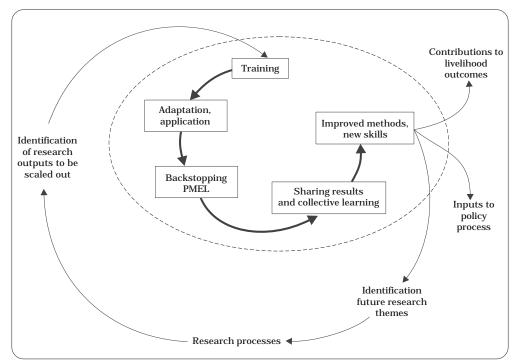


Figure 1. The Learning Alliance process (PMEL = participatory monitoring, evaluation, and learning).

Shared responsibilities and costs

An LA seeks to benefit both parties; therefore responsibilities and costs should be shared. This is imperative at the beginning of such relationships where funds for scaling out (from the research side) or training (from the development side) are often tied to project budgets that are difficult to modify in the short term. In the future, joint proposals for funding may present a good vehicle for supporting these activities.

Outputs as inputs

In the myriad contexts in which rural development occurs, there are no set answers. As such, LAs view research outputs as inputs to processes of rural innovation that are place and time specific. Methods and tools will change as users adapt them to their needs and realities. Understanding why adaptations occur, if they are positive or negative in terms of livelihood outcomes, and documenting and sharing lessons learned is the goal.

Differentiated learning mechanisms

Learning Alliances have diverse groups of participants ranging from rural women to extensionists to NGO managers to international scientists. Identification of each group's questions and its willingness to participate in diverse aspects of learning processes is key. Flexible but connected methods—ranging from participatory monitoring and evaluation to tried and true impact assessment—are also needed. A critical research issue is how different learning processes interface with one another, and how this interplay affects development outcomes.

Long-term relationships

Rural development is a process that stretches over many years. To effect meaningful change and to understand why that change occurred requires long-term, stable relationships capable of evolving to meet new challenges. These relationships should orient researchers' agendas towards key issues that contribute to positive change and, on the other hand, inform development practitioners of new or improved methods or tools that improve their practice. The transaction costs involved in establishing and maintaining LAs and their long-term nature indicate that quality should take precedence over quantity.

Based on these key issues, how should a research organization select adequate partners for LAs? A relatively simple way of going about this is to use a scoring tool such as a matrix based on key criteria identified by the research organization. Table 2 shows an example of such a tool adapted from Franzel et. al. (2001), and applied to rural agro-enterprise partners.

Selection criteria	Partner organization		
	1	2	3
Reach (areas and number of farmers)	Н	Н	L
Interest in rural agro-enterprise development	Н	М	Н
Use of participatory approaches	М	М	М
Availability of staff, resources, good management	Н	Н	М
Openness to change and new practice	М	Н	Н
Commitment to monitoring, evaluation, and learning	Н	М	Μ
Accessibility (distance)	Н	L	М
Shared objectives	Н	М	М
Time and resources that CIAT spends on them	L	L	Н
Potential value per unit effort	H: agreement on methods needed	M: Limited experience in agro-enterprise development	L: Small organization

Table 2.	Matrix for assessing the potential contribution of partner organizations in Learning Alliances
	(partners can be scored H-high, M-medium, or L-low on each criteria).

Once LAs are operational, what use are they in terms of scaling out? Potential uses for LAs can be divided among direct results, contributions to development outcomes, and higher level results. Direct results are those from the learning process itself and include improved methods, tools, and approaches adapted to varying conditions, as well as increased knowledge about processes of institutional learning and change. Learning Alliances in the area of rural agro-enterprise development can also contribute to improved livelihood outcomes, and should be assessed in terms of increased competitiveness of rural economies and value chains, employment generation, and reductions in rural poverty. Finally, higher level results, which combine direct results with livelihood outcomes, can contribute more focused research agendas, and provide inputs for improved rural development policies.

Learning Alliances and Learning Selection

How do LAs relate to processes of innovation and change described by others? Are they complementary or contradictory? This section contrasts LAs to one model of technological innovation to see how they compare.

Douthwaite et al. (2002) present a conceptual model for explaining innovation in agricultural engineering called Learning Selection (LS). This approach posits four steps or stages through which a technology evolves on its way to being widely adoptable. These are: (1) bright idea, (2) best-bet, (3) plausible promise, and (4) wide adoptability. Throughout this process, the R&D team interacts with users in different fashions, often informally, to move a technology from development to expansion. In this process, much of the innovation needed to ready a technology for rapid expansion comes not from scientists and engineers, but from users themselves. During the innovation process, researchers assume a role of selectors whereby changes that increase the robustness of a given technology are "selected" and promoted, while others are discarded. A widely adopted technology, following this model, contains some of the researchers' original ideas, but is composed mostly of user innovations that have been identified and selected throughout the process. This model of innovation is much more dynamic and realistic than the traditional ToT model when applied to hard technologies. How does the LA approach and its focus on knowledge-based or soft technologies fare when compared to the LS conceptual model?

Certain similarities exist between both models because they attempt to promote processes of adaptation and improvement between researchers and users. Key similarities include the need for a clearly defined output (or technology) to share with potential users, the importance of selecting motivated partners who face a real need for the technology in question, and a strenuous learning system that allows researchers to follow change in the technology and support positive innovation. The LA approach complements the LS model in a variety of ways. First, there is an explicit focus not only on the robustness of the technology itself, but also on understanding the institutional learning and change process between researchers and development partners that leads to improved soft technologies. Second, results in areas indirectly related to the technology itself—development outcomes and higher-level outcomes, such as information for policy formulation or improved research agendas—are included in the scope of analysis. Finally, the LA approach advances the LS model in that it examines soft as well as hard technologies, thus providing inputs to assess the effectiveness of the LS model in the case of soft technologies.

Learning Alliances in Practice: Two Cases

The Rural Agro-enterprise Development Project of CIAT has developed a Territorial Approach to Rural Enterprise Development comprised of four interrelated components (Lundy et al., 2002):

- (1) Formation of working groups on rural enterprise development within a territory;
- (2) Identification of market opportunities;
- (3) Analysis of product chains and the design of strategies to improve the competitivity of these chains, and
- (4) Supply of sustainable rural business development services.

The Territorial Approach is the sum of these components and may be considered the technology being scaled out using the LA approach. This section will describe that process briefly as it applies in Nicaragua and east Africa.

In collaboration with CARE-Nicaragua, the Territorial Approach to Rural Enterprise Development is being applied in 10 municipalities in the Departments of Estelí and Matagalpa in Nicaragua. A working group on rural enterprise development has been formed in each department with the participation of a varying mix of local NGOs, farmer or community organizations, and for-profit technical assistance firms. These working groups have carried out a rapid diagnosis detailing the enterprise potential of their areas, existing enterprises, and support services, and identified market opportunities. During 2003, they will prioritize market opportunities and design strategies to increase their competitiveness in the selected product chains. The LA as originally negotiated will finish in July 2003 with the design of these competitivity strategies for 10 product chains.

Formal time for learning and reflection are built into the work plan after the first 6 months, and again at the end, while informal learning and documentation occur throughout the process. Of interest here is the variety of learning agendas ranging from those of community organizations to those of the international research center facilitating the work. An effort is being made to link these agendas in a coherent fashion so as to draw more complete conclusions about the process.

Based on work thus far, direct results achieved include improved methods for working group formation and market identification, augmented skills among participants, and the generation of locally adapted versions of CIAT tools. Early indications show that higher-level results may include changes in departmental development strategies, as well as links to other rural economic development activities funded by common donors in other parts of Nicaragua. A full evaluation of this process was carried out in the second semester of 2003 to more completely assess results.

A second example of an LA in practice is the collaboration between CIAT and the Catholic Relief Services (CRS) in east Africa. Based on the same technology—the territorial approach to rural enterprise development—an LA was established between CIAT and CRS for six countries of east Africa (Ethiopia, Madagascar, Kenya, Tanzania, Uganda, and Sudan). In this case, the LA process occurs at a regional scale, with CRS country offices being the direct participants. Within each country, the CRS office selects a pilot region where the technology will be implemented, and trains local partners in its use. This LA is slated to finish during 2004 with the design of strategies for improved competitivity for selected product chains.

Results achieved to date include changes made to the territorial approach to adapt it to African conditions (the technology was developed in Latin America), an increased use of participatory tools and techniques for market identification, as well as new skills learned by CRS staff in east Africa. Possible higher-level results include the reformulation of CRS enterprise development strategy for the region, and a proposal to replicate the process in additional countries in eastern Africa, southern Africa, and Latin America and the Caribbean.

What lessons can be drawn from these two experiences? First, a strong demand exists for an LA approach. Both CARE and CRS have repeatedly expressed their interest in a long-term, stable relationship through which research results could be scaled out and development outcomes improved. The philosophy of collaboration and learning appear to have struck a chord with these two development agencies. Second, a cost-sharing approach is feasible. In both Latin America and east Africa, costs for the LA are shared among the development agencies and CIAT. Third, the territorial approach to rural enterprise development is seen as a good way to improve development outcomes in the field or rural enterprise development.

Finally, the LA approach appears to be an effective vehicle for scaling out with limited resources. Prior to implementing the LA approach, CIAT was able to reach two municipalities directly in Central America and three sites in east Africa. As a result of this strategy, CIAT research findings are now being implemented and improved upon in six countries in east Africa and 10 new municipalities in Nicaragua, with no change in CIAT staffing. Additional possibilities for scaling out this process have also been identified. These can be grouped into "geographic spread" or "organizational spread" categories. In the geographic category, repetition of the LA approach is being discussed with additional partners in Africa and Latin America, and would open the possibility of inter-organizational sharing of results. In the organizational category, potential avenues of scaling out include collaboration with CRS Latin America in eight countries, and with CARE in four countries in Central America. A key challenge facing the LA approach at this juncture is how best to mix funding sources between development and research to take advantage of these opportunities.

Questions for Further Research

Experience to date suggests that the LA approach is an effective way for scaling out results and may serve as an appropriate vehicle for carrying out more systematic research on the process of scaling out itself. As the approach evolves, however, additional research needs to be conducted on the topics given below.

- (1) When is it most appropriate to engage development partners during the research process? Some authors posit that stakeholders enter once researchers have defined their "best bet" (Douthwaite et al., 2002), while others cite the need for much earlier involvement of users in the process (Denning, 2001). What difference does earlier or later involvement in the research process make in terms of later scaling out of results?
- (2) The use of a more nuanced model of scaling out where issues such as adaptation-, innovation-, and context-based best practice in a given time and space force us to look beyond simple, linear explanations of this process. How do institutional models and learning processes play a role in scaling out? Can they be promoted as a way to speed it up? Should they be treated as a research issue in their own right? Should CIAT and the CG pay more attention to this area when designing and assessing processes of scaling out?
- (3) The use of an LA approach requires a willingness to negotiate research agendas between scientists and development practitioners. Is it feasible to expect research centers to shift from a tradition of researcher- or donor-led science to one of demand-led science where the research agenda is structured on concrete demands from development partners? What impact would such a shift have on

scientific quality, applicability, and final contribution to livelihood outcomes? How would this shift affect donor willingness to support research activities?

(4) Shifting from a paradigm of training to one where interaction with partners is characterized by joint learning requires specific skills, such as an ability to negotiate institutional agendas, a capacity to conduct research on process, not just product outputs, and the ability to relate discrete research findings to a larger context of development outcomes. Do research centers have the necessary skill base to effectively carry out LAs on a large scale? What skills would be needed to achieve this? Are donors willing to support additional staff with the skills necessary to make an LA approach work?

Conclusions

A more coordinated approach between R&D agencies offers the potential for positive synergies and improved outcomes to support the livelihoods of the rural poor. To achieve this in practice, however, negotiations on organizational and personal goals and structures are necessary. A clear mutual understanding needs to be developed to underpin collaborative efforts in the mid to long term. The structuring of this relationship and identification of key factors that facilitate it is, in itself, a research issue. The question facing the CG centers is one of remaining relevant not just scientifically, but as effective partners helping to resolve global issues such as poverty in a creative and sustainable fashion. This goal is too big for any one institution or even group of institutions. To achieve meaningful change, researchers and development practitioners need to join forces in effective alliances where skills and funds complement one another, rather than reinventing the wheel. The LA approach is an attempt to provide a framework for such collaboration.

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