



Gender and natural resources management: improving research practice

Elizabeth Watson

Research that is to succeed in contributing to improved natural resources management (NRM) and to tackling poverty needs to be gender-sensitive – gender relations, NRM and poverty are closely linked. Gender sensitivity is still only partially realised in practice, but this can be improved by drawing on positive examples of gender-sensitive NRM research in a development context.

Key messages

- Gender-sensitive research needs to examine how NRM and poverty intersect with gender *relations*, that is, with the socially constructed relations between men and women.
- NRM research projects need to ensure that both men and women are included in project activities, and in both the technical and institutional aspects of projects.
- It may be desirable to work with men and women separately, even differently; but work should not collude with stereotypes which construct men as breadwinners and women as homemakers.
- NRM research projects need to work harder to integrate ‘natural’ science and ‘social’ science disciplinary approaches, as the division between these aspects of projects militates against gender-sensitive work.
- Participatory rural appraisal (PRA) methods are valuable for carrying out gender-sensitive research, but need to be augmented with systematic survey and analysis of NRM contexts and communities.
- Community volunteers are excellent mediums for good gender-sensitive NRM research, but their engagement with projects could be more rigorous and more carefully monitored. In return for more clearly defined and extended responsibilities, financial reward should be considered.
- In action-research projects, research tends to take a back seat to action, owing to pressure from project participants or beneficiaries. This tendency needs to be resisted and taken into account in the planning of projects, because gender relations and their interaction with NRM and poverty are complex, and detailed and dedicated research is needed to understand them.
- Projects need to have checks built in to make sure that gender relations are considered specifically at the planning and implementation stages. Follow-up procedures should also be put in place to show how gender relations have changed after a project has finished.

Summary

Gender relations can play an important role in the outcome of development interventions, and therefore gender-sensitivity is vital to successful research. This Brief summarises findings from a study into gender-sensitivity in natural resources management (NRM) research. A key finding is that gender relations are often neglected, not merely because researchers do not give them high enough priority, but because time and effort are required to elucidate the complex ways in which gender, NRM and poverty intersect. When that time

and effort are not available, researchers fall back on generalised stereotypes, which employ incorrect assumptions about gender roles and responsibilities in NRM. These stereotypes mask the role of women in NRM, and can hide the ways in which NRM varies over time and space. Another finding is that working separately with single-sex men’s and women’s groups can be productive. It is important, however, that detailed research is carried out into understanding the position of individual men and women involved. Generalisations



NRSP Brief

such as 'all women are poor' are not necessarily correct, and can hide the exclusion of vulnerable individuals. The study also points to ways in which participatory rural appraisal (PRA) methods and community workers could be used more effectively to achieve more gender-sensitive research.

Background

Gender relations are socially constructed power relations between men and women. In a given society they determine the use of, and rights to, natural resources for men and women. They also determine the different benefits that men and women can derive from natural resources. Gender relations therefore have a strong influence on NRM and poverty.

It is now generally accepted that development policy and practice need to be gender-sensitive; otherwise women not only often fail to receive a share of the benefits of development, but their positions may be undermined by the development process. A lack of appreciation of the way gender relations influence NRM and poverty is frequently indicative of a wider lack of understanding of NRM and poverty in a particular situation. Such paucity of understanding may lead to wider problems, including inappropriate policies, failure of projects, and unintended consequences for different social groups. Successful integration of gender issues into NRM research can therefore be equivalent to better research, and is a matter of importance and urgency.

Technological innovations such as irrigation projects, introduction of new seeds and techniques, and agro-forestry projects were once assumed to be socially neutral; in other words they were thought to benefit everyone equally. If technological projects were targeted at men, it was thought that benefits would 'trickle down' to women. However, research has shown that technological innovations are far from neutral: they lead to far-reaching transformations in labour relations, in tenure arrangements and in relations between people. 'Trickle down' often does not happen. Unless attention is paid to the gendered consequences of development

processes, it is unlikely that women and men will both benefit.

Natural Resources Systems Programme (NRSP) research has found that gender relations are incorporated unevenly into NRM projects, and the way in which gender is understood varies not only between projects but also between different people working on the same project. Although many projects demonstrate an initial commitment to and awareness of the importance of gender relations, in practice the concern for gender often slips during the project cycle, to the point where it effectively disappears.

This Brief summarises a study commissioned by NRSP to examine this unsystematic treatment of gender relations in NRM research, and how it can be improved. The study involved a general review of literature and NRM case studies, and detailed examination of two NRSP projects in Karnataka, India and Kumasi, Ghana. The study projects were set in peri-urban environments, and were 'research-for-development' projects that aimed to contribute directly to improving livelihoods, and research was coupled with hands-on development activities. The two case studies point to some of the obstacles that exist to successful gender-sensitive work, but also illustrate positive experiences and approaches from which lessons can be drawn.

Why are gender relations overlooked?

Interviews with NRM researchers revealed a range of reasons for the uneven and unsystematic treatment of gender relations. Many interviewees felt that gender issues were personal, and that to intervene in gender relations was to involve a challenging of 'tradition' that was tantamount to cultural imperialism. Others felt that gender issues were taken care of as their projects focused on the poor and on improving their lives:

"We work with women because they are the poorest. Women make up at least half of the poorest people. Therefore at least half the people we work with are women."

(NRM consultant, 2004)

In practice, however, projects often collected little information on the status and poverty of the people with whom they worked compared to others in the community. In addition, measures of poverty were often too broad to reveal much about how poverty was influenced by gender, age, marital status, caste or class. Conflating women with the poor is not always helpful: not all women are poor, and research needs to examine how gender and poverty are interwoven. Combining a treatment of gender inequality with other forms of social exclusion, such as caste or class, misses differences in the way exclusion is structured and manifested. However, the attitudes expressed above are understandable; they reflect a fear of being culturally insensitive and a desire to engage with forms of inequality beyond that of gender. Race, caste, marital status, age, ability and ethnicity have also all too often been overlooked.

These attitudes are often combined with a lack of time, resulting in inadequately focused research into gender, NRM and poverty. Extra time and effort are needed to bring to light the ways in which women and men use resources, and the ways in which their different uses interrelate to produce the overall patterns of NRM and poverty.

Relying on gender stereotypes

Women's involvement in and influence over NRM, though significant, is often less visible than that of men, or is not formally recognised. For example, women frequently carry out labour on land over which they hold no formal tenure rights: usufruct rights are obtained through husbands, fathers or brothers. Men are often considered the official decision makers and to have power over the way natural resources are managed; but in practice, if women are working with the resources day to day it is likely that they have some influence over their use and management. The project in Karnataka, India shows how the formal or official involvement in NRM is frequently accepted at face value by projects (see Box 1).

Identifying men as the main agents in NRM concurs with gender stereotypes which construct men as the main breadwinners and women as the nurturers, whose activities are limited to the home.

Box 1. Missing women in Karnataka

The project in Karnataka, India aimed to improve NRM and to build the capacity of the community to carry out its own future development. It combined two elements: field-level demonstrations (FLDs), in which the new NRM techniques were introduced and supported; and the formation of self-help groups (*sangha*), which served as credit and savings groups and participated in development activities. It was through the *sangha* that group work and participatory sessions were organised, in which any discussions about gendered roles and responsibilities took place.

Because the technical activities required land for the FLDs, those who took part in them were landed and frequently not the poorest. By helping some landed individuals to improve their NRM, it was thought that all would benefit, for example the landless would take up supportive activities like agricultural labour, carpentry, blacksmithing and other forms of rural artisanal crafts. The *sangha* activities which were not field-based included income generating activities such as soap making or incense stick manufacture.

In practice, these activities were gendered, as the land-based FLDs focus on men:

"It [FLD] is a crop demonstration, and it is mainly done involving men because they are the ones who look after the fields. Women's involvement in FLD is rare and I have not come across any FLD involving women."

(Interview with research team, 2004)

However, the same interviewee also commented later that:

"In agriculture, 50% of the work is done by women. When the people plan cropping, men and women plan together. A woman's participation is a routine thing and there is nothing special about it. Her participation is actually more (weeding, collection of fodder for livestock, taking care of them). Men just plough the land and harvest."

Based on NRSP project R8084

Under these gender stereotypes, men tend to be seen as the 'natural partners' for the technical aspects of NRM, while women are seen as the 'natural partners' for group work. Such group work is often not natural resource related, and it is in the group work that any 'consciousness-raising' activities aimed at tackling gender inequalities tend to be organised.

The acceptance of these gender stereotypes is furthered because the gender division of project staff frequently supports them: 'natural scientists' (agronomists, veterinary officers or foresters, for example) tend to be male, while 'social scientists' and gender specialists tend to be female. When these two disciplinary approaches fail to integrate effectively, the promotion of the gender stereotype in the gender division of project activities is exacerbated.

Such gender stereotypes often hide the variability in men and women's roles and responsibilities in NRM. In peri-urban contexts this variability is particularly high. Men and women may react very differently to the opportunities and experiences offered by the urban environment; they will probably do different kinds of work; and they will engage with market opportunities differently. This variation is also significant in other contexts.

The gender stereotypes also mask women's involvement and influence in NRM processes. Such collusion has the potential to increase the marginalisation of women in relation to NRM, instead of challenging it. Work with men only in field-based activities may cause an increase in work burdens for women who, because they are not invited to meetings, are unable to comment on their experience and work loads. In addition, interventions in NRM may change the nature of access to and use of natural resources on that land, which may have repercussions for others, particularly women.

Working with groups

In the Karnataka project, the majority of *sangha* were single-sex women's groups. They have undoubtedly been successful (see Box 2), which suggests that although project planners may associate women's groups with older approaches to working with gender issues, they are still valuable. The women

Box 2. The success of women's groups in Karnataka

Sangha are groups of usually about 15 people who meet weekly. The members contribute an agreed amount of money that can be used for a specific purpose by the group, or can be used as collateral to access credit. The money provides a safety-net for *sangha* members, and can also be used for a new initiative by an individual in the *sangha* or by the group together.

For many women, going to a *sangha* meeting was one of the few times that she could socialise independently and outside her home. The money was kept by the group, and was available for use by the woman, out of reach of her husband, brother or father. In this way the *sangha* provided a new degree of economic and social activity. One *sangha* member explained her experience:

"Before we had a sangha, we 15 people, we all went about our lives separately. We had no friendship or bond. But after we formed a sangha we had a bond. All castes, Muslims and Hindus, now we are all together... In the sangha, the main thing is not the loans, it is the bonding. In marriage, now people help each other. In times of illness, now people help each other. So now there is a lot of love in the village and harmony."

(Interview, 2004)

Another factor that came out of interviews was that the training in general skills, especially literacy, provided by the NRM project is considered particularly valuable by the women,:

"You have given us this business and if it clicks we will have an extra roti every day. Earlier our husbands told us that we didn't know anything and they never allowed us to go out...We never used to come to the front to talk. The Community Officers have taught us to sign our names. If you take us to the shop where we can sell our products then after that we can go on our own. We will also go to the panchayats and to the banks ourselves."

(Interview, 2004)

Based on NRSP project R8084

commented that their lives had improved economically and socially through *sangha* membership. They had also gained some political empowerment, in that many felt they could speak in meetings. In some communities, different women's *sangha* had come together and campaigned against the sale of alcohol in their villages, leading to a ban. The *sangha* had therefore improved women's influence over village affairs, and allowed them to address directly some of the problems they associated with gender inequalities.

A frequent problem associated with women's groups is that men in the community feel resentment and hostility towards the independent activities and new strengths of their wives, sisters or mothers. In this case, project workers who lived within the community made vital contributions by building trust between the project and the community. By talking to male members of households, they encouraged them to let their wives become *sangha* members. In addition, men's groups were formed, largely following the success of women's groups. Owing to the success of both initiatives, resentment over the formation of single sex-groups was avoided. Women's groups have also been criticised because they may be asking women who are already heavily burdened to do more. By encouraging men to form their own groups, the problem associated with asking only women to carry out the difficult tasks of development and the tackling of gender inequalities can also be avoided.

The Ghanaian case study project followed more contemporary approaches to tackling gender relations than the project in India. This project strove to work with men, as a way to improve the lives of men and women in a community. Unfortunately the project's experience in general, and the drop-out rates in particular, showed how difficult such an approach can be: it was not been easy to engage men in project activities (see Box 3). The project worked with mixed-sex groups, as it did not consider single-sex groups as necessary or appropriate in the Ghanaian context. Women in Ghana already have a degree of social and economic independence, and therefore the formation of single-sex groups was not likely to lead to the same kinds of direct benefit as those experienced by the women of Karnataka. But

Box 3. Missing men in Ghana

The project in Kumasi, Ghana extended credit to people who were able to demonstrate that they could put the investment to good use, and pay back the loan. Members of the community were trained to make their own business plans, and to assess the business plans of others, so that project beneficiaries were chosen by the community. The project also set up groups for new income-generating activities, such as grasscutter rearing (grasscutters are large rodents whose meat is a delicacy), mushroom cultivation, snail rearing (for sale and consumption) and soap making. Groups were mixed sex, and formed around the interest of individuals in different activities. The group activities aimed to alleviate poverty, to generate incentives to protect natural resources, or to generate alternative income generating activities to relieve pressure on natural resources.

In this peri-urban context, there were high levels of male unemployment, and men frequently travelled long distances seeking casual employment. The project identified men as a vulnerable group whose lack of productive activity was also impacting negatively on their wives and children. The project found, however, that the local gender stereotypes meant that it was initially difficult to engage men in project activities. These gender stereotypes cast men as the main breadwinners and women's activities as 'petty'. Men saw the project activities as mostly small in scale, and said that they were not 'worth their while'.

When the new group activities were introduced, there was a great increase in male involvement. Men made up 66% of participants in these activities. But when these activities were slow to reap rewards, 64% of male participants dropped out (compared to a drop-out rate of 42% for women), showing that the project had still not overcome the difficulties of engaging men. More detailed investigation of the reasons for dropping out showed that the basis on which groups had been formed was also a problem. The remaining members of groups were often those who had a strong social relationship before the formation of the group (such as a brother and sister, or husband and wife); those without any previous social relation to others in the group often stopped cooperating.

Based on NRSP project R8090

the problems associated with the mixed-sex group work in the Ghana case suggest that more thought needs to be given to the organisation and make-up of the project groups, and that single-sex groups might be a way forward. More detailed investigation of the two projects points to the general need to pay closer attention to who is included, and who is excluded, in these groups.

Challenging gender stereotypes using participatory methods

The Ghanaian case study project was innovative in the way it used PRA methods to generate debate about gender stereotypes and hence to try to challenge them directly. This involved the preparation of a participatory business plan by each individual applying for credit from the project, which mapped the contributions of different members of the individual's household. The project's research had found that, although women's contributions were much smaller, they were often much more frequent: over a year it was not uncommon for the income accumulated by a wife to be more than three times that of the husband. Through mapping the contributions these disparities were made apparent, and the misnomer of 'petty' that is frequently applied to women's work, and the devaluation that comes with it, could be challenged.

At the time of this study these plans had largely been developed in one-off events and so had not yet fulfilled their potential in terms of encouraging project participants to rethink their prejudices. These and similar techniques could be powerful tools for generating social change and tackling gender inequalities if they could be used systematically, and if the project did not simultaneously support gendered stereotypes in other areas of its work.

Taking community workers more seriously

A factor that emerged as important in both case studies in India and Ghana was the role played by community workers. Both projects relied on people who lived with the community, some of whom were

members of the communities themselves. They were used to mediate between the project and the community, and as a source of knowledge about the community. They were also used to identify beneficiaries, organise project activities and monitor results. In the sensitive area of gender relations, good and trusting personal relations between project workers and project participants is especially important. This trust can only be built up through patient listening and talking to individual community members. As one community worker in India explained:

"We have to have a lot of patience and strength. If we go to a household we have to listen to their two-hour lecture for our two-minute business. By the end of the day we really have a headache!"

(Interview, 2004)

In both projects, beneficiaries and project workers also commented on how female community workers acted as valuable role models for other women in the community.

It is undoubtedly hard for community workers to carry out their work successfully. Only in India was this a paid role. It was assumed that, for the unpaid workers, it was sufficient reward for them to see the benefits of the project for their community, or to receive some on-the-job training. But imposing a large work load and heavy responsibility on unpaid voluntary workers can lead to a lack of motivation and to resentment. It can also mean that projects cannot use these local people to their full capacity. If community workers had some financial reward for their services, they could be used more systematically, and could be more fully integrated into the development of more gender-sensitive research.

Time for detailed and dedicated research

In the Ghanaian case, research into men's and women's incomes was carried out and used to develop the participatory business plans. Detailed knowledge and use of information on the gendered dimensions of NRM processes was the exception rather than the rule, however, pointing to the need for more research into the way in which gender, NRM and poverty intersect in particular contexts.

Without such research, projects may be planned without full understanding of the roles and responsibilities of different women and men. It is necessary for projects to look at the less visible and less formal processes taking place, as well as the highly visible and formal processes. These projects often took the formally recognised natural resource users as the starting point for defining project participants. This meant that, in India, the people they worked with were men in the main NRM activities; women were involved through *sangha* activities. In India and Ghana, the projects both worked with women, but had little information on how the project participants related to others in the community or on the status of the women involved. It was assumed that they were poor, but when asked if they were married or unmarried, had children or not, a researcher in Ghana commented “we don’t really get down to these nitty-gritties”. They had little information about whom, or why different people had been organised together in particular groups. Researchers in India and Ghana commented that, with hindsight, they could see that their projects had used too broad criteria for measuring poverty: the gendered dimensions of NRM and poverty were not visible.

This research has found that the lack of adequate criteria to understand poverty and gender, and the lack of attention to less visible processes, can also be exacerbated by problems with certain research methods and strategies. The use of PRA methods, community workers, and the combination of ‘action’ and ‘research’ activities in action-research projects, are assumed by research designers to represent good practice. This research points to the need for them to be viewed more critically and for them to be augmented with other research methods and strategies, if research is to succeed in becoming adequately gender-sensitive. More specifically:

- Although participatory methods have great potential as a means to challenge gender inequalities, as a research tool they can produce generalised pictures that hide differences between and within genders. Less-visible processes may also be neglected. Participatory methods therefore need to be accompanied by more systematic surveys and analyses which examine NRM practices, poverty, and the positions of project participants compared with others in the community.
- The use of volunteer community workers is one of the strengths of these projects, however, projects can also over-rely on community workers to identify the poor and to select project participants. This can mean that project managers have limited knowledge of those with whom they are working or of how those people relate to others in the community. More support for community workers, and, again, more systematic survey work and reporting, could reduce this limitation.
- It was found that participants in projects with development and research components frequently suffer from research fatigue. Beneficiaries become impatient with research activities and, under pressure, many projects abandon attempts to collect basic information. When research is combined with development activities it is easy for the research to take a back seat, to be carried out hastily and to be shallow. This is particularly problematic for gender-sensitive research because time is needed to explore the complexities and the often invisible ways in which gender intersects with NRM. Project workers and project beneficiaries need to take the research dimensions of these projects more seriously: more openness and inclusion of local people with the ongoing work (not merely in terms of using participatory methods but also in discussions about the aims, objectives and meaning of the research as a whole) are likely to improve matters.
- NRM practice and gender relations have been shown to change over time; therefore it is necessary to continue to monitor them. This had not been planned for in the projects discussed here, and was missing in almost all of the other projects reviewed. There should be a follow-up period aimed at eliciting the consequences of the processes implemented, such as unmanageable increases in the burden of work and responsibility on women, knock-on effects on other groups and on gender relations in the community, and effects on income control. This follow-up needs to be taken into account when defining the time span of a project.

About this Brief

NRSP Briefs present research carried out at the culmination of the programme to synthesise results across projects. They derive lessons and key messages that could benefit future research and policy on a range of topics that added to or crosscut the NRSP and RNRRS research agenda.

This Brief is based on **NRSP Programme Development assignment PD123, Gender sensitive**

NRM research for development. Details of this assignment and its publications, and those of other NRSP projects, can be found in the Project Database at the NRSP website: www.nrsp.org.uk.

Elizabeth Watson is at the Department of Geography, University of Cambridge.

Other NRSP Briefs

The peri-urban interface: intervening to improve livelihoods

Linking research, policy and livelihoods: challenges and contradictions

Common pool resources: management for equitable and sustainable use

Climate change: enhancing adaptive capacity

Communication in research uptake promotion (*forthcoming*)



The **Natural Resources Systems Programme (NRSP)** is one of ten programmes comprising the Renewable Natural Resources Research Strategy (RNRRS) of the UK Department for International Development (DFID). The RNRRS started in 1995 and ends in 2006. NRSP's purpose is the delivery of new knowledge that can enable poor people who are largely dependent on the natural resource base to improve their livelihoods. To achieve this NRSP undertakes research on the integrated management of natural resources. This research encompasses 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 intended outcome of the research is that natural resource related strategies for improving people's livelihoods, that are of proven relevance to poor people, will be delivered in forms that could be taken up by the poor themselves and/or by development practitioners operating at a range of levels, from grassroots to senior policy level.

Contact:

NRSP Programme Manager
HTSPE Ltd
Thamesfield House, Boundary Way
Hemel Hempstead HP2 7SR
Tel: +44 (0)1442 202400
Email: nrsp@htspe.com

The NRSP is managed by HTSPE in association with MRAG and DPU.



HTSPE Ltd
www.htspe.com



Marine Resources Assessment Group Ltd
www.mrag.co.uk



Development Planning Unit
www.ucl.ac.uk/dpu

This document presents research funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

May 2006