



Farmers are interested to experiment on their own farms through Farmers' Field Schools. Photo: ICRAF

Going to scale

What we have garnered from recent workshops

Julian F. Gonsalves

Agricultural and Natural Resource Management (NRM) research and development projects often have too little impact in terms of farmers reached, poverty reduced, sustainability of the development process or influence on policy. Researchers and development workers are therefore constantly being challenged by colleagues, funders and policy makers to maximise impact and "scale up" the development process. In the present situation of reduced financial support to agricultural research and development (R&D) the interest in "Going to scale" is growing. Larry Harrington and colleagues (2001), in a paper presented at the NRM research meeting in Penang, warn us that if insufficient attention is given to scaling up, "we will have failed in our purpose of contributing to poverty alleviation, food security and environmental protection".

Evaluations of programmes are necessary to understand which approaches to scaling up are most effective or to show the effectiveness of new approaches, for example in participatory development. In the past two years, there have been at least four international events dealing with scaling up. ICRAF sponsored a workshop in September 1999, at Nairobi, looking primarily at how agroforestry innovations should be scaled up within a research and development framework. Two events were sponsored by the CGIAR NGO Committee and the Global Forum for Agricultural Research, (one held in October 1999 at the World Bank in Washington and the other in April 2000 in Silang in the Philippines). The most recent event focussed a bit more directly on NRM research: this was held at Whitstable, sponsored by the Natural Resources Institute UK in January 2001.

The approach, in at least three of the four workshops, was to use cases and participants' own experiences to derive common principles. Although the case analysis did not allow for drawing up any general models, some important principles and lessons were identified at the workshops. The goal of this article is to discuss these principles and lessons with the purpose of improving our general understanding of the process of scaling up. Some references are also made to relevant important literature.

Several of the cases presented in the Philippines workshop are included in this issue of the LEISA Magazine.

What is scaling up?

The first emphasis of scaling up is on reaching *larger* numbers of people. Also, the need to get specific innovations and methodologies accepted by conventional (mainstream) research, development and policy institutes in order to bring about institutional change is sometimes referred to as scaling up or "mainstreaming", especially by proponents of participatory approaches (Long, 1999).

With the renewed focus on poverty alleviation, questions of equity and distribution of benefits are invariably raised. Given the wide interest in the subject, it is probably not surprising that participants in the Philippine and Washington workshops arrived quite quickly at the following multidimensional understanding that *scaling up leads to more quality benefits to more people over a wider geographic area more quickly, more equitably and more lastingly*. This operational definition has served as a basic assumption and starting point in subsequent meetings.

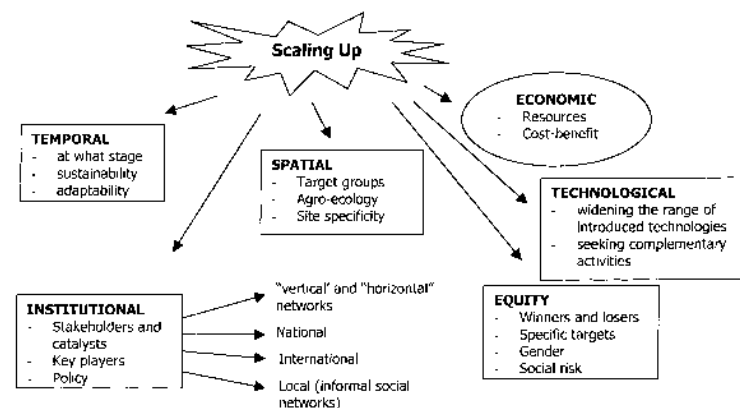


figure 1: A framework to summarise participants' understanding of the contexts of scaling up

Figure 2:
GOING TO SCALE
More Benefits, More People, More Quickly

As one goes up higher the institutional levels (vertical scaling up), the greater the chances for horizontal spread; likewise, as one spreads farther geographically (horizontal scaling up), the greater the chances of influencing those at the higher levels.



VERTICAL SCALING UP is higher up the ladder. It is institutional in nature that involves other sectors/ stakeholder groups in the process of expansion - from the level of grassroots organizations to policy-makers, donors, development institutions and investors at international levels.

HORIZONTAL SCALING UP is geographical spread to cover more people and communities and involves expansion within same sector or stakeholder group. Others refer to it as a scaling out process across geographical boundaries. Achieving geographical spread is also realized through scaling down - increasing participation by decentralization of accountabilities and responsibilities particularly in breaking down big programs into smaller programs/projects.

Types of scaling up

Among the first to discuss types of scaling up approaches was Clark (1991) who, in examining the work of NGOs, distinguished between three types of scaling up: *project replication*, *building grassroots movements* and *influencing policy reform*.

In their paper to the Philippine workshop, Uvin and Miller discuss in considerable detail a taxonomy of scaling up. They suggest looking at scaling up in terms of structure, programme, strategy and resource base, and propose four types of scaling up: quantitative, functional, political and organisational (Box 1).

Carl Taylor, on the other hand, using primarily his experience in the health sector, has suggested four models of going to scale: *blueprint*, *explosion*, *additive* and *biological* (see box Carl Taylor p.14). He makes a case for what he calls a biological model for scaling up involving a number of stages. Action usually begins at the community level and starts with a few simple ideas. With success more ideas are tested. When a cluster of innovations are worked out, that community based action becomes a basis for learning by other communities. These communities serve as learning centres. Other communities learn from that experience and adapt it further. Finally, when a larger enabling environment is put in place the ideas spread rapidly. These approaches are discussed in more detail in his article on page 14 and in his forthcoming book.

At the Washington meeting, an attempt was made to systematise the various perspectives of scaling up arising from the workshop discussions (see figure 1). There is the spatial dimension wherein technologies spread to larger numbers of farmers over a wider area. However, this should also include helping communities strengthen their ability to solve their own problems. The temporal dimension refers to the need to know when a certain technology or process can be scaled up. The economic dimension reminds us that the cost effectiveness of the effort has to be kept in mind. Does the availability of resources to

scale up guarantee that the efforts of an institution will be sustained? The technological dimension often includes the need to diversify the range of technologies or to implement complementary approaches in order to achieve synergism. Scaling up is always multi-dimensional, involving technological, process, institutional and policy innovations.

Vertical and horizontal processes: up, down and out

One of the more easily understood concepts is that scaling up has both *vertical* and *horizontal* processes. The vertical process represents efforts to influence policy makers and donors and is

Box 1. Four types of scaling up (Uvin and Millar, 2000)

Quantitative: A programme or an organisation expands its size by increasing its membership base or constituency through increase in geographic area or budgets.

Functional: A community-based programme or a grassroots organisation expands the number and the type of its activities e.g. from agricultural production to health, nutrition, credit, training, literacy, etc.

Political: The organisation moves beyond service delivery towards empowerment and change in structural causes of underdevelopment. This usually involves active political involvement and the development of relations with the state.

Organisational: Community-based programme or grassroots organisations increase their organisational strength to improve the effectiveness, efficiency and sustainability of their activities. This is through diversifying fund sources, increasing level of self-financing/income generation, assuring the enactment of public legislation earmarking entitlements within the annual budgets for the programme, creating external links with other organisations, or improving internal management capacity of staff.

generally institutional in nature. The horizontal process refers to the spread across communities and institutions and geographic boundaries (see figure 2).

Larry Harrington and colleagues (2001) introduced the following ways of understanding scale as it is applied to NRM work:

- **Scale of analysis:** from plant to plot to farm to watershed to regional scales;
- **Scale of intervention point:** “high-level” interventions (e.g., policy change, adjustments in institutional arrangements or property rights, fostering of collective action) vs. “low-level” interventions (e.g., programme of farmer experimentation or extension on specific NRM practices);
- **Scale of investment** in intervention strategies: small vs. large investments in extension, in farmer experimentation programmes or in efforts to inform policy;
- **Scale of community empowerment:** the number of communities with capacity to undertake their own research and adaptation through processes for local learning;
- **Scale of geographical coverage** of an NRM practice: whether the practice is limited to a village or watershed, or whether it has attained regional or national significance;
- **Scale of impact**, e.g., the extent to which desirable outcomes (improved system productivity and resource quality) are achieved through NRM research.



Farmers, NGO and government staff learning about vegetative strips in farmer's field. Photo: ICRAF

The scales are linked and greater impacts are generated from higher levels of investment in suitable interventions or from more efficient use of these investments through reliance on community empowerment leading to expanded geographic coverage of suitable practices.

No to blue prints and cookie cutters

The strong interest in *planning* for scaling up could lead to an undue reliance on predetermined activities and strategies. There were early reminders from David Korten and Carl Taylor (p.14) about the limitations and dangers of relying on blueprints. Carl Taylor warns us that **there are no universal solutions but only universal processes** in social development work. At the Washington meeting, Norman Uphoff stressed that what we need is frameworks and not blue prints and that too often we try to find straight line solutions and to routinise innovation. Standardisation is often stressed, but what we probably need is systematisation, which is less “strict”. Uphoff warned partici-

pants of the dangers of viewing scaling up as merely replication (the cookie cutter approach) since quality scaling should involve multiplication through adaptation not replication. It is probably in this context that the limitations of model and pilot projects are also increasingly being raised. The emphasis on strengthening organisational and learning capacities emphasised by numerous participants (probably the single most mentioned concept) results from an appreciation of the concerns raised by Korten, Taylor and Uphoff.

Building capacities to innovate and the learning process approach

To achieve scale and to also ensure sustainability in programmes of technological enhancement, the strengthening of local capacities to innovate may often be just as or even more important than the technologies themselves. Knowing and understanding the underlying principles are crucial. Strengthening peoples' capacities to innovate were often mentioned in the four workshops as being important in up-scaling and sustaining impact.

Knowing the principles behind a technology and improving capacities to innovate helps communities cope with changing environments and new problems. Many feel that technologies are usually adapted not adopted. One example of wide-scale adaptation by farmers can be seen in the Landcare programme in the Philippines (p.31), where thousands of farmers have decided to adapt a range of soil conservation approaches based on a basic principle of vegetative strips across contours. Farmers utilise the contours in a diverse manner, some letting vegetation establish itself while others enhance the grass strips by planting fruit and timber trees species. Still others plant annual species and short-term perennials or use the contours to raise fodder grasses.

Farmers, communities and local organisations that are exposed to a wide range of available best practices can locate which ones are relevant to their particular situations. The usual approach here is to talk about the value of a basket of technological options. Presenting farmers with options could foster or strengthen the drive to innovate or adapt.

Divergence of methods

Peter Horne of CIAT made a point at the Washington workshop about the value of a divergence of methods. This, he said, was good primarily because of the huge complexity from site to site. He felt that local people needed to be assisted with resources and knowledge to deal with the complexity in their own situation. If the capacities to innovate are to be strengthened, farmers probably need not only a wider diversity of technologies but also a wider diversity of methods or approaches. The ICRAF meeting referring to collaborating institutions indicated that in order to learn from successes and failures with using these diversities of technologies and methods, there was a need to develop an analytical learning culture amongst partners.

The ongoing documentation and systematisation of experiences with wide ranges of technologies, strategies and methods is a useful tool for discovery and dissemination. These best practices must guide the process of scaling up: systematisation of lessons needs to be planned for, if successful sharing is to take place at different levels. Unfortunately there is a lack of documentation on best practices dealing with sharing between farmers, NGOs and different institutions.

Partnerships and alliances

The nature of most efforts to scale up involve a multiplicity of players and it is therefore not surprising that all the four workshops stressed the importance of institutional collaboration and partnerships. Many would argue that partnerships are an essen-



Farmer to farmer exchange: a very effective means of dissemination.
Photo: PMHE

tial element of a strategy to scale up: to reach larger numbers of people in horizontal scaling up, a wider range of organisations might be involved. The need for widening the representation of stakeholders, especially policy makers and local leaders was also stressed. Involving a wide range of actors at different levels also helps capitalise on different strengths among various players. In vertical scaling up, efforts are directed towards reaching policy makers and planners, which may need the involvement of a lesser number of organisations.

The ICRAF workshop stressed the value of a strong network of partners with shared and complementary agendas. There will, however, be a need to continually review the agreements on collaborations and exit strategies. Partners must accept that collaboration has its own costs and resources must be set aside for this.

Ownership and social capital

However, as was emphasised in the Washington meeting, merely engaging multiple stakeholders in a consultative process is not adequate to build ownership. Instead, strategic alliances need to involve the participation of a broad range of stakeholders as early as possible and in different stages of the project cycle. The report of the Whitstable meeting (Gündel and Hancock, 2001), which focused on project cycle dimensions, pays special attention to this. It reminds us of the need for flexibility at all stages and the need to avoid rivalry in terms of ownership of innovation as it is not the technologies which matter as much as the process.

It is indeed a reality that competition and mistrust between players exist in almost all situations and that these are considered as impediments to scaling up efforts. Inter-institutional collaboration and coordination is not only important, it is crucial and a prerequisite for maximising impact. However, we are reminded that reaching consensus and gaining commitment from the different stakeholder groups are important first steps. In this context, several references were made by Juan Sanchez at the Washington meeting about the value of social capital (Box, p.17). He emphasised the value of the '*mesas de concertacion*' (roundtable discussions involving community members, their local government and those engaged in R&D). It was felt that efforts to enhance and strengthen the social capital would improve the quality of partnerships and foster increased networking. The value of cooperation is stressed, whether in

arriving at common policies or in joint action. Different institutional interests are considered in negotiating strategies. Transparency and accountability of the different partners is fostered.

The driving forces: building upon "sparks" and "champions"

The urge to scale up is often associated with the need to expand initially successful small-scale experiences or pilot projects. From the Workshop discussions, participants identified other driving forces or "sparks" that stimulate technologies, processes, principles, programmes, organisations, etc. to be scaled up. While the initial successes continue to be recognised as providing the sparks, the "timing" (when they come) remains to be properly analysed. Sparks come unexpectedly – and they tend to come from everywhere. They may be generally unpredictable. Examples of such sparks are:

Local champions - people or individuals within institutions can be driving forces to the scaling-up process. These can be people with unique skills within the community who are strongly motivated to initiate and support change.

Development practitioners - to show impact and account for their work, practitioners need to achieve the numbers, i.e., scale up without necessarily sacrificing quality. This desire to reach out to more people in more communities to prove that they can make a difference can provide the sparks for development programme to go to scale. These sparks come about as practitioners try to empower people or shift power or authority towards a desired state or try to be simply of help to farmers. **Support groups** - stakeholder groups external to the community, like donors and parent organisations of local groups and the people behind them – development workers, extensionists, researchers, etc. can be sparks as well. These include people who are eager to share with others and consequently get widely recognised.

Success in small-scale initiatives can provide inspiration to go to scale.

Crisis - crisis situations and the raising of questions on where technologies, projects, programmes, etc. should lead to - can also become sparks.

However, Carl Taylor warns us, that in moving from a bottom-up to top-down approach, the spark that produced the initial empowerment can be lost. Experts can "engineer out the spirit and human energy that gives heart, motivation and life to the process."

While recognising the value of champions, many participants cautioned about the fragility of a process championed only by a single person. This is probably why the IDS Participation studies (1999), while reinforcing the importance of champions also reminds us about the challenge for the future to multiply the number and effectiveness of champions, especially local ones. Relying too much on a single champion could affect the long-term sustainability of the effort and limit its expansion to other areas. One has to find and support champions wherever they are - in government, in donor agencies, in civil society etc.

The critical role of markets as driving forces

The Washington and Nairobi meetings put a considerable amount of emphasis on the value of markets in influencing scale. Paul Rice at the Washington meeting had three core messages for participants: 1) all farmers produce to market – they need to produce but they also need to sell and earn; 2) farmers need to organise themselves to achieve economies of scale to produce economically and profitably; 3) consumers are increasingly concerned about social and environmental concerns and are often willing to pay more for quality products. Farmer



Farmer promoters of Campesino a Campesino conduct workshop for farmers. Photo: Eric Holt-Gimenez

organisations can help their member farmers take advantage of the economies of scale and better prices. Co-operations marketing large volumes of produce can negotiate better prices and access distant markets. But, for many farmers it is also equally important to recognise their need to reduce risks.

Participation and scaling up

In all the workshops discussed in this report, the question invariably arose about whether participation is sacrificed during efforts to scale up. Uphoff, Esman and Krishna (1998), in their review of cases, cite the case of the National Dairy Development Board's work in India which indicates that, inevitably, there are risks of "dilution and diminution of effort" and that patterns of organisation and operation were compromised in scaling up. However, the authors emphasised that the criterion of success is whether the capacity for collective action that has been fostered is used by rural people to improve their lives in other ways.

At the Silang workshop, the issue on how to *maintain* not only adequate levels of participation but also how to assure quality in expanded programmes was raised. While believing that participation should not be sacrificed in scaling up, many participants felt it was inevitable. A lack of participation however, could also mean that benefits are not being maintained. It could also suggest the existence of tension resulting from different paradigms of development e.g., top-down approaches used in a government bureaucracy and the bottom-up approaches of NGOs. However, if a right approach is used, a NGO-GO link can help NGOs to *mainstream* participatory approaches that have been developed or are engaged in.

Broad-based grassroots level movements can also provide the pressure to bring about change at higher levels. An initiative like a farmer field school can be important, because these are often precursors of local institutions (e.g., farmers' associations). The large-scale, people-centred IPM programme in Asia has built, over the last decade, local capacities to engage farmers in active learning. A decentralised farmer-led approach, we know, has been useful in tackling location-specific demands of tropical agroecology (see Dilts, p.18). However, this programme also involved a process of large-scale re-education, often using training as the initial strategy.

Planning for scaling up: implications for project design, monitoring and evaluation

The Whitstable workshop raised a concern about the fact that in natural resource management research projects, the issue of scaling up is only addressed in the *post-project* phases. In other words, scaling up is not thought of earlier nor is it planned for. Participants at the workshop in Silang came up with a checklist to facilitate planning. Participants of the ICRAF workshop made an overview of the fundamentals of scaling up agroforestry research (see p.13). The Whitstable meeting identified key strategic elements for scaling up activities in the pre-project, implementation and post-project phases. All of these have implications for project design for which a guiding framework was created (Gündel et al, p.11).

One important implication is the need for donors to fund a pre-project phase where a considerable amount of time and effort is engaged in situational analysis, defining target groups, objectives and outputs and a monitoring and evaluation (M&E) system. This also involves an engagement in policy dialogue on a "pro-poor" agenda. The Whitstable report also suggested that the focus on M&E should be established at an early stage but not necessarily with rigid indicators but "with initial ideas of what aspects of process and what levels of impact will be addressed."

In their book, "Reasons for Success", Uphoff, Esman and Krishna (1998) raise concerns about donors being wedded to the project approach despite evidence that this is not a good way to use resources. They believe that if a project is carried out in a learning process mode, many of the pitfalls of a blue print orientation can be avoided. The authors call upon donors, especially when they have confidence in a certain approach to rural development and certain leadership and model of operations, to fund programmes on a "wholesale" rather than a "retail" basis, allowing for flexibility and complementarity. The bottom line, according to Uphoff, Esman and Krishna, is that while funding is required, "**successful rural development programmes depend more on ideas, leadership and appropriate strategies than money!**"

Julian F. Gonsalves, Toledo Apts., Tagaytay City, Philippines 4120.
Email: juliangonsalves@yahoo.com, julian@accessway.ph

- IIRR. 2000. **Going to scale: can we bring more benefits to more people more quickly?** International Institute of Rural Reconstruction, Y. C. James Yen Center, Silang, Cavite, Philippines.

The author would like to acknowledge the contributions of the participants at the Nairobi, Washington, Silang and Whitstable workshops and Mr. Ric Armonia who served as the primary documentor at two of the CGIAR NGO Committee workshops and whose notes were referred to frequently.

References

- Cooper PJM, and Denning GL, 2000. **Scaling up the impact of agroforestry research: report of the agroforestry dissemination workshop**, ICRAF, September 14-15, 1999, Nairobi, Kenya.
- Gündel S, and Hancock J, 2001. **Scaling up strategies for pilot research experiences**. NRI UK Workshop 23-25 January 2001, Whitstable, Kent, U.K., Workshop report.
- Harrington L, et al, 2000. **Delivering the goods: generalising and propagating NRM research results through "scaling out."**
- IDS, 1999. **Learning to take time and go slow: mainstreaming participation in development and the comprehensive development framework**. Sussex. Prepared for the Operations Evaluation Department, World Bank.
- Long C, 1999. **Participation in development: the way forward**. Institute for Development Research, Boston.
- Taylor CE, 2000. **Sustainability and equity in scaling up social development**. IIRR Workshop.
- Uvin P, and Miller D, 2000. **Scaling up: thinking through the issues**. IIRR Workshop.
- Uphoff, N, Esman M, and Krishna A, 1998. **Reasons for success: learning from instructive experiences in rural development**. Kumarian Press, New Delhi, India.