

17 Lessons for out-scaling and up-scaling from *Pro-poor seed systems in East Africa*

Background

Interesting lessons for out-scaling and up-scaling are provided by Crop Protection Programme project R8480, which considered pro-poor seed systems⁵⁹. This was run as part of the UK Department for International Development (DFID) Renewable Natural Resources Research Strategy (1995-2005). The lessons point to the need for pathways for uptake to be clearly defined in order to ensure that end-users benefit. Crucially, they also make clear that unless research findings are thoroughly documented they are useless for out-scaling and up-scaling.

Most small farmers in Sub-Saharan Africa get their seed from the 'informal seed sector'. That is, they save their own seed, exchange seed, and trade it with neighbours and through non-government organisations, community-based organisations and farmer groups. This is mostly because the coverage of commercial seed supply systems in the region is poor and the seed they supply is too expensive for poor farmers. From the farmers' perspective, seed obtained through the informal seed sector is readily available, affordable and comes from sources that they trust.

There are, however, problems with informal seed supply systems. The quality of seed is often poor, for example, and it may carry pests and diseases. Plus, seed may not be stored properly and germination rates may be poor. Crop failures because of droughts or other causes mean that there may be no seed for the following year and there may be little choice of suitable varieties.

Key points

- Evaluate the effectiveness of products and pathways for improving uptake of research findings.
- Insist on high-quality, complete research documentation—any loss of research findings due to poor documentation is a tragedy.
- Participatory learning methods offer considerable scope for building sustainable seed systems. However, changes at the grass roots level need to be integrated with changes throughout the system.
- Existing learning resources may be useful in out-scaling and up-scaling research findings.
- In many developing countries, laws that do not recognise the informal seed sector are barriers to out-scaling.
- Draw on many different perspectives when drawing up plans to improve uptake of research results.

Lessons learned

Evaluate the effectiveness of products and pathways for improving uptake of research findings. In 2003, a group of stakeholders representing international agricultural research organisations, national agricultural research systems, universities, the seed trade and farmer organisations from throughout East Africa met at a Good Seed Initiative workshop. They agreed that the main weakness in the informal seed sector in the region was the failure to share and disseminate research findings to "farmers, seed traders and regulators, researchers, extensionists and policy makers".

To address this weakness a Crop Protection Programme project set out to develop and produce a number of publications of different types (ranging from reports to posters) to share research findings. These were distributed to 1,000 beneficiaries—including workshop participants, coordinators, members of national steering committees, partner and intermediary organisations involved in the Good Seed Initiative or seed-related activities in the region, and regional networks. The publications were also made available in newsletters and websites, and on the internet generally.

The project estimated that these beneficiaries would disseminate this information to up to 10,000 farmers. Unfortunately, however, it did not evaluate the actual extent to which the people who received the publications did share them, or what impact they had on the poor and on legislation. So, there is no way to assess to what extent the project's objective⁶⁰ was achieved. The reason given for not doing any evaluation was 'lack of time'. This suggests that either evaluation was planned but that the timeframe for the project plan was unrealistic and time ran out before all the plans could be carried out, or that evaluation was not in fact part of the plan.

Experience shows that evaluation is often seen as an 'add-on' and is not an integral part of plans. Unless the response to printed materials aimed at out-scaling and up-scaling research findings is evaluated it will be impossible to find out whether or not they are effective.

Similarly, the Good Seed Initiative seemed an ideal pathway to speed uptake and impact of seed-related research outputs in Kenya, Tanzania and Uganda. This was because members of the initiative were seen as playing a key role in raising awareness of the

⁵⁹ Phiri, N. 2006. 'The Good Seed Initiative (GSI)-sharing the learning from Crop Protection Programme programmes into pro-poor seed systems in East Africa. R8480. Final Technical Report'.

⁶⁰ The Good Seed Initiative aims to generate greater synergy between informal seed systems and innovations delivered through the formal seed sector and participatory research. This includes addressing issues such as the need for higher yielding varieties, pest resistant varieties, varieties for new markets, farmer participation in selecting varieties, better ways of saving and looking after seed.

relationship between good quality seed and better crops, and in disseminating seed-related research outputs.

By developing and producing useful materials and distributing them in limited numbers, the project has indeed taken some initial steps towards out-scaling and up-scaling. But it is not clear whether 'making information easily accessible and readily available' resulted in uptake of research findings by, for example, guiding the development of seed legislation. The lesson is that analysis of uptake pathways in networks needs to be rigorous. This may well indicate the need for significant investment in major communication strategies (as opposed to dissemination of outputs) to stimulate each of the different target groups of end-users (such as farmers, seed traders and regulators, researchers, extensionists, and policy makers) to change. A clear understanding of pathways for uptake and what can and cannot be done via these pathways will help to improve impact on end-users.

Insist on high-quality, complete research documentation—loss of research findings because of poor documentation is a tragedy. The Crop Protection Programme project reviewed over 200 research projects related to seed and undertaken between 1996 and 2005. Of these, 38 had findings related to seed quality, seed health or seed dissemination that could be immediately adopted by target beneficiaries. Tragically, a fifth of these 38 projects were not documented in sufficient technical detail for the research findings to be usefully shared.

Research that is not thoroughly documented might as well never have been done. In this case, one fifth of research findings identified as potentially the most valuable to improving the informal seed sector were lacking the technical detail needed to apply the new knowledge or method. This is surely an important lesson for the future and points to an urgent need for quality assurance processes.

Participatory learning methods offer considerable scope for building sustainable seed systems. However, changes at the grass roots level need to be integrated with changes throughout the system—to ensure quality assurance, certification and legislation. The project's final report suggests that the participatory approach offers considerable scope for building sustainable seed systems. Such participatory work would start with the needs of the community and widen to link with existing systems for quality assurance and seed certification.

This means that for out-scaling of improvements to seed to be effective, community level initiatives would need to be integrated with up-scaling efforts to develop quality assurance and certification schemes, and change legislation. At present there is no indication of how this might be done. Partners in the Good Seed Initiative have much to offer in participatory and learner-centred methods and tools, but only at the grass roots level.

Existing learning resources may be useful in out-scaling and up-scaling research findings. The Crop Protection Programme project R8480 developed and tested discovery-based learning exercises in Kenya, Tanzania and Uganda. After testing,

the exercises were published in a training manual.⁶¹ The manual for trainers tackles topics such as 'raising awareness' and appropriate dissemination of outputs (e.g. posters). It also sets out discovery-learning exercises that take farmers through processes which allow them to find out for themselves the value of new information and new methods of improving seed.

This project is one of many that have developed, tested and produced learning resources. Depending on how effective these materials are in practice, they may be useful in out-scaling and up-scaling initiatives, or at least useful starting points for developing materials. Materials and media need to be selected to achieve specific objectives in overall communication strategies. For example, participatory digital video proved to be an important peer-to-peer learning tool in Bangladesh for dialogue, and for sharing concepts and results.

Laws in many developing countries that do not recognise the informal seed sector are barriers to out-scaling. In many developing countries, laws governing seed (such as the Kenyan Seeds and Plant Varieties Act) do not recognise the informal seed sector. The Good Seed Initiative aims to address policy issues as well as improving seed systems at the grass roots level. The informal seed sector seems like a good candidate for an innovation systems approach in which integrated strategies bring to bear the concerted influence of existing organisations.

Involve many different perspectives when drawing up plans to improve the uptake of research results. Unless farmers are aware of the value of good seed it will be difficult to establish self-sustaining alternatives to commercial seed supply systems. The 2003 workshop identified farmers' lack of awareness of the value of good seed as one of three major constraints. The others were the quality and health of farmer-produced seed and poor dissemination of research findings.

Of the three constraints, the workshop participants chose the third (poor dissemination of research findings) as their preferred entry point. It is not surprising that they made this choice, as dissemination of research findings is a process most would probably be familiar with, whereas they might be uncertain about launching a major campaign to make farmers aware of the value of good seed. The decision that was made does, however, point to the need to involve many different perspectives when drawing up plans to improve the uptake of research results, as otherwise promising options may be overlooked.

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

Phiri, N. 2006. 'The Good Seed Initiative (GSI)-sharing the learning from Crop Protection Programme programmes into pro-poor seed systems in East Africa. R8480. Final Technical Report'.

See

[http://www.research4development.info/PDF/Outputs/FTR_Good_Seed_Initiative_\(R8480\)_P1.pdf](http://www.research4development.info/PDF/Outputs/FTR_Good_Seed_Initiative_(R8480)_P1.pdf)

⁶¹ 'Discovery-learning exercises for improving the quality, health and dissemination of farmer-saved and farmer-traded seed: A manual for training extensionists and poor farmers in the management of seed for improved yield'. 2006. CABI.