

Gender Analysis and Conservation of Natural Resources

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Gender analysis is a tool to better understand the realities of the women and men, girls and boys whose lives are impacted by planned development. Principally it is about understanding culture, expressed in the construction of gender identities and inequalities, and what that means in practical terms is also political.

It aims to uncover the dynamics of gender differences across a variety of issues. These include gender issues with respect to social relations (how male and female are defined in the given context; their normative roles, duties, responsibilities); activities (gender division of labour in productive and reproductive work within the household and the community; reproductive, productive, community managing and community politics roles); access and control over resources, services, institutions of decision-making and networks of power and authority; and needs, the distinct needs of men and women, both practical (i.e. given current roles, without challenging society) and strategic (i.e. needs which, if met, would change their position in society)?

Why do gender analysis?

Information is essential to gender mainstreaming at all levels from the formulation of national legislation and policy, to the planning and monitoring of specific interventions. For use in the planning of livelihoods interventions, information from a gender analysis will be useful in order to understand the following:

Needs: to identify different needs of men and women that will help them to achieve more sustainable livelihood strategies

Constraints to participation: to highlight the different responsibilities of men and women that might constrain their participation in a livelihoods project

Ability to participate: to understand different stakeholders' capacity to participate in any given intervention, e.g. given differential levels of education or autonomy.

Different benefits from participation: to determine the different ways in which men and women do, or do not benefit from particular livelihoods interventions.

Both qualitative and quantitative gender analytical research can also be used to raise awareness of gender issues; to inform policy makers; to provide material for gender training; and to monitor the differential impact of policy, project and budget commitments on women and men.

Gender analysis and agriculture

The introduction of the concept of gender in planning circles makes it possible to view practices that are oppressive to women not solely as women's issues but as concerns deeply embedded in the social relations between men and women. This concept is an important tool to analyse those relations and formulate policies to improve women's conditions in many locations.

Gender analysis draws on the understanding that every development situation is unique. No other individual, family, village or nation has the same set of resources to manage with the same people, in the same time frame, or with the same constraints. Women's work and men's work differ from place to place and examining gender roles in each specific development context will help to avoid programme failure. Development initiatives which aim to improve the livelihood of local people must take into account gender based divisions of labour, gender-based access to resources and control over those resources. Otherwise, decisions will be based on mistaken assumptions. Gender-disaggregated information also reveals what rural women and men know and what they need. Women and men are both sources of valuable cultural knowledge and sustainable resource management practices, but each may be knowledgeable about different species and practices, according to their activities. Building on local knowledge is a way to enhance agricultural programme success.

Planning for people-centred development requires precise information about who the people are. They are not a homogeneous group. The people include both women and men. The poor are poor women and poor men. The children are girls and boys. Everywhere, and within every socio-economic group, the lives of females and males are structured in fundamentally different ways. A gender-based division of labour is universal; but it differs by culture, geographic location and socio-economic group. It is recognized that gender is only one of many important social characteristics – along with ethnicity, race, caste, class, age and occupation. (These characteristics are included in gender analysis.) It is important to remember, however, that gender cuts across all the others. Whatever their class or ethnicity, women and men have different roles, responsibilities, resources, constraints and opportunities – because of gender. Therefore, information is not precise enough for agricultural programme planning unless it is disaggregated by gender. This includes information about women and men's agricultural activities.

Conservation agriculture and gender concerns

As conservation agriculture is intended to meet some of the gendered millennium Development goals (MDG) namely, enhanced quality of life for women and and gender equity and women's empowerment.

For knowledge and/or technology exchange to occur at the community level it is necessary to identify factors that can bring about a change rather than those that merely provide the means for change. Hence during the development of new or improved technology such as conservation agriculture, its potential for adoption by local communities should be assessed during an early stage of a project.

The conceptual framework (Figure 1) was developed to guide the design of field research and its implementation. The conceptual framework provides the rationale, grounded in the local socio-economic and cultural milieu and policy environment, in which to: i) identify the existing technologies used by rural women; ii) analyse women's and men's respective technology needs; and iii) review existing technology support. It integrates consideration of different factors - such as rural economics, rural infrastructure and logistics, technology traditions and practices, and rural institutions - that affect the supply of and demand for gender-responsive technology. The availability of technology

and gender-differentiated access were examined for activities in three groups: agricultural production, post-harvest and household activities.

Within each of these segments, researchers examined the existing access among men and women to technology in order to identify gender gaps - that is a situation where the technology supply does not meet the demands of rural women. In a complementary process, gender-differentiated expectations and perceptions of technology needs and user capacity were studied. Supply and demand was considered on the basis of the type of technology available, access to related information and training support, its cost and user-constraints, as well as the existing institutional and policy framework.

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For the purposes of this study, technology is defined to comprise hardware (such as seeds, vaccines or machinery), management practices and techniques (such as soil and water conservation practices, post-harvesting and crop mixes), and increases in knowledge (whether traditional, modern or some combination of the two) that strengthen local capacity for experimentation, communication and general resource management. Gender responsive technologies are defined as a set of technologies that pay due attention to gender-differentiated needs and constraints, reduce drudgery among women, release time for alternative activities, and promote labour efficiency and sustained household economic and welfare gains.

Introduction of a new concept like conservation agriculture (CA) requires more than a simple switch from one technical package to a supposed better one. There is need for a collective effort on social mobilisation, education and training and so on.

Gender analysis framework for agriculture

The gender analysis framework has four parts and is carried out in two main steps. First, information is collected for the Activity Profile and the Access and Control Profile. Then this information is used in the analysis of factors and trends influencing activities and access and control, and in the project cycle analysis.

Gender dimensions of conservation agriculture

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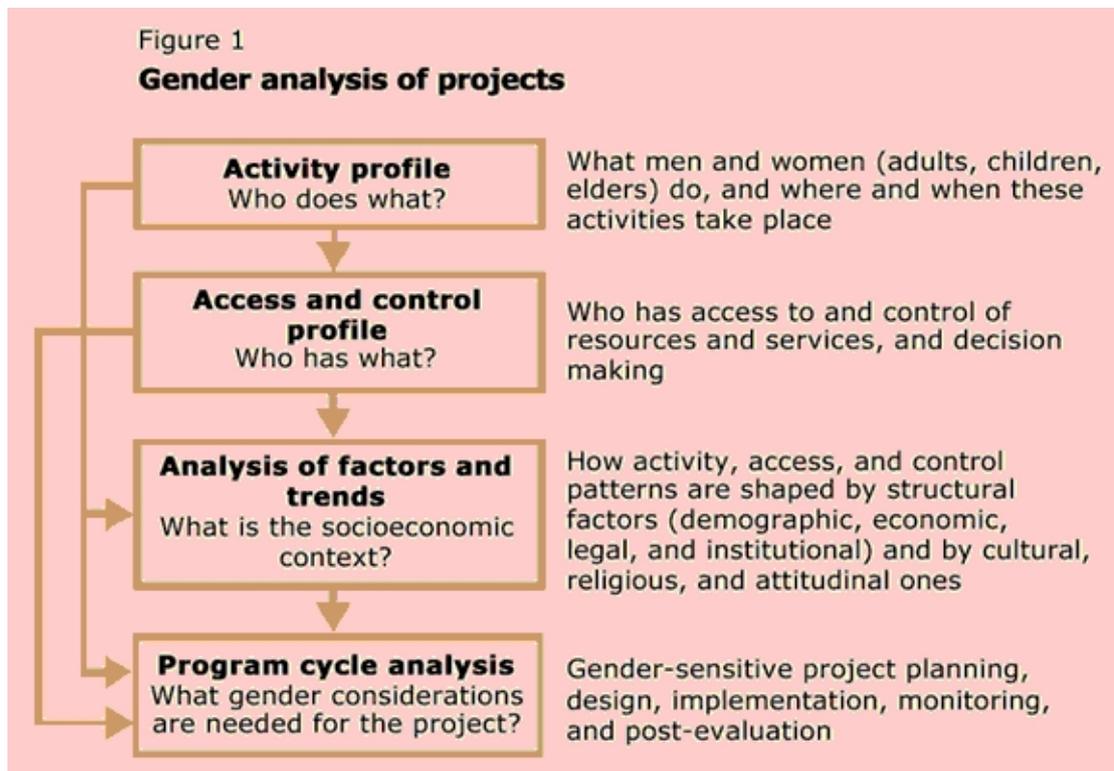


Fig. 1 shows the steps involved in the gender analysis of projects.

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As conservation agriculture is intended to meet some of the gendered MDG goals namely, (i) enhanced quality of life for women and (ii) gender equity and women's empowerment, it is imperative to examine the gender implications of this new theme. Introduction of a new concept like CA requires more than a simple switch from one technical package to a supposed better one. Gender analysis for development projects/programmes at the community level will help to determine the different impacts of development. Besides, the analysis will help in obtaining gender-disaggregated information about what rural women and men know and what they need which in turn will help in formulating gender sensitive policies.

Gender analysis of some aspects of conservation agriculture

Conservation agriculture being a *holistic* and *sustainable* farming approach, it is expected that it will have a gender approach that will cater to the needs of women and men as well as acknowledge the contribution of rural women to food security. CA includes three interlinked principles to mimic natural ecosystem processes: minimum soil disturbance through reduced or no tillage; permanent organic soil cover through cover crops, mulch and residues; and diversified crop rotations and associations. Keeping these principles in mind we may start by doing a gender analysis as follows:

	Women	Men	Remarks
Knowledge			
Practices			
Income generating activities			
Reproductive activities			
Community activities			
Access to resources			
Influencing factors: socio-cultural, religious and others			

Studies showed that in areas of traditional agriculture, among communities and classes that did not practice gender seclusion, women's participation in for biomass-related activities was high, and women's knowledge and interest in conservation was apparent. In communities where women were the main food producers, women's involvement with conservation practices (such as the preservation and maintenance of quality seed) was high. However, the project also found that this traditional knowledge base of both women and men was being eroded, with changes relating primarily to age and secondarily, to gender. In agriculturally developed areas where market forces had penetrated deeply, women were less involved in conservation practices but continued to play a role in seed preservation.

The research clearly pointed out that there is no simple or uniform division of labour, skills and knowledge along gender lines. Secondly, the research demonstrated that age and education are increasingly important factors in determining gender roles and knowledge of natural and ecological resources.

While there are encouraging indications, it is too early to offer a precise assessment of the impact of these innovative studies. The exercise represents an initial attempt to understand the linkages between gender and biodiversity, and highlights a number of gender considerations in conservation and resource use. It, therefore, has undoubted potential to influence the programming of biodiversity management by local community groups and to motivate national and regional initiatives. India is in danger of losing its biodiversity wealth unless immediate and urgent steps are taken in the Western Ghats, the northeastern region, the Jeypore tract of Orissa, and coastal ecosystems. Simultaneously, the voice of nascent women's groups in these biodiversity-rich areas needs to be recognised and strengthened, and their organisational units need to be extended, so that action to manage biodiversity achieves short and long-term success.

There is a need to initiate action research programmes designed to integrate the gender dimension in the following three areas: (a) conservation—*in situ*, *in situ* on-farm and *ex situ* (b) sustainable utilisation and (c) ethics and equity in sharing benefits.

- Zero tillage, along with other soil conservation practices, is the cornerstone of CA
- principles of rebuilding the soil, optimizing crop production inputs and optimizing profits

We can begin by focussing on the key principles of CA which advocate for minimum external input and maximum natural farming for sustainability and ecological well being. Under CA,

i) identify the existing technologies used by rural women; ii) analyse women's and men's respective technology needs; and iii) review existing technology support. It integrates consideration of different factors - such as rural economics, rural infrastructure and logistics, technology traditions and practices, and rural institutions - that affect the supply of and demand for gender-responsive technology. The availability of technology and gender-differentiated access were examined for activities in three groups: agricultural production, post-harvest and household activities.

It is the woman who conserves, preserves, and germinates seeds in most parts of our subcontinent.

Gender analysis - access to resources

Gender analysis concepts tend to be abstract and can often be controversial because they raise sensitive issues. Visual tools have been found to be very effective in getting both men and women to focus on gender concerns without feeling threatened. Gender analysis of access to resources is a technique that can provide insights into whether a development intervention has had a gender differentiated impact on the access to and control of domestic and community resources. The process of conducting the exercise with community members also helps to raise their awareness about these issues. The technique can be used as part of a group discussion involving both men and women. If the women are to feel comfortable and express themselves freely, however, in many cultures it will be preferable, and perhaps even necessary, to meet separately with the women and men.

The technique uses three large drawings of a man, a woman, and a couple as well as a set of cards showing different resources and possessions owned by people in the community, including, for example, cattle, currency, furniture, radio, food, animals, huts, jewellery, water pots and so on. Participants then assign the resources to the man, woman, or couple, depending on who works with particular physical and community resources and who owns or makes decisions about them.

(Source: <http://www.worldbank.org/poverty/impact/methods/analytic.htm>)