

**SOCIO-ECONOMIC METHODOLOGIES
FOR NATURAL RESOURCES RESEARCH
BEST PRACTICE GUIDELINES**

**ADDRESSING GENDER
IN RENEWABLE NATURAL
RESOURCES KNOWLEDGE
STRATEGIES**

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GENDER AND GENDER CONCEPTS

Introduction

Why is gender important to the Renewable Natural Resources Knowledge Strategies?

The Renewable Natural Resources Knowledge Strategies (RNRKS) emphasize that 'all research is focused on the livelihoods of poor people'. In developing countries the majority of poor people are found in rural areas where they often derive much of their livelihoods from local natural resources. Gender takes on practical significance in considering the relationship of women and men to a particular resource or activity, in this context the management of crops, grazing, forests, livestock, fisheries, soils, water, and other resources.

In many cases women are the majority of the rural poor, and are heavily engaged in productive activities. This may be because the able-bodied men-folk are away working, or seeking work, elsewhere, but also for a wide range of other reasons ranging from cultural norms to the (perhaps unanticipated) impacts of modern technology. The result is that women are commonly over-burdened, both with additional work and added responsibilities. This commonly occurs in situations where cultural norms require men to undertake certain activities and make key decisions, but where the men are not available. The result is an increase in gender inequality (in terms of work and responsibility loads), and also a potential for gender conflict and negotiation as gender roles start to change. Efforts to overcome poverty are further constrained by gender discrimination (usually against women) in access to natural resources, such as land, water for irrigation, trees for firewood, and animal draught power. Discrimination also takes place in terms of access to credit, extension services and loans of equipment.

Gender constraints also occur at institutional level. For instance the involvement of women scientists in on-farm research should encourage higher rates of rural women's participation in research activities. It may appear rational to assign women scientists to projects and programmes that seem to be women-focused. However, the risk here is that gender analysis is confined to the realm of women scientists, rather than being an integral part of research planning and implementation.

A review of RNRKS project proposals (Godley *et al.*, 1996) found that most research programmes are still not directly addressing strategic gender needs. These strategic concerns include access to and control over resources; effective access to institutions; involvement and empowerment in the research process itself; and effective access to benefits (or at worst, avoidance of dis-benefits). With the exception of post-harvest programmes, where financial constraints on women are often addressed, analysis has largely avoided strategic gender interests. Even in the latter programmes there is limited reference to gender and evidence of gender analysis in project reports.

The scope of this guide

This guide aims to encourage RNRKS programme managers and project leaders to address gender more explicitly and effectively in their work. They might ask 'how can a natural resources research programme, being largely technical in content and emphasizing research with generic applications, effectively address gender,

particularly issues of gender equality and women's empowerment?' There is no simple answer to this question. However, this guide is based on the assumptions that:

- participation in the research process is an empowering experience for poor rural women and men. Women (and men) who have the time and interest to participate in the research process will gain knowledge and access to resources they otherwise would not have enjoyed;
- although the RNRKS research programmes are structured along sectoral lines, because they are also demand driven in principle, they present opportunities to mainstream gender concerns and thereby influence disadvantaged gender groups in particular geographical areas; and
- addressing practical needs can simultaneously empower and improve the strategic positions of a particular gender group to benefit from research, by freeing their time and/or increasing their income. The results can be more direct and faster compared with approaches that address gender through legal and policy instruments that often have limited impact outside national capital cities.

The guide focuses upon opportunities to address gender during programme design, monitoring and implementation. It begins with a discussion of what gender means, why gender is an issue of central importance to development strategies targeting poverty in the natural resource sector, and the risks of ignoring gender. This is followed by sections on gender bias in projects, gender blindness, and whether or not gender is better addressed separately, or as an integral part of socio-economic analysis. Conceptual frameworks for conducting gender analysis are discussed briefly.

The second major part of the guide is concerned with programme and project-level issues and the extent to which constraints on mainstreaming gender can be overcome. A reading list is offered to those looking for more specific examples in relation to the various natural resource sectors, more detailed general gender guidelines, and greater enlightenment on conceptual and analytical issues relating to gender.

Gender and gender inequality

A common misconception is that gender means women and that gender issues are the same as women's issues. Gender is equally about men, and gender refers to the socially or culturally established roles of women and men. These roles very often differ from one culture to another and may change over time. Gender relations are those between men and women within a particular cultural context. They may be co-operative, within a locally accepted division of tasks and responsibilities, or they may be competitive and in conflict. When roles and responsibilities are clearly defined along gender lines, there is less room for overt conflict between men and women; each group has its own sphere of influence and decision making. However, where certain roles and responsibilities are shared, there is much more room for conflict, and also for negotiation.

Gender conflict implies not only competition, but also inequality in gender relations. Power is a dimension of all social relations, including gender relations. If one group has an unfair advantage over another in relation to a particular resource, there is an

inequality of power. Gender inequality usually applies to two contexts. Firstly, key productive and decision-making roles and responsibilities are often defined on gender lines, and one gender (often male) controls most of the highly valued resources. Secondly, key roles and responsibilities (often burdensome ones) may in principle be shared, but in practice fall largely upon one gender (often female) rather than another. Gender inequalities often occur in the division of labour and access and control of resources. This usually means that women are at a disadvantage compared with men, either in the amount of work expected of them, or in control over key resources, and often in both.

What is gender analysis?

Gender analysis involves the systematic and objective comparison of women's and men's roles, rights, responsibilities and performance. In the context of natural resource research, gender analysis is usually carried out in relation to a particular enterprise, sector, or topical area. It should be geographically defined, and may also focus on a particular socio-economic category, such as 'poorer households'. Gender analysis is guided by the use of a conceptual framework and a methodological approach.

Gender analysis moves beyond stereotyping. Women and men are not homogenous groups. Care needs to be taken in distinguishing factors common to all women or men, and those which may vary between different groups. Moreover gender differences related to age (e.g. children's work) and social status may be important factors; old men cannot be compared with girls, and high-status women cannot be compared with low-status boys. Further stereotyping may occur where women are perceived variously as 'the problem', 'the victim' and 'the solution'. For example, African women have been seen to be causing deforestation by cooking with the only fuel available to them – fuel wood. The counter-tendency has been to see women as 'victims' rather than as active participants forging their own environmental strategies. Whilst it is true that women have been victimized by the imposition of improper renewable natural resource strategies and thus problems have arisen, women themselves are neither the victims nor the problem. Recently there has been a move towards seeing women as providing a solution, as 'carers of the environment'. This view invites the addition of environment and natural resource management to the long list of women's frequently unwaged, caring roles.

Convictions differ as to whether gender issues should be addressed within the wider category of socio-economic analysis or discussed separately. It is true that good socio-economic analysis should always include gender analysis, but this does not always happen. In the past rural households have been viewed as 'black boxes' – without members having specific genders and assigned roles, responsibilities and privileges. One risk of treating gender separately is that it becomes marginalized. One reason why gender has become an issue is because of 'gender blindness' (the household seen as a black box) on the part of development planners and technicians. Another reason is gender bias during the research process.

What are gender roles?

Gender roles refer both to 'who **should** do what' and 'who **actually** does what'. The analysis of gender roles may start by looking at the normative framework for gender roles, that is, what activities (including decisions) are seen as culturally appropriate

for women and men to undertake. For example, it may be regarded as culturally appropriate for both men and women to weed crops, but culturally inappropriate for women to plough with oxen or to spray pesticides. Rigorous gender analysis goes on to examine what activities are actually undertaken by men and women. Such analysis may find that women spend, for example, five times as much of their time weeding as men and some women may plough with oxen and spray pesticides because there are no men who can be relied on to carry out these tasks.

Gender roles are dynamic, not static. The origins and functions of the Chipko movement in India illustrate how traditional roles of women in renewable natural resource management change in relation to changing resource use. The movement illustrates how policies have victimized women and caused difficulties, and subsequently how empowered women are regaining their roles in renewable natural resource management.

BOX 1 : The Chipko movement

India's people have traditionally recognized the dependence of human survival on the existence of forests. A systematic knowledge of plants and forest ecosystems has been thus generated and informal principles of forest management formulated. It has often been argued that 'scientific forestry' and the management of forest resources in India began with the British. However, indigenous forest management, largely the domain of women for producing sustenance, had evolved before the British arrived.

The British interest in forests was largely for commercial timber; therefore the women's expertise was redundant and replaced by the patriarchal science of forestry. The women's subsistence economy, based on forest resources, was replaced by a commercial economy, not because of superior forestry knowledge, but by dominant power. Since it is women's work that protects and conserves forestry ecosystems, peasant women were most adversely affected and women became 'victims'.

The Chipko movement emerged from the increased pressures placed on women as a result of the change in forest management. The main thrust of resource management movements like Chipko is that natural resources such as forests are life-support systems and should be protected and regenerated – a holistic approach with women as managers of the environment and natural resources. It was stated that the main role of the hill forests should not be to yield revenue, but to maintain a balance in the climatic conditions of the whole of northern India and the fertility of the Gangetic Plain. If the forests' ecological importance is ignored in favour of its short-term economic utility, it will be prejudicial to the climate of northern India and will dangerously enhance the cycle of recurring and alternating floods and droughts.

Gender bias and mainstreaming gender analysis

Lack of specific attention to gender has, in the past, created 'gender bias' in research project planning and implementation. Gender bias arises from a number of inter-linked causes including:

- mistaken ideas about who is (or who should be) involved in what activities, often resulting from the research planners' or implementers' preconceptions about what men or women do, or should do;
- gender imbalance in the staffing of projects;
- lack of gender sensitivity and training of project staff;

- local cultural norms that influence interactions during the research process, leading to problems of gender inclusion; and
- workload and activities that make participation in the research (very often by women) more difficult.

Gender bias leads to the exclusion of women more often than men from research activities. One reason for undertaking a separate gender analysis is because gender is often misunderstood and quickly becomes an emotive issue rather than an analytical one. The ‘gender equals women’ syndrome results in token references to women in project proposals and reports. Experience has shown that if specific attention is not drawn to gender during the research process, then it is either overlooked during project design and implementation or treated in a token way. A third situation occurs when, as a result of sensitization, gender is recognized as an important issue, but the tools for incorporating gender and addressing bias are not available to the research team. The effect of gender bias is often to reduce substantially the value of research outputs, or in some cases to produce outcomes that adversely affect women’s livelihoods or well-being.

Mainstreaming gender analysis implies that it should be integral and routine during RNRKS planning, implementation and evaluation. However, this guide takes account of the reality that constrained resources and capacity place practical limitations on what a particular research programme or project can undertake. Activities suggested within the guide can be incorporated into the existing research planning and implementation processes, rather than constituting a separate activity. At the same time, it is stressed that unless gender is singled out and given specific attention, it is very likely to be overlooked.

Conceptual frameworks for gender analysis

There are several frameworks for conducting gender analysis; sources are given in *Further Reading* at the end of this Guide. They have arisen from a range of development and academic contexts and from the evolving debate about how best to address women’s needs in development. During the 1970s, development programmes emphasized targeting women to improve their welfare and they began to influence natural resource research programmes in the early 1980s. The welfare of women approach was soon followed with emphasis on equity for women and on their rights and strategic gender needs. This approach posed challenges during implementation during the 1980s, and gave way to a greater emphasis on efficiency gains by including women and addressing their practical needs. A more recent approach has been to emphasize empowerment of women by a culturally situated emphasis on achievement and expression of potential and influence (as distinct from a western feminist-imposed agenda). This approach also poses some challenges to implementation.

Most development and research projects tend to focus more on addressing practical gender needs, often within the context of empowering the participants. The empowering parts of these programmes are often gender specific (focusing on women or men) or gender inclusive (ensuring that both women and men are appropriately represented in decision making and project activities).

One conceptual framework has been developed specifically to address gender issues in agricultural research, particularly farmer-oriented applied and adaptive research. The gender in agriculture framework developed by Feldstein and Poats (1989) is most readily applicable to a natural resources research context. It facilitates the analysis of strategic gender issues, but at the same time lays greatest emphasis on practical gender needs to improve project efficiency. Parts of this framework are used in the next section, which looks at addressing gender at research programme and project level

THE PROCESS OF ADDRESSING GENDER

Gender at sector level within the RNRKS

Gender can be addressed at various stages of research and different players are involved, as indicated in Table 1. While the main principles of gender analysis apply across all sectors of research, different components within the RNRKS are likely to require somewhat different approaches to incorporating gender. The relevance of gender analysis is also related to the type of research conducted, the likelihood of this research producing large pay-offs, and the scope for end-user participation in the research process.

TABLE 1: When and who: addressing gender at research programme and project levels

LEVELS AND STAGES	DECISION TAKERS ON GENDER
Programme or sector level	
Setting programme objectives and strategy	DFID and programme advisory committee (PAC)
Programme monitoring and review	DFID and PAC
Project screening and approval process	PAC (particularly social development representative) and programme management team
Project level	
Design/planning	PAC, project leaders and collaborating scientists and direct beneficiaries/target group
Implementation	Programme management team, project leaders and collaborating scientists, linked agencies and direct beneficiaries/target group
Monitoring and evaluation	Donors, project leaders, collaborating scientists, linked agencies, the target group and project review missions
Impact assessment	Donors, linked agencies and the target group

RNRKS research programmes, while incorporating poverty-related objectives, are primarily driven by the nature of a particular technical problem being addressed, and by their generic and sectoral research mandates, rather than by the expressed needs of poor people. In relation to gender, this means that they are likely to ask questions

like ‘on the basis of what we hope to achieve, who (in gender terms) is likely to benefit and in what ways will they benefit?’ or ‘given that we need to do this type of research, who (in gender terms) is likely to be interested in participating, and what may they contribute?’ They are unlikely to ask a question like ‘what are the main problems of a particular gender group in a particular geographical area, and how can we address these within our research programme?’ This type of question is likely to be asked by an adaptive or farmer participatory research programme with a geographical mandate (as distinct from a sectoral/technical one).

Research programme objective setting, monitoring and project selection

Natural resources research programmes, with the exception of the socio-economic methodologies programme, focus on technical sectors. Each research sector presents specific challenges and opportunities for addressing gender. At strategy level within a sector it is possible to conduct a preliminary analysis of typical gender roles, and use this to identify particular topic areas as having potential to address gender needs, both strategic and practical. However, this can only be done in a meaningful way if the geographical area for the research has been defined. For example, in artisanal fisheries it may be found that most of the fish-catching operations and conservation decisions are made by men, while women are more often involved in processing and marketing. However, there is always a danger in over-simplification. Often the interdependencies between the actors responsible for particular stages of an enterprise (in this case between capturing, selling to processors/marketeers, processing and marketing) are as important as each stage within a technical or economic process.

Selection of geographical focus itself represents a further opportunity to address gender at programme strategy level. While geographical focus will be determined by a number of factors (e.g. DFID priorities, importance of an enterprise or problem, links to bilateral research programmes, etc.), the depth of poverty and the extent to which poverty is articulated through gender may also be used in making decisions about location.

The process of reviewing programmes and approving projects provides a further opportunity to address gender at programme level. Project review teams should include someone with gender-analysis expertise (preferably expertise specific to the sector under review). In the review of research programme implementation, when reading project reports (and during field visits if these are undertaken as part of programme review), the review team should look for evidence of meaningful gender analysis and gender-inclusion strategies used in funded projects.

To enable an efficient gender-screening process during project approval, the programme advisory committee (PAC) should have a member with gender analysis expertise relevant to that particular sector. This person should not only look for evidence of gender sensitivity and analysis in the project proposal, but more importantly be able to make sound judgements about how far, and in what ways the project can realistically incorporate a gender perspective into its objectives and activities. A PAC member with this capacity will go a long way to reducing token references to gender in project proposals, and provide feedback that will help project designers and leaders to monitor and support practical measures to address gender, and also to reflect these measures in their reporting of research results.

Project design

Most RNRKS projects have a specific technical focus, and the trend is that this focus, together with geographical target areas, is specified in the call for concept notes. There is also a trend towards funding more participatory on-farm research in order to adapt and verify previous on-station research outputs. This trend provides both a challenge and an opportunity to consider, at concept-note stage, how a particular piece of research is likely to impact on gender.

Addressing gender in a concept note will be possible if one of the authors has a reasonable understanding of gender relations in the proposed research area, and more specifically how gender may relate to the commodity or technical factor being researched. This can be best addressed in the beneficiaries section of the concept note, but may also be mentioned when describing promotion pathways to ultimate beneficiaries in the outputs section. It may also be appropriate to refer to gender in the project purpose, particularly if there is a specific gender focus within the project. If more than one country is involved, or if within a single country there is significant cultural diversity, inclusion of gender issues at concept-note stage will be a more challenging task than where only one geo-cultural region is being targeted.

More upstream research that does not involve direct participation of the intended target group requires more careful handling. In such cases as, for example, biotechnology solutions to address a disease or pest outbreak through incorporating resistant genes, more long-sighted and speculative gender analysis may be necessary, requiring an appropriate specialist input.

At project memorandum stage, Section B (on demand, uptake and geographical focus) and Section D (outputs and activities) of the project memorandum form provide adequate opportunity to include gender considerations. The following gender issues may be addressed under section B:

- identification of the gender categories expected to benefit from the proposed research. This should be in relation to an understanding of general gender involvement in the enterprise/commodity or biophysical process being addressed; and
- on the basis of current understandings of livelihoods and social groups, a qualitative assessment of any potential negative impact of the research on gender categories.

Under Section D on activities:

- identification of who (in gender terms) is likely to participate (and who is likely to be interested in participation) and in what activities; and
- in relation to these activities, identification of possible barriers to participation (and gender biases), and an indication of actions the project intends to take to mitigate the negative effects of these.

At the design stage, if the research team has members who are not only gender sensitized but also equipped and trained to undertake gender analysis and implement gender-inclusion strategies, then gender should be addressed to a reasonable level. If

team members lack training and experience, they will still need guidance from someone with the required skills during the project design. With this in mind, Boxes 2 and 3 below set out some of the potential pitfalls that a gender-sensitized (but not trained and experienced) team are likely to face during the project design phase of the research programme. The boxes address the various stages that most more participatory and adaptive research programmes are likely to pass. Subsequent Boxes 4 and 5 relate to implementation and impact assessment.

In using these boxes, it is important not to see stages of research as separate events, but as linked parts of a process in which coherence of gender analysis is crucial. There is little value in carrying out a thorough analysis of gender roles and decision making during a needs assessment and then not using this information in the design and evaluation of experiments that follow. Participation by the same group of actors (including the target beneficiary group) during the various stages of the research process, as is advocated in farmer-participatory research, should improve coherence. Extrapolation of findings on gender beyond local areas, and over-reliance on the gender knowledge of local research partners, are both risky. To be done well, gender analysis within a research programme should be fine textured. Moreover, because gender relations are dynamic and complex and take time to understand fully, gender should be revisited when research outputs are ready for wider dissemination.

BOX 2 : Potential pitfalls during diagnosis or needs assessment

Intra-household labour division, access to and use of resources, and access to benefits may be overlooked or treated superficially in the description of gender roles

Data collection from different gender categories or household types is not analysed as such

Labour calendars for gender categories may not be combined with operations calendars for key enterprises, and, as a result, labour constraints are not fully understood

Differential access to resources by gender category and household type may not be analysed, and local (within household, extended family and village) control of access may often not be reported

Benefits accruing from the enterprises being assessed may not be analysed in terms of which gender categories or household types benefit most

Preferences relating to the enterprise or technology being pre-screened for testing may not be analysed in relation to gender

If a needs assessment is being conducted, whether through formal survey or PRA methods, specific measures will probably be needed to ensure that the appropriate gender categories are included in the relevant part of the investigations. Assuming the team has limited prior knowledge of gender in a particular community, the following steps are likely to be helpful during a needs assessment exercise:

- ensure that there are team members who are well equipped to speak to both gender groups. This usually (but not always) implies a balance of male and female team members;

- find out where women and men are likely to be easily found and when during the day (or week) they are most likely to be available for discussion at that time of the year;
- find out who is likely to be most busy (usually it will be the women) and develop a strategy for engaging with them in a time-efficient way (for example, if there is a village meeting, and a lot of formal discussions with male village leaders at the start, the women are likely to get bored quickly and will not be so interested in participating later in the meeting);
- develop strategies for making sure that both gender groups contribute freely during discussions. This may involve focus-group discussions based on gender and age groupings for some topics. For other topics it may be better to have individual interviews, because some topics may be sensitive, even when discussed within a gender and peer group;
- during information feedback and analysis sessions, think of using gender-focused groups if prior analysis suggests that this will be helpful; and
- during these (and other) sessions, use methods that are easy for non-literate people to follow, such as conversations, symbols and diagrams, rather than long lists of written text.

The principal purpose of needs assessment is to inform subsequent project design. However, potential problems in needs assessment indicated above, and in the use of needs assessment data, may pose problems for research project design (see Box 3).

BOX 3 : Common pitfalls in planning research design

Gender aspects may often be overlooked in trial design, because of weak areas of data collection and analysis (see Box 2)

Selection of experimental topics and activities may therefore be out of line with local preferences, and they may tend to be technically derived rather than arising from an understanding of the logic of social organization and gender dynamics driving an enterprise

End beneficiaries may not be consulted during design decisions. If they are consulted, this consultation may not be informed by prior gender analysis

In planning research, a common problem is that even where effective needs assessment data are collected, experiments are planned and designed by professionals, without further input from the people who provided information during needs assessment. Another difficulty, is that the plans are made with limited use of any gender analysis conducted during the needs assessment.

Inclusion strategies at this stage should be well informed by the gender analysis conducted during needs assessment. Research planning meetings are often time consuming, and therefore involvement of end beneficiaries in this task needs to be

considered in relation to gender workloads and also the incentives to participate in such a meeting. If food is being provided, it is important to make sure that all of the women's time is not taken up with food preparation and serving (perhaps advance arrangements may be made for someone to be paid to do this, or convenience food could be provided by the research team if that would be culturally acceptable).

If the gender analysis has shown that for the topic under discussion women and men play different roles at different stages of an activity cycle, this should inform the way the research options and experimental design are discussed. If both men and women are significantly involved, it will be helpful to have gender-focus groups to begin with, in order to assess separately the reactions of men and women to the technology and experimental designs being considered. After gender-focus discussions, it is useful to have a mixed gender meeting to discuss the results, and to agree a consensus about future activities. After this, the research team may wish to discuss gender participation and what they have learned that will help them to plan future meetings.

Project implementation

It is during project implementation that the opportunity to address gender becomes a practical reality. It is not possible to provide highly detailed guidelines for this stage of the research, because much will depend on where the research is being conducted, what type of activities are being undertaken, and who is doing them. Box 4 however, indicates some of the pitfalls that may arise where there is insufficient consideration of gender issues at this stage.

BOX 4 Implementing research and evaluating technology

During the experimental process for applied research, trials are often conducted under conditions typical of the potential beneficiaries and with their participation in the research process. Certain gender pitfalls may occur:

- researchers may not keep records of who does which operation in experiments involving a number of treatments (e.g. planting method, spraying, etc.);
- limited thought may be given to methods and strategies for selecting final beneficiary collaborators, particularly over information gathered during diagnosis and planning. Selection may be delegated to field staff or happen at larger meetings, and, as a result, women may be marginalized;
- economic analysis of experimental data is rarely gender specific, and may fail to include the cost of foregone activities or negative components of new technologies; and
- where qualitative assessment of technology is undertaken the results may not be disaggregated in terms of gender, nor analysed in terms of their implications for women, men, and household decision making.

It is important for research projects to recognize that there are likely to be barriers to gender participation, particularly, but not necessarily just, by women. Addressing gender inclusion problems requires the following:

- a good understanding of the local culture where the research is taking place;
- a recognition by the team that lack of participation is a difficulty (i.e. it is negatively affecting the research process),

- a willingness by the project manager to allocate resources for tackling this;
- a willingness by the local community to discuss the issue and to take action; and
- open and constructive dialogue between the research team and the local community and a willingness to make research an enjoyable experience and an opportunity for learning on both sides.

Certain difficulties may arise in the design of experiments to be undertaken in farmers' fields by members of the farming household. Often contact is with one person, either the wife or the husband, and there is much room for miscommunication or non-communication between the two of them, and between both of them and the researcher/s. At times, agreements are made between the researcher and the husband (as head of household), but experimental management is left to the wife and a field assistant. Therefore trials may not be conducted as agreed.

To avoid such difficulties it is helpful to develop a contract (probably a verbal one) that clearly defines who has what responsibilities for experimental implementation. To reduce risks of mis-communication, it may be better during the first round of experiments to have a contract between the researcher and one member of the household (the one most interested and who will implement the experiment). Other family members may be involved when it comes to experimental evaluation and during the second round of experiments.

Having taken steps to avoid pitfalls in experimental design, it remains critically important to ensure that subsequent reporting and analysis are explicit in terms of gender disaggregation .

Project monitoring and evaluation

Monitoring of field research may not be a straightforward process, since researchers may pay monitoring visits to experiments, but not find collaborators at home. During evaluations, opinions about experimental treatments may be provided based on limited knowledge by household heads who may have had little actual involvement in an experiment, but want to receive visitors and present an appearance of interest and knowledge. In mixed-gender group evaluation meetings, men often dominate the discussion. Some gender pitfalls can arise from these circumstances (see Box 5).

BOX 5: Pitfalls in developing technical recommendations and impact assessment

There may be limited, if any, involvement of collaborators in the development of recommendations arising from research

Research recommendations may be 'technical' and therefore rarely targeted at gender categories or informed by gender analysis

If technical recommendations are gender informed, they may incorporate a specific cultural understanding of gender roles that apply to the area where the research is being conducted, but does not apply more widely – even though the technology may apply more widely

Technology adoption studies usually involve both men and women, but often do not make a gender analysis of who is adopting

Evaluation may occur at several stages, or only at a particular stage of the experiment (such as at harvest time for a crop experiment). If evaluation by the collaborating user group is at several stages, for more efficient time management it is probably at the individual household level. This is likely to present fewer difficulties for gender inclusion, provided there is a good understanding between the researcher (or most often his representative) who is monitoring an experiment and the household. Difficulties may arise if the monitoring process breaches cultural norms (for example, a male researcher or field assistant visiting the farm and evaluating the trial with the wife in the absence of her husband may be not appropriate in some cultures). In such a case, group involvement in evaluation may avoid this problem. Alternatively, changing the gender of the visiting researcher or field assistant may be a solution.

If evaluation is done in groups, separate male and female groups may be more effective, particularly during the first round of experiments. If there are significant differences in the evaluation results of gender-based groups, then it makes sense to continue with these. If not, it may still be helpful to have them if one gender (usually female) is inhibited in giving their opinion when the other gender is present. However, if both genders are free, and there is good rapport, a mixed-gender group can work well and is more resource efficient.

Conclusions

It may be that existing research teams require further expertise in order fully to implement gender-focused components and analyses. Part of the solution, as indicated in earlier sections, may be to involve social scientists at all stages of the research cycle. Advice and inputs may be available from a variety of sources, e.g. from social scientists associated with the team, from UK institutions or from overseas bodies, especially countries in which the research is to be located. Local institutions may include both 'formal' bodies such as universities and research institutions, but NGOs may also have much to offer, particularly those which are focused specifically upon the needs of women.

At a strategic level there is a case for more explicit plans for programme monitoring which incorporate gender components. This has a value even where the result is to indicate that gender is not relevant, for example, in some areas of strategic research.

If researchers are serious about gender inclusion issues, they should think about ways of monitoring their own performance in this area. Most research programmes use some type of written record during needs assessments, planning meetings and experimentation. This provides an opportunity to monitor gender inclusion at various stages of the research process. For example, during a needs assessment, participation in the exercise (by both the research team and the informant group/s) can be broken down by gender. Records of planning and evaluation meetings should indicate participation by gender. Research trial data sheets should indicate the gender of the key collaborator, and also the gender of the person providing qualitative information relating to the performance of an experiment during monitoring visits. Monitoring of outputs can assess the extent to which data and analysis are effective in the explicit presentation of gender disaggregated material.

In monitoring inclusion it is important not just to look at quantitative indicators, but also at the quality of inclusion. For example, women may attend planning meetings,

but not effectively participate in them for a variety of reasons. Effective monitoring of inclusion will require visits and participation in the research process. For this reason it is ideal if the research team can monitor this itself.

FURTHER READING

Guidelines and case studies that illustrate how gender analysis has been incorporated into research programmes in developing countries

Web Pages

IFPRI: Gender CG Newsletter, Vol. 4 No. 1, April 1998. The CGIAR's Systematic Program on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation.

<http://www.cgiar.org/ifpri/themes/mp17/gender/news4-1/2news41c.htm>

ICRAF: Agroforestry Training Materials. Introductory training course - "Agroforestry Research for Development/Integrated Land use".

http://www.cgiar.org/icraf/res_dev/prog_5/tr_mat/modules.htm

ISNAR: Gender Analysis for Management of Research in Agriculture and Natural Resources. <http://www.cgiar.org/isnar/activities/training/8gen.htm>

BUCKLAND, L. and HALEEGOAH, J. (1996) *IITA Research Guide 58: Gender analysis in agricultural production.*

http://www.cgiar.org/iita/inform/trn_mat/irg58/irg58.html

IFAD, Gender Training Material. <http://www.ifad.org/gendown.htm>

CGNET has been reviewing the possibility of setting up a conferencing network for women scientists in the international agricultural research centres and/or those interested in using gender analysis as a tool for effecting technology development. Connection details: WWW: <http://www.cgiar.org:80/ifpri/gender/gender.htm>

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