

The background of the cover is an abstract, repeating pattern of blue and white geometric shapes, resembling stylized leaves or branches. The pattern is composed of various shades of blue, from light to dark, and white, creating a complex, organic-looking design.

Linking research, policy and livelihoods: a synthesis

*Karen Brock and
Elizabeth Harrison*

Linking research, policy and livelihoods: a synthesis

*Karen Brock and
Elizabeth Harrison*

2006



DFID Natural Resources Systems Programme



This document is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

Cover design: Elizabeth Harrison, University of Sussex

Editing, text design and layout: Green Ink (www.greenink.co.uk)

Printing: Pragati Offset Printers Pvt. Ltd, India (www.pragati.com)

CONTENTS

Acknowledgements	iv
Summary	1
Section 1 Background and context	5
Background	5
Context	6
Section 2 Defining, understanding and influencing policy	9
Diverse approaches to understanding policy	9
Power – ever present, seldom discussed	10
Interdisciplinarity is key	11
Beyond the workshop: alternative routes to policy influence	12
Reflexive practices	16
Networks and support for learning	16
Time, continuity and commitment	17
The role of individuals	18
Section 3 Policy, research and livelihood outcomes	19
Livelihood outcomes of policy and research	19
Decentralisation: key to positive livelihood outcomes?	21
Legal frameworks and tenure: connecting policy to livelihoods?	25
Factors of difference: whose livelihoods are improved?	25
Conclusion	29
References	31
Appendix Projects reviewed	35

ACKNOWLEDGEMENTS

Interaction with project leaders and researchers was an important part of this study. We are grateful for their time and constructive discussions on the longer version of this booklet. We are also grateful to anonymous NRSP reviewers for their comments and to NRSP Management for their facilitation of the synthesis itself. The views expressed within this booklet and any errors or omissions are entirely our own.

This booklet highlights the findings of a synthesis of research undertaken by the Department for International Development (DFID)'s Natural Resources Systems Programme (NRSP). The synthesis focused on projects that yielded insights into policy processes and institutions in natural resources management (NRM). It aimed to answer a series of questions:

- How do researchers conceptualise policy processes and the roles of different institutions within them?
- What does it take for research to influence policy?
- What is the relationship between policy-focused research and livelihoods, and how is this influenced by the institutional context within which the research takes place?

The booklet is arranged in three sections. The first elaborates the context within which the synthesis took place, including a discussion of current thinking about the nature of policy making and institutions in NRM. The second section focuses on how NRSP researchers approached policy. This includes discussion of the programme itself, and how DFID influenced the parameters of policy definition. The section also considers the different experiences of using research to influence policy, and reflects on the importance of interdisciplinarity, researcher reflexivity, learning networks and the role of individuals. The last section examines the relationship between research, policy and livelihood outcomes. Here, the sometimes unpredictable and counter-intuitive chains of cause and effect that link policy to livelihoods are discussed. The focus is on decentralisation, legal frameworks and social difference as key factors that mediate livelihood outcomes.

Context

Policy processes and institutions play a key role in NRM, and have been the focus of various research projects supported by the NRSP. This synthesis considers these projects in the context of increasing interest in the relationship between policy processes and livelihoods. Recent research has argued for a more nuanced

understanding of this relationship, stressing both unpredictability and the importance of politics and power. The ways that individual responses are influenced by institutional location has also been seen as important. The synthesis asks what NRSP projects can tell us about policy processes, and the relationship between policy-focused research and livelihood outcomes.

The synthesis first examined how researchers approached the challenge of influencing policy – how policy making and policy makers have been conceptualised. Then it assessed the research findings themselves – what NRSP projects reveal about the characteristics of the institutions involved at all levels in making policy, the political context of the policy process, and the ways in which diverse stakeholder voices come to be heard.

Defining, understanding and influencing policy

All research projects were strongly influenced by DFID's sustainable livelihoods approach. They also generally emphasised the importance of participation and stakeholder engagement, and implications of their activities for poverty reduction. Within this, there was considerable diversity in the ways that projects understood policy and policy processes. This ranged from those that saw policy as generally manageable and logical, to those that focused more on the political and contested aspects of policy making. For some, policy makers are officials in formal positions of influence; for others, natural resource users themselves should be seen as policy makers and participants in decision making.

Despite widespread recognition of the importance of both politics and power in policy processes, this was seldom substantively discussed. This matters because, if research fails to understand the complexities of the processes with which it is engaging, the prospects that it will have genuinely pro-poor effects are reduced. The absence of overt understanding of power relations can partly be explained by disciplinary orientation; researchers from a natural science background often led the projects, and were steered towards participation and institution building, which are not part of their training. The few projects that explicitly saw policy as embedded in power relations were led by researchers whose primary academic training was in the social sciences, and for whom writing about politics and power is more normal and acceptable. This problem could be overcome through more effective interdisciplinarity.

Although relatively few projects explicitly engaged with power relations or politics, the approaches that some took to influencing policy were innovative and

ultimately effective. Various factors may have contributed to this. Good understanding of the ways in which policy makers learn, and the ability to nurture and develop individual relationships are important, as is effective and sustained network building. Methodological flexibility and reflexivity among researchers also play a role. Lastly, time and continuity of commitment are critical.

Policy, research and livelihood outcomes

The last section considers the relationship between research, poverty and livelihood outcomes. The evidence on this is inconclusive, partly because livelihood outcomes are influenced by many factors that are independent of both policy and research. In addition, there is a disconnection between policy on paper and policy in practice. Sometimes policies are implemented only sporadically, if at all. Often positive and negative impacts of policy and intervention occur simultaneously.

It is often suggested that democratic decentralisation enables NRM policy and practice to become more accountable, and increases chances of greater community control over the processes of planning and management. However, the evidence is mixed. There is certainly evidence for participatory NRM working well in the context of decentralised government. However, decentralisation may be associated with elite capture, and the development of uncoordinated and incoherent policy. There is also the danger that centrally based policy makers will feel threatened and will resist decentralisation. Implementing decentralisation at the lower levels of state governance is a long task; mature experiences of decentralisation are very different from those that have been recently initiated.

The research reviewed contains many insights into the social, economic and political factors that influence livelihood outcomes. Legal frameworks governing resource access are crucial in shaping outcomes. Many research projects found overlapping and unclear legislation on property and access rights for natural resources. Social relationships are a crucial mediator of what is and is not possible in NRM. The most important factors of difference are economic status, age and gender; these factors also influence the outcomes of managed processes of social change such as decentralisation, and the ways in which different people may be represented in, or excluded from, NRM processes.

Some of the factors that were found to influence the relationship between policy and livelihood outcomes in NRSP projects are presented in Table 1.

Table 1. Influences on policy and livelihood outcomes: examples from NRSP projects

Influencing factor	Examples from NRSP projects
Tenure and property rights	In Bangladesh , community-based approaches to fisheries management have entailed the transfer of property rights to fishers. This is only of value if they can enforce and protect these rights. <i>De jure</i> and <i>de facto</i> property rights are very different. Patronage is an important mediator of resource access, with local power brokers using fish cooperatives as a front (Barr, 2001)
	In Ghana , tenure is especially important to resource access in rural areas, where much land is controlled by chieftaincies and the Ghana Forest Service (Brown and Amanor, 2002; Wiggins, 2003). At the peri-urban interface (PUI), tenure plays a key role in livelihood outcomes and disputes with traditional authorities are common. Changes in land allocation procedures present opportunities for local initiatives (Nunan, 2001)
	To pursue aquaculture in eastern India , self-help groups and cooperatives need longer leases on ponds in order to be able to successfully manage them. But conflict increases when ponds gain value from establishing tenure (Haylor and Savage, 2003). Also in India, in the forests of Madhya Pradesh, various tenancy rights issues are important, including encroachment on forest lands for cultivation without legal entitlement, and issues of entitlements of tribal people to <i>usufruct</i> from forests (Vira, 2005). At the PUI in Kolkota (Calcutta), meanwhile, “the complexity of land tenure belies belief” (Edwards, 2002: 6)
	Clearly defined boundaries concerning the nature of the resource and of the community that has access to it are an important pre-condition for community management in Tobago (Brown <i>et al.</i> , 2001)
Vertical linkages in government	In Uganda , strengthening community-level actors to engage in policy processes cannot stand on its own. If local levels of government are dislocated from the centre, effective policy impact is difficult (Sanginga, 2005)
‘Social capital’	In Bangladesh and Uganda , there is a need to build social capital in order to create greater trust, cohesiveness and common purpose, and overcome conflicts about NRM (Barr, 2001; Sanginga, 2005)
Gender	In Hubli-Dharwad in India , gender influences who does what in the PUI in many ways. Differences in male and female interests mean that it is sometimes important to consult with men and women separately. However, there is still a tendency to assume that men are the ‘natural partners’ in natural resources related work (Watson, 2005)
Age	In Ghana , young people are often those burning charcoal, in conflict with elders (Brown and Amanor, 2002)
Caste	In India , scheduled castes are often socially excluded and finding ways to engage them as well as other groups can be particularly challenging (Haylor and Savage, 2003)

Background

The role of policy processes and institutions in natural resources management (NRM) was an important thematic focus for the Natural Resources Systems Programme (NRSP). This study provides a synthesis of the findings across projects that have contributed to this theme. It was designed to extract insights and lessons for both NRSP and a wider policy audience.

The synthesis comprised a desk study and interviews with project leaders. Thirty-five projects were reviewed (Appendix), covering a wide range of geographical regions and policy contexts, including:

- In the Caribbean, participatory NRM and pro-poor integrated coastal co-management
- At the peri-urban interface (PU) in Ghana and India, urban development policy and planning
- In Nepal, policy environments supportive to improved land management strategies, soil fertility management and soil conservation
- In Bangladesh, aquatic and land resources, including floodplain management policy
- In Uganda, local bye-laws governing natural resources use
- In India, Tanzania and Zimbabwe, policies on common property resources
- In Tanzania, policies that support rainwater harvesting
- In India, aquaculture service provision
- In Ghana, environmental and forestry policy, particularly commercial policy concerning use of chainsaws, and policies for local land use, including charcoal burning and cultivating close to river banks
- In India and Nepal, joint forest management
- In the Brazilian Amazon, agrarian and environmental policies and the linkages between these and land use dynamics and livelihood security.

The synthesis conveys important lessons concerning the relationship between research and policy. However, a number of caveats need to be made concerning the findings. Firstly, because initial analysis focused on a range of key themes that were

identified in an inception phase, certain projects inevitably came to the fore. This synthesis does not therefore claim to be comprehensive in its coverage. Secondly, the majority of interviews were carried out with UK-based project leaders, and the insights from the interview material reflect this bias. Thirdly, and most importantly, some of the projects reviewed were not completed at the time of the synthesis. We acknowledge that the impact of research on policy is far from instantaneous, and further impact may have taken place after the synthesis study.

Context

There has been increasing interest in policy processes and the relationship between these, development practice and livelihoods. A growing literature questions the linear and technocratic approach to policy making that has characterised much development thinking in the past (Shore and Wright, 1997; Keeley and Scoones, 1999; Mosse, 2003; 2005). At the same time, donors (including the Department for International Development, DFID) are searching for ways to inform and improve policy making. If policy does not impact on livelihoods in the ways that have been assumed, then there is a need to clarify the ways in which policy is both generated and implemented. Underlying all of this is a concern with the ways that research influences – or should influence – NRM policy making.

The relationship between research and policy making has been the subject of much recent analysis. As well as being of concern for NRSP and other research programmes, this relationship has been the subject of DFID-funded research in the shape of the Overseas Development Institute (ODI)'s Research and Policy in Development (RAPID) programme. There has been a sustained questioning of the impact and value of research for policy making, as well as development practice (Young and Court 2004). Earlier assumptions that research informs policy in a straightforward way have been replaced by an awareness of the complexity of the situation. Solesbury (2003), for example, examined the sustainable livelihoods approach (SLA) in DFID policy, and emphasised the critical importance of context, the relationships between individual advocates, and communication processes. The SLA has become an important cornerstone of DFID thinking with regard to NRM, and its spread may have much to do with the abilities of a small group of advocates to get their ideas across. This in turn is influenced by institutional location and personal contacts, factors that are seldom explicitly addressed in processes of policy analysis or research that aim to influence policy processes.

Of course, insights about research–policy linkages do not necessarily tell us anything about what happens with policies after they are formulated – and therefore little about the eventual impact on livelihoods. A critical literature suggests that the relationship between policy and implementation is in fact strongly mediated by a range of factors that lead to unpredictability of outcomes. These include the role of politics, power and personal discretion. Mosse argues that in development projects, policy does not produce practice, but rather practices influence policy, in the sense that “actors in development devote their energies to maintaining coherent representations regardless of events” (2005: 2). Thus policy serves more to legitimise what is taking place than direct what might take place.

The notions of discourse and narrative are also important for many commentators on policy processes. Drawing on the work of scholars such as Latour (2000), they suggest that in order to understand policy making, we need to engage with how what is said and written is located in relations of power and inequality. In turn, the implementation of policy is as much influenced by the internal dynamics and the structural positioning of institutions as it is by the merits or otherwise of the policies themselves. Accounts of the practices of such institutions, and particularly the encounters between different kinds of development implementers (Long and Long, 1992; Goetz, 2001; Olivier de Sardan, 2005), go some way towards explaining the unpredictability of policy implementation.

Increasingly over the last 5 years, NRSP, like other programmes within the Renewable Natural Resources Research Strategy (RNRRS), has begun to ask researchers to explicitly engage with policy processes. But what does this amount to? And what do these projects tell us about the relationship between policy and NRM outcomes?

With these questions in mind, the synthesis study focused on two areas. Firstly, it looked at how researchers approached the challenge of influencing policy. These findings reveal much about the way that researchers conceptualise the policy process, as well as the challenges and contradictions posed by the dynamic relationship between research and policy. Secondly, it examined what NRSP research projects had discovered about policy processes and institutions in NRM. Those projects that analysed policy and policy processes give us information about the characteristics of the institutions involved in making policy, the political context of the policy process, and the ways that diverse stakeholder voices come to be heard.

Diverse approaches to understanding policy

The approaches to policy taken by NRSP researchers were strongly influenced by NRSP's own evolving setting. DFID, as funder, influenced the broad parameters of the research programme. This became particularly important after 1998, when DFID oriented its strategy towards a poverty focus and the notion of sustainable livelihoods. The parameters for researchable questions became increasingly focused.

All the NRSP projects reviewed here approached their enquiries with a set of assumptions that were strongly influenced by DFID's broader pro-poor agenda, as well as research on policy processes that it has funded, and the widespread acceptance of participatory, multi-stakeholder approaches to NRM. In many cases, the predominance of DFID's sustainable livelihoods model (Carney, 1998; Scoones, 1998) is reflected in the approaches to policy and institutions adopted in the projects. Research on environmental policy processes which came from the same team that initially worked on sustainable livelihoods (Keeley and Scoones, 1999) has also had a very strong influence on how researchers framed the question of policy. In later projects, ODI's RAPID programme, which identifies the importance of policy 'windows' (Court *et al.*, 2004), also shaped the way that teams made sense of policy processes.

Nonetheless, NRSP research projects reflect a broad spectrum of perspectives in their definition and conceptualisation of policy. This diversity of approaches is illustrated by the examples in Box 1.

Despite this diversity across projects, there were also similarities between perspectives. Most agreed that there is a gap between policy on paper and policy in practice which needs to be investigated, and that this gap creates a disjuncture between the apparent intent of policy and its *de facto* effects. So implementation needs to be understood more clearly as part of policy processes if there is to be any chance of making policy that responds to NRM practice, or to ecological fluctuations.

The different approaches to policy result in diverse actors falling under the name of 'policy maker'. They can be the stakeholders in a localised NRM intervention such as a project or programme; more often they are located in a broad range of institutions of local government and civil society which are involved in the day-to-day mechanics of implementing policy. For some researchers, an inclusive view of the

Box 1. Diverse approaches to understanding policy in Nepal, Uganda and Ghana

A project analysing land management strategies in Nepal adopted a methodology for analysing policy that assumes that policy processes are rational and measurable. It concluded that policy decision making involves choosing between alternative aims, objectives and actions which are often made on the basis of limited knowledge.

Research in Uganda focused on strengthening social capital to improve decision making in decentralised NRM processes. Here, policy was seen as embedded in society and social processes, and as dynamic and diverse. Because of this, researchers concluded that if research is to influence policy, it needs to provide direct support to processes of policy formulation and implementation.

Projects in the Brong Ahafo region of Ghana approached policy as a political process. In this view, policy needs to be informed by the experiences of citizens, and citizens need to understand the avenues through which they can create demands for appropriate policies. Researchers argued that the institutional mechanism for the validation of policy prescriptions must ultimately be the democratic process.

Based on projects **R7958**, **R7856** and **R8258**

policy process means that natural resource users are also to be considered as ‘policy makers’, with a right to representation in decision making processes that affect their livelihoods.

Power – ever present, seldom discussed

Despite this opening of the definitional boundaries of what constitutes a policy maker, a strong assumption of rational policy maker behaviour remains embedded in many of the approaches to policy taken by researchers. It is widely held that the decisions of policy makers can be influenced by better and more accurate information. As a result, despite widespread recognition of the importance of both politics

and power in policy processes, this is seldom substantively discussed in research findings. A reading of the final written outputs of the projects reveals that an analysis of the power relations that animate institutions and shape their behaviour is notably absent from most. While findings are presented that demonstrate power relations at work, the lack of systematic analysis of these means that they remain largely embedded in background information, and are not explicitly used in efforts to influence policy.

Much research thus still overlooks the role of power, resulting in the development of managerial and technical solutions to problems that in reality have just as much, if not more, to do with institutional change and policy influence. Such research seldom attempts to understand the difficulties and complexities of the processes with which it is engaging. This matters because, without such an understanding, the chances that the insights from research will have genuinely pro-poor effects are greatly reduced. As is discussed in Section 3, elite capture and the presence of competing interests are a constant threat in the implementation of equitable development policy. Understanding how this works in particular instances is therefore essential.

Interdisciplinarity is key

The reasons for the absence of overt understanding of power relations have much to do with disciplinary orientation within projects, and with an increasing pressure to show results from research. The shift in emphasis away from technology or productivity, and towards policy and institutions, has challenged many researchers. The synthesis study shows that, over the course of the NRSP, researchers from a predominantly natural science background were encouraged to adapt their research focus to accommodate this. Some did this very well, others less so; but the important point is that it was not part of what they were trained to do, and certainly not how they expected to present their findings.

The few projects that explicitly engaged with policy formulation and implementation as politicised and problematic processes were led by researchers whose primary academic training was in the social sciences. Articulating policy processes in terms of politics and power, context and contingency, is what social scientists have been trained to do. And importantly, this is the language in which it is normal for them to report their findings. For natural scientists or those with a background in management, the apparently more neutral language of linear cause and effect is more normal and acceptable.

One project leader described the challenges of communication thus:

“The difficulties are the ways that the different disciplines report, and their expectations. The anth[ropologist]s would write a paper with some catchy title, and the soil scientists would want to write a treatise on Carbon 16 in this field or whatever, so the sort of product we were trying to give to each other was very different.”

For many, interdisciplinarity is a solution to the challenge of strengthening policy influence. There are positive examples of interdisciplinary learning in NRSP projects. One researcher explained the reasons for successful interdisciplinary work in the following terms:

“I think two things [matter]...one is trust, and the other is chemistry... I had to be willing to put myself through a mini-anthropology course to understand what they were talking about, to understand what were the basic tenets of the discipline, and they had to be willing to come and do some computer work.”

If positive livelihood outcomes are to emerge from development research, it will be necessary to develop closer relations between the natural and social sciences, better communication between them, and more transparency in addressing the sometimes painful clashes or competition for resources that mar their collaboration at present.

Beyond the workshop: alternative routes to policy influence

Although relatively few projects were explicit in their engagement with power relations or politics, the approaches that some took to influencing policy were nonetheless innovative and ultimately effective. How did this happen?

Policy influence became of increasing importance over the duration of the NRSP. However, some researchers felt that practical guidance to improve influence was lacking. One researcher observed that:

“...there was very little guidance from NRSP or DFID’s research in general about policy processes, and I think there was an implicit assumption about linearity – you do the research, you write it up, you publish it, policy makers read it [...] there is an assumption that the kind of things you would need to produce from your research would somehow influence policy, but the final [part] between the end of the research and a policy change is very poorly thought through.”

This assumption of linearity led to a standardised model for policy influence: a familiar range of written dissemination products including policy briefings, research reports and training manuals; plus workshops for policy makers, sometimes including other stakeholders, at which research findings were shared, discussed and debated.

But beyond the workshop exists a hinterland of networks and alliances between key actors in policy processes. Many researchers made conscious efforts to build on the standard model of policy influence, to penetrate these networks, or to create partnerships with local researchers who are themselves linked to key networks. Some of the different techniques and strategies used by NRSP projects with the aim of engaging with and influencing policy processes or policy makers are summarised in Table 2.

Several projects took the demand for policy influence as a starting point for pursuing action research and planning methodologies, which implies a different understanding of policy influence from the publications-plus-workshops model. In the action research tradition, changes catalysed by the research are part of a process of collective learning and action, an ongoing outcome of the research process, rather than a final output. This has led to dilemmas for researchers who find themselves part of the processes of policy making, planning and NRM as actors, rather than merely as observers. One project leader asked,

“What are we trying to do? Are we trying to influence policy, or are we trying to promote the interests of certain people in the policy process? [...] Our attempt really [...] is to promote the interests of those who were formerly looked down upon, to try and invert the whole policy process in their interests [...] Basically this is an ocean liner which you can’t change the course of very easily, certainly within a two and a half year project.”

Despite the challenges of this kind of research, it is from the interface between research and action that many insights on institutions and policy processes emerge. Box 2 shows an example of a project that engaged with NRM stakeholders at the village level, and at the same time developed and piloted methodologies for participatory action planning, using action-oriented methodologies.

The Hubli–Dharwad project illustrates the challenges of carrying out action research on NRM in a policy vacuum. There is no policy or planning that touches the PUI, and local people mistrust those government actors normally seen as policy makers. In this context, the task of producing research that influences policy turns on the successful engagement with communities being used to challenge an anti-poor

Table 2. Tools and strategies to promote influence of research on policy

Project theme	Key features of research tools and techniques	Strategies for influencing policy and policy makers
Flood plain management, Bangladesh (R8195)	Participatory action plan development (PAPD): action research, consensus building and action planning with community groups	Spread of PAPD methodology across different international development agencies
Marine protected area management, Tobago (R7408)	Trade-off analysis and multi-criteria analysis: iterative decision support tool that generates future scenarios, defines criteria with which to judge them, and weights criteria by stakeholder groups	Policy actors were stakeholders in the trade-off analysis process. Results were owned by these participants, increasing the possibilities for influence through workshops and seminars
Rainwater harvesting, Tanzania (R7888)	Training materials (PowerPoint slides, booklets, leaflets and videos) and courses, including training of trainers. Close engagement with senior policy makers	Fill knowledge gaps among those charged with promoting and extending rainwater harvesting
Constraints to sustainable land management, Uganda (R7856)	Action research aimed at facilitating dialogue, supporting action, policy analysis, and integrated NRM research and development	Formed policy working groups and 'task forces' at different levels of local government, stakeholder forums
Inclusive public governance, Ghana (R8258)	Networks and platforms to generate locally owned, accurate information with the aim of informing policy makers	Two-way strategy: better information to bind senior policy makers to downward accountability, and increased local capacity to hold policy makers accountable
Pro-poor rural services, India (R8100)	'Facilitated advocacy', street plays, documentaries, consensus building. Eight-step process with strong role for researchers as facilitators	Consensus building among policy makers using 'Delphi technique', from high to much lower levels. 'Facilitated advocacy' to bring poor people's voices to the policy process

Box 2. Community action planning at the peri-urban interface (PUI) in Hubli–Dharwad, India

Two projects in India examined livelihood dynamics in the semi-arid and drought-prone peri-urban area around the twin cities of Hubli and Dharwad. Despite increasing urbanisation, policy makers concerned with NRM tend to focus on rural areas. Urban planning processes are not effective enough to have a role in major PUI production systems, and there are no broad strategic plans covering the peri-urban area.

An action planning initiative aimed to bridge gaps between actors in the planning process. This component of the research took the form of a participatory planning process facilitated by researchers and evolved by community members. The process of producing action plans involved not just community members and researchers, but other stakeholders such as non-governmental organisation (NGO) staff, Indian and British academics, and government personnel. Thus the methodology was designed not only to nurture ownership of plans at the community level, but also to increase the sensitivity of other stakeholders to the needs and priorities of the poor. The project manager observed that by taking this approach, the researchers were consciously trying to address a major bias in the mindset of planners and policy makers in India: “that the poor are difficult to work with”.

Based on projects **R7959** and **R8084**

policy bias, and on the dissemination of the methodology that has been developed, so that ultimately a change in practice may indirectly influence policy.

In all cases of projects using applied or action-oriented approaches to catalysing policy change, considerable methodological flexibility was needed in order to stick to the ultimate goal of developing methodologies that would allow resource-poor members of communities a voice in development processes. This meant adapting to existing conditions – for example, a lack of trust in government staff, or the dynamics of patron–client relationships between richer and poor people in the same villages – as part of an iterative process of methodological testing.

Reflexive practices

It is often not the quality, accuracy or robustness of research findings that determine their contribution to policy processes, but rather political questions of legitimacy and 'stake'. For example, the assumption that information from externally funded research can and should have an influence on policy, and a similar assumption that such research should be 'demand-led' by Southern policy makers, may both be questioned.

Such issues imply that researchers need to become more reflexive. Reflexivity refers to research practice in which the researcher recognises and explicitly analyses the impact of their own history, experiences, beliefs and culture on the processes and outcomes of the enquiry. If, as they are urged to do, researchers are to engage directly in the processes they seek to influence, then it is increasingly important for them to consider their own position, and the implications this has for what can and cannot be done with their findings. If research is really to influence policy, researchers need to become more visible, and clearer about the kind of changes they are aiming, and able, to achieve. Those projects in which researchers reflect directly and explicitly on their own role in the process, are also those in which engagement with policy makers appears most deeply and successfully embedded.

Networks and support for learning

Influencing policy is often a question of building stronger bridges between institutions and stakeholders at different levels. It is also about supporting policy makers in their efforts to learn, rather than simply giving them access to more information. This can include providing support to stakeholders who are currently excluded from NRM processes, as well as strengthening the skills and capacities of the relatively powerful in order to promote the development of more efficient and accountable management and governance processes. In this, the relationship between the research funders and their in-country offices and representatives is potentially important, but often overlooked or underplayed. When the relationship is strong, the chances that research will influence policy are higher. Unfortunately, in some cases, the relationship between DFID's centrally funded research and national development programmes is one of disconnection and mutual ignorance.

Time, continuity and commitment

Several projects emphasise the time, continuity and commitment necessary to conduct research that influences policy. Creating change in local institutions and policy processes is challenging: they may be relatively autonomous and locally specific, and they will always face their own imperatives. In those projects where change has been successfully stimulated through research, significant investments of time and the construction and maintenance of local alliances have proved essential. This implies ownership of the research agenda by local partners and a long-term commitment from the research funding body. An example is shown in Box 3.

Box 3. Continuity of commitment in the Caribbean

In research into marine protected areas (MPAs) in the Caribbean, continuity between projects was important. The first project focused on the problem of managing an MPA in Tobago, drawing in a wide range of stakeholders. The second project, informed by the challenges identified in the first, looked much more closely at the institutional landscape which shaped what could and could not be done to adopt a sustainable approach to managing the park. Because the research team had adequate time to build their learning and pursue this across different institutional levels, they have delivered particularly rich insights, not only into what policy is but also into how to catalyse policy change, moving beyond the boundaries of what can be expected from conventional policy research.

Based on project **R7408**

Conversely, researchers on shorter projects found that expectations of what could be achieved within the time allowed were sometimes unreasonably high, and that there was little room for manoeuvre if the early stages of the research produced surprising findings or gave rise to unexpected process difficulties. In these cases, it is dissemination and downstream activities that come under pressure, since time and other resources are taken away from them to support the research effort.

The role of individuals

Individuals also have a key role in either catalysing or inhibiting institutional change. While this may seem self-evident, it does have implications for understanding what is needed to bring about positive change. The pivotal role of individuals demands a focus on the micro-politics of how decisions are made and the consensus required for different kinds of action. Trusted individuals are key to effective communication and learning processes, but change initiatives that over-rely on individuals may become fragile and vulnerable. Several research teams that developed good relationships with key individuals and began to build constituencies for change experienced problems when those individuals were posted to other areas or left their institution to find other employment. Conversely, when researchers engage not just with individuals but with the factors influencing their actions and priorities, there are better chances that positive change may be sustained.

Livelihood outcomes of policy and research

Livelihood changes occur for a number of reasons, some of which may have very little to do with policy. There is also often a strong disconnection between policy on paper and policy in practice.

In the synthesis study, lack of impact of policy on livelihoods, and the difficulty of tracing impact, emerged as recurrent themes. For example, research into the impact of community forest management on livelihoods in Nepal found that impact varied according region, the type of forest being managed, and the social and spatial patterns of forest resource use (Seeley, 2003). Impacts were not always positive, and even where they were positive, there was also evidence that women and poor and vulnerable social groups were not involved in decision making, and had not benefited from any improvements in management systems. This illustrates that policy impact is seldom simple, and positive and negative outcomes may occur at the same time.

Research on sustainable land management in Amazonia found that government policies had little impact in the region, where access to land is fiercely contested by powerful actors (Brown and Muchagata, 2002). Despite the existence of pro-poor policies – one, for example, supports small family farms – these tend to be poorly integrated, implemented by different agencies acting in isolation, and sometimes completely contradictory in direction. They also seldom take into account the linkages and interactions of various activities or forms of land use.

Research on environmental policy and livelihoods in Brazil and Ghana also found a lack of impact (Wiggins, 2003). Here, policies on paper had very little influence on livelihoods because they were only applied sporadically, if at all. In Ghana, rules and regulations that were only occasionally applied sometimes resulted in ‘campaigns’ that had a negative impact on particular livelihood practices. Charcoal burning and forest-based occupations such as carpentry and timber extraction were particularly susceptible to this. Later projects in Ghana add the finding that agricultural development policies have tended to help richer farmers; they have often attempted to develop plantations which favour those with access to land, capital and labour (Brown and Amanor, 2002). Many of these policies arise from a strong centralised policy narrative about environmental protection in which the ‘the poor’ are seen

not as the beneficiaries of policy, but as agents of environmental destruction. In this sense, policies are not intended to be 'pro-poor', but nonetheless have significant impacts on poor people's livelihoods, both positive and negative.

These findings illustrate how some policies have failed to have an impact on livelihoods, while others have had an unintended impact. Do different issues emerge if we examine the impact of policy-directed research projects on livelihoods? Box 4 illustrates a research process that catalysed positive livelihood change, as well as having an impact on policy makers or policy processes. It should be noted that in this example, as in others where successful change has been catalysed, NGOs and community groups have been important partners.

This project demonstrates that a research project may bring both material and non-material livelihood benefits to those community members with which it

Box 4. Improved policy for aquaculture service provision to poor people, India

This project worked on influencing the policy process for aquaculture service provision in three states: Jharkand, Orissa and West Bengal. Its emphasis was on self-help groups (SHGs), backed by strong support and advocacy from an NGO (Gramin Vikas Trust) and the principal research team from Support to Regional Aquatic Resources Management (STREAM).

Livelihood benefits have accrued to pond keepers as a direct result of project action, but the impact has been far wider according to the project leader. Project activities gave rise to changes in policy, and these have resulted in livelihood benefits. In one case:

"... the policy change [changed policy on lease period] was the driver for exploited weavers to struggle to take up aquaculture and the benefits this has brought. Similarly, One-Stop Aquashops (that changed policy on making information available to farmers and fishers) have emerged in different forms within government, NGOs, the private sector and federated SHGs without any project financial support..."

In addition, the increased income generated by aquaculture activities has resulted in the proliferation of apparently successful, and locally initiated, group formation.

Based on project **R8100**

engages. Further, livelihood benefits may be indirectly catalysed, as research influences policy, which may in turn influence livelihoods. Finally, beneficial change may spread outwards from the small group, both more widely in the community, and from community to community, via the spread of methodologies and approaches developed by researchers. Research projects can also test new approaches and technologies that are against the grain of existing policies, and policy makers as much as researchers use these experiences to push boundaries and learn lessons.

Decentralisation: key to positive livelihood outcomes?

The existing governance context is critical to whether policy or research is to achieve success in terms of positive livelihood outcomes for poorer people. It is frequently argued that democratic decentralisation provides an opportunity for NRM policy and practice to become more accountable, and increases chances of greater community control over processes of planning and management (Brown and Amanor, 2002).

In a positive scenario, decentralised NRM could make good use of local knowledge and insights, and the impact of policies on livelihoods would be less likely to be ignored or discounted. Decentralisation could provide a solution for the disconnection of national policy from local realities. It may also allow local or community-level research interventions to become useful as valid examples that might be replicated in other decentralisation contexts. Participatory NRM, which has emerged in recent years as an increasingly important strategy for nurturing both the conservation and development of natural resources, is considered by many to function most effectively in a context of decentralised local government. Together, decentralisation and participatory NRM processes can create opportunities for multiple stakeholders to address their problems and conflicts, particularly where resource use is contested. The policy narrative advocating both approaches is powerful, although experience of realising this in practice has been extremely variable (Sarin, 1998; Adams and Hulme, 2001).

But decentralisation is also associated with a plethora of potential dangers for NRM policy and practice, and the synthesis study provided many examples of these. It can lead to uncoordinated and incoherent policy, made without adequate information or analysis, and based largely on the interests of local elites (Wiggins, 2003). It can involve the establishment of institutional mechanisms that exist on paper only, and in reality have no resources or influence (Brook, 2005). Decentralisation involves central government institutions giving up powers which some are not happy to relinquish; this can result in central policy actors digging in

their heels and blocking the progress of decentralisation (Brown *et al.*, 2001; Brown and Amanor, 2002). Institutions of decentralised government have in some cases taken up responsibility for setting policy agendas and writing new rules governing resource use, whilst simultaneously devolving responsibility for implementation to communities, who have little choice but to bear the costs of implementing decisions which they did not make (Lewins, 2004).

Implementing decentralisation policy and creating effective processes at the lower levels of state governance is a long task (Manor, 1998). Established decentralisation provides a very different context for NRM from where decentralisation has been recently initiated. Boxes 5 and 6 present the experiences of two research projects which looked at different aspects of forest management in contrasting contexts

Box 5. Joint forest management under decentralised local government in Harda District, Madhya Pradesh, India

In 1990, a nationwide programme of joint forest management (JFM) began in India. Under JFM, resource users are given a role in the protection and regeneration of forest land in return for rights over the use of certain forest products. In 1992, decentralised local government (Panchayati Raj) institutions were empowered to perform a role in the management of local natural resources, including forests, at the village level. In Harda, however, Panchayati Raj institutions (PRIs) do not play a significant role in the management of forests, despite the legal provision to give them a greater role.

Different stakeholders have very different perceptions of the JFM programme in Harda District. Forestry Department (FD) staff felt there had been a paradigm shift in their functioning, from working ‘against the people’ to working ‘with the people’, but some felt that this had met with resistance from within the department. However many respondents thought that there was now greater acceptance by the FD staff of the rights of the local communities.

Respondents from community organisations such as the Mass Tribal Organisations, on the other hand, believed that there continued to be significant differences between the FD and local people. They argued that JFM had tilted the balance of power towards the FD, since departmental staff controlled and dominated JFM committees at the village level.

Based on projects **R7973** and **R8280**

Box 6. Decentralised environmental policy processes in Ghana

Local government decentralisation in Ghana has its origins in reforms first introduced in 1987. While devolution is still far from complete, there is in process a progressive transfer of decision making and legislative control to district-level authorities for many aspects of environmental management. Partial decentralisation is mirrored by a rhetorical commitment to local participation in policies that affect natural resource use. But despite many pronouncements in favour of local participation in the 1990s, in reality environmental policy making in Ghana remains highly centralised, and moves towards local community engagement are at best tentative.

Environmental management and the dangers of environmental mismanagement have a high profile at all levels, and district administrations have been under pressure to implement environmental policies, including forest management policies. This has led to the formation of new institutions of environmental control and protection, such as committees and local fire squads, and an increase in the number of local bye-laws to control activities including charcoal burning, hunting and the use of fire.

Two major forces shape these new institutions and decision making processes. Firstly, even at decentralised levels, the narrative of environmental crisis that prevails at the centre of the policy process is very strong. This narrative casts poor people as the instigators of negative environmental change. Secondly, new institutions and decision making processes are located in an environment where rights and claims to natural resources are shaped by factors like ethnicity, age, gender and length of residence. More and less powerful local actors have very different access to and influence on local decision makers, and there is little evidence that attempts at decentralisation are increasing the chances of marginalised voices being heard in the policy process.

Researchers concluded that the shortcomings of the forest management system are not necessarily the product of decentralisation. The contradictions tend to come from the higher levels of administration: from ministries, departments and regional coordinating bodies who issue top-down directives and expect the districts to comply; from government agencies who expect districts to implement government policy without a debate on the appropriate needs of the districts; and from departments which think they are too important to decentralise.

Based on projects **R7957** and **R8258**

of decentralisation. The first, in Madhya Pradesh, India, worked within a well-established example of decentralised and participatory forest management, widely held to have been a success. It examined how processes could be improved by a more thorough incorporation of stakeholder perceptions to forest management. The second, in Brong Ahafo, Ghana, examined the poverty dimensions of forest governance and worked to establish information systems that presented local realities to policy makers in district-level institutions.

The example in Box 5 illustrates how national policies on decentralisation and forest management can play out on the ground. Adopting a participatory approach to forest management implies a change in the policy culture of the Forestry Department, just as adopting a decentralised approach to governance implies a change in the broader political culture. But intended changes are mediated by prevailing social, political and bureaucratic systems. Although not all perceptions of the joint forest management implementation are positive, the Harda case does illustrate a scenario in which changes were taking place that generally corresponded with the directions laid out in national policy. This is in contrast to the Ghana example, where policies with similar intent have unfolded in a very different way (Box 6).

Comparing the Ghanaian experience with that in India illustrates how important the decentralisation context is to the outcome of attempts to broaden the direction of NRM policy to involve a wider range of stakeholders. Both examples present qualifications to the assumption that decentralisation and participatory NRM are mutually beneficial. Particularly important in the Ghanaian case are the upward linkages that keep theoretically decentralised processes within the sphere of influence of central policy actors, and maintain a command-driven and prescriptive approach to NRM structures and policies. The Indian case meanwhile draws attention to the kinds of conflict that can emerge as new decentralised management institutions are created and animated by local social and political forces. The dissonance between different stakeholders' perceptions about the implementation and functions of joint forest management processes illustrates not only the different interests of different groups, but the challenges of getting stakeholders to work together effectively.

NRM policies and interventions must take into account the status and form of decentralisation if they are to be successful. Local communities may need support in building the skills and capacities that are needed to effectively take up the opportunities that decentralisation offers, just as government officials at lower levels may need support to make policy which reflects local issues rather than central narratives.

Legal frameworks and tenure: connecting policy to livelihoods?

Legal frameworks governing resource access are also a crucial factor in shaping outcomes. They often emerge from particular policy approaches, and are the mechanism through which the intentions of policy makers are translated into structures that have an impact on livelihoods. Elements of economic, social and political processes – from socially differentiated access to resources to the financial costs associated with formal resource tenure – are all reflected in these frameworks, which vary widely from place to place.

Many research projects found overlapping and unclear legislation on property and access rights for natural resources, especially in the case of common property resources. Systems of land tenure in particular were found to be extremely complex in many areas. In many studies, the complexity of legal frameworks, combined with weak implementation, meant that there was a strong difference between legal and actual natural resource tenure.

Research in Uganda looked in detail at the dynamics of formulating and implementing legal frameworks for NRM, focusing on local bye-laws. The findings, summarised in Box 7, show that there are many factors at play in the weak implementation of legal frameworks.

Many NRSP researchers argue that legal frameworks are of critical importance in building sustainable NRM practices. But numerous variables, not directly apparent from the legal and policy typologies, may affect and even determine the legal framework. As the Ugandan example illustrates, some of these variables involve resource users at the local level; others involve international obligations, governance structures, and the effective deployment of human resources.

Factors of difference: whose livelihoods are improved?

Social relationships within and beyond the local area are a crucial mediator of what is and is not possible in NRM, and in shaping the livelihood outcomes of policy or research interventions. The research reviewed contains a wealth of insights concerning the social, economic and political factors that influence livelihood outcomes. These exist regardless of what researchers do, and they are an important part of the picture with which policy makers need to engage.

Box 7. Bye-laws in agriculture and NRM in Uganda

Unusually, Uganda's 1997 Local Government Act, which outlines the structure of decentralisation, provides a legal framework for the participation of local communities in NRM policy making. Land use, management and administration are all located in a system of elected local councils (LCs) that extends from the village through sub-county to district level.

There are six bye-laws on agriculture and NRM covering the areas of soil and water conservation, food security, tree planting, bush burning, controlled grazing, and swamp reclamation. Each of these byelaws has specific regulations and enforcement mechanisms, and various local government staff are charged with implementation. In reality, enforcement mechanisms are very weak, and low levels of enforcement are compounded by the lack of an effective agricultural extension service.

Farmers in general are not aware of these bye-laws. In addition, analysis revealed that some categories of farmers would have difficulty in complying with some of them. These included older men and women, widows and orphans with limited family labour, or lacking money to hire labour or to buy implements like spades and hoes needed to establish conservation structures. Farmers with alternative sources of income, which are more lucrative than farming, might not have the time to put up conservation structures on the plots they are using for food security. The controlled grazing bye-law could cause problems for owners of small livestock, especially women, who have small-sized farms and do not own grazing land; it may force the poor to sell their livestock and could increase poverty and conflict among farmers.

Based on project **R7856**

For example, in a hierarchically organised society like that in Bangladesh, social relationships are partly based on patron–client links. Such relationships both secure and restrict access to natural resources. As a result, a Bangladeshi floodplains project concludes,

“achieving pro-poor development through improving the management of natural resources, especially CPRs....can only occur when the interests of those endowed with socio-political capital are considered.” (Barr, 2001: 22)

While this conclusion cannot be generalised, it is nonetheless a reminder that research and policy interventions risk a great deal if they do not thoroughly examine social context, and consider the relationships between the more and less powerful.

The most important factors of difference include economic status, age and gender, which play a critical part in shaping opportunities to sustain or improve livelihoods. These factors also influence the outcomes of managed processes of social change such as decentralisation, and the ways in which different people may be represented in, or excluded from, NRM processes.

Research findings point to the need for caution to ensure that development resources are not captured by local elites, and to the critical importance of building on existing collective arrangements for NRM rather than necessarily developing new ones. A common finding across the projects is that many local institutions lack the capacity to implement sustainable and equitable NRM policies and practices.

This synthesis has shown that there are considerable challenges for researchers in trying to fully comprehend the policy and institutional context within which their research is operating. Researchers may come from backgrounds where such understanding is not prioritised; and it cannot easily be bolted on to approaches that have emphasised technical and managerial approaches. Equally, the institutional context will reflect prevailing relations of power, and discussion of these may not be encouraged. These challenges are compounded by pressures on research projects of both time and continuity.

But such comprehension is worthwhile. The evidence from NRSP projects indicates that, where this has been successful, the dividends in terms of the livelihoods of the poorest can be significant. On the one hand, at a local level, elite capture may be avoided. Also, engagement with higher level policy makers can be more effective if the context within which they operate is understood. Therefore analysing how policy makers learn may be as valuable as simply providing them with information. In this, individuals may be important, but it is also necessary to understand the factors that influence their actions and priorities.

Researchers do need to be sensitive to their own role in influencing the nature and content of both research findings and policy responses. This may be a key factor in achieving better interdisciplinarity, which implies mutual learning between those with technical NRM expertise and those with a stronger focus on understanding institutions. For research funders, the expectations placed on individual research projects should include consideration of the time taken to influence policy, and focus as much on the approach taken as the results achieved.

REFERENCES

- Adams, W. and Hulme, D. (2001) Conservation and community: changing narratives, policies and practices in African conservation. In D. Hulme and M. Murphree (eds), *African Wildlife and Livelihoods: the Promise and Performance of Community Conservation*. James Currey, Oxford.
- Barr, J.J.F. (2001) Methods for consensus building for management of common property resources. Final Technical Report for project R7562. Centre for Land Use and Water Resources Research, University of Newcastle, Newcastle.
- Brook, R.M. (2005) Enhancing livelihoods and natural resources management in peri-urban villages near Hubli–Dharwad. Final Technical Report for project R8084. School of Agricultural and Forest Sciences, University of Wales, Bangor.
- Brown, D. and Amanor, K. (2002) Poverty dimensions of public governance and forest management in Ghana. Final Technical Report for project R7957. Overseas Development Institute, London.
- Brown, K. and Muchagata, M. (2002) Policies, institutions and interventions for sustainable land management in Amazonia. Final Technical Report for project R7870. Overseas Development Group, University of East Anglia, Norwich
- Brown, K., Adger, W.N. and Tompkins, E. (2001) Building consensus amongst stakeholders for management of natural resources at the Land Water Interface. Final Technical Report for project R7408. Overseas Development Group, University of East Anglia, Norwich.
- Carney, D. (1998) *Sustainable Rural Livelihoods: What Contribution Can We Make?* DFID, London.
- Court, J., Hovland, I. and Young, J. (2004) *Bridging Research and Policy in International Development: Evidence and the Change Process*. ITDG Publishing, Rugby.

- Edwards, P. (2002) Institutional assessment: reviewing policies, processes and stakeholder positions at the Kolkata peri-urban interface. Working paper for project R7872.
- Goetz, A-M. (2001) Women Development Workers: Implementing Rural Credit Programmes in Bangladesh. Sage Publications, New Delhi.
- Haylor, G. and Savage, W. (2003) Investigating improved policy on aquaculture service provision to poor people. Final Technical Report for project R8100. STREAM Initiative, Bangkok.
- Keeley, J. and Scoones, I. (1999) Understanding Environmental Policy Processes: a review. IDS Working Paper No.89. Institute of Development Studies, University of Sussex, Brighton.
- Latour, B. (2000) When things strike back: a possible contribution of science studies. *British Journal of Sociology* 5 (1): 105–123.
- Long, N. and Long, A. (eds) (1992) *Battlefields of Knowledge: The Interlocking of Theory and Practice in Social Research and Development*. Routledge, London.
- Lewins, R. (2004) Integrated floodplain management – institutional environments and participatory methods. Final Technical Report for project R8195. ITAD Ltd, Hove, East Sussex.
- Manor, J. (1998) *The Political Economy of Democratic Decentralization*. World Bank, Washington.
- Mosse, D. (2003) The making and marketing of participatory development. In P. Quarles van Ufford and A. Giri (eds), *A Moral Critique of Development: in Search of Global Responsibilities*. Routledge, London and New York.
- Mosse, D. (2005) *Cultivating Development: An Ethnography of Aid Policy and Practice*. Pluto Press, London
- Nunan, F. (2001) Further knowledge of livelihoods affected by urban transition, Kumasi, Ghana. Final Technical Report for project R7854. School of Public Policy, University of Birmingham.

- Olivier de Sardan, J-P. (2005) *Anthropology and Development: Understanding Contemporary Social Change*. Zed Books, London.
- Sanginga, P. (2005) *Strengthening social capital for improving policies and decision making in Natural Resources Management*. Final Technical Report for project R7856. Africa Highlands Initiative and International Centre for Tropical Agriculture (CIAT), Kampala.
- Sarin, M. (1998) *Community forest management: whose participation?* In I. Guijt and M. Shah (eds), *The Myth of Community: Gender Issues in Participatory Development*. ITDG Publications, Rugby.
- Scoones, I. (1998) *Sustainable Rural Livelihoods: a framework for analysis*. IDS Working Paper No. 72. Institute of Development Studies, University of Sussex, Brighton.
- Seeley, J. (2003) *Social structure, livelihoods and the management of common pool resources in Nepal*. Final Technical Report for project R7975 2003. Overseas Development Group, University of East Anglia, Norwich.
- Shore, C. and Wright, S. (1997) *The Anthropology of Policy: Critical Perspectives on Governance and Power* Routledge, London and New York.
- Solesbury, W. (2003) *Sustainable livelihoods: a case study of the evolution of DFID policy*. ODI Working Paper No. 217. Overseas Development Institute, London.
- Watson, E. (2005) *Gender-Sensitive Natural Resources Management for Development*. NRSP project PD123 final report.
- Wiggins, S. (2003) *Environmental policies and livelihoods in the forest margins of Brazil and Ghana*. Final Technical Report for project R7577. Department of Agricultural and Food Economics, University of Reading.
- Vira, B. (2005) *Incorporating stakeholder perceptions in participatory forest management in India*. Final Technical Report for project R8280. Department of Geography, University of Cambridge.

Young, J. and Court, J. (2004) Bridging Research and Policy in International Development: An Analytical and Practical Framework. RAPID Briefing Paper No. 1. Overseas Development Institute, London.

Details of these projects, that are listed numerically by project number, can be found in the Project Database at the NRSP website www.nrsp.org.uk.

1. PD131 The effectiveness of the PAPD method: a comparison of community organisation experience in the CBFM-2 project.
2. R6755 Sustainable local water resource management in Bangladesh: meeting needs and resolving conflicts
3. R6759 Integration of aquaculture into the farming systems of the eastern plateau of India
4. R6778 Community forestry in Nepal: sustainability and impacts on common and private property resource management
5. R6787 Learning from self-initiated community forest management groups in Orissa
6. R6919 Evaluating trade-offs between users in marine protected areas in the Caribbean
7. R7304 Zimbabwe: Micro-catchment management and common property resources
8. R7408 Building consensus amongst stakeholders for management of natural resources at the land water interface
9. R7514 Development of monitoring process and indicators for forest management, Nepal
10. R7517 Bridging research and development in soil fertility management (SFM): practical approaches and tools for local farmers and professionals in the Ugandan hillsides
11. R7549 Consolidation of existing knowledge in the peri-urban interface
12. R7562 Methods for consensus building for management of common property resources
13. R7577 Environmental policies and livelihoods in the forest margins of Brazil and Ghana
14. R7854 Further knowledge of livelihoods affected by urban transition, Kumasi, Ghana
15. R7856 Strengthening social capital for improving policies and decision making in NRM

16. R7867 Filling gaps in knowledge about the peri-urban interface around Hubli–Dharwad
17. R7870 Policies, institutions and interventions for sustainable land management in Amazonia
18. R7872 Renewable natural resource-use in livelihoods at the Calcutta peri-urban interface
19. R7877 Common pool resources (CPRs) in semi-arid India – dynamics, management and livelihood contributions
20. R7888 Promotion of rainwater harvesting systems in Tanzania – Phase 1
21. R7957 Poverty dimensions of public governance and forest management in Ghana
22. R7958 Developing supportive policy environments for improved land management strategies
23. R7959 Natural resource management action plan development for Hubli–Dharwad peri-urban interface
24. R7973 Policy implications of common property resource (CPR) knowledge in India, Zimbabwe and Tanzania
25. R7975 Social structure, livelihoods and the management of CPRs in Nepal
26. R7976 Institutional evaluation of Caribbean MPAs and opportunities for pro-poor management
27. R8084 Enhancing livelihoods and NR management in peri-urban villages near Hubli–Dharwad
28. R8100 Investigating improved policy on aquaculture service provision to poor people
29. R8134 Developing guidelines for successful co-management in the Caribbean
30. R8195 Integrated floodplain management – institutional environments and participatory methods
31. R8258 Informing the policy process: decentralisation and environmental democracy in Ghana
32. R8280 Incorporating stakeholder perceptions in participatory forest management in India
33. R8317 Pro-poor policies and institutional arrangements for coastal management in the Caribbean
34. R8334 Promoting the pro-poor policy lessons of R8100 with key policy actors in India
35. R8362 Validation and communication of a community-led mechanism for livelihood improvement of remote communities in Bolivia

Linking research, policy and livelihoods: a synthesis questions key aspects of the relationship between natural resources research and policy processes. How do researchers conceptualise policy processes and the role of different institutions within them? What does it take for research to influence policy? What is the relationship between policy-focused research and livelihoods, and how is this influenced by the institutional context within which the research takes place? Answers to these questions are derived from a synthesis study of research undertaken by the Natural Resources Systems Programme (NRSP) of the UK Department for International Development (DFID). This booklet provides a summary of the study.

The NRSP undertook research between 1995 and 2006 on the integrated management of natural resources. This research encompassed the social, economic, institutional and biophysical factors that influence people's ability to both use and maintain the productive potential of the natural resource base over a relatively long timeframe. The NRSP's purpose was the delivery of new knowledge that can enable poor people who are largely dependent on the natural resource base to improve their livelihoods.

About the authors

Karen Brock is an independent consultant.

E-mail: k.brock@in4action.com

Elizabeth Harrison is at the Department of Anthropology, University of Sussex.

E-mail: e.a.harrison@sussex.ac.uk

