DEPARTMENT FOR INTERNATIONAL DEVELOPMENT

STRATEGY FOR RESEARCH ON RENEWABLE NATURAL RESOURCES

NATURAL RESOURCES SYSTEMS PROGRAMME

FINAL TECHNICAL REPORT

DFID Project Number

R 7865

Project title

Scaling-up strategies for pilot research experiences - a comparative review

Project Leader

Dr. Sabine Guendel

Organisation

Natural Resource Institute, UoG

NRSP Production System   *Date*

Hillsides   12/7/01

Contents

Three documents comprise the Final Technical Report as follows:

Final Technical Report to DFID, 26 July 2001

Annex 1: Scaling-up strategies for research in natural resources management

Annex 2: Scaling-up strategies for pilot research experiences, 23-25 January 2001

1. Executive summary

The present review, commissioned by the DFID NRSP Hillsides Research Programme, had the objective of identifying appropriate strategies to accelerate uptake of innovations by target farmers and providing a framework to guide the formulation of scaling-up processes of innovation facilitation. The review methodology analysis of the consultation of key literature, an electronic discussion, a mid-term workshop with various stakeholders (researchers, NGOs) from Asia, Africa, Latin America and Europe and a detailed case study analysis.

The definitions of "horizontal" and "vertical" scaling-up used were:-

Horizontal scaling-up is the geographical spread to more people and communities involving expansion within same sector or stakeholder group, commonly referred to as dissemination. Others refer to it as a *scaling-out* process across geographical boundaries.

Vertical scaling-up is *institutional* in nature and involves other sectors/stakeholder groups in the process of expansion - from the level of grassroots organisations to policymakers, donors, development institutions and international investors.

Furthermore we based our review on the following overarching definition of the objective of scaling-up:

More quality benefits to more people over a wider geographical area more quickly, more equitably and more lastingly. (IIRR 2000)

This definition stresses the importance of *a people centred* vision to scaling-up, furthermore it introduces the **quality dimension** to the definition without neglecting the **quantitative dimension** and it highlights the importance of **time, equity and sustainability**, dimensions which are of particular importance in the NRM context.

Few cases of successful scaling-up were encountered in relation to research, where creating impact has largely resided with developing traditional uptake material at the end of projects without taking into account the above dimensions.

The majority of research cases took a more narrow perspective to scaling-up and emphasised the existence of knowledge and technologies and saw the challenge in improving the ways to "get these technologies out" to the target groups over a wider geographic area (horizontal scaling-up). Many of the development oriented cases acknowledged the multidimensional nature and complexity of scaling-up and stressed the importance of institutional processes and learning and the need to include a range of stakeholders from different sectors.

These two perceptions should not be seen in isolation and it is important to acknowledge that the transfer and adaptation of existing knowledge as well as creation of new knowledge is important in the context of NRM research.

Agreement exists that scaling-up is about creating sustained poverty alleviation and increasing local capacity for innovation on larger scales. The review and case studies showed that there are no simple rules to achieving scaling-up. Attempts focus either on geographical and quantitative dimensions of scaling-up, or on institutional processes. These two are not mutually independent pathways, but synergistic and overlapping. A central finding is that research has to be integrated within wider pro-poor development processes.

While no blueprint methods for scaling-up can be found, the report concludes from case studies and wider experiences that creating an impact from research results has in the past

focused heavily on the "post-project" stage, meanwhile many of the key strategies which have been identified as prerequisites for successful scaling-up need to be addressed more extensively in the pre-project and implementation phase.

As a response to this major shortcoming a strategic review framework was developed which places its main emphasis on the preparatory and implementation stages of research projects. Finally conclusions and recommendations for the implementation of the framework were developed.

2. Background

NRSP has largely contributed in the past to the development of technological innovations focusing on soil and water conservation measures in hillside production systems with particular emphasis on resource poor farmers in fragile environments.

In order to make a significant contribution to poverty reduction and the improvement of livelihoods, the use of these technologies by target farmers has to be accelerated and up-scaled, an aspect that has conventionally been treated in isolation from the research process itself. At the 1999 Hillsides conference principal investigators of the NRSP and other donor-funded hillside projects concluded that there is a recognized need for more innovative and demand-driven up-scaling strategies to accelerate the impact of research.

A key criticism, from a livelihoods perspective, of the conventional approach to technology dissemination (Transfer-of-Technology) is its failure to reach the poor. Success has often been restricted to "Green revolution technologies" that best fit the needs of better-off and resource privileged farmers. Technologies have also often failed to address gender specific needs, usually ignoring the involvement of women. Where interventions have been successful and sustainable, poverty alleviation has generally been restricted to relatively small numbers of farmers.

New knowledge is needed to develop approariate scaling-up strategies which enhance the transfer of innovations and knowledge "up-stream" and "down-stream".

3. Project Purpose

This review is aimed at the identification of improved scaling-up strategies for natural resource management assuming that the adoption of the improved strategies will reduce the time lag between innovation development and its uptake in NRM and will increase the availability of innovations and knowledge to the benefit of the poor.

4. Outputs

The main output of the review process is the review document entiteled "Scaling-up strategies for research in natural resource management research" (see Annex 1). This document contains a systematisation and analysis of past and on-going initiatives and case studies related to scaling-up. Based on the analysis of existing information it proposes a strategic framework for scaling-up and draws conclusions for researcher and research programme managers.

The key findings from the review process show two main current strands of understanding scaling-up. One takes a more narrow perspective to scaling-up and emphasises the existence of knowledge and technologies and sees the challenge in improving the ways to "get these technologies out" to the target groups over a wider geographic area (*horizontal scaling-up*). The other strand acknowledges the multidimensional nature and complexity of scaling-up and stresses the importance of institutional processes and learning and the need to include a range of stakeholders from different sectors (*vertical scaling-up*).

These two perceptions should not be seen in isolation and it is important to acknowledge that the transfer and adaptation of existing knowledge as well as creation of new knowledge is important in the context of NRM research.

Furthermore, the demand for scaling-up seems to be formulated by the knowledge providers (research, donors, etc.) and the literature lacks information regarding scaling-up needs and demands from other stakeholders (NGOs, CBOs, etc.) in terms of research.
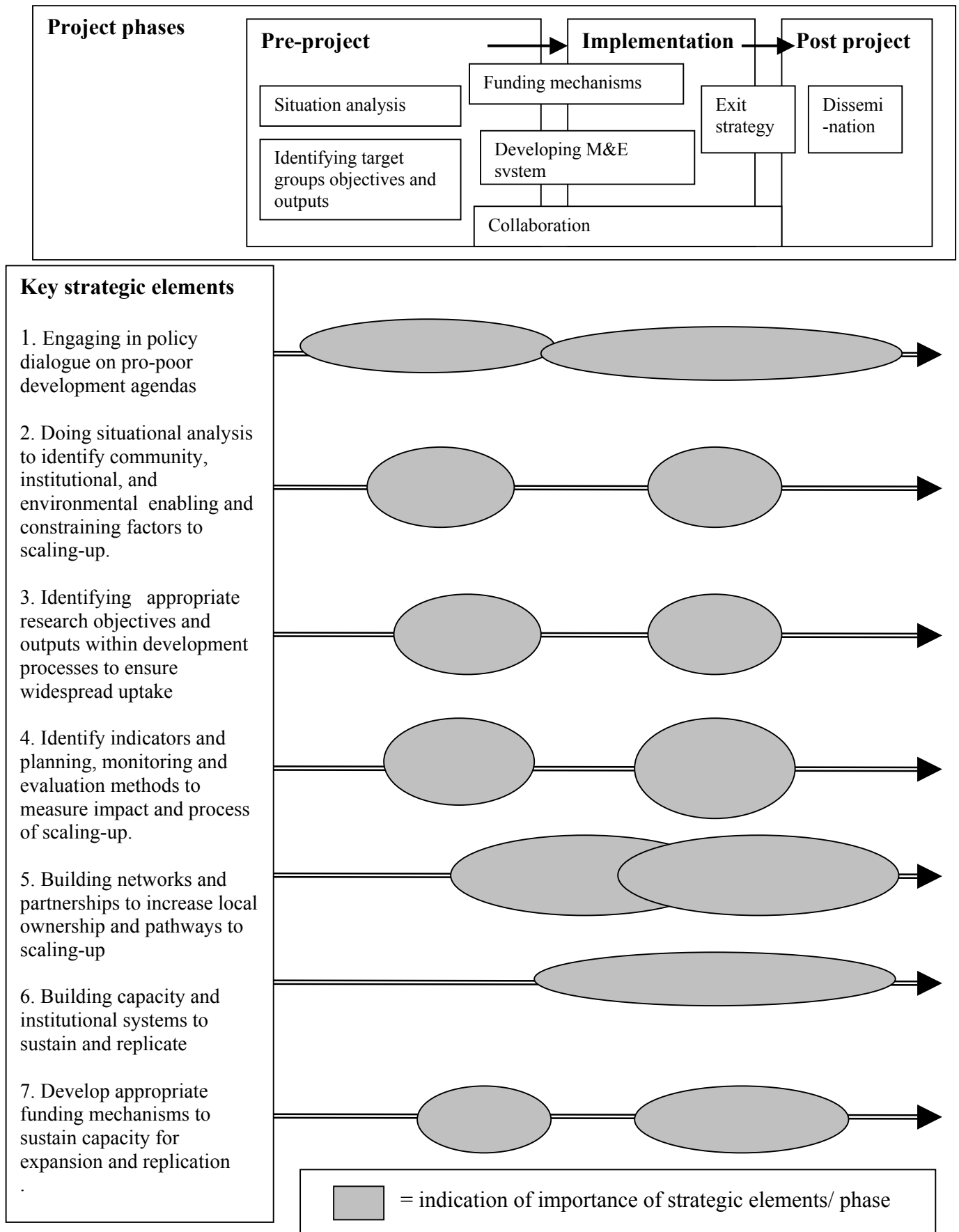
Another key finding is that creating an impact from research results has focused heavily on the "post-project" or dissemination stage, whereas many of the key strategies which has been identified as prerequisits for successful scaling-up need to be addressed more extensively in the pre-project and implementation phase.

As a response, the strategic review framework developed places its main emphasis on the preparatory and implementation stages of research. Many of the elements are not within traditional research activities, and are often related to good development practice, nevertheless have a direct bearing on the success in scaling-up research. These are:

❑ Engaging in policy dialogue on pro-poor development agendas and during the project to demonstrate project successes in terms of pro-poor impact
❑ Doing situational analyses to identify target groups and local, institutional, and environmental enabling and constraining factors to scaling-up
❑ Identifying appropriate research objectives and outputs within development processes to ensure widespread uptake
❑ Building networks and partnerships to increase local ownership and pathways to scaling-up
❑ Awareness raising among different stakeholders including the wider target group and policy makers of the merits of the approaches taken
❑ Building capacity and institutional systems to sustain and replicate
❑ Develop appropriate funding mechanisms to sustain capacity for expansion and replication
❑ Identify indicators and planning, monitoring and evaluation methods to measure impact and process

Figure 1. gives an idea of how elements are important across several if not all the project phases.

Figure 1.   Key strategies for scaling-up NRM research in relation to design process

Project phases

Pre-project ⟶ **Implementation** ⟶ **Post project**

Funding mechanisms

Situation analysis

Exit strategy

Dissemi -nation

Identifying target groups objectives and outputs

Developing M&E svstem

Collaboration

Key strategic elements

1. Engaging in policy dialogue on pro-poor development agendas

2. Doing situational analysis to identify community, institutional, and environmental enabling and constraining factors to scaling-up.

3. Identifying   appropriate research objectives and outputs within development processes to ensure widespread uptake

4. Identify indicators and planning, monitoring and evaluation methods to measure impact and process of scaling-up.

5. Building networks and partnerships to increase local ownership and pathways to scaling-up

6. Building capacity and institutional systems to sustain and replicate

7. Develop appropriate funding mechanisms to sustain capacity for expansion and replication
.

= indication of importance of strategic elements/ phase

The key strategic elements identified are described in more detail below:

Engaging in policy dialogue on pro-poor development agendas
   Research needs to be placed in the context of local, regional and national development agendas, as this helps identify key entry points and the major needs. This is ideally done at an early stage so as to shape the overall project design, but can also be done through regular reviews of the project, or presentation awareness raising of results of projects at other development discussion meetings.

Doing situational analysis to identify community, institutional, and environmental enabling and constraining factors to scaling-up
   The likelihood of scaling-up will be increased if key hindrances as well as opportunities are identified at an early stage to identify key channels for scaling-up research activities and development outcomes. All enabling and constraining factors cannot be identified at the outset and so the research activities (project) will need to build in mechanisms to review new issues and plan around them or with them. Crucial phase in terms of addressing the real priorities of target group, as well as identifying catalysts for scaling-up.

Identifying appropriate research objectives and outputs within development processes to ensure widespread uptake
   Rather than identifying outputs and forms of dissemination just at the end of research, these should be shaped at an early stage together with stakeholders, and users and subsequently modified throughout the project. These outputs may include identification of solutions, which can be very technical in nature.

Identifying indicators and planning, monitoring and evaluation methods to measure impact and process of scaling-up.
   Should be central to scaling-up processes in deciding what should be scaled-up and how this might be achieved, and in providing validated evidence to influence policy-makers. To manage, learn from and gain credibility methods and measures for assessing pro-poor and NRM impact on different scales needs to be elaborated. The intermediate supporting processes and institutional to achieve this will also need agreed measures and review mechanisms. Various participatory methods are vital to this to ensure open feedback. A major area of this work is identifying cost-effectiveness, so as to be able to work towards it.

Building networks and partnerships to increase local ownership and pathways to scaling-up
   In order to achieve the above elements, researchers and their institutions need to develop relationships throughout the process which can develop into firmer partnerships with development and other institutions, there always being a firm link to the grassroots and end users. Personal relationships also foster direct interest and enthusiasm, increasing the chances of institutionalisation and spread of ideas.

Building capacity and institutional systems to sustain and replicate
   The capacity to manage learning through doing is critical for scaling-up to be able to evolve and continually identify further opportunities for scaling-up. It is also important especially in the implementation and exit stage to internalise new ideas within institutions, especially within communities and government.

Developing appropriate financing mechanisms to sustain capacity for expansion and replication

Maintain flexibility and ensure funding for softer activities (local and regional networking, capacity building, consultations) is in place at the pre-project stage. At the same time one has to begin building ownership through clear shared resource commitments to activities. Seek opportunities for self-sustaining results in research outcomes, or at least mechanisms for reducing costs when expanding, replicating etc. Take into account the very real dynamics between technologies and wider economic spheres, and financial constraints facing local and government institutions.

Table 1 below gives a breakdown of key activities per project stage and provides a set of attributes to be achieved (or aspired to) in the scaling-up process.

Table 1. Activities, strategic elements and attributes of scaling-up processes for NRM research

Project phases	Activities relevant to scaling-up	Strategic elements towards successful scaling-up	Attributes
Pre-project	Situation analysis	Engaging in policy dialogue on pro-poor development agendas.	Inclusive & plural Recognise differentiation
		Identify community, institutional, and environmental enabling and constraining factors to scaling-up	
		Appraisal of institutional capacity of agencies to be involved in scaling-up required.	
	Identifying target groups	Identifying appropriate research objectives and outputs within development processes to ensure widespread uptake	Consultative
	Setting objectives and outputs		Collegiate
	Developing M&E system	Identify indicators and planning, monitoring and evaluation methods to measure impact and process of scaling-up	Participatory
	Collaboration	Building networks and partnerships to increase local ownership and pathways	Constructivist
	Funding mechanisms	Develop appropriate funding mechanisms to sustain capacity for expansion and replication	Innovatory

Project phases	Activities relevant to scaling-up	Strategic elements towards successful scaling-up		Attributes
Imple-mentation	Capacity building	Building capacity and institutional systems to sustain and replicate		Vertical sharing
	Institutionalising			Start early
	Partnership forging	Demand, supply & support actors identified.	Other resource organisations contribute with products and by building technical capacity.	Collegiate
	Networking			Inclusive
	Awareness raising	Multi-media dissemination of findings.		
	Policy dialogue	Aggregate and assess findings from individual projects and derive policy relevant information.		Pro-active
	M&E and Support studies	Central to scaling-up processes in providing evidence to influence policy-makers, in deciding what should be scaled-up and how this might be achieved		Participatory Plural

Project phases	Activities relevant to scaling-up	Strategic elements towards successful scaling-up	Attributes
Post-project	Exit strategy	Concerted action required on a regional level	Concerted
	Dissemination	Should involve the target group as disseminators	Accessible
	Impact assessment	Built upon M&E. Representatives of target part of assessment team. Technological and livelihoods assessment required.	Participatory

Major implications in terms of research programmes are that NRM research has to take place in the context of local and national development processes in order to be able to respond to local demand.

❑ Project calls have to be addressed towards institutions and organizations in the target regions to strengthen the implementation of a demand-led approach.

❑ Shifting the emphasis of research to partners in developing countries may require the development of regional capacities in terms of demand-led approaches, sustainable livelihoods and scaling-up and development of partnerships, and innovative means to fund, monitor and evaluate these strategies.

The implications for researchers and their institutions are:

❑ The establishment of functioning partnerships with in-country agencies, particularly in terms of working within participatory development processes and producing outputs suitable to addressing and communicating local and regional situations.

❑ Furthermore researchers and their institutions have to become accountable in their contribution to scaling-up which in turn requires the identification of indicators which show research effectiveness in terms of extent of impact.

Potential research contributions to current knowledge gaps that should be addressed were identified:

❑ M&E indicators and approaches for scaling-up, including the pro-poor targeting and cost effectiveness of scaling-up;
❑ How to develop appropriate partnerships; mechanisms for policy dialogue and channels for communicating effectively with target groups.
❑ There is also further scope to learn from other sectors and encourage a cross-sectoral systematisation initiative for scaling-up.

A weighted index system for the identification of appropriate scaling-up strategies was not produced. The literature review showed that there was no logical way of prioritising strategies given the context specific nature of successful scaling-up. All other outputs were achieved.

A mid-term workshop was held with various stakeholders (researchers, NGOs) from Asia, Africa, Latin America and Europe. This provided an initial analysis of case studies, some of which were later looked at in more detail from Bolivia, Uganda and Nepal. The workshop presented a great opportunity for information exchange and for "scaling-up" the findings from the review, as participants are keen to receive the final review document to which they have contributed extensively with their knowledge and ideas. The workshop process and findings are documented in form of internal workshop proceedings (see annex 2).

5.   Research Activities

The review consists of the following activities:

- A synthesis of lessons from current and completed research and development experiences from within NRSP target countries and other relevant countries (Literature review and electronic discussion)

- Engagement of key stakeholders in a consultation process, that captures different perspectives and experiences in the identification of successful scaling-up strategies (Workshop, electronic discussion)

- Development of a strategic framework to assist on-going and future research initiatives to identify the most appropriate up-scaling strategies for research outputs (Workshop and review)

- Discussion and recommendations regarding the application of the framework in the research context (Workshop and review)

5.1 Literature review

The literature review was based on an internet search, which was broad enough to include documents from other sectors such as health and education where the scaling up discussion is a key to institutional reforms. We also revised DFID's postion on research and a range of on-

going initiatives of other programmes within DFID research portfolio as well as NRSP project memoranda of current NRSP projects.

Other entry points into document identification were the two international CGIAR-NGO committee workshops in Washington (1999) and in the Philippines (2000), which have brought together researchers and development practitioners to discuss the issues of scaling-up the impact of agriculture and NRM interventions. The proceedings of these workshop led us to interesting case studies as well as to the identification of key resource person to be included in the electronic discussion and/ or the Whitstable workshop.

Other workshops by ICRAF and on INRM on the topic of scaling-up formed key documents for the review.

5.2 Electronic discussion platform

An electronic disscussion platform was established at an early phase of the review. The participants were identified based on a series of criteria. It was intended to engage stakeholders form different institutional backgrounds (NARS, CGIAR, NGO's Universities, etc.) as well as from different regions covering the NRSP Hillside target countries. As mentioned above, key person were identified from the participants lists of the CG NGO committee workshops, INRM workshops, and other sources. In total 38 people joined the electronic discussion platform. The aim of this discussion was to share thinking and findings from an early stage and to make people aware of the existence of the review.

5.3 Mid-term workshop

The 3-day workshop (from now on referred to as "Whitstable workshop") was designed and facilitated by Natural Resources Institute with participants from relevant projects in Nepal, Uganda, Bolivia, Colombia, UK and the Philippines.

During the workshop the participants discussed the importance of a strategic franmework for scaling up and identified important elements. The mix of participants from north and south, academic and development backgrounds helped to bring out key issues, which contributed significantly to the process. The elements and issues form the backbone of much of the present document.

5.4 Analysis of selected case studies

During the Whitstable workshop three case studies with different scaling up strategies were presented from one of each NRSP Hillside target country (Bolivia, Nepal and Uganda). A SWOT analysis of these case studies was undertaken to identify strategic elements and to feed into the development of a framework for scaling up. Other relevant case studies were identified through the literature review and the electronic disscussion.

6.   Contribution of Outputs

OVIs at the purpose level have been achieved in as much as the identification of strategic elements and the development of a strategic review framework will assist researchers and programme managers in the task of designing and implementing effective scaling-up strategies aimed at improving the livelihoods of the poor. The findings will also inform NRSP on the requirements that should be included in the development of project memoranda.

The engagement of 38 participants in the electronic platform and the mid-term workshop makes a significant contribution to the dissemination of project findings. Relevant key stakeholders from NGO, CGIAR and NARS institutions are aware of the project activities and many have contributed to the development of the strategic review framework.

The finalised review document including the framework will be circulated to NRSP Hillsides projects. A wider peer review process is proposed. Following this elements of the review and framework should be re-packaged in a more synthetic and practical form for practitioners and other research programme managers.

7.   Publications and other communication materials

Institutional report series
"Scaling-up strategies for research in natural resources management", NRI, Medway Publications (planned)

Newsletter articles

"Developing a framework for scaling-up research in natural resources management" ILEIA Newsletter Special Issue on Scaling-up, ETC, The Netherlands

possible contribution to ODI Natural Resource Perspectives

8.   Project logframe

Most recent version to be included

9.   Key words

Scaling-up, research, impact, NRM, pro-poor, strategic review framework.

10.   Annexes

Review and framework document **"**Scaling-up strategies for research in natural resources management" (Annex 1).

Mid-term workshop proceedings "Scaling-up strategies for pilot research experiences" , $23^{rd} - 25^{th}$ January 2001, Whitstable, Kent, UK (Annex 2).