

4 Lessons for out-scaling and up-scaling from *Monitoring and evaluation*

Background

The lessons on out-scaling and up-scaling presented here are drawn from a synthesis that mainly considered monitoring and evaluation at the level of the Renewable Natural Resources Research Strategy projects. Although these projects and programmes did develop methods and tools for monitoring and evaluating inputs, outputs and outcomes¹⁰, only a very few tackled aspects of out-scaling and up-scaling. Generally it was felt that up-scaling and out-scaling to reduce poverty were outside the immediate project area and timeframe because they depended on factors beyond the control of researchers (such as policies or ready markets). All this means that simple methods still need to be developed for tracking processes that transform new knowledge and technologies into development outcomes. These methods will become *'the principal mechanism for strengthening social learning processes that allow organisations to accomplish new tasks and mandates – such as achieving impact or becoming more poverty-relevant.'*¹¹

Key points

- We need to study monitoring and evaluation systems outside DFID and adapt those relevant to out-scaling and up-scaling.
- Pathway mapping is theoretically promising for out-scaling and up-scaling but unproven. Methods of monitoring and evaluating pathway processes would need to be developed.
- Monitoring and evaluating how organisations learn and change is going to be critical to out-scaling and up-scaling.
- We need to make sure that any opportunities for learning turned up by monitoring and evaluation are not lost because of poor documentation and communication.
- We should not start up-scaling or out-scaling without a baseline, a monitoring and evaluation plan, and a budget to carry out that plan.
- Incentives and rewards for reflection and learning need to be provided.

¹⁰ *Monitoring* is mainly descriptive. Usually it means regular financial and activity reports giving details of progress against plans (inputs and activities). *Evaluation* is more analytical and looks at how the work is done and what has happened because of it (outputs and outcomes). *Impact assessment* looks at the longer-term effects of the work on reducing poverty and how external factors help or hinder (impact).

¹¹ P 232 in Hall, A, Sulaiman, V. R. Clark, N. and Yoganand B. 2003. 'From measuring impact to learning institutional lessons: an innovation systems perspective on improving the management of international agricultural research', *Agricultural Systems*, volume 78, pp 213-241.

Lessons learned

Study how others handle monitoring and evaluation.

Those involved in work to up-scale and out-scale research results will need a set of practical guidelines for monitoring and evaluation. This is especially important because most of the work will be done collaboratively by regional institutions, all of which will need to march to the same drum. However, the experiences of the Renewable Natural Resources Research Strategy are limited with regard to monitoring and evaluation in out-scaling and up-scaling.

It should be recognised, therefore, that agencies that implement development projects may have experiences more relevant to out-scaling and up-scaling than those of the research-oriented projects of the Renewable Natural Resources Research Strategy. It would be worthwhile examining these when developing guidelines.

Some of the Renewable Natural Resources Research Strategy programmes did develop systems for assessing the impact of research on reducing poverty. Finding the log frame approach limiting, they looked at participatory approaches and the use of the more holistic 'livelihoods framework'. However, these did not necessarily give insights into the chains of influence, power and knowledge related to out-scaling and up-scaling.

Other programmes explored frameworks such as pathway analysis, national systems of innovation, significant change stories and balanced scorecards¹². Although promising, these frameworks are new and unproven. Their key strength is that they measure several aspects in an attempt to see the bigger picture rather than just a single aspect, such as an economic benefit. They do, however, also demonstrate the value of looking to other sectors (such as industry and the service sector, development advocacy NGOs and agencies that implement large development projects) for relevant methods and tools that can be adapted.

Various ways of pathway mapping are theoretically promising.

New technologies that aim to make a difference to poor people but that only look at one narrow aspect of why they are poor often fail to take off (Box 4.1). And, although risks and assumptions were part of log frames, there was a tendency in the RNRRS not to monitor these factors.

When out-scaling or up-scaling depends on other changes, such as new policies or new credit facilities being available, there is no way of predicting when these conditions for uptake might happen. So, there has been a shift to looking for systems where feeding in new technologies is most likely to result in out-scaling or up-scaling.

¹² Table 8 page 32 in Pasteur, K. and Turrall, S. 2006. 'A synthesis of monitoring and evaluation experience in the Renewable Natural Resources Research Strategy (RNRRS)'

Box 4.1

A mid-term impact assessment found that important factors for out-scaling were absent

The Crop Protection Programme interviewed chickpea farmers in Nepal halfway through a project to improve management of pests and diseases. They found that literacy and location were important factors preventing farmers taking part in extension projects¹³.

Case studies of uptake and adoption of new technologies in banana, maize, yam, rice and vegetables in sub-Saharan Africa and south Asia showed that even when farmers know about them, there are many complicated reasons why they do not take them up.

A project can be highly successful in producing the outputs it proposed; however, this does not guarantee that the research will be taken up. Programmes to out-scale new technologies need to identify such factors and find practical ways of overcoming them that countries can afford.

In theory, mapping out the paths that new technologies take to become widespread should mean that following these paths will result in widespread out-scaling or up-scaling. Pathway methods try to construct sequences of events that will lead from inputs, to outputs, outcomes and impact. That is, they put research in local and national social and political contexts. However, the pathways are likely to be many and varied and how these could be monitored is wide open.

There have been some initial attempts to map these paths. But there is no proof that new technologies introduced in this way would reduce poverty. Plus, there are no practical guidelines as to how to do it successfully, for example, how to identify the various actors in an innovation system, then bring them together and get them to work together. In a complex system with many parts, the links between the parts may be weak and there may be many steps along the pathway.

So, if such systems are to be used, simple methods and tools for monitoring and evaluating multiple parameters and relationships will be needed. Plus, monitoring and evaluating such systems will involve many organisations, individuals and relationships. The Crop Post Harvest Programme in East Africa developed a monitoring and evaluation system for their Partnerships for Innovation Approach which may be a starting point for efforts to undertake monitoring and evaluation in innovation systems¹⁴ (Box 4.2).

Get up to speed in how organisations learn and change.

To up-scale and out-scale research results, people and institutions will have to change. In general, research programmes have little

¹³ Stevenson, P. Borai, V., Misra, M. and Neupane, R. 2002. 'Mid-term Livelihood Impact Assessment: IPM-chickpea production on farms in Nepal (R7885) December 2002. Submitted to Crop Protection Programme DFID.'

¹⁴ DFID CPHP East Africa 2005. 'User manual: participatory monitoring and evaluation for coalition projects' (Draft)

Box 4.2

Monitoring and evaluation in partnerships for innovation

The Crop Post-Harvest Programme developed a monitoring and evaluation system aimed at helping partners learn lessons as part of its Partnerships for Innovation approach. This system did help to identify who were the key players in innovation and work out ways to move forward.

They did this by having three sets of stakeholders (management, beneficiaries and partners) monitor five aspects of projects:

- progress in carrying out activities
- outputs of the activities
- benefits and negative effects of the outputs
- changes in relationships and partnerships between key stakeholders
- changes in how the partnership was working

Measurement of outputs needs to be relevant and can include, for example, capacity building workshops and briefing papers targeted to specific audiences. This is a shift from journal articles, manuals, workshops and policy advice as measures of outputs. Evaluation needs to track how systems change towards innovation systems that will have impacts on poor people.

Box 4.3

Monitoring changes in institutions?

The Crop Post Harvest Programme worked with national institutions to convert research into successful innovation. They created tools to monitor changes in the institutions—providing institutional histories, maps linking actors and matrices.

The public and private sectors and civil society were instrumental in breeding improved rice in Nepal from 1996–2005. Institutional changes were the most important factor in contributing to long-lasting changes in crop research and development. But because these were not foreseen in the original project proposal, they were not monitored and evaluated¹⁵. This factor was only discovered in a later review of the programme.

practical experience in how to develop cultures of learning, how to bring about organisational change and how to track progress, although some tools have been developed (see Box 4.3).

Learning can be fast-tracked, however. Much can be gleaned from organisations that have already set out to learn and change through

¹⁵ Joshi, K. D., Biggs, S., Gauchan, D., Devkota, K. P., Devkots, C. K., Shrestha, P. K., Sthapit, B. R. 2005. 'The evolution and spread of socially responsible technical and institutional innovations in a rice improvement system in Nepal'. Unpublished.

formal programmes, such as the Consultative Group on International Agricultural Research's Institutional Learning and Change programme (ILAC), for example.

Good documentation and communication. Lessons learned on what worked and did not work in monitoring and evaluation have been lost because experiences were not recorded and shared. Plus, lessons learned from failures that could lead to valuable innovations tend not to be reported¹⁶.

Opportunities for cross-fertilisation of ideas and experiences help people learn (build capacity). This means that cross-fertilisation should not be left to chance. It must be planned for and made to happen. Many ways of doing this—setting up knowledge systems, arranging events where people can meet and discuss their experiences and making sure networks feed regular updates and information—have already been tried, tested and put in place. But, these need to be central rather than peripheral processes and adequate budgets need to be allocated. This will be especially important given devolution to the regions and the move towards South-South cross-fertilisation.

Experience shows that preparing monitoring and evaluation reports for different donors who each have a different system is a lot of work. But, because work in out-scaling and up-scaling will involve coalitions of donors, there are opportunities to harmonise monitoring and evaluation. This could lessen the work load, reduce labour costs and provide a valuable opportunity for partners to learn and take corrective action.

Do not start up-scaling or out-scaling without a baseline, a monitoring and evaluation plan, and a budget to carry out that plan. The most telling lesson perhaps is that it has not been possible to assess the impact of the overall Renewable Natural Resources Research Strategy because a formal framework and baseline were not established at the outset of the strategy.

Monitoring and evaluation are not an add-on but are an integral part of how work will be done. The monitoring and evaluation plan itself has two vital functions. First, it tells people what monitoring and evaluation they are expected to do. Second, it encourages people to learn from their successes and mistakes so that they change what they do to make the plan work better.

There are four key aspects to a plan: first, it clearly states the responsibilities of the various parties; second, it has a schedule for monitoring and evaluation; third, it establishes a baseline against which progress can be measured; and fourth, it sets out guidelines on appropriate methods and processes.

The budget for monitoring and evaluation is also a key issue. Monitoring and evaluation will not be useful unless there are the human and financial resources needed to do it properly. This means resources, for example, to set up information systems or hold regular meetings where people can talk face-to-face.

Provide incentives and rewards: motivate, demonstrate, change and invest in people. Providing incentives and rewards is perhaps the greatest challenge for leadership (Box 4.4). Programmes only began to look at evaluation and impact assessment relatively recently (the Natural Resources Systems Programme in 2002 and the Fisheries Management Science Programme in 2005, for example) as impact was not the original goal. Most new methods of assessing impact stemmed from self-motivation at programme level (despite being discouraged by management) and were prompted by the shift to the sustainable livelihoods approach in the late 1990s. The emphasis in monitoring and evaluation was on accountability rather than learning. Clearly, learning is going to be vital in out-scaling and up-scaling processes.

Box 4.4

Motivate, demonstrate, change and invest in people

The most significant resource for up-scaling and out-scaling research is the human resource. Researchers and research systems have certain sets of skills, as do politicians, community leaders, entrepreneurs and other groups of people who at some stage may be part of bringing in an innovation.

Donors and managers need to motivate those who they fund and manage to learn and change—this means setting up a scheme of incentives and rewards. Managers need to demonstrate values, beliefs, norms and traditions that support learning and change—this means 'acting the talk'. The leadership needs to change management systems to encourage and celebrate risk taking, originality and learning. The leadership also needs to invest in people—this means spending time and money to make sure people study to get the knowledge and skills they need, then making sure they build on these through hands-on experience.

This synopsis of lessons learned for up-scaling and out-scaling research into use is drawn from:

Pasteur, K. and Turrall, S. 2006. 'A synthesis of monitoring and evaluation experience in the Renewable Natural Resources Research Strategy (RNRRS)'.

See

http://www.research4development.info/pdf/ThematicSummaries/RNRRS_ME_synthesis_FINAL.pdf

Pasteur, K. and Turrall, S. 'Monitoring and evaluation: pathways for change. A summary of monitoring and evaluation experience from the Renewable Natural Resources Research Strategy (RNRRS)'.

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¹⁶ Hall, A., Sulaiman, V. R., Clark, N. and Yoganand B. (2003) 'From measuring impact to learning institutional lessons: an innovation systems perspective on improving the management of international agricultural research' *Agricultural Systems*, volume 78, pp. 213-241.