7 Lessons for out-scaling and up-scaling from *Common pool resources: management for equitable and sustainable use*

Background

The Natural Resources Systems Programme brief *Common pool resources: management for equitable and sustainable use* presents lessons and key messages on equitable and sustainable management of natural resources, such as forests, water, fish stocks and grazing land, that many different groups of people use. These 'common pool resources', as they are known, are managed in different ways—some are open to everyone, others may be communally or privately managed. The pressures on common pool resources (such as over-use, intensification of farming, extraction of timber) are significant, and the poor often lose out when their interests conflict with those of more powerful users.

The projects and programmes of the Renewable Natural Resources Research Strategy developed simple techniques to help common pool resource stakeholders appreciate each others needs and agree how to manage common pool resources equitably and sustainably. Technical changes had significant effects in some social set-ups. Methods of weighing up economic costs and benefits also helped stakeholders to decide how common pool resources could be managed. Project experiences suggest that equitable property rights or use rights are necessary.

However, although simple techniques do now exist for resolving conflicts and managing common pool resources, the application of those techniques tailored to local situations is not at all simple. In very few cases do local institutions already have the skills and knowledge needed to use these techniques and engage with national policy makers, and vice versa. These skills nearly always have to be learned.
This means that for out-scaling and up-scaling research findings, the main thrust needs to be to help groups, communities and institutions at all levels learn to use the methods and tools that exist for managing common pool resources sustainably and equitably.

Key points

- We need to help a vast numbers of stakeholders learn how to influence and deal with policies on common pool resources.
- We need to analyse the economic costs and benefits of different management options for common pool resources.
- We need to tackle property rights, as these determine the extent to which technical changes can be out-scaled and up-scaled.

Lessons learned

Help a vast number of stakeholders learn how to influence and deal with changes to policies on common pool resources. The Tanzanian government's water policy incorporates rainwater harvesting as a way of reducing conflict between agricultural and pastoral communities over access to water. Adoption of such policies by governments paves the way for stakeholders to manage common pool resources (like runoff, rangelands, rivers, and channels) through institutions such as catchment and village committees. But stakeholders at all levels need the skills to handle these institutions effectively. Unless they have such skills, opportunities to make changes for equitable and sustainable management of common pool resources will be lost (see Box 7.1). Developing the skills of vast numbers of people will be a major challenge.

Box 7.1

Examples of efforts to ensure the equitable and sustainable management of common pool resources by helping stakeholders to learn new skills
In all the following cases, the stakeholders involved learned and applied new skills to common pool resource management. The more quickly and effectively people can be helped to learn, the more quickly and effectively research findings on common pool resource management can be applied.

In **Tanzania** (Natural Resources Systems Programme project R8116) stakeholders learned to set up catchment and village committees to manage the implementation of a government policy on rainwater harvesting. Women and young people were fairly represented on these committees. Stakeholders learned about common pool resource tenure systems, the administration of land leases, policies and laws relating to land and how to manage common pool resources.

In **Bangladesh** (Natural Resources Systems Programme projects R7562, PD131 and R8103), the existing legal and institutional frameworks failed to resolve conflicts between different groups of users of floodplain resources. Stakeholders used the Participatory Action Plan Development technique to determine and solve problems. This involved a series of local workshops to scope, plan and implement management plans. This technique recognises the strengths of informal institutions and power relations.

Box 7.1 *continued...*

Since there are 4 million hectares of open water and since 7 million poor live on sand islands in rivers in Bangladesh, the potential for out-scaling seems enormous. But, the number of people who would need to learn new skills to realise this potential is also enormous.

In **Uganda** (Natural Resources Systems Programme project R7856), communities learned to act collectively to deal with soil erosion on steeply sloping hillsides. Farmers developed policy, and implemented and enforced by-laws, by using a five 'INs' approach: strengthening local **INstitutions**; providing **INformation**; linking by-laws to natural resource management **INnovations**; finding and promoting **INcentives**; and building a network of **INfluence**.

In **Mexico**, large plantations of exotic trees for carbon sequestration, although efficient, may eliminate the non-timber resources of native forests on which the poor depend. In a win-win solution, villagers learned how to manage native forests sustainably and how to plan, set up and run appropriate institutions to manage carbon sequestration.

groups to invest in pond management. This is but one example of how property rights determine the extent to which technical changes can be implemented.

This synopsis of lessons learned for up-scaling and out-scaling research into use is drawn from:
Lovett, J., Ockwell, D., Quinn, C. and Gregorowski, R. 2006. 'Common pool resources: management for equitable and sustainable use'.
The document can be accessed through the following link:
http://www.research4development.info/pdf/ThematicSummaries/NRSPCPR%20BriefLR.pdf

Analyse the economic costs and benefits of management options for common pool resources. A sound analysis of costs and benefits can help stakeholders to agree on priorities for managing common pool resources, although this does mean gathering considerable sets of data on social, environmental and economic parameters. A good example of this kind of work is trade-off analysis of coastal resources run in the Caribbean (Natural Resources Systems Programme project R7408), which brought consensus on long-term management priorities. As yet though, however, there is no evidence to prove that the management option chosen through this process can actually be used to manage common pool resources equitably and sustainably.

Another project in south-eastern Asia (AFGRP project R7917) showed that self-recruiting (wild) species improve productivity in commercial aquaculture. This is a win-win scenario for commercial fish farmers and the poor. Fish farmers improve their profits because maintaining self-recruiting species in their ponds keeps levels of biodiversity high and increases the yield of commercial species. They save the cost of cleaning out these wild species from their ponds. The poor also benefit because they can continue to harvest wild fish, snails, prawns and crabs from privately-owned ponds and rice fields.

Tackle property rights as these determine the extent to which technical changes can be out-scaled and up-scaled. Fish ponds are important for the poor, as fish provide protein and can also be sold. In eastern India, the government changed its policy on leasing ponds to self-help groups. Previously, one-year leases gave little security and no encouragement to improve management. When the poor were given a voice, the government changed to ten-year leases that provide an incentive to