



Integrating gender into forestry research

A guide for CIFOR scientists and programme administrators

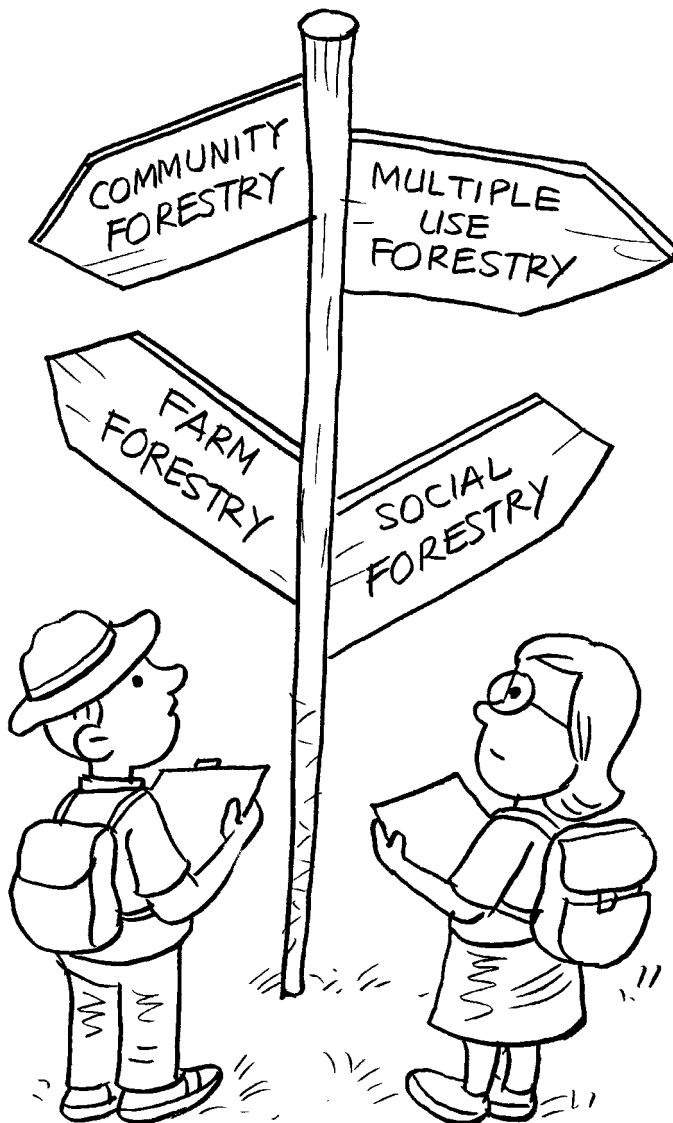
Cristina Manfre and Deborah Rubin



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Cristina Manfre and Deborah Rubin
Cultural Practice, LLC



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CIFOR
Jl. CIFOR, Situ Gede
Bogor Barat 16115
Indonesia

T +62 (251) 8622-622
F +62 (251) 8622-100
E cifor@cgiar.org

cifor.org

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Abbreviations

ACM	Adaptive collaborative management
CEDAW	Committee on the Elimination of Discrimination against Women
CFG	Community forest group
CGIAR	CGIAR is a global research partnership for a food secure future
CIDA	Canadian International Development Agency
CIFOR	Center for International Forestry Research
CRP	CGIAR Research Program
ENERGIA	International Network on Gender and Sustainable Energy
FAO	Food and Agriculture Organization of the United Nations
HIV/AIDS	Human immunodeficiency virus infection/Acquired immunodeficiency syndrome
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
IPCC	International Panel on Climate Change
IUCN	International Union for Conservation of Nature
JFM	Joint forest management
NAPA	National Adaptation Program of Action
NGO	Non-governmental organisation
NTFP	Non-timber forest products
OECD	Organisation for Economic Co-operation and Development
RECOFTC	The Center for People and Forests
REDD	Reducing Emissions from Deforestation and Forest Degradation
UNCTAD	United Nations Conference on Trade and Development
UNDRIP	United Nations Declaration on the Rights of Indigenous People
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WOCAN	Women Organizing for Change in Agriculture and Natural Resource Management

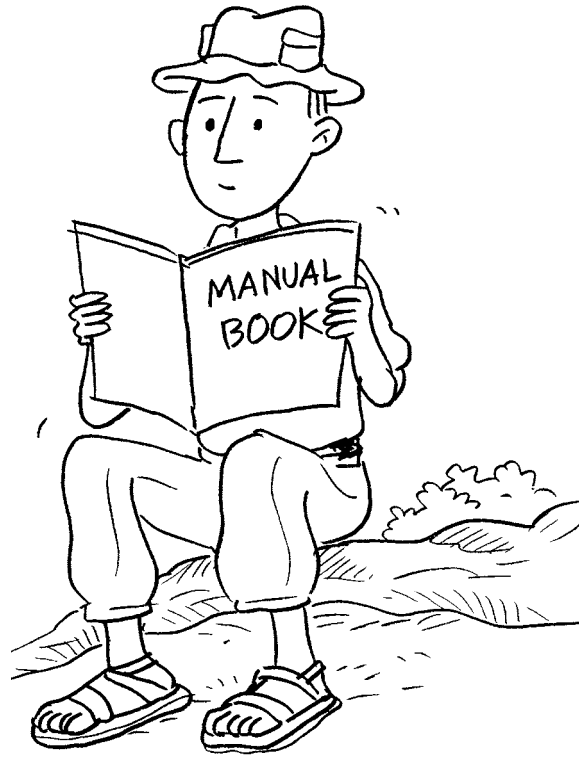
Introduction

The current interest in gender at the Center for International Forestry Research (CIFOR) is an opportunity to develop the capacity of CIFOR scientists to integrate gender issues into research. Several internal and external factors drive the interest in gender. Over the past few years CIFOR has created a dialogue and community of practice around gender. Gender is a cross-cutting issue in CIFOR's most recent medium term plan (2009-2012). At the same time, External Programme and Management Reviews, Consultative Group on International Agricultural Research (CGIAR) initiatives and donors point to the need to pay more attention to gender issues. This manual supports CIFOR's efforts to incorporate gender analysis more systematically into research. The aim is to boost understanding of gender concepts among CIFOR scientists, and to enhance their confidence and capacity for using gender analysis in forestry research, either on their own or in collaboration with other experts.

The manual was developed by Cultural Practice LLC, with oversight by CIFOR researchers Esther Mwangi (Senior Scientist) and Yen H. Mai (Associate Professional Officer, Forest and Governance Programme). It takes into account suggestions from a 2009 survey of CIFOR staff and from conversations with CIFOR scientists at the 2011 CIFOR Annual Meeting. Staff and scientists indicated a desire for guidance on what 'integrating gender' entails, and specific recommendations about what can be done, by whom and for what purpose.



Guide to the manual



Who should use the manual

If you are reading this guide, we expect that you are a CIFOR scientist, partner or other researcher interested in learning how to integrate gender issues into forestry research. This guide was developed for all researchers—ranging from those with no knowledge of gender concepts or gender analysis to those who already have some familiarity with gender. The concepts and tools described in the manual can help you in your work with forest communities and in other research to support the health and economy of forests.

How to use the manual

In this guide, you can expect to find information about gender issues in forestry research and information on ways to improve attention to gender in your research. The manual is designed to be used as a reference. It will not equip you with the expertise to conduct a gender analysis but will help you to understand the gender related aspects of your research by providing resources that will help you to seek out the answers to your questions. The manual will also help you to understand where you might need to bring in a gender advisor to support your efforts during the research process. You do not need to read the manual in sequence from

beginning to end. You may find certain sections to be more informative and relevant to your research than others.

The manual is divided into two parts:

- **Part I. A guide to key issues.** This section discusses gender issues in key forestry research topics. It provides short summaries of the intersections between gender and important forestry research themes, such as climate change, value chains, REDD+ and tenure. At the end of each summary you will find some potential research questions in a *How does this link to my research?* box.
- **Part II. How to apply gender analysis to forestry research.** This section provides guidance on how CIFOR scientists and their partners can pay more attention to gender issues and how they can apply gender analysis in current and future research.

The relevance of gender to forestry research

Research and scholarship on gender and the environment date back several decades. The work spans diverse positions linking feminist perspectives on the environment with social constructs of gender and identity (Box 1). Despite this scholarship, mainstream forestry research has often ignored the role that women play in forest management. Forestry has frequently been considered a sector dominated by men. Research and implementation efforts have overlooked women's knowledge of forest resources, their role in managing them and their dependence on forest resources for their livelihoods and wellbeing.

Today, examining how gender norms unevenly shape men's and women's use and management of forests is increasingly being recognised as critical for enhancing sustainable forest management. Gender issues have a foothold on the international agricultural research agenda. While international and national commitments emphasise the importance of redressing the inequalities between women and men, implementing more equitable approaches remains a challenge. At the same time, issues such as climate change are transforming notions of human wellbeing, equity and environmental conservation. Decentralisation is allowing new actors to voice their interests and demands. This rapidly evolving environment means it is necessary to continually make the case for the relevance of gender in forestry research.

- **Women's participation in forest management improves governance, resource allocation and the sustainability of forest resources.** Women have less access than men to the institutions that govern forest management and use. Yet, enhancing women's participation in decision making committees in

Box 1. Feminist scholarship and the environment

Feminist scholarship on the environment emerged in the 1970s and reflects differing discourses on the perspectives of men, women and gender on environmental change, problems, solutions and activism. The most prominent include:

- **Ecofeminism** which subscribes to the notion that women and nature share a common history of oppression by patriarchal institutions. It claims a positive relationship between women and nature which, for some, stems from shared biological attributes while, for others, it is a social construct.
- **Feminist environmentalism** which emphasises how men's and women's different tasks and responsibilities lead to gendered interests in resources and ecological processes.
- **Socialist feminism** which incorporates political economy into its discourse and the concepts of production and reproduction.
- **Feminist post structuralism** which considers situated knowledge that is shaped by identity – gender, class, race, ethnicity and age.
- **Environmentalism** which incorporates gender with a liberal feminist perspective that draws in women as participants and partners in environmental protection and conservation.
- **Feminist political ecology** which emphasises gender as a critical variable in decision making processes and social, economic and political contexts which shape environmental practices and policies. Gender, as well as other social variables, shapes ecological change.

Source: Rocheleau *et al.* 1996.

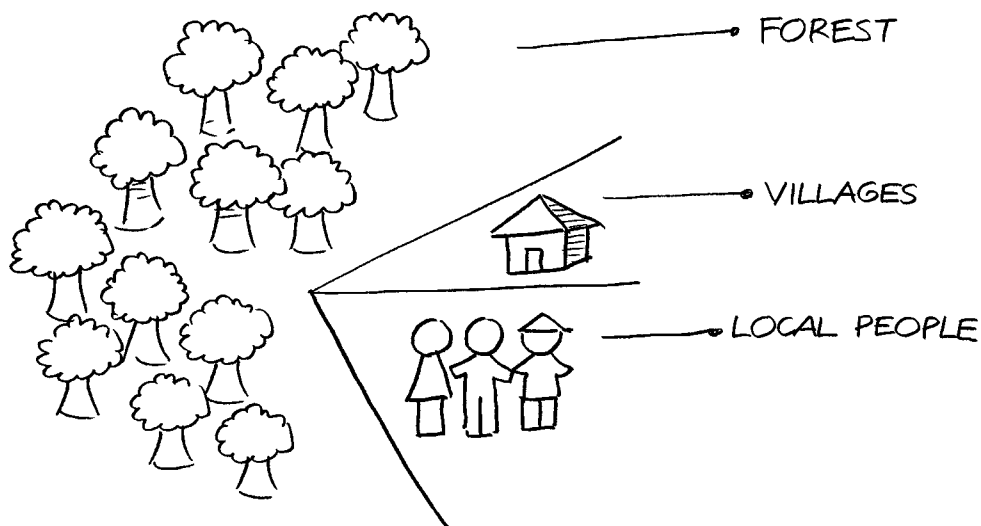
community forest institutions has been shown to improve forest governance and resource sustainability (Agarwal 2009, 2010). Research also shows that when there are women in community forest user groups, and in decision making positions in those groups, the outcomes are better (Acharya and Gentle 2006). Women's participation was also found to mitigate capture of benefits by elites during decentralisation and to improve access to district level budgeting processes (de Vries and Sutarti 2006; Syamsuddin *et al.* 2007; Komarudin *et al.* 2008).

- **Ignoring gender differences in forest use and management can lead to less effective policies.** Overlooking gender differences can result in incorrect assessments of the tradeoffs and effects of policies on forest communities. This is becoming obvious in climate change research. Recent research stresses that



ignoring the differences between the climate change adaptation strategies of women and men results in uncertain climate change predictions and reduces the effectiveness of responses (Nelson *et al.* 2002; Shea *et al.* 2005; Djoudi and Brockhaus 2011; Peach Brown 2011).

- **Both men's and women's forestry activities contribute to household livelihoods.** According to the World Bank, women in forest communities derive 50% of their income from forests, while men derive only a third (World Bank *et al.* 2009). Research by the CIFOR Poverty Environment Network (PEN) found that income from forest activities makes up about one-fifth of total household income for rural households living in or near forests; men contribute more than women because their activities generate an income whereas women are more involved in subsistence activities. The importance of forest activities in the contributions that men and women make to households requires careful consideration of how changes in rules associated with access and use of forest resources will affect their livelihoods.



Frequently asked questions

Are the terms 'gender' and 'women' the same?

No, the terms gender and women are not the same. The concept of gender encompasses ideas about both men and women. So while an examination of women's roles, needs and preferences is part of gender analysis, so too are the roles, needs and preferences of men. Gender also refers to the relationships between men and women, and examines the role that power and institutions play in determining differences between them.

How do I integrate a gender analysis into my research?

This manual should begin to help you answer this question. It was designed to provide you with an understanding of gender concepts and terms, and with practical tips that you can apply immediately in your research. However, this manual will not have all the answers. We recommend that you also take advantage of internal resources at CIFOR, including the gender officers. The CGIAR has also established a Gender and Agriculture Research Network, led by a Senior Advisor on Gender and Research, to address shared gender issues across CGIAR Research Programs. We have provided a list of resources and organisations at the back of this manual where you can find additional information.

Will gender analysis make the project more expensive and take more time?

Not necessarily. However, including gender analysis in your research may increase the cost if you have not done gender analysis before and you need a social scientist with specific gender expertise to be part of the research team. Furthermore, because women in forest communities often have multiple responsibilities and are short of time, it can cost more and take more time to proactively reach out to them and involve them in participatory research. Nevertheless, with careful planning, appropriate staff, time and resources can be built into the programme in the research design phase. There is increasing evidence that integrating gender analysis into projects leads to better and more sustainable outcomes.

Gender is not the most important variable in my research. Why do I need to address it?

We recognise that gender is one variable among a number of social variables that your research may address. Moreover, some of you may be researching biophysical aspects of forestry, where social variables are not explicitly factored into research. Our hope is that, whether or not you include gender as a variable in your research, you will be able to articulate in your project proposal how your research contributes to CIFOR's purpose of advancing 'human wellbeing, environmental conservation and equity'.

What do I do if only a few women (or men) are responding in a group interview or focus group?

If you find yourself in a situation where only a few individuals are responding, you will need to consider how to change the balance of power. There are several strategies you could try. Change the orientation of your meeting by moving yourself to a different place in the room. Remind participants of the need for everyone to offer their opinion. Break the group into smaller units, separating the louder voices from the quieter ones. Although your immediate goal may be to collect information, learn from the experience. Take note of whose voices are the loudest and determine what confers that power on them. It may not be a gender issue, but may relate to their status in the community, their age or other socio-cultural variable. In subsequent interviews, consider stratifying the group along different socio-cultural lines in order to encourage broad community participation.

When I conduct interviews only with women, sometimes men hang around and listen. What can I do?

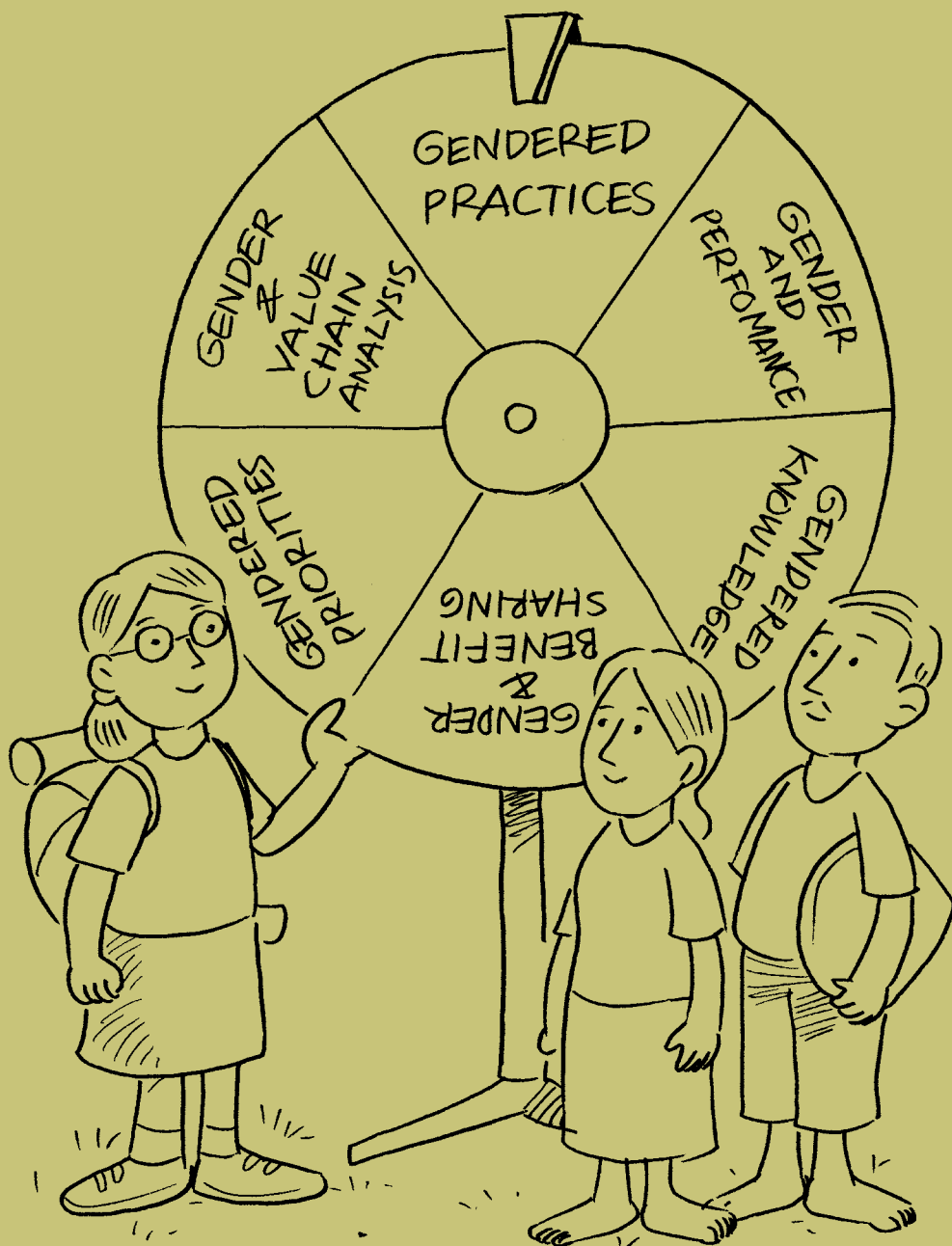
So, you've planned to interview women and your best laid efforts are thwarted when you notice that men are lingering outside the classroom or have pulled up chairs underneath the tree nearby! If you find yourself in this or a similar situation, it is a perfect opportunity to have other team members interview the men or engage them in a conversation that distances them from the women's group. When scheduling interviews, you might consider organising separate, concurrent interviews for men and women to avoid this scenario.

What should men team members do when women only focus groups or interviews are being conducted?

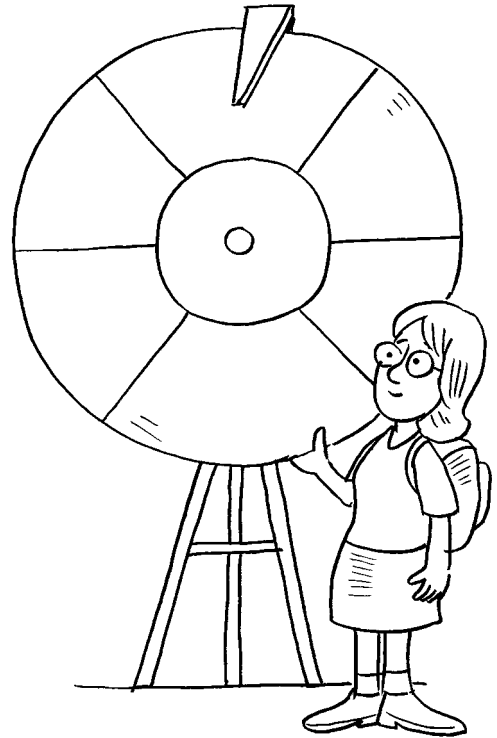
Depending on the context, the presence of men team members at women only group interviews can affect both participation and the answers to questions. If this is likely to be the case, as described above, plan to have men and women team members conduct separate interviews or focus groups at the same time. Use the time productively!

Are we changing culture by talking about gender?

The overall goal of our research is to reduce the harmful practices or behaviours that affect the sustainability of forests in favour of practices that advance human wellbeing, environmental conservation and equity. Whether or not this involves talking about gender, it certainly is about changing culture. It is about identifying ways to improve on usual practices to respond to global, national and local challenges. Engaging women more directly in research may challenge the way things are usually done, but may not alter the balance of power or outcomes for women. Research focused on understanding how to improve outcomes for men and women (e.g., gender transformative research) may, in fact, change the roles, relationships and activities of men and women. However, this is no different from changing the relationship between communities and the forests they depend on.



Part I. A guide to key issues



1.1 What is gender?

Gender refers to the economic, political and cultural attributes associated with being a man or a woman. These attributes vary both across and within countries and change over time (Box 2). Gender differs from **sex**, which refers to universal biological characteristics that differentiate males and females according to biology and reproductive characteristics. Although the terms are often used interchangeably, it is important for analytical purposes to distinguish between them. Categories based on sex do not change. Categorisation based on gender, however, allows for recognition of the social changes that occur in households and communities over time.

When we hear the word gender we tend to think simply in terms of men and women. We slip into using a simple dichotomy of men versus women, where men and women are assumed to be easily identifiable groups that have competing and conflicting interests (Cornwall 2001). A number of issues complicate this simple dichotomy.

Box 2. Key terms and concepts

Gender is a concept that describes the economic, social, political and cultural attributes associated with being a man or a woman. While often confused with **sex**, which refers to universal biological characteristics that differentiate males and females, gender is socially constructed, and gender attributes around the world differ and change over time. Gender encompasses the roles and relations between men and women.

Gender roles refer to the socially defined tasks, responsibilities and behaviours that are considered appropriate for men and women. These too are context specific and can change over time. For example, the introduction of new technology or services can alter the on farm division of labour, shifting some tasks from women to men or vice versa.

Gender relations define the ways men and women interact with each other. Both gender roles and relations are reinforced by social institutions, are socially constructed and historically specific. The interaction of men and women in public, for example with bank officers or extension agents, is different both within and across countries.

Gender analysis is a methodology that requires the collection and analysis of sex disaggregated data. Data can be collected using quantitative and qualitative methods. A gender analysis will first describe existing gender relations in a particular context, ranging from households to firms, forest management groups to policy making institutions. It will clarify how gender roles and relations create opportunities or obstacles for achieving development objectives and identify ways to address disparities between men and women.

First, oversimplification fails to account for the interdependence and connectedness of men's and women's livelihoods. Pitting men and women against each other fails to leave room for understanding how they work together and complement each other. For example, as Rocheleau and Edmunds (1997) explain, a focus on separate spaces and places of resource control ignores the 'in-between spaces' where women occupy land that is above, below and in between men's crops and trees.

Oversimplification also obscures the interplay between gender and other social variables, such as ethnicity, age, marital status and race. Women are not a homogenous group and, among them, differences in power, opportunities,

resources and activities are the result of the influence of other social variables. In Zimbabwe, Nabane (1997) highlights how Korekore women have better access than Vadoma women to the benefits of community based wildlife management programmes. Age and marital status also contribute to establishing hierarchies among women. Bradley (1991) found that among the Luhya in Kakamega forest in Kenya, older widows have more decision making authority than do younger widows in the management of woodlot and fencerow trees. Sithole (2005) describes how the wives of community leaders harness more power and influence than other women. Furthermore the lines of allegiance and power do not always come together in expected ways. Low caste and poor women may be less subject to norms that restrict the mobility and speech of upper class women (Agarwal 2001).

Why such a focus on women? The term gender is often used synonymously with women, which is incorrect and leads to the misperception that women's needs are more important than men's. The focus on women arises because, relative to men, women have fewer rights and opportunities. Women are discriminated against in a number of formal and informal ways. Gender related work seeks to identify the obstacles that have created this inequality and find ways to redress imbalances. Good gender analysis examines both men's and women's situations and identifies ways of drawing on the strengths of both to overcome the weaknesses of one or the other. What is more, it is also becoming difficult to ignore the constraints that men and boys face as their livelihoods are reshaped and changed (Box 3).

Gender not only defines individuals, but is an element of social relations (Cornwall 2001). Gender relations refer to the social constructs of how men and women interact. These include not only relationships between husband and wife, but refer to the interactions between brothers, sisters, fathers, mothers, daughters and sons, and beyond kinship ties. Gender relations also refer to social networks beyond kinship in communities, markets and political spaces. Social networks can be a source of power and are often renegotiated in response to changes in the environment.

Power, like gender, is a cross-cutting issue that is derived from a number of sources and manifested in numerous ways. Gender and other dimensions of identity shape who has access to different types of power and the conditions of access to and distribution and control of property, which makes power particularly relevant in forestry research. This manual often returns to the concept of power because it is closely linked to who participates and influences decision making processes that govern forest resources, planning and benefits. Box 4 defines how power manifests in a number of different ways.

Box 3. 'The other half of gender'*

Much of the literature on gender describes the position of women and the inequalities women face in many aspects of their lives. This is because, relative to men, women face more constraints. Relative to men, women have less access to land, spend more time on household chores, receive lower wages and participate less in politics. Gender and development initiatives first sought to redress these inequalities by focusing efforts on women and on overcoming the barriers preventing them from enjoying the same opportunities as men. For this reason gender analysis tends to devote a disproportionate amount of attention to women's roles, conditions and experiences. This manual highlights many of the cases where women are more disadvantaged, relative to men, in the forestry sector.

There is, however, a growing discussion on masculinity and the disparities in power among different groups of men and boys. The loss of jobs in historically male dominated sectors (e.g., construction or finance) as a result of the global economic crisis, low rates of school attendance by boys, gang violence and HIV/AIDS, are just a few of the gender issues affecting men and boys. These issues also affect their relationship with women. The household division of labour in many places is being redefined as men experience more frequent and longer periods of unemployment. Men and boys face challenges in Latin America, Africa and elsewhere.

*The phrase 'the other half of gender' comes from the book of the same title on men's issues in development Bannon and Correia 2006.

It is worth repeating that gender roles and relations are dynamic. They evolve over time in response to changing circumstances, needs and interests. Just as forests grow, shrink, change and shift, so gender roles and relations also undergo constant renegotiation. Failure to capture the complexity of gender roles and social relations results in failure to see opportunities for improving forest management and the possibilities for building greater equity. Drawing the lines of difference (and similarity) between and among men and women becomes critically important for understanding the context of forestry research.

1.2 Gendered practices, gendered knowledge

Ideas about gender shape everything, from what types of clothing are appropriate for men and women, to the types of occupations and employment opportunities they can pursue, to who makes decisions in the household. These ideas also affect

Box 4. Power

Power is manifested in a number of different ways. These include:

- **Power over:** This power involves an either/or relationship of domination/subordination. Ultimately, it is based on socially sanctioned threats of violence and intimidation. It requires constant vigilance to maintain, and it invites active and passive resistance.
- **Power to:** This power relates to having decision making authority, power to solve problems and can be creative and enabling.
- **Power with:** This power involves people with a common purpose or common understanding organising themselves to achieve collective goals.
- **Power within:** This power refers to self-confidence, self-awareness and assertiveness. It relates to how individuals can recognise, by analysing their experiences, how power operates in their lives and gain the confidence to act to influence and change this.

Source: Williams *et al.* 1994.

how men and women use forest and tree resources and the rules that govern access to forests.

Understanding the scope of men's and women's forest practices relates to the concept of 'gender division of labour'. This refers to distinct activities performed by men and women that are socially sanctioned and institutionally reinforced. The concept generally encompasses three different types of activity. 1) Productive work, which includes tasks and responsibilities that produce goods and services for sale or consumption. This can include employment, self-employment and activities both in the formal and informal sectors. 2) Reproductive or household work, which involves activities associated with maintaining the household, such as cooking, cleaning and caring for children, the sick or the elderly. 3) Community work, which includes men's and women's contributions to community projects, such as community forestry groups, producer associations and water user groups. This can be paid or unpaid.

1.2.1 Gendered practices

The general assumption about gendered practices in forestry is that men are more often involved in activities in large scale forest enterprises, such as logging, while non-timber forest products (NTFP) used in the household or for small, income

generating activities are disproportionately in the domain of women. Forestry research tends to reinforce this assumption. The lack of data around women's participation in large scale forestry and other forestry activities makes it difficult to obtain an accurate picture of their involvement. This may suggest that women's roles in the sector are invisible and informal, leading to poor working conditions and lower remuneration (World Bank *et al.* 2009). However, we need to be prepared to question our assumptions about the differences between men and women and investigate the actual levels of men's and women's participation in different activities, and the factors that shape that participation.

Among NTFP activities there is incredible variation across and within countries in terms of the types of products and the stages in production to consumption chains in which men and women are engaged (Alexaides and Shanley 2004; Kusters and Belcher 2004; Sunderland and Ndoye 2004). For example, cardamom is harvested by men in the Lao People's Democratic Republic (Lao PDR), but by women in Viet Nam (Kusters and Belcher 2004). In southern Ethiopia, women can be found tapping and collecting gum olibanum, while in northern and north western Ethiopia these activities are done by men (Shackelton *et al.* 2011). Whereas women weave bamboo baskets in Lao PDR, men undertake this activity in Nepal (FAO undated). Furthermore, women are involved in many timber related activities, for example tree nurseries and planting, as well as hunting and fishing (Ruiz-Pérez *et al.* 2002).

What is deemed appropriate work for men and women is continually shaped by power relations, social norms and changing socio-economic contexts. Many activities undertaken by women are perceived as extensions of their household responsibilities. Bolaños and Schmink (2005) found that in Bolivia both men and women expected women's involvement in forest management to be primarily in providing food for workers. Notions about men's role as primary breadwinners and women's dominant role in households, and perceptions about men's and women's supposedly 'natural abilities', can limit women's opportunities for upward mobility or translate into unequal pay for similar work. Norms around mobility can affect where women gather forest products or the distances they can travel to trade. Women's disproportionate responsibility for household chores also has an influence on their ability to participate in community forestry meetings or invest in expanding their businesses (Box 5). As Bolaños and Schmink (2005) note, in Bolivia women's participation in meetings was found to be constrained more by an overall lack of time than by the time of day meetings took place. Mwangi *et al.* (2009) hypothesise that women's groups face labour and time constraints that limit their ability to undertake regeneration activities, such as tree

Box 5. How women use their time

Globally, women take on greater responsibility for household tasks than men. Women in India spend 354 minutes on daily household activities, including cooking and caring for children, as compared to 36 minutes by men. In Tanzania, women spend 270 minutes per day on these tasks, and men 54 minutes. In comparison with their urban counterparts, rural women spend more time in activities such as collecting water and fetching firewood because they have less access to basic services.

Source: Budlender 2010.

planting or clearing undergrowth. Ruiz-Pérez *et al.* (2002) identify lack of time as one of the factors that limit the ability of women traders in the Cameroon to expand. Demands on women's time limit their opportunities to engage in a number of forestry related activities, from expanding NTFP businesses to participating in community forestry meetings.

However, defining particular forest products as exclusive to the domain of men or women risks overlooking how socio-cultural norms have shaped access to, and control of, forest resources. As products take on new value in the marketplace, the gender norms around them have a tendency

to change. Dolan (2001) found that, although women had historically been the main producers of horticultural products in Kenya, increased demand from European markets increased contestation in the horticultural sector, including appropriation by men of women's income, labour and land.

1.2.2 Gendered knowledge

Women's knowledge of forests and forest products differs from men's knowledge in several important ways (Box 6). Women acquire knowledge of forest products to assist them with their household responsibilities—providing food, supplementing household incomes and meeting other needs that arise as a result of droughts, famines or disasters. Their knowledge of genetic material and experience in adapting and domesticating forest species allows them to weather household ups and downs and adapt to climate change. Furthermore, in many places, women maintain biodiversity as an important part of upholding cultural traditions. Howard (2003) describes the links between the kitchen and biodiversity, also arguing that a bias against women's knowledge overlooks the kitchen and pantry as two of the most undervalued aspects of plant biodiversity (Box 7).

Box 6. Gender differences in knowledge systems

Huisinga *et al.* (1993) identify four areas of gender differences in knowledge systems related to forests:

- Women and men have knowledge about different things
- Men and women have different knowledge about the same things
- Women and men may organise their knowledge in different ways
- Men and women may receive and transmit their knowledge through different means.

In some places women's knowledge of forest biodiversity can be quite extensive. The Lao PDR Forest Management and Conservation Project found that women used a range of forest resources for food, fuel and to generate income: 37 different types of food, 68 different medicinal products, 18 types of products for other uses and 18 different animal species. In Acre, Brazil, Kainer and Duryea (1992) found that women demonstrated botanical knowledge and plant management skills related to over 150 wild and domesticated species, especially those used for food, spices, medicines and beverages.

The research does not dismiss men's knowledge, but explores the differences in men's and women's knowledge. Men's knowledge links more directly to their agricultural activities (e.g., using forest products for mulch). In Tanzania, men acquire specialised knowledge about different fodder plants for livestock (Kajembe *et al.* 2000), while women's knowledge of trees species is more closely related to firewood, vegetables and fruits (Katani 1999).

Box 7. Women, the kitchen and plant biodiversity

Around the world, maintaining plant biodiversity plays an important role in culinary diversity, household consumption and cultural heritage.

- In the Andes, a wide range of potato and maize varieties are conserved for different culinary purposes. In Quechua communities, women maintain that knowledge (Howard-Borjas 1999).
- More than 50 wild plant species are used in Tuscan soups in Italy (Pieroni 1999).
- Mayan women from the Yucatan transplant plant species to their urban gardens in Quintana Roo, Mexico, as a way to preserve their culture and biodiversity. (Greenberg 2003).

The pathways by which men and women acquire knowledge also differ, even when the knowledge is about the same product for the same purpose. Both men and women learn about forest products that can be used for medicinal purposes. In Maasai culture, however, boys learn about herbal medicines while tending to goats and sheep in the bush. Girls, in contrast, are taught by their mothers and grandmothers near home (Sindiga 1994).

1.2.3 Gendered priorities

Women's priorities for forest use are often considered to stem from their household responsibilities, such as collecting firewood for cooking or forest plants for medicinal purposes. At the same time, women prioritise activities that facilitate their ability to meet household needs for food and fuel. Men, in contrast, often engage in high value activities, such as logging and timber, that are linked to perceptions of their role as primary breadwinners and about their presumed greater physical strength.

As a result, women and men experience changes affecting forest resources differently. When a forest is redefined as a protected area and access to it changes,



this may either facilitate or impede women's access to resources depending on whether or not the rules of access take women's concerns into account. Identifying the potential consequences of changes will help policy makers, donors, investors and other actors to make more informed decisions about conservation, climate change mitigation or adaptation, and other strategies.

There is, however, a delicate balance to be struck here between ensuring women's and men's priorities are met and not reinforcing inequalities between men and women. While women may prioritise access rights that help them fulfil household obligations, they should not be prohibited from other rights that are important to men.

How does this link to my research?

The documentation of gendered practices, knowledge and priorities is a key building block for understanding gender issues in forestry. It not only provides baseline information about men's and women's relationships with forests and forest related institutions, but also informs our understanding of potential avenues for engaging them in conservation, land use planning, reforestation or regeneration of forested lands. Here are some potential research questions:

- What forest products do men and women use? In what ways do they use forest products differently? How can NTFP value chains be developed in ways that maintain or strengthen women's positions in specific chains?
- What tree species are valued by women? What tree species are valued by men? What implications does this have for conservation?
- How do men's and women's priorities, practices and behaviours change as the forest passes through different transition stages?

1.3 Gender and climate change

While in 2007 the International Panel on Climate Change (IPCC) recognised that climate change will have differing consequences for men and women, there continues to be a large knowledge gap around the gender and climate change nexus. Most gender and climate change work focuses on two elements: women's vulnerability to climate change and the lack of attention to women in climate change decision making at national and global levels. This narrow focus on women's susceptibility to climate change has been at the expense of research examining women's contribution as agents of change in mitigation and adaptation.

Women's vulnerability to climate change is shaped by their dependence on natural resources for their livelihoods and household activities. Climate change has the potential to exacerbate gender inequalities and increase women's vulnerability in a number of ways. Rural women who derive their income from forests will find their livelihoods altered by changes that affect the availability of resources. Changes in the availability of water and fuel wood may force women and girls to travel farther and spend more time collecting. Gender differences in access to productive resources, social networks and other resources influence how men and women will experience and adapt to climatic changes and shocks. Women are also more likely to bear the brunt of natural disasters that occur as a consequence of climate change. Women and children are more likely than men to die in natural disasters and they bear the brunt of recovery efforts during the aftermath (Terry 2009).

However, women are not just victims of climate change. Their active involvement in managing and conserving forests and other natural resources make them key actors in mitigation and adaptation efforts. Djoudi and Brockhaus (2011) argue that the positive results of women's involvement in the sustainable management of resources suggest that women have adaptive capacities which should not be ignored. It is also likely that women contribute to mitigation efforts, but their contributions are not well documented or accounted for in payment for environmental services. At the same time, many gender advocates raise concerns about the absence of women from, and the lack of attention to women's issues in, national and global policy making on climate change. In her review of the National Adaptation Programme of Action (NAPA) in the Congo Basin, Peach Brown (2011) highlights the lack of participation of women in the development of these strategies.

Increasingly, development practitioners and researchers are using gender analysis as a tool to improve the efficiency of adaptation strategies. Gender analysis of adaptation strategies examines what strategies men and women are adopting, what resources are needed to support these strategies, and how roles and



responsibilities are shifting as a result of climate change. Men's and women's responsibilities shape their perceptions of risk and are also likely, then, to affect what adaptation strategies they adopt. Thomas *et al.* (2007) analysed perceptions of climate risk in South Africa and found that because men tend livestock they perceive drought as a risk. Women, in contrast, perceive unpredictable rains and flooding as more of a risk because the crops they look after are susceptible to flooding. Djoudi and Brockhaus (2011) describe a shift in the gender division of labour in Mali. Here, because men are migrating as an adaptation strategy, women are attempting to take on activities previously dominated by men, such as herding livestock and making charcoal.

That both men and women are going to adapt to climate change is not in question. What is more important is how they adapt and the capacity they have to adapt in ways that secure or improve their livelihoods. Research is showing that women's ability to adapt is constrained by their relative lack of assets.¹ As a result of changes

¹ Assets are the stock of resources that a person accesses, controls or owns. They can be categorised roughly as: natural resources (e.g., land, trees, water); physical capital (e.g., technology, vehicles, infrastructure); human capital (e.g., education, skills, health); financial capital (e.g., savings or credit); social capital (e.g., networks, membership in organisations); and political capital (e.g., citizenship or effective participation). The gender dynamics of asset ownership and control are becoming a key focus for gender and agricultural research because assets have been shown to be important in setting men and women on the pathway out of poverty. For more information see IFPRI's Gender, Agriculture, and Assets Project (GAAP) <http://gaap.ifpri.info/>.

in climate, women in the Ganges River basin are switching crops and moving into fish farming. These women identified the need for information, training and extension services to help them adopt new practices successfully (Terry 2009). In Tanzania and Kenya, although women and men in the same households were found to be equally capable of adopting new strategies, the women were limited by a lack of financial capital, gender norms that restrict their activities and lack of time because of responsibilities for other tasks (Terry 2009). Women in Mali faced difficulties breaking into the charcoal industry because it was dominated by men and socially restricted to Iklan women (Djouidi and Brockhaus 2011). Other constraints were access to networks and markets.

Less is known about how gender analysis can improve mitigation efforts. Certainly, a better understanding of men's and women's current behaviours can help to identify and target gender specific strategies that can change behaviours. Research by the International Network on Gender and Sustainable Energy (ENERGIA) seeks to understand the gender dynamics of energy use to identify alternative, clean energy sources. For example, methane- or solar-powered cooking stoves can eliminate women's need to gather fuel wood. There is also a need for more research into how men and women can benefit equitably from REDD+ as part of mitigation efforts. Finally, as climate smart, agricultural techniques are identified, these will need to be tailored and disseminated in ways such that both women and men have the opportunity to adopt them.

How does this link to my research?

- How can women more effectively participate in the design of local and national climate change policies?
- What adaptation strategies are men and women adopting? What resources do women need to improve their adaptation strategies? How does climate change affect men's and women's use of time, access to income or access to forests?
- What kind of strategies can improve women's mitigation efforts? How do these differ from men's?

1.4 Gender and participation

Over the last several decades, participation has become a cornerstone of development and research activities in almost all sectors. The concept embodies a number of ideas including empowerment, inclusiveness, democracy and efficiency. It has at times been represented as a panacea for development challenges. Participation has many definitions, which are often misinterpreted and misused. It can refer to the inclusion of those most affected by specific interventions in development interventions. Often times it is a shorthand to refer to the inclusion of marginalised groups. It can refer to both the use of participatory methods as well as the process of taking part in decision making (Akerkar 2001). In forestry research, participation appears in most of these different forms.

There are a number of issues, both conceptual and methodological, related to gender and participation that deserve attention. This section discusses the most important conceptual issues and debates. Later in the manual, there is a discussion of the methodological issues.

1.4.1 Participation for efficiency and empowerment

The justification for conducting a gender analysis of participation is based on both efficiency and empowerment. On the one hand, participation is cited as necessary for the institutional efficiency of community forestry groups and other



local community based organisations. Bardhan (1999) finds that compliance with water use rules in water users groups is linked to participation in rule formulation. Agarwal (2009, 2010) demonstrates how enhancing women's participation in decision making committees in community forest institutions improves forest governance and resource sustainability. Women's participation is also found to mitigate elite capture of benefits during decentralisation and improve access to district level budgeting processes (de Vries and Sutarti 2006; Syamsuddin *et al.* 2007; Komarudin *et al.* 2008).

On the other hand, equitable participation is an important indicator of citizenship, and a form of voice and agency. When inclusivity is sacrificed and participation favours one group's needs over another's, it exacerbates unequal power relations and inequalities. Shortly after India instituted the joint forest management (JFM) programme to encourage the participation of communities in forest management, Sarin (1995) found that in some places the time taken and distance travelled by women for a head load of wood increased several fold. This was because JFM groups did not take into account how women used forests and closed their access to them completely.

1.4.2 Determinants of participation

According to Agarwal (2001), the ability to participate and the terms of participation are shaped by a number of factors, including rules of entry, social norms, perceptions, and the assets and attributes of those affected (Table 1). Determinants are context specific; they are established through national policies (e.g., membership criteria for community forestry groups), and socio-cultural norms and beliefs (e.g., women should not speak in public forums). This means

Table 1. Determinants of participation

Determinant	Definition	Example
Rules of entry	Refer to membership criteria of community forest groups, water user groups or producer associations. These may be set by individual associations or by government policies	In producer associations, membership is often based on access to land, which tends to exclude women who do not own land Community forest groups that admit one person per household will exclude women in men headed households even though men and women in the same household may have different needs and interests

continued on next page

Determinant	Definition	Example
Social norms	Refer to the norms that guide what public spaces men and women have access to, how they should behave in those spaces, and how men and women spend their time (gender division of labour)	Women may be unable to attend meetings when these are scheduled at times when they prepare meals or do other household chores. Household chores also limit their ability to participate in meetings that extend over a number of hours
Social perceptions	Refer to beliefs about men's and women's capabilities and skills	It is not uncommon to hear that women are treasurers because they are good with money. Women may also be perceived as lacking the knowledge or self-esteem to lead organisations. These perceptions can reduce the space in which women (or men) can participate in groups
Personal endowments	Refer to men's and women's access to resources, both physical and social, that affect their status in the community	Not all women lack power or are vulnerable. Widows often have greater personal endowments; they are often able to speak more freely or have greater mobility than married women
Household endowments and attributes	Refer to household resources that affect the status of members of that household in the community	The wife of the village chief will draw power and influence from the importance of her household Class and caste position of the household can affect an individual's ability to participate, but in some surprising ways. High caste women may be more subject to social norms that restrict their ability to participate than women from low caste households

Adapted from Agarwal 2001

that the stumbling blocks to women participating in decision making on an equal footing with men vary both across and within countries.

Determinants of participation define not only inclusion, but also the grounds for excluding certain groups or individuals. 'Participatory exclusion' can remove people from decision making institutions or create exclusionary practices

within participatory institutions (Agarwal 2001). Women's exclusion from decision making processes in the forestry sector has been noted by several authors (Saigal 2000; Agarwal 2001; Gupte 2003, 2004; Benjamin 2010; Buffum *et al.* 2010; Giri and Darnhofer 2010; Sunam and McCarthy 2010).

There is a tendency to think of participation as having only positive attributes; that is, having no costs but simply benefits. However, women can face significant costs in terms of time. Given the unequal division of household labour, women manage a tightly scheduled day and participating in meetings may be hard to fit in. Moreover, there are risks involved in transgressing the social norms and beliefs that define the terms of participation, including loss of reputation, guilt or shame. For some, challenging norms may lead to public censure, the loss of kinship or social networks, or worse. The institutional efficiency arguments for participation do not consider the high cost exacted from men, women and the communities that take on greater responsibilities.

1.4.3 Types of participation

Participation is not an 'all or nothing' scenario. There are degrees of participation. A number of typologies have been developed to characterise participation (Arnstein 1969; White 1996). Agarwal derives a 'gendered' typology from her work in the forestry sector (Table 2).

Table 2. Typology of participation

Form/level of participation	Characteristic features
Nominal participation	Membership in the group
Passive participation	Being informed of decisions <i>ex post facto</i> ; or attending meetings and listening to decision making without speaking up
Consultative participation	Being asked an opinion on specific matters without a guarantee of influencing decisions
Activity specific participation	Being asked (or volunteering) to undertake specific tasks
Active participation	Expressing opinions, whether or not solicited, or taking initiatives of other sorts
Interactive (empowering) participation	Having a voice in, and influence on, the group's discussion

Source: Agarwal 2001

Women often participate in ways that can be categorised along this typology as passive or consultative, such as informally influencing decision making. As Sithole (2005) finds in Zimbabwe, women do not participate directly in community forestry decisions, but view their role in the household as being highly influential. Wives discuss proposals with their husbands prior to public meetings. Others have also cited the ways in which women devise strategies to make themselves heard (Schroeder 1993; Dolan 2001). Nemarundwe (2005) argues that these strategies are becoming more visible as women use the support of local non-governmental organisations (NGOs) or women's groups to move their influence from the privacy of the household to public arenas. The role of NGOs and other external actors in advancing women's participation in forestry management is a feature of research being conducted in Uganda and Nicaragua by CIFOR.²

1.4.4 How many women are enough?

One of the key debates related to gender and participation revolves around the importance of increasing the number of women in decision making processes and at what level of participation women begin to have an influence ('threshold



² See for example Banana *et al.* 2012.

representation' or 'critical mass'). This remains an issue of debate precisely because the determinants of participation mentioned earlier vary so widely from one country to another (Agarwal 2010). One-third representation often seems to be the minimum, for example in political parties across Latin American and in village councils in India and Pakistan (Agarwal 2010).

Furthermore it is not always clear whether women's participation leads to better outcomes for women. Put another way, do women represent women's interests? Because they are not a homogenous group, women's interests are not uniform. Some women may advance their own interests at the expense of improving conditions for other women, thus creating inequalities not based on gender, but on class, ethnicity, race or other social categories. Cornwall and Goetz (2005) found no link between increasing women's participation in politics and the pursuit of gender equality policies.

None of these questions and challenges negates the importance of ensuring that men and women have equal opportunities to participate in forestry governance. On the contrary, they suggest that more research is required to understand the context specific variables that inhibit or facilitate equitable participation at multiple levels of governance, and the potential effect of broad participation on indicators of forest sustainability, wellbeing and poverty reduction.

How does this link to my research?

- How does the participation of men and women make a difference to your research? What can you do to foster it? What constraints will you face in engaging men and women more equitably? What mechanisms are needed to ensure both men and women are able to participate in and influence decision making?
- What are the gender differentiated determinants of participation in different forest related activities, for example value chains, national adaptation plans and conservation efforts? What are the effects of increasing women's participation across CGIAR Research Program on Forests, Trees and Agroforestry research themes?
- How can mechanisms or decision support tools for conservation, climate change policies or forest use be evaluated for their effectiveness in fostering equitable participation?

1.5 Beyond the community

There is wide acceptance that the policy environment is not gender neutral (Williams 2003; Tran-Nguyen and Zampetti 2005; World Bank 2011). The context in which policies are shaped and implemented is gendered. Women and men typically work in different sectors and jobs, have different access to resources and basic services, and play different roles in households, communities, forest management and the economy. These differences influence how men and women are likely to benefit from policy changes. At the same time, they also influence the extent to which women and men are able to participate in the processes that shape the content of the policies.

Research on gender issues ‘beyond the community’ is less prevalent than at the community level. This is partly because researchers can ‘see’ the differences and inequalities between men and women in what they do, who participates in meetings and how they participate at the local level. The numerous participatory methods and tools on how to engage women at the local level also garner greater attention than those that improve the policy making process at regional and national levels. As one moves towards higher levels of decision making there is both a real absence of women in the institutions that govern and a failure to engage the organisations that advocate on behalf of gender equality or women’s specific needs.



Yet, focusing efforts on gender issues ‘beyond the community’ is important for improving action at local level. While promoting more equitable participation in horizontal associations strengthens collective action, vertical associations are needed in order for individuals and communities to influence policy makers, businesses and other stakeholders in the forestry sector (Pierce Colfer 2005). As Agarwal (2001) emphasises, participation at any level is “...a measurement of citizenship rights and...a form of empowerment and voice.” These days, the levels of negotiation and decision making are expanding tremendously. Governments

are decentralising and devolving power to communities, and global and regional efforts to respond to climatic changes and manage forests are proliferating. Most countries are part of regional bodies that deal with cross border landscape issues as well as cross border trade and economic relations. This means that research must contend with the imperative to address gender inequalities at multiple levels of the decision making process.

1.5.1 Lack of data and political will

Integrating a gender perspective into research at the regional and national levels is thwarted by a lack of sex disaggregated data and an absence of political will to invest in and demand gender analysis at levels beyond the community. Nonetheless, there are a number of examples of gender analysis of policies across different sectors. ENERGIA conducted gender audits of energy policies in seven countries, Botswana, Kenya, Senegal, Philippines, India, Nigeria and Ghana. The audits can be found at <http://www.energia.org/what-we-do/policy-influencing/gender-audits/>. In Tanzania, at the request of the Minister of State in the Vice President's office, the International Union for Conservation of Nature (IUCN) developed a gender and climate change policy to feed into the national climate change strategy (Box 8).

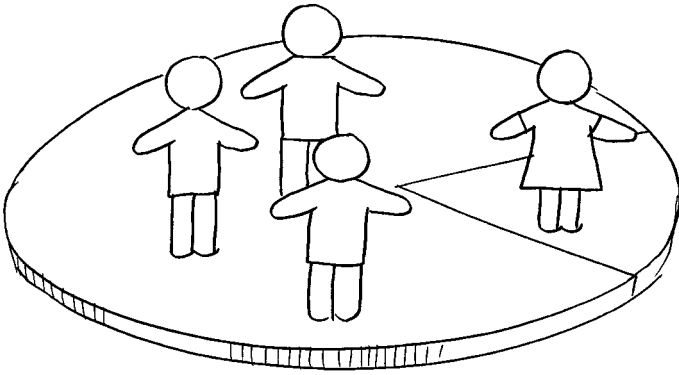
Box 8. National strategy on gender and climate change for Tanzania

Tanzania's commitment to gender equality is embodied in the Constitution, Bill of Rights and a number of ratified international agreements and conventions. The National Strategy for Growth and Reduction of Poverty 'MKUKUTA' and the Tanzania Vision 2025 both highlight the importance of gender equality for achieving long term development, growth and the wellbeing of its citizens.

Although not initially present in the National Adaptation Programme of Action and other communications to the United Nations Framework Convention on Climate Change (UNFCCC), the Government of Tanzania recognises that redressing inequalities between men and women is critical to achieving national climate change adaptation and mitigation goals. In June 2011, Dr. Terezya L. Huvisa, Minister of State for Tanzania, requested assistance from the IUCN to develop a national strategy for mainstreaming gender in climate change in Tanzania. A series of consultations and interviews with relevant policy makers, as well as a stakeholders' workshop, resulted in a draft document presented at the end of October 2011. The strategy defines the role of the Vice President's office and integrates gender into six priority sectors – agriculture, water, health, energy, forests/REDD and coastal management.

Source: IUCN 2011.

1.5.2 Participation of women



The gender gap in political participation is present in both developed and developing countries. Women are under-represented in national parliaments, heads of governments and decision making positions; on average

they occupy 17% of the seats in national parliaments and make up roughly 17% of ministers (UN 2010). The United Nations Environment Programme's (UNEP) 2006 governance survey of gender mainstreaming across environment ministries found that women are over-represented at the lower levels of decision making and under-represented at higher levels; women make up an estimated 41% of the lower levels and 27% of the staff at the management level (excluding ministers themselves) in the countries surveyed. In Nepal's Ministry of Forests and Soil Conservation there are five women professionals out of 246 officers at the lower bureaucratic levels, and of 1189 forest rangers, just 27 are women. There are no women at decision making levels. In Indonesia, women comprise 22% of the technical and administrative staff of the Forestry Department while in Cambodia women comprise 10% of Forest Administrative staff and 0.5% hold management positions (Gurung *et al.* 2011).

This absence of women in decision making positions points to gender based constraints that prevent women from moving into these positions. Investigating these constraints will illuminate the structural barriers facing women and the potential avenues for removing constraints and creating a more equitable environment.

1.5.3 Gender advocates and influence

Recently, research on gender and policy making has focused on issues related to women's influence. That is, efforts are being made to identify the point at which women's participation begins to influence or effect change in institutions. Arguments for empowering women to participate in policy making decisions focus on the need to remove discriminatory practices that prevent women's participation. Arguments for efficiency focus more often on how women improve decision

making. The shift towards influence combines the arguments for empowerment and efficiency by seeking to identify the point at which empowering women begins to lead to different outcomes. For example, Norgaard and York (2005) find that countries with high rates of women's participation at the parliamentary level are more likely to ratify international environmental treaties. Dahlerup's (1988) study of gender dynamics in Scandinavian politics found that stereotyping and exclusionary practices were common until women's representation increased to about 30%. These findings inspired a number of studies to look at similar issues in the forestry sector. These studies stress that being involved in a process is not the same as having a voice or the ability to influence.

1.5.4 Translating policy into practice

A critical step in development is translating policies into practice. Many governments are paying more attention to gender equality in policies. In some cases, demands from donors to make gender equality more explicit help governments to navigate the politics in gender equality debates. However, the gulf between the language of policies and the practice of policies is wide. Peach Brown's (2011) review of NAPAs in the Congo Basin demonstrates that gender in the language of documents does not necessarily lead to action on gender. She stresses the importance of fostering participation from the beginning of the policy making process. She also worries that government agencies responsible for action are ill equipped to lead efforts to improve gender equality in the REDD+ readiness process. Greater attention to strategies and approaches that improve implementation of equitable gender forest policies is needed.

How does this link to my research?

- What factors contribute to increasing the participation of men and women in, and their influence on, decision making at the national level? What are the consequences of increasing women's participation at different governance scales?
- What mechanisms are necessary for translating national gender commitments in the forestry sector into practice?
- How well are women represented in the staff of forestry agencies? What factors limit women's participation in these agencies?

1.6 Gender and tenure rights

This manual would not be complete without a discussion of the gender dimensions of tenure rights and access to forests. Tenure rights refer to the “social relations and institutions

For a more detailed discussion of tenure rights see Larson, A. 2012.

governing access to and use of land and resources” (Larson 2012). These define the relationships of individuals, communities and institutions to land, trees, water and other resources, as well as the relationships of different groups of people to each other. Tenure rights can determine ownership rights, access to and use of resources, management of resources, and disposal or transfer rights. These rights are reflective of, and shaped by, social relations and power structures that are mediated by a number of socio-economic characteristics, including gender. Moreover, they are mutable and are, therefore, rewritten and renegotiated as internal and external pressures change interests, and the value of trees and forest resources. Gender analysis of tenure rights can

- Illuminate the complex and overlapping arrangements that govern men’s and women’s use, access to and management of trees, forests and other natural resources
- Inform forest tenure reform to make it more equitable.

1.6.1 Understanding the gender aspects of tenure rights

Understanding the links between gender and tenure rights is necessary for improving the sustainable management of forest resources, enhancing livelihoods and addressing unequal power relations. Unfortunately, discussions in agriculture and forestry have focused narrowly on women’s lack of access to formal ownership of land or forest lots. This is, in part, because not many women have secure title. It also stems from the tenuous rights women have to land and the many examples of appropriation by men of land or other natural resources under women’s management. This does not mean that women do not need secure tenure or title to land or forest lots, but as the following paragraphs explain, the gender dimensions of tenure rights are much more complicated than just lack of formal ownership.

While women lack access to land and other natural resources, the narrow focus on ownership overlooks women’s access to, and use of, forest resources for a multitude of purposes. It also ignores the existence of complex arrangements that confer various rights on women in different ways, for different purposes and at different times; all in the absence of women’s ownership. Along Kenya’s coast, for example, Swahili women own trees on land for which they do not hold title, but which is owned by men relatives (Fortmann 1985).

Rocheleau and Edmunds (1997) provide one of the most well known reviews of the gender dimensions of tree tenure. In their analysis, they redraw the landscape of tenure issues to focus on rights to use, highlighting the shared and separate spaces where men and women access and use trees and forest resources. They point to the ‘in-between’ spaces that women have access to; spaces that are between men’s crops, trees, or on degraded land where women can collect fuel wood or wild foods. They also draw attention to the importance of understanding *de facto* rights embedded in customary or local norms. These are rights based on kinship, norms of reciprocity, or informal associations. Local norms may also confer rights to specific parts of trees that may be owned by men (e.g., leaves or fruits), seasonal rights (e.g., during the dry season), or during or after shocks (e.g., drought or floods). They argue that understanding the gender dimension of the existing arrangement can help identify more tailored and flexible arrangements that allow for sustainable management of resources and, at the same time, safeguard the needs of multiple users.



Protecting women’s access to forest resources, however, is not a substitute for identifying ways to improve women’s ownership of land and other resources. Owning assets, land or trees, strengthens the position of women in households and communities (Meinzen-Dick *et al.* 1997) and provides them with incentives to sustainably manage the resources. It is important, therefore, to examine the gender differentiated pathways by which men and women acquire and transfer ownership of land. These include the state, inheritance, membership of a

community, or the market. Individuals can also acquire land by investing in it. For example, it is possible to claim land by planting or tending trees, or by clearing trees and converting the land to other purposes. Men and women do not have the same capacity to gain ownership through these pathways. Rural women rarely have enough capital to purchase land through the market. While legislation on inheritance may provide men and women with equal opportunities to inherit, customary law may favour men.

1.6.2 Collective action

Tenure rights and access to forests are being revisited and rewritten as competition for land increases, and deforestation and degradation of forests continues. The increasing pressure to protect and conserve forests, convert them to agricultural land, or privatise them is making it more important to find solutions that can meet the needs and expectations of different interest groups. Navigating pressures from different interest groups is challenging and can lead to decisions that favour certain groups over others. Reforms that privatise or commoditise forests tend to drop complex access rights and to overlook the rights of specific communities and individuals who depend upon forest resources for their livelihoods. In these reforms, the social relations, in which existing arrangements are embedded, are also renegotiated. Finding equitable and efficient solutions requires an understanding of the interests of multiple users and the willingness to include them at multiple levels of decision making.



Collective action plays a key role in finding equitable solutions because many forests are governed communally and because collective action has been a vehicle for advocating the rights of different interest groups to other forest stakeholders. As mentioned previously, there is an absence of women and lack of attention to women's needs at higher levels of decision making and authority. This results in the inability of women to participate in shaping forest tenure at the regional, national or district level. Collective action can be a vehicle for women to protect and secure rights to trees, land and other resources. Women's groups can be a means to strengthen their access to resources. In cases where women are unable to secure individual rights, they may be better able to gain and maintain access to resources through rights conferred on groups.

It is important to recall here that gender dynamics shape who can participate in collective action efforts such that these efforts do not always yield results for women. Integrating women into institutions dominated by men does not guarantee their ability to have their needs or interests met. Women may face constraints in participating effectively in community level governance structures, especially when these are informal. Research in Uganda found that women were more likely to participate in formal forest user groups than in informal ones (Banana *et al.* 2010). However, by working through women's groups women can build their capacity to effectively advocate for their rights and increase their ability to negotiate with other institutions.

How does this link to my research?

- What rights do men and women have to forest products under different tenure regimes? How will changes to tenure affect men's and women's access to NTFPs?
- What mechanisms strengthen women's rights to use forests at different governance scales? What mechanisms strengthen women's ownership of forest lots at different governance scales?
- How can women's groups influence policies and decision making processes to enhance women's access to, and ownership of, assets or secure rights to forests, trees and land?

1.7 Gender and REDD+

The potential for reducing greenhouse gas emissions through financial incentives is one of the most attractive proposals on the global climate change agenda. The reducing emissions from deforestation and forest degradation (REDD+) mechanism puts a financial value on carbon stored in forests and offers incentives to developing countries for reducing emissions from forested lands. Already more than 40 countries are developing national REDD+ strategies and many have begun pilot programmes. The rules governing eligibility, monitoring and benefit sharing mechanisms obligate global, national and local actors to identify mechanisms that meet international standards and which can be adapted to local contexts.

The gender community has been quick to contribute critical inputs to the REDD+ debates. Many of the concerns are common gender issues that the research and development community have grappled with for many years, with some successes. Among the key concerns are the unequal representation of women's needs at all levels of decision making, the lack of effective mechanisms for facilitating women's access rights to forests and the inequitable benefit sharing mechanisms. On the one hand, because the gender agenda consists of issues that are well known, efforts to identify ways of 'engendering' REDD+ initiatives can move quickly. On the other hand, because there are high stakes involved in REDD+ and because tradeoffs will need to be made, there is an unsettling feeling that these issues will remain unresolved.

1.7.1 Women's participation and the representation of women's interests in REDD+ processes

The development of equitable REDD+ initiatives will be more likely when both procedural (e.g., rights to consultation) and substantive (e.g., access to land) rights are recognised (Peskett 2011). Both men and women require opportunities to participate and represent their interests in debates at the national, regional and global levels. It is widely accepted that local communities must take part in negotiations and consultations. The rights of indigenous peoples have been explicitly addressed in the REDD+ social and environmental standards and link to the United Nations Declaration on the Rights of Indigenous People (UNDRIP) and the International Labour Organization's (ILO) Decision 169 (RECOFTC 2011). However, despite numerous international agreements on gender equality, including the Committee on the Elimination of Discrimination against Women (CEDAW), no official commitments have been made to uphold gender equality.

At the national level, attention to gender in REDD+ strategies and climate change policies has been inconsistent. Gurung *et al.* (2011) draw attention to gender and women's issues in the development of national REDD+ policies or strategies in several countries in Asia. They found evidence in Viet Nam, Indonesia and Nepal of some efforts to include women in consultative processes, while in Cambodia there was an absence of any mention of gender or women. Peach Brown (2011) found a similar situation in the Congo Basin, where gender differences in forest use and management were not initially considered in REDD+ readiness processes.

1.7.2 Tenure and access to benefit sharing

Designing the incentive structure on which REDD+ rests requires careful negotiation of the diverse set of expectations of governments, donors, communities, the private sector, and individual men and women. Questions of who receives both cash and non-cash benefits and how they are transferred are critical. Land and forest tenure reform may also be necessary in order to clarify the relationship between individuals and communities regarding land, trees and carbon.

Recalling the previous discussions on gender and tenure rights, a number of issues complicate the equity of REDD+ programmes. The relationships of women to land and trees are often embedded in social relations that confer use and access rights, but rarely in formal ownership titles. If formal title to land or forest lots is required their ability to benefit from REDD+ programmes would be limited. Equally problematic will be cases where women's labour is exploited to manage trees either on men's or communal lots without access to the benefits from conservation or reforestation efforts.

As with other payments for environmental services, women risk being excluded. For women, the rules and social norms governing the different institutions (e.g., households, communities or community groups) to which they belong will mediate how and whether or not they are able to access benefits. Targeting households may not result in benefits because intra-household dynamics can unjustly reward some members of households more than others. Participation in community forest groups may also fail to bring necessary rewards depending on the criteria for membership and whether or not women can protect their interests. Evidence from payment for environmental services programmes has shown that if women are not clearly targeted as project beneficiaries (e.g., by including their names on certificates and contracts) they will not benefit (Leimona and Amanah 2010).

1.7.3 Do no harm

One of the most significant challenges gender advocates face is being able to help policy makers and practitioners navigate tradeoffs. While the rhetoric from donors suggests that gender equality is a high priority in development initiatives, when faced with competing priorities, dwindling budgets and the complexity of social issues, some issues fall off the agenda. The goals of gender equality or women's empowerment are not explicitly key priorities of REDD+ initiatives.

And yet, the benefits (or risks) of REDD+ are unlikely to be the same for all people. The potential risks of REDD+ for women include restrictions on livelihood activities or forest access, which can lead to higher workloads or a loss of income, and exclusion from benefit sharing mechanisms (Gurung *et al.* 2011). Many of the risks may also affect men. The rules and practices governing REDD+ should look for ways to advance equal opportunities for both men and women to participate in, and benefit from, initiatives and, at a minimum, should seek to do no harm. However, simply establishing a 'do no harm' principle will be challenging. To maintain a 'do no harm' principle it will be necessary to establish baselines, for example, of the use of time and of incomes, in order to assess both the relative and absolute changes in men's and women's livelihoods over time.

How does this link to my research?

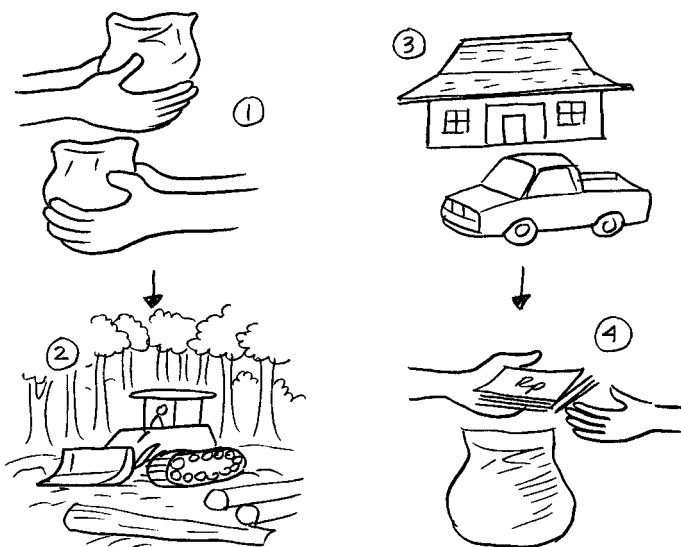
- How can policies be designed to ensure equitable access to benefits from REDD+? How can benefit sharing mechanisms be designed to reward women and men for their mitigation efforts?
- What tools are required to measure the gender differentiated effects of REDD+?

1.8 Gendered patterns of benefit sharing

Gender relations shape patterns of resource allocation and the distribution of benefits in households and communities. At the household level, the bargaining power of men and women determines the relative influence they have on decisions regarding resource allocation, including food, income, technologies and other resources. Gender, in combination with other factors, plays a role in determining how much bargaining power an individual has in the household. Understanding the dynamics that establish how benefits are distributed is necessary to ensure that the gains from forestry activities are distributed equitably.

One of the important lessons from research on intra-household dynamics is that some households pool their resources, while others do not. In some households the expectation is that men invest their income in productive activities (e.g., agricultural activities), certain household needs (e.g., health and education of children) and, at the same time, reserve some of it for their own discretionary use. Women may spend their income on small household items and food, as well as investing in their children's health and education. Where households use separate income streams (men's and women's) for specific expenses, sustaining income generating opportunities for men and for women becomes important so that each can meet the financial expectations placed on them. Other households may pool their resources, allowing greater flexibility in how income is earned and spent.

Antinori and Bray (2005) identify four benefit streams from community forest enterprises: profit sharing, investment in community infrastructure and welfare projects, investment in community forest enterprises and employment (wages and associated benefits).



In community forest projects, Agarwal (2009) identifies benefits that can come as cash transfers, payments in kind (e.g., fodder or fuel) or through community funded projects. How these benefits are distributed is a key issue. In South Asia, Agarwal (2001)

found that funds generated by community forest projects were dedicated to activities from which women were unlikely to benefit. These included forming youth clubs, purchasing drums or rugs, and financing travel for executive committee members. Cash transfers to members of the group also often benefit men more than women. Cash may be distributed as a single share per household even when men and women are members, or simply to the household head. In each case, intra-household dynamics and power relations will affect whether women have access to this cash, as discussed previously. Both Sarin (1995) and Agarwal (2009) found that, because of the patterns established in households and communities, women preferred to have separate or equal shares for each spouse. Some refused to participate in groups without these conditions.

Participation in forestry activities can bring indirect benefits by giving women a voice and by helping them influence decision making. Under the right conditions, participation enables men and women to build agency, develop broader social networks, and access information and knowledge that may allow them to strengthen their livelihood strategies.

If the results from forestry research are going to have a positive outcome on the lives of forest dependent households and communities, understanding patterns of resource distribution is important. A number of socio-cultural factors, including ownership of assets, social status, lineage and age, interact with

Box 9. Agents of resistance

All too often, women are portrayed as victims of discrimination or passive participants in research and development efforts. This portrayal of women overlooks the myriad ways that they make choices, influence decisions and resist change. Women's acts of resistance are often the result of a perceived threat to their livelihoods as the following examples show:

- In Gambia, Schroeder (1993) documents how women resisted attempts to convert vegetable gardens into woodlots and orchards through formal legal proceedings and sabotage
- Women in Kibale, Uganda, uprooted and trampled seedlings to resist the conversion of supposedly 'degraded' hillsides into community forest plantations (Edmunds 1997)
- In Cameroon (Veuthey and Gerber 2010), women stood between loggers and trees in 'spontaneous' resistance to logging companies interested in extracting moabi.

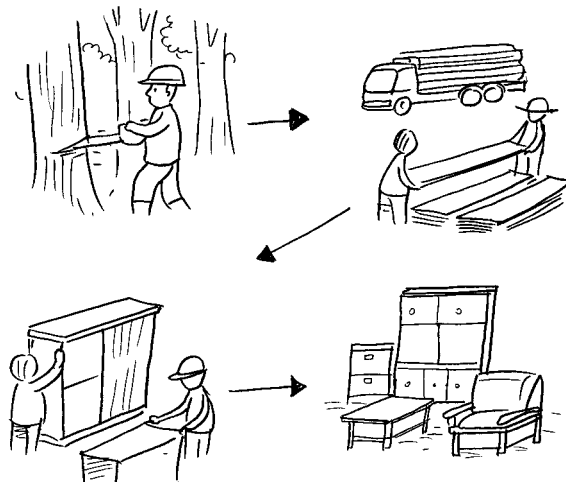
gender to strengthen bargaining power in households and elsewhere. Resource distribution patterns change with the establishment of new governance rules (e.g., membership criteria for, or access to, benefits from community forest groups), thus making gender analysis necessary to ensure benefit sharing is equitable. Ignoring these patterns can contribute to increasing and reinforcing inequalities in the community and unequal gender relations. Women and men who have few incentives to contribute to upholding forest rules may be more likely to break them or fail to contribute time and energy to supporting community activities (Box 9).

How does this link to my research?

- What policies, strategies or mechanisms are required to ensure an equitable distribution of monetary and non-monetary benefits derived from REDD+, community forest projects, forest certification or other forest initiatives?
- What types of benefits do women value most? What types of benefits do men value most? How can gender specific incentives be designed to improve conservation efforts?
- How can REDD+ or other environmental services measure men's and women's contributions to conservation or mitigation?

1.9 Gender and value chain analysis

Gender issues shape the totality of production, distribution and consumption within an economy, but have often been overlooked in developing value chains. A value chain consists of the actors, market linkages and activities that take a product or service from conception, through a series of steps, including production, processing, marketing and delivery, to final consumers, consumption and disposal.



Gendered patterns of behaviour condition men's and women's jobs and tasks, the distribution of resources and benefits derived from income generating activities in the chain, and the efficiency and competitiveness of value chains in the global market. Value chain approaches are increasingly being adopted in forestry research to examine the commercialisation of timber and NTFPs.

Value chain approaches are popular because they clarify market relationships among different stakeholders, but there is little consensus on the most useful methods to either analyse or develop value chains. Most approaches do not clearly address how to organise markets in gender equitable ways (e.g., how to best increase women's participation in forest enterprises or how to effectively reduce gender inequalities in accessing inputs or services).

In business contexts, value chain analysis involves collecting information about firms and market connections to identify strengths (or weaknesses) in the coordination of activities and to examine the power and position of firms vis-à-vis other actors in the chain. Integrating gender into value chain analysis in a development context focuses on three categories of barriers and opportunities: participation, performance and benefits. Considering gender in value chain analysis makes explicit the different levels and categories of participation of men and women in activities at different stages and identifies opportunities for improving the positions of both along the chain. In this context, the 'firm' could be a household, a community forest group or a business engaged in producing, processing, transporting or marketing forest products—or supporting these activities. Gendered value chain analysis identifies how men and women can improve their 'firm's' performance by reducing costs or enhancing the

distinctiveness of products or services (or both), a process known as ‘upgrading’. At the same time, the analysis should point to ways that men and women can improve the benefits they accrue from participating in the chain.

1.9.1 Determinants of participation

Men’s and women’s participation in value chains is influenced by gender differences in assets. The options available to each are determined by their access to land, inputs, education, training and financing. Men and women can enter value chains as employees, entrepreneurs or smallholders. In general, men have more of the assets (e.g., land, inputs and credit) that facilitate entry as smallholders, entrepreneurs and managers. Women, with fewer resources to harness, often participate as employees in large scale production and processing efforts, where access to land is not a prerequisite, or as unpaid family workers in smallholder enterprises. However, women may also operate as small scale entrepreneurs in the informal sector, or in local markets as traders or retailers. This is the case in West Africa where women are heavily involved in trading. Research on trading in the region also demonstrates how access to resources influences the scale of men’s and women’s businesses (Ruiz-Pérez *et al.* 2002; Awono *et al.* 2010; UNECA 2010). The value and scale of men’s businesses are often greater than those of women because of the products men trade and because they have access to financial resources, time, market information and networks that allow them to grow their businesses.

Perceptions about appropriate work for men and women also shape how they participate in value chains. In the furniture value chain in Indonesia, men and women participate at all stages in the chain, but in different jobs and in different numbers. Women are most numerous in positions that are perceived to be more appropriate to them, like customer service and financial management. Men are employed in positions that are more physically demanding or require the use of technology, where they are perceived to have an advantage over women. Men’s jobs are often better remunerated, which reinforces the perception that men are the primary breadwinners (Nansereko undated). These perceptions influence opportunities for training and upward mobility in firms.

1.9.2 Gender and performance

Relative to men, women have less access to land, labour, information, training and networks. Intra-household dynamics, and social and legal institutions, affect access to, and accumulation of, these resources by men and women. These differences affect the ability of men and women to maintain and improve their performance in value chains. For example, if women’s access to forests and forest products is

variable—not guaranteed—this can limit their ability to expand their businesses as they would be unable to maintain a steady supply of raw materials. In Tanzania, horizontal links among smallholder producers are consistently associated with upgrading (Bloom *et al.* 2008). In addition, access to value chains is enhanced when women as well as men are able to actively engage in group discussions and activities (Van Ingen *et al.* 2002).

1.9.3 Gender and benefit sharing

Gender relationships mediate how participation in value chains translates into benefits for individuals, households and communities. The benefits of participating in value chains include employment, wages or other income, and empowerment, all of which can accrue to an individual or a household. Men and women can improve the terms of their participation in value chains by acquiring skills, and increasing their bargaining power. Of critical importance is how gender dynamics and power relations at the different stages of the value chain determine who gains, and how benefits are accessed and distributed. As Coles and Mitchell (2011) stress, gendered patterns of benefit distribution are such that participation in value chains does not always translate into gains for those who participate. At the same time, non-participation does not equate to a lack of benefits. This is exemplified in the Kenyan French bean value chain. Women provide 72% of the labour, but derive only 38% of the income (Dolan 2001). What matters is not only the level of income derived from value chain activities, but also issues related to ownership or management of a commodity, the scheduling of payments and the points of entry into chains.

How does this link to my research?

- How do gender roles and responsibilities affect men's and women's participation in specific value chains? At what stages of the chain are women absent? Why?
- How will differences in men's and women's assets affect their ability to participate in specific value chains? How do differences in men's and women's assets affect their ability to improve their position in value chains?
- How will changes to specific value chains to meet sustainability objectives differentially affect men and women's participation in those chains?



Part II. How to apply gender analysis to forestry research



Part II of the manual provides guidance to researchers interested in understanding how to integrate elements of gender analysis into their research or fine tune their current strategies. There is an abundance of resources available to researchers and practitioners on how to conduct a gender analysis. This section draws on a fraction of that literature. Readers can consult additional resources to complement the information provided here.

The next section is organised as follows:

- **Guiding principles** provides good practices for integrating gender analysis into research
- **Identifying gender dimensions of forestry research** reviews gender related questions provided in Part I
- **Designing and implementing the approach** recommends different tools and methods for data collection and analysis, and provides a number of tips for field work
- **Building the right team** outlines some key issues for ensuring you have a team capable of conducting gender analysis
- **Monitoring results** provides tips for gender sensitive indicators.

2.1 Guiding principles

- **No single approach.** Because gender roles and relationships are defined in space and time, researchers need to be prepared to modify and adapt the methods and tools they use for different contexts.
- **Know your context.** Precisely because gender dynamics are rooted in local socio-cultural dynamics, becoming familiar with your research site will help you to identify appropriate methods and tools for research. For example, knowledge of the research site can help you determine whether focus group discussions need to be single or mixed sex, or whether they need to be disaggregated by age and/or sex. Acquiring this knowledge can be done through primary and secondary research.
- **Use quantitative and qualitative methods.** Using a combination of methods allows for triangulation and allows you to be more confident about your findings. It also gives you the ability to tailor arguments to diverse audiences according to preferences for either quantitative or qualitative findings.
- **Seek multiple perspectives.** One of the biggest mistakes you can make when you are integrating gender issues into your research is to interview too few individuals. Interviewing only women will provide you with information from the women's perspectives, but will not provide you with an understanding of where and how men's and women's opinions differ, conflict or overlap. Likewise, interviewing only the most vocal woman is likely to provide a biased picture.
- **Allow sufficient time and budget for iterative research phases.** Understanding gender dynamics is an iterative process that may require you to return to your field site several times. It may require more than one interview or conversation with your informants to fully appreciate the household or community dynamics. It is your responsibility to ensure that your research proposal has been designed to allow sufficient financial resources and time.

2.2 Identifying gender dimensions of forestry research

Part I of this manual outlined a number of key gender issues relevant to forestry research. This section draws on that material and takes it a step further to help you identify different types of gender related questions that could be included in your research.

2.2.1 How does gender link to my research?

If you are reading parts of this manual, it is likely that you are interested in knowing how you can integrate gender analysis into your research. Your primary research interests may not be to investigate gender issues in forestry, but perhaps

you acknowledge that gender roles or relations may influence your research process and outcomes. However you come to the topic, you will need to think about the implications of integrating gender issues into the various stages of your research.

You may wonder whether or not gender is a significant variable in your research. Remember that it is often not possible to determine whether or not gender is significant to your research *prior* to conducting an analysis. For this reason it is important to ensure that the methods and practices you adopt to conduct research allow for the collection and analysis of sex disaggregated data. Many aspects of forestry research can be analysed from a gender perspective. The choice to include such a perspective may boil down to whether you know, suspect or are curious about how gender roles and relations can alter the outcomes of your research (Box 10).

Box 10. Why include gender issues?

Earlier in this manual the rationale for integrating gender issues in forestry research were explained. These explanations attempted to make the case for gender analysis using efficiency and equity arguments. However, these arguments are not necessarily scientifically inspiring.

So why do it? Here are three more reasons why you should do it.

1. Because you **know** gender makes a difference in your research setting, but you are not really sure about what that difference means for the outcomes of your research.
2. Because you **suspect** gender may be an important variable in your research, but you don't know what aspects of gender are most important to investigate.
3. Because you are **curious!**

Adapted from: Quisumbing, A. Undated

Gender analysis in the forestry sector seeks to understand the relationships between men and women that affect the determinants, processes and outcomes of forest policy and management. Throughout this manual we have provided guidance on how gender roles and relations intersect with current and emerging forestry issues. In Part I, this intersection was discussed in relation to a number of thematic areas. At the end of each discussion a box entitled, 'How does this link to my research?' includes additional insights on the links between gender and the key topic.

Among the many ways that gender relations may shape men's and women's places in the world, there are four categories of information that forestry scientists need to be aware of to improve attention to gender in CIFOR research.³ These are:

Gender differences in knowledge, preferences and priorities

Women and men typically use forest and tree resources for different purposes. Their knowledge, preferences and priorities are the result of socialisation processes that confer certain responsibilities on them because they are men or women. Women's priorities are often considered to stem from their household responsibilities, including collecting firewood for cooking or forest plants for medicinal purposes. It is important not to generalise or make assumptions about men's or women's knowledge, preferences or priorities. Instead, research should identify men's and women's preferences and use this information to establish research priorities on tree and forest species, traits, land uses and products.

Research questions related to this category include:

- What roles do men and women have in forest management or conservation?
- What forest products do men and women use? In what ways do they use forest products differently?
- What tree species are valued more highly by women? By men? What implications does this have for conservation?

Consequences for men and women resulting from changes to forests

Women and men experience changes to forest resources differently. This is the result of differences in men's and women's use of, and dependence on, forest resources. Changes in access to forests, for example when a community forest becomes a protected area, may either facilitate or impede women's access to income generating resources depending upon how well the management plan and rules of access take women's concerns into account. Identifying the potential consequences of changes to the forest will assist policy makers, donors, investors and other actors to make more informed decisions on conservation strategies, climate change mitigation or adaptation strategies, and reforms.

³ These categories are based on the Gender Dimensions Framework and draw on the principles of other frameworks described elsewhere. They have been refined specifically for use with USAID programmes and projects in large part by Deborah Rubin and Deborah Caro of Cultural Practice LLC under USAID contracts (the Women in Development Indefinite Quantity Contract and the Health Policy Initiative).

Research questions related to this category include:

- What rights do men and women have to forest products under different tenure regimes?
- How will changes to forests alter men's and women's access to income? Will they shift income patterns in the household or community? Will they decrease or increase men's or women's income?
- How will changes to forests alter men's and women's use of time?
- How will changes affect men's and women's access to food and medicine?

Access to resources and the ability to adopt materials and technologies

Land tenure and property rights regimes determine how men and women access resources and affect efforts to improve forest management (Mwangi *et al.* 2011). Likewise, gender biases in access to extension, information and technologies constrain women from adopting forest enhancing practices. Additionally, women's household responsibilities may limit the time and effort they have available to adopt and pursue these practices. For example, regeneration activities require both time and labour, which women typically have only in short supply (Mwangi *et al.* 2011) although they may want to support forest regeneration. Strategies to regenerate forests need to take account of the demands of other responsibilities on men's and women's time.

Research questions related to this category include:

- How will differences in men's and women's assets affect their ability to participate in decision making processes at the community, regional or national level?
- How do differences in their assets affect their access to REDD+ payments?
- How do differences in men's and women's assets, roles and responsibilities affect their ability to adopt new technologies?

Equitable participation in, and ability to influence, decision making processes

Women's exclusion from decision making processes has been noted by a number of researchers (Saigal 2000; Agarwal 2001; Gupte 2003, 2004; Benjamin 2010; Buffum 2010; Giri and Darnhofer 2010; Sunam and McCarthy 2010). A number of factors discourage women's participation in forestry groups, and can affect efficient management of resources and equitable distribution of the benefits resulting from tree and forest products, payment for environmental services

and REDD+ projects. The challenge is to identify what conditions facilitate the participation in decision making processes of women who wish to do so and to ensure that their participation is meaningful.

Research questions related to this category include:

- How will differences in men’s and women’s assets affect their participation in value chains?
- What factors contribute to increasing men’s and women’s participation in, and influence on, decision making at the community level? What factors contribute to increasing men’s and women’s participation in, and influence on, decision making at the national level?
- What mechanisms are necessary to translate national gender commitments in the forestry sector into practice?

Table 3 provides additional information on the gender dimensions of different research themes.

Table 3. Gender dimensions of my research

My research is about...	The gender dimensions of my research include analysing (illustrative)
Smallholder production systems and markets	Differences in men’s and women’s access to planting material, inputs, credit and improved management techniques for improving productivity of forestry and agroforestry practices Gender-specific determinants of participation in, and access to, the benefits of value chains Gender differentiated mechanisms for influencing policies and decision making processes to enhance access to, and ownership of, assets and to secure rights to forests, trees and land
Management and conservation of forests and tree resources	Gender-specific criteria for prioritising tree species for conservation Men’s and women’s differentiated knowledge and practices regarding management of species and traits for cost effective and appropriate mechanisms for conservation Mechanisms for fostering gender equitable participation in different multiple use management systems Strategies for equitable resolution of conflicts around benefits and rights to forest resources

My research is about...	The gender dimensions of my research include analysing (illustrative)
Landscape management for environmental services, biodiversity conservation and livelihoods	<p>How men's and women's priorities and use of forests contribute to forest transitions</p> <p>How social and gender norms influence the design of incentives to achieve efficiency and equity in the management of multi-functional landscapes</p> <p>Methods and tools for fostering men's and women's participation in decision making</p>
Climate change adaptation and mitigation	<p>Multiple pathways through which men and women participate in (e.g., design of global agreements, national policies and pilot projects) and benefit from (e.g., access to income, improved tenure) adaptation, including REDD+ initiatives</p> <p>Gender differentiated responses to, and effects of, climate change</p>
Effects of trade and investment on forests and peoples	<p>Gender differentiated effects of forest related trade and investment on men's and women's livelihoods</p> <p>Policies and complementary measures to enhance the positive and mitigate the negative effects of forest related trade and investment on men and women</p>

2.2.2 The gender continuum

Development projects often use a continuum to help them improve the design of gender sensitive interventions. Along the continuum, projects can be designed to be **gender blind**, **gender aware** or **gender transformative**, depending on the type of analysis. The same principles can also be applied to forestry research. The continuum of approaches reflects the extent to which research seeks to understand or change gender relations, as well as the level of sex disaggregation and gender analysis planned for in the research (Figure 1).

- **Gender blind** research will make no effort to disaggregate data by sex or to engage women, women's interest groups or other under-represented organisations. It generally treats households, communities, community forestry groups and other institutions as unitary models, ignoring the power dynamics within them. Results emerging from this research can reinforce existing power imbalances and inequalities. In extreme cases, this approach can misuse information about existing gender disparities to pursue research outcomes. For example, it could use women's role in the household to justify their limited activities in the management of resources outside the home

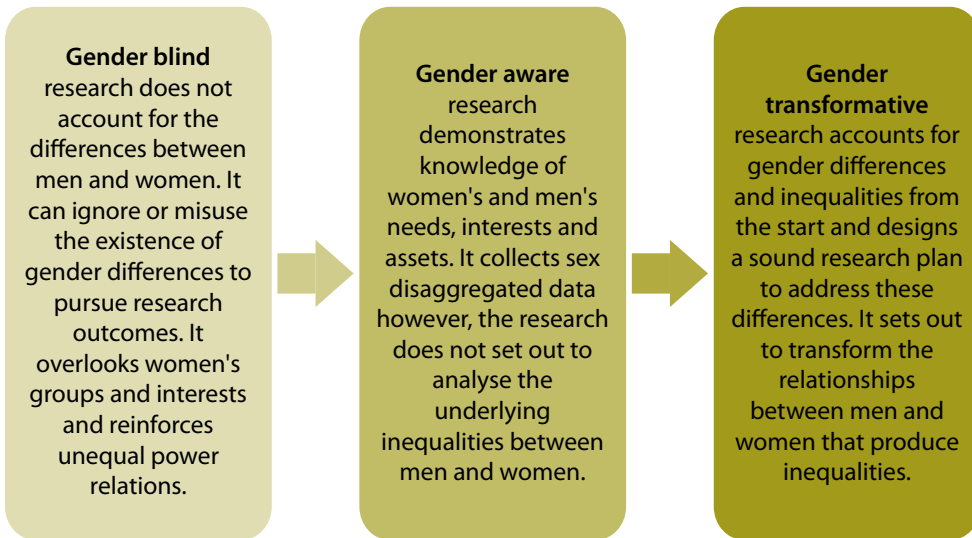


Figure 1. Gender continuum

- **Gender aware** research will acknowledge differences between men and women. It will collect sex disaggregated data and may describe men's and women's different interests, needs and priorities. It adopts a 'do no harm' approach. Recommendations may lead to improvements in men's and/or women's participation or access to services, but it does not change the underlying power imbalances between different groups
- **Gender transformative** research will identify the underlying causes of gender inequalities. It will collect sex disaggregated data and analyse gender inequalities to examine how these inequalities affect different groups of people. This research is more likely to be conducted collaboratively with communities and other stakeholders who will participate in shaping the scope of research and activities. Recommendations for improving forest policies and practices from this research will offer the best option for all parties and seek to address imbalances in assets or power.

CIFOR's adaptive collaborative management approach is an example of **gender transformative** research because its intent is to have all forest stakeholders share power, responsibility and management (Box 11). Not all research, however, will adopt a gender transformative approach. It may not be relevant or appropriate. Your intent, however, should be to design your research so that it falls between gender aware and transformative, and to avoid approaches that are gender blind.

Box 11. CIFOR's definition of adaptive collaborative management (ACM)

ACM is a value adding approach whereby people who have interests in a forest agree to act together to plan, observe and learn from the implementation of their plans, while recognising that plans often fail to achieve their stated objectives. ACM is characterised by conscious efforts among interest groups to communicate, collaborate, negotiate and seek out opportunities to learn collectively from the effects of their actions. It seeks to enhance the ability of forest stakeholders to adjust their systems of management and organisation to respond more effectively to the challenge of managing a complex and dynamic system.

Three research questions underpin the concept of ACM:

- Can collaboration among stakeholders in forest management, enhanced by processes of conscious and deliberate social learning, lead to both improved human wellbeing and the maintenance of forest cover and diversity? If so, under what conditions?
- What approaches, centred on social learning and collaborative action among diverse stakeholders, can be used to encourage the sustainable use and management of forest resources?
- In what ways do the processes and outcomes of ACM affect social, economic, political and ecological functioning and how does this feedback reinforce or weaken forest management? How do the different ways that stakeholders act and learn together explain the effects on people and forests?

Source: <http://www.cifor.org/acm/>

Whether your primary objective is to conduct a gender analysis or whether you are integrating elements of a gender analysis into your research, you can strive to move your research along the continuum.

Table 4 provides an example of the differences between gender aware and gender transformative approaches. Use this table as a guide in developing your proposal. If you are reviewing a proposal, this can also help you to understand the extent to which the intended research is gender aware or transformative. It may help you provide useful guidance to researchers on how to improve a proposal.

Table 4. Differences between gender aware and gender transformative approaches

Gender aware proposals...	Gender transformative proposals...
Describe gender inequalities	Analyse the extent and cause of gender inequalities or disparities
Examine only women's activities or design stand alone activities for women	Examine differences and complementarities between men and women or design integrated activities to reduce disparities or inequalities between men and women
Plan for one off gender training	Plan to build capacity through a continuous and iterative process combining classroom training with non-training strategies
Count numbers of men and women only	Measure changes in disparities between men and women and in the quality of men's and women's participation
Do not demand accountability from partnering institutions	Demand accountability from partnering institutions

Adapted from IFPRI and ILRI. Undated.

2.3 Designing and implementing the approach

2.3.1 The case for 'methodological pluralism'

In their review of gender analysis in forestry research, Mai *et al.* (2011) highlight the predominance of methods that use participatory techniques. They call for greater methodological pluralism to better "...understand the drivers of gender-differentiated outcomes in order to inform policy and practice" (p. 254) and push for the inclusion of gender analysis in household and intra-household surveys, global comparisons and across different governance regimes and scales. The call to use multiple methods is echoed here as well.

Often considered to be dichotomous, quantitative and qualitative approaches should be used together for a number of reasons. A mixed methods approach offers the best option for designing questionnaires, triangulating information, and interpreting and presenting information (Table 5). Qualitative research conducted prior to designing a survey can ensure that questions are appropriate to local circumstances or that constructs or proxies are valid in specific contexts. Quantitative research, in contrast, can help determine the prevalence of certain findings or help to inform a stratification strategy.

Table 5. Mixed methods may be the best option

How qualitative research adds value to quantitative research	How quantitative research adds value to qualitative research
Identifies issues and questions for surveys and hypotheses for testing	Identifies stratification strategy
Identifies response options for survey questions	Provides community and household characteristics for sampling
Clarifies terms/language for use in surveys	Identifies issues for investigation
Confirms validity of constructs and proxies	Provides triangulation, confirmation and contradiction
Provides triangulation, confirmation and contradiction	Determines prevalence of qualitative findings across a wider population
Helps explain/interpret survey findings	Reveals representation of qualitative sample

Source: Adato 2010.

A mixed approach offers particular benefits in gender analysis. One of the objectives of gender research is to identify and remove restrictions on men's or women's access to resources or opportunities that result in gender differentiated outcomes. Rubin *et al.* (2009a) call these restrictions 'gender based constraints'. The term includes:

- Measurable inequalities that are revealed by sex disaggregated data and gender analysis
- Identification of the factors that cause disparities.

This definition means that it is imperative for research to include methods for identifying and *quantifying* inequalities, and identifying and describing the factors that contribute to the disparities. This will allow an analysis that couples quantitative (the measurable inequality) with qualitative (the factors) data.

2.3.2 Data collection methods and analytical approaches

Gender analysis is a type of socio-economic analysis used to examine gender roles and relations in a particular context, explore how these impinge on development

challenges and identify policies that can reduce inequalities and improve wellbeing for men and women. It is a methodology that:

- Describes existing gender relations between men and women in a particular setting, ranging from households and firms to communities, ethnic groups or nations
- Organises and interprets, in a systematic way, information about gender relations to make clear the importance of gender differences for achieving development objectives.

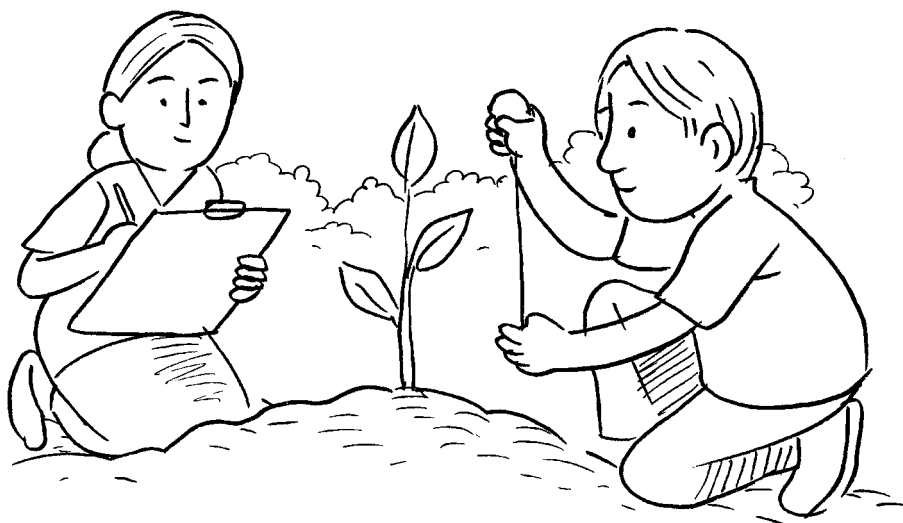
It is critical that your research integrates both aspects of gender analysis.

As is evident from the definition of gender analysis, the methodology is a two step process. While the collection of sex disaggregated data is the first step and is necessary, it is insufficient for gender analysis. On its own, sex disaggregated data simply describes the current situation using biological categories, which do not change. As a researcher, your job is to think critically about the data and interpret how it illustrates the dynamics of social relations. You need to move beyond describing static conditions to analysing the gendered relationships, drivers and motivations that alter men's and women's roles and responsibilities in a changing environment. This will allow you to identify possible avenues for changing policies to improve the lives of men and women in forest communities.

You will use a number of criteria for deciding what methods and approaches to use for your gender analysis. The criteria you use should first consider the technical aspects of your research and what methods and approaches will be most appropriate for exploring your research question.

- Your choice of method may depend on scale. If you are intending to make comparisons across countries, surveys may be suitable, while participatory methods may be more appropriate for examining changes in access to rights to forests in a specific region.
- Your choice of method may depend on your audience. Policy makers can absorb quantitative data and small chunks of information, while development practitioners and academics prefer more detailed discussions.
- Your choice of method may depend on how closely you intend to work with local communities or your intentions regarding empowerment; participatory and collaborative approaches are better suited for this.
- Other criteria, such as time, money and available expertise, may also be factors in your choice of methods. Consult Pierce Colfer and Minarchek (2012) for a discussion of how methods and approaches for addressing gender issues require different levels of resources.

The discussion that follows describes how different methods can be used for gender analysis. It also outlines some key gender analysis frameworks for analysing data. None of the methods or approaches described here are mutually exclusive. That is, your research can use a combination of these methods in order to gather information and you can build a framework within which you can analyse information.



Examples of methods⁴

- **Existing documentation and data.** Research should begin with a review of existing research and documents on the local, regional and national context under investigation. Existing ethnographic research, policies and legal codes, public records and other similar resources can be consulted. Information collected via these resources can provide an understanding of the current and historical context in which gender dynamics and forest policies co-exist and evolve. As Wardell and Fold (in press) demonstrate, archival research can be used in conjunction with other approaches (e.g., value chain analysis) to correct assumptions that women have only recently entered into agriculture and forestry. Wardell and Fold's analysis demonstrates the long standing predominance of women in the production and marketing of shea nut. Similarly, Bandiakya-Badji (2011) analyses the history of forest governance in

⁴ The tables used in this section were adapted from Fontana *et al.* 2010.

Senegal, demonstrating how the institutions that dominate local and national policy making fail to provide equitable conditions, in part because women have been excluded from decision making processes.

Although sex disaggregated information specific to the forestry sector is not available for every country, there are resources that provide national level data to inform your understanding of the legal status of men and women in different countries, their participation in the workforce, and the educational, health and political challenges that they face. Consulting this information is a first step to improving your understanding of gender issues in specific contexts. A number of resources can be consulted to understand the status of women and gender inequalities in different countries (Box 12).

- **Surveys.** As a method for data collection, surveys have the advantage of being able to standardise and compare data. As exemplified by the PEN, which collected survey data on 8000+ rural households living in or near forests, surveys allow for large scale global comparison.



However, their lack of flexibility makes it difficult to capture contextual factors or allow respondents to participate actively in the research.

In order for surveys to be used for gender analysis, it is necessary to indicate the sex of the respondent in the survey data. Using the same questionnaires for men and women allows comparison of their answers. If necessary, questions can be added to the survey to explore specific gender related roles, activities and issues.

Table 6. Advantages and disadvantages of surveys

Use to	Advantage	Disadvantage
Capture quantifiable data and results	Findings can be extrapolated and compared to the population as a whole or groups in other countries	Contextual and descriptive factors are poorly captured
Capture baseline data about men and women against which change can be measured	High level of standardisation	Results are often not available immediately

continued on next page

Box 12. Data on the status of women and gender inequalities

- **Gender law library (World Bank).** The gender law library is a collection of national legal provisions affecting women's economic status in 183 economies. The database facilitates a comparative analysis of legislation, serves as a resource for research and contributes to reforms that can enhance women's full economic participation. The collection is updated regularly, but that does not guarantee that the laws are the most recent versions, nor is the library exhaustive. Translations are not official unless indicated. <http://wbl.worldbank.org/WBLLibrary/elibrary.aspx?libid=17>
- **Gender and land rights database (FAO).** This database provides country level information on the social, economic and political issues that contribute to gender inequalities in land rights. It compiles information on national legal frameworks, including rights entrenched in constitutions, civil codes, labour codes and family codes that influence women's ownership, use of and access to property. Where possible, it includes a discussion of customary law, international treaties and conventions and land tenure institutions. <http://www.fao.org/gender/landrights>
- **GenderStats (World Bank).** This database provides sex disaggregated data across four themes – demographics, education, health, and labour force and wages. Currently there is data for 20 indicators for the years 2000, 2004 and the most recent year available after that. A number of other tools are available on the GenderStats website, including the World Bank eAtlas of Gender that allows users to create animated maps depicting the results of selected indicators, access to the International Finance Corporation enterprise survey that includes information on women's entrepreneurship, and a training module to support organisations in the development and use of gender related statistics.
- **Demographic and Health Surveys (DHS).** The Demographic and Health Surveys are nationally representative surveys on population, health, HIV and nutrition in over 90 countries. The DHS data also includes indicators on women's status and empowerment, including whether women work, whether they control income and household decisions, attitudes towards gender based violence and other issues. <http://www.measuredhs.com/>
- A number of institutions have developed scores to measure inequality and the status of achievement of men and women across different sectors. These include the
 - **Gender Inequality Index (GII).** Developed by the UNDP, this index demonstrates the loss in human development as a result of inequalities between men's and women's achievements in three dimensions – reproductive health, empowerment and the labour market. <http://hdr.undp.org/en/statistics/gii/>
 - **Global Gender Gap.** Produced by the World Economic Forum, this highlights gender inequalities and progress towards reducing those inequalities across economic, political, education and health indicators. <http://www.weforum.org/issues/global-gender-gap>
 - **Social Institutions and Gender Index (SIGI).** Developed by the OECD, this provides a ranking of gender inequality in institutions in 124 countries. The index compiles data on social norms and practices related to the family, ownership rights, physical integrity, civil liberties and physical integrity. <http://my.genderindex.org/>

Use to	Advantage	Disadvantage
Compare different groups (by sex, sex and age, or sex and other socio-economic characteristics) at a given point in time and changes over time in the same group	Estimates can be made for the size and distribution of outcomes	Data processing and analysis can be a major bottleneck
Describe conditions in a particular community or group		Can be expensive and time consuming
Assess levels of poverty of men or women headed households or of men, women and children within similar households		Information that can be captured through formal surveys is limited

- **Interviews.** Structured, semi-structured, group and key informant interviews allow for greater flexibility than surveys. Although they may also be guided by questionnaires, they are generally less directed and permit the respondents to provide more context and detail. This is helpful for gender analysis because it makes it easier to gather information about the dynamics and factors that shape behaviours, which are not as easily captured in surveys. Interviews allow for the exploration of different themes and ideas.

Table 7. Advantages and disadvantages of interviews

Use to	Advantage	Disadvantage
Capture socio-economic changes, highly interactive social situations, or people's opinions, attitudes and feelings. Can be presented as indicators and can also be quantified by ranking and scoring	Low cost	Difficult to generalise because findings usually relate to specific communities or localities
	Can be conducted quickly	
	Provide flexibility to explore new ideas	Usually small samples and harder to analyse
Provide context and interpretation for quantitative data	Crucial to interpret the survey data	Seen as less valid and credible than formal surveys

- **Participatory methods.** Participatory methods can mean many different things and can vary in the degree of participation that they seek. Some methods simply seek to engage communities more interactively, using

participatory tools, to extract information, while others, like CIFOR's ACM (CIFOR 2009), work with communities to analyse and solve problems. In ACM, researchers give up a certain amount of power and control over the process in order to help local communities build skills to solve problems. The resources, time commitment and skills required to implement participatory methods depends on the degree of participation involved. Pierce Colfer and Minarchek (2012) argue that participatory or collaborative research offers the greatest potential for sustainable solutions.

Table 8. Advantages and disadvantages of participatory methods

Use to	Advantage	Disadvantage
Engage men and women beneficiaries in monitoring	Focus on issues relevant to key players in the design process	Sometimes regarded as less objective
Learn about local conditions and local people's perspectives and priorities	Establish local ownership	Can be time consuming to involve stakeholders in meaningful ways
Identify problems and trouble shoot problems during implementation	Enhance local learning, management capacity and skills	Potential for misuse by some stakeholders to further their own interests
Evaluate a project or policy	Provide timely, information for decision making	
Provide knowledge and skills to empower poor people		
Generate quantitative data		

Examples of approaches⁵

There are a number of gender analysis frameworks that can guide the analysis of gender relevant information. Each framework is based on a set of assumptions about how gender is constituted and how an understanding of gender can lead to better outcomes and greater equality. These frameworks reflect the different institutional priorities of the donor agencies that contributed to their development. As such, they may not be suitable for all places or all times. Over time, different characteristics and consequences of gender norms have received more or less

⁵ This section is drawn from March *et al.* 2005 and Rubin *et al.* 2009 (a).

attention in these frameworks, but they remain useful models to consult. Some of them also offer tools for data collection and organisation.

- **Harvard Analytical Framework** (also known as the Gender Roles Framework or the Gender Analysis Framework) is a framework based on the efficiency approach to gender analysis. It assumes that allocating resources to women as well as men makes economic sense. Data is collected at the individual and household level about reproductive and productive activities. The analysis of the data considers how those activities reflect the distribution, access to, and control of, income and other resources.

Key resources: Overholt, C., Anderson, M., Cloud, K. and Austin, J. 1985. *Gender roles in development projects: cases for planners*. Kumarian Press, West Hartford, CT.

Rao, A., Anderson, M.B. and Overholt, C. (eds.). 1991. *Gender analysis in development planning: a case book*. Kumarian Press, West Hartford, CT. 110p

- **Social Relations Approach**, developed by Naila Kabeer at the Institute of Development Studies, locates the family and household within the network of social relations connecting them to the community, market and state. In this way it demonstrates how gender and other inequalities are created and reproduced within structures and institutions.

Key Resource: Kabeer, N. 1994. *Reversed realities: gender hierarchies in development thought*. Verso, London, UK. 346p.

- **Women's Empowerment Approach** was developed by Sara Hlupekile Longwe, a gender expert from Lusaka, Zambia. She argues that women's poverty, rather than emerging from a lack of productivity, is a consequence of oppression and exploitation. Her explicitly political model seeks to empower women and puts forward five progressively greater levels of equality:

- o Control in decision making over factors of production
- o Participation (equal) in decision making processes related to policy making, planning and administration
- o Conscientisation (in depth understanding) or attaining equal understanding of gender roles and a gender division of labour that is fair and agreeable
- o Access (equal) to the factors of production by removing discriminatory provisions in the laws
- o Equal access to material welfare (food, income, medical care).

Key Resources: Williams, S. 1994. *Oxfam gender training manual*. Oxfam, London. 634p.

March, T. and March, C. 1991. *Changing perceptions: writings on gender and development*. Oxfam, London. 324p.

- **Moser Gender Planning Framework** builds on the Harvard Analytical Framework to introduce the idea of the triple roles of women—in production, reproduction and community management—and how these affect their ability to participate in the development process. In making these links, both between women and the community, and between gender planning and development planning more broadly, Moser’s framework encompasses both the technical and political aspects of gender integration into development.

Key Resource: Moser, C.O.N. 1993. *Gender planning and development: theory, practice, and training*. Routledge, London. 304p.
- **Gender Dimensions Framework** provides an approach that examines how gender relations operate in four intersecting dimensions of social life: access to assets; practices and participation; beliefs and perceptions; and laws, policies and institutions. It helps to identify where there are specific gender based structural and institutional constraints that affect the relative status and opportunities open to men and women which can be addressed by development activities.

Key Resource: Rubin, D., Manfre, C. and Nichols Barrett, K. 2009. *Promoting gender equitable opportunities in agricultural value chains: a handbook*. USAID, Washington, DC. 141p.

2.3.3 Conducting gender sensitive field research

The previous section provided a number of different examples of methods and approaches that can be used to for gender analysis. This section discusses cross-cutting issues that affect the data collection and analysis process regardless of the methods you use.

Conducting research at the household level

Over the years, gender analysis has focused considerably on understanding the household. Early on, the household was considered as a unitary model (Becker 1981), where the household has common interests and where resources are pooled. This perspective, however, created a model of a unit that functioned as one, where preferences and needs were uniform and resources were allocated similarly to all household members. Our understanding of the household has shifted significantly, however, and today we understand it to be a much more complicated unit where conflict, cooperation and negotiation occur between members with differing levels of power and influence. Resources, such as land, may be controlled and/or owned by one individual in the household, not by all, and income may or may not be pooled. With this shift in understanding, there is recognition that a wide range of endogenous and exogenous factors influence

how the household and the members within it behave, and this has led to a greater appreciation of the need to understand intra-household dynamics.

Household level gender analysis uses the sex of the household head as the unit of analysis. This allows for an examination of the differences (or similarities) between or among households headed by men and households headed by women. How the type of household will be affected by, or will affect changes in, access rules to forests or climate change cannot be assumed, but is an empirical question. Women's routes into headship differ tremendously; they can be by choice or involuntarily through marriage, separation or widowhood. There is wide variation in the wellbeing of women-headed households depending on whether they are in urban or rural areas, the stage of life of the woman, the number of dependents in the household and access to resources beyond the household.

However, focusing on the head of household overlooks gender relations between members of the same household, which can have a significant influence on those members' lives. This can be different for women in men-headed households and for men in women-headed households. For example, women in households headed by men may have a lower intake of calories than men and sons in the same household because of the unequal distribution of food. Thomas (1991) found that maternal income effects are larger for daughters than for sons, while paternal income effects are significantly larger for sons. IFPRI research in Bangladesh found that pre-school boys consistently received a disproportionately higher share of animal and food products in the household. Adult women received less than their share even though they expend more energy than pre-school boys. This means that women in households headed by men may not fare well even when the household is above the poverty line. While headship may be the appropriate unit of analysis for some research, using headship may mask differences in bargaining power, preferences and assets of individual members and will affect the outcomes of the research.

The relevance of these different dynamics will depend upon the objective of your research and the socio-cultural context. And, remember, that even when you have carefully considered how to conduct household level research, you may still find that you have not accounted for everything (Box 13)!

Conducting research at the community level

Research at the community level has the advantage of being able to collect information from a large number of informants and to observe relationships between those people. Conducting village level surveys or participatory research at

Box 13. How many people belong to your household?

Inquiring about household composition can be confounding, yet respondents reveal important gender dynamics in the process. As an example, the extract below comes from an account of a survey interview with a phone card businessman conducted by Jake Appel, a field researcher with Innovations for Poverty Action.

“Jake began with the first survey questions, and soon came to the fifth question. ‘Ernest, how many people belong to your household? By that I mean, how many are you that share a single living space and take meals together?’

Ernest didn’t waste any time. ‘Oh, that is just me, sir.’

‘I see. So you live alone?’

‘Oh, no, sir. I have a wife and three children. But myself, I wouldn’t eat with them. My wife brings my food to me along.’

‘Ah, but normally your wife cooks for the whole family.’

‘Yes. She will prepare the stew and the fufu for all.’

‘So for how many people does your wife prepare food each evening?’

‘That is’ – and Ernest counted silently on his fingers – ‘eight.’

‘Eight. So it is yourself, your wife, your three children, and three others. Who are the other three?’

‘Hm. They are my grandmother and my wife’s sister.’ He cocked his head and waited.

‘Well, that sounds like two.’

‘Yes.’

‘So that makes seven altogether: you, your wife, your three children, your grandmother, and your wife’s sister.’

‘Yes, we are seven. And also the sister’s children. They are two.’

‘Oh, so seven and the two children – nine in all?’

‘Yes.’

‘And your wife’s sister is she married?’

‘Yes, she has a husband.’

‘And does he join you for meals most days?’

‘No, he stays with his family at the Central Region.’

‘I see. But what about his wife and two children you mentioned? Do they live at your house?’

‘No. They are with him.’

‘Oh. I thought you said they normally share meals with your family.’

‘Yes, we have been eating together.’

‘I’m afraid I don’t understand. Your wife’s sister and her two children – how can they live in the Central Region and also normally share meals with you?’

‘Oh Jake! They have to stay with us.’ Ernest was smiling. Maybe he was thinking of his full house.

‘Are they just visiting, or do they live in the house with you?’

‘Oh, no, they don’t live there. They have only been staying for a very short time.’

‘Okay. So how long have they been with you?’

‘They came around the Christmas season.’

It was July.”

Source: Karlan and Appel. 2011.

the community level will illuminate the broader social context and norms in which men and women operate. There is a tendency to consider the household as the greatest source of gender inequalities. However, these inequalities often reflect and are reinforced by social norms and hierarchies that exist outside the home. Gender analysis at the community level can uncover gender and power dynamics that are influenced by age, class, ethnicity and kinship. These influence the participation of individuals or households in decisions made about the distribution of communal property, employment and community benefits.

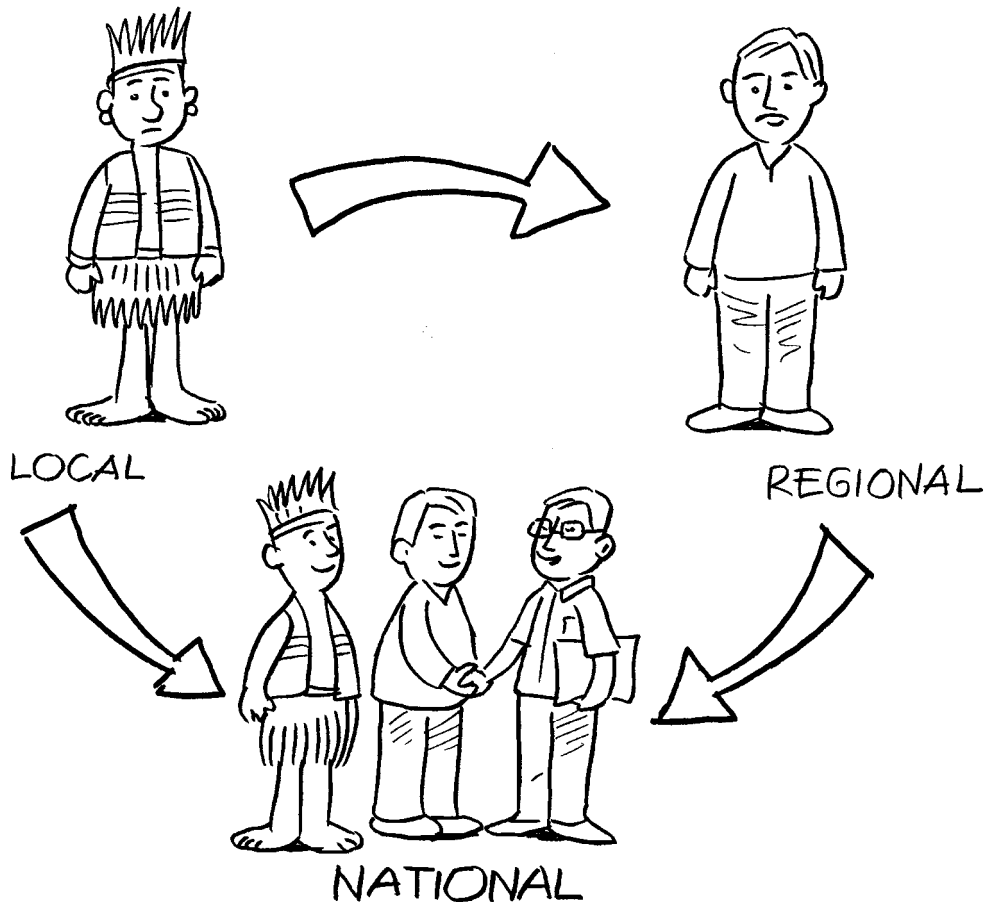
When working collaboratively with communities and other stakeholders, being able to navigate these dynamics becomes even more critical. Using approaches like CIFOR's ACM requires carefully managing and facilitating local dynamics to avoid problems of participation such as those described in Part I.

Conducting research at the regional or national level

Regional and national level policy research has a tendency to be blind to the interests of different stakeholders and social groups. As discussed in Part I, this is partly because policy makers overlook the different effects that laws, policies and other regulatory institutions have on men and women. It is also the result of the absence of women, women's organisations and other groups representing women's interests in the policy making process. Yet, in order for policy recommendations to effectively and equitably meet the needs of citizens, it is important to ensure that a broad range of stakeholders are consulted.

Gender analysis of the policy environment should seek to interview decision making institutions about their role in supporting gender related issues, as Peach Brown (2011) does in her analysis of gender and REDD+ programmes in the Congo Basin. When conducting gender analysis at the national level, efforts should also reach beyond the usual subjects. It is necessary to proactively seek out the participation of ministries and advocacy groups in the public space that respond to the differing needs of men and women. Over the years, the importance of gender to a number of forest related issues has increased and there are now a number of national, regional and international groups that can be consulted as stakeholders for research:

- **Regional level gender committees or units.** A number of regional bodies now have units or committees dedicated to addressing gender issues at the regional level. The Common Market for Eastern and Southern Africa has a Gender and Development Division which has developed a gender strategy for the period 2008 to 2012. The Southern African Development Community has a Standing Committee of Ministers Responsible for Gender Affairs and



an Advisory Committee/Regional Advisory Committee on Gender and Gender Focal Points at the sector level. The strength and influence of these organisations vary widely. Engaging these institutions can provide valuable insights into the opportunities and challenges for identifying and promoting equitable policies. At the same time, ensuring that these units are part of research legitimises their presence and could strengthen their position in regional forums

- **Ministries of gender or women's affairs.** As part of their commitment to the Beijing Platform of Action, signatory countries committed to mainstreaming gender into all government policies and legislation. This led many countries to establish a Ministry of Gender or Women's Affairs. Many of these ministries lack funding and capacity to implement the Beijing Platform commitments

and are marginalised from key decision making circles. As a result, they often work on subjects in very narrow fields where national contexts allow them to achieve some successes. For example, in Latin America, many ministries have been successful in advocating and promoting legislation around gender based violence

- **Women's organisations and business associations.** Specifically targeting women's organisations and business associations is necessary because women often face difficulties becoming members of, or representing their interests in, mixed sex groups. Membership in forestry groups, farmer and business associations, and social movement organisations can be disproportionately biased toward men. Women who are members of these groups may face challenges when voicing their needs or participating in public forums where forestry decisions are made. For this reason, it is important to identify and hold dialogues with women's organisations in a range of sectors that represent women as producers, wage workers and entrepreneurs.

2.3.4 Mixed or single sex

There are different reasons for choosing mixed as opposed to single sex interviews. Consider whether the gender of the group will affect the responses to your questions. If you know that women are exclusively involved in collecting NTFPs for medicinal purposes, it will be appropriate to target questions on NTFPs to them. If you are interested in comparing the answers of men and women to your questions, interviewing them separately will ensure that you collect information about the same issues from both. If you are asking men or women questions on sensitive issues, it is better to do that without others present, including those of the same sex.

Mixed sex interviews may initially be helpful to understand the power and gender dynamics of the community. This understanding can inform subsequent decisions about how to divide your sample in order to get the best information possible. You may find that it is necessary to divide the group by sex or by sex and age. Then you might conduct single sex meetings to encourage women to participate freely. If you are adopting collaborative approaches, it will be necessary for men and women to find a way of working together. You may use certain tools in single sex environments, but you must also find ways for men and women to negotiate and come to joint decisions.

When conducting household interviews or surveys you may wish to interview men and women separately. If you are using the same questionnaire for men and women, and you want to compare answers for similarities and differences, it is not advisable to conduct a joint interview. You cannot assume that spouses have access to the same information or that they share information freely with each other. If you are interested in understanding the dynamics between men and women,

you may wish to question them together and observe how they interact, and then follow up with separate interviews.

2.3.5 Additional tips

- **Local adaptation of surveys, questionnaires and other methods.** Even the best designed survey or questionnaire will need to be adapted to different countries, regions or contexts. Some of this has to do with language. English and Spanish speakers are well aware that there are many words that refer to the same things and that the use of words can vary widely. However, much of the need to adapt surveys has to do with socio-cultural differences that can affect men's and women's participation, access to resources or opportunities. Surveys investigating land use will need to understand tenure regimes to determine whether to capture sex disaggregated differences at the household or the plot level, or whether it is necessary to capture single or joint ownership of assets. Questions on marital status might need to include options for different types of arrangements, including polygamy.
- **Observe group dynamics.** Whether in mixed or single sex groups, your research participants will have different degrees of power and confidence that will influence how they participate. A lot can be learned by simply observing the ways people interact. How individuals accommodate themselves in the spaces where you are interviewing them can tell you a lot about subtle forms of hierarchy. You might find that in a classroom, men sit in the first rows and women behind them. Or that the executive committee of a community forestry group occupies the seats while everyone else is on the floor. Paying attention to these clues can help you understand power dynamics and lead you to consider different ways of conducting your interviews. For example, you might consider changing the arrangement of the meeting so that women are in the front or interviewing the executive committee separately from the rest of the community. Consider breaking the group into smaller units, by sex or age, to encourage participation.
- **Time, location and duration.** When planning field activities, whether they are individual interviews or group meetings, be sure you are sensitive to issues of time, location and duration.
 - Make sure you schedule your different activities to coincide with times when men and women are available. These may be different. Women may have more time after preparing breakfast or lunch, while men may have a more flexible schedule. Consult with both men and women to confirm when the most appropriate time is for you to meet with them
 - Choose a location that is easily accessible. This means a place that it is not too far away and where men or women can convene. In many places, holding an interview or meeting with women in a bar would not be considered appropriate

- o Be sensitive to the constraints on men's and women's time. Make sure you communicate how much time you need from your interviewees and do your best to stick to that. If you think you will need more time than they have available, consider finding ways of breaking up the activity.
- **Be prepared to deal with resistance at different levels, including from the community and within your own research team.** Resistance comes in many forms. Communities may resist discussing gender issues—from the different jobs men and women undertake in the forest to whether men and women should have equal opportunities to participate in community forestry. Other less acknowledged forms of resistance occur within our own research teams and at differing levels of analysis beyond the community. Resistance is also not necessarily expressed with malevolent intent or because of male chauvinism. In Bolivia, forest technicians initially resisted including women in forest management discussions because they assumed women were not interested in forestry decision making (Cronkelton 2005). Sara Longwe's research into identifying different forms of resistance and strategies for overcoming them is helpful for understanding resistance and identifying strategies for overcoming it (OECD 1998).

Table 9. Forms of resistance and counter resistance

Type of resistance	Definition	Strategies to counter resistance
Denial	Denial appears at different levels. It takes the form of people suggesting that gender equality is not a concern for their country (or community, or region). It can also be as simple as stating that a programme does not discriminate against women. People will often claim they are not in the business of 'changing culture'	<p data-bbox="770 1096 1094 1281">Present current sound empirical evidence (statistics, oral histories, solid research) that documents gender disparities and discriminatory practices</p> <p data-bbox="770 1328 1094 1418">Dispel myths or assumptions about women not being involved in forestry</p> <p data-bbox="770 1466 1094 1650">Use the words 'men and women' instead of gender and stress that it is important for community work to engage all people for greater effect</p>

Type of resistance	Definition	Strategies to counter resistance
Selection of a token action	The users of this strategy acknowledge that something should be done about equality issues, but they are unwilling to think about significant change. They select a specific project (or component within a project) that is often based on a limited assessment of gender disparities and may view women as a 'vulnerable group'. Thus, when asked about what they are doing on gender equality issues, people point to this specific project to demonstrate that they are doing 'something'. However, equality has not been taken up in a serious fashion	<p>Ensure that equality issues are given a high profile at all stages of the planning process (not just problem identification)</p> <p>Ask questions about the eventual consequences and results of the initiative and who will benefit (which women and which men)</p> <p>Engage in a discussion of the effects on men and women across multiple aspects of the project</p>
Lip service	This strategy involves acknowledging the issue at the level of rhetoric, but fails to take meaningful action	Push for systems that monitor and evaluate effects on equality between women and men in all programmes
Speaking on behalf of 'women'	With this strategy, the speaker assumes that women are a homogeneous group who have one position and one set of interests. One or two experiences are generalised into a broad statement intended to cover all women	Look for research that has been done that attempts to analyse both women's common interests and diversity. Make the case that an understanding of each situation is required and urge the use of gender sensitive methods of participation
Compartmentalisation	Users of this strategy do not recognise equality issues as cross-cutting and delegate all actions to the person officially responsible for 'women's development'. This, in effect, turns a concern with equality into a sector	Make a concrete case for how and why gender equality issues are relevant to the work. Push for overall attention to gender issues in programme planning, implementation and evaluation

continued on next page

Type of resistance	Definition	Strategies to counter resistance
Misconstrued mainstreaming	<p>Mainstreaming as a strategy is misunderstood. Instead of a focus on equality between women and men as the goal of a mainstreaming strategy, the main emphasis is on the process of involving women, often in activities and programmes in which they have had little input. Users of this strategy may argue that there are no specific programmes for women as women participate in all activities.</p> <p><i>“Women in the region already work very hard. It would be irresponsible of us to ask them to participate in more project activities”</i></p>	<p>Try to shift the attention to the effects of the initiatives and ask questions about who will benefit. Does the project widen gender disparities? Does it have the potential to contribute to more equal gender relations?</p>
Tokenism	<p>One or two women are appointed to committees or invited to participate in a decision making process. Women with little interest in gender equality issues may be selected for precisely that reason, or even if a woman with a commitment to equality is invited to participate, she may carry little weight in the overall process</p>	<p>Push for greater transparency of the decision making process and more input into decisions by those affected by them. If you are the token women, look for allies both inside and outside the formal structure</p>

Source: OECD 1998.

2.4 Learn more: gender analysis manuals and toolkits

CIFOR and CGIAR have resources for researchers interested in learning more about gender analysis. Your best resource may be to consult your peers and colleagues at CIFOR, including, but not limited to, the scientists appointed to lead gender integration efforts. Also, there are others within CRP Forests, Trees

and Agroforestry who have experience in developing and implementing gender analyses in their research. As all CRPs are required to consider gender in their research, there are a number of resources across the 15 CGIAR centres that can be consulted. Many centres have developed toolkits on how to include gender analysis into different elements of the research process. A few of these are listed below. In addition, the CGIAR Consortium is increasing its efforts to enhance research and innovation that address the gender gap in agriculture, including forestry. In 2011, a Senior Advisor on Gender and Research was hired to coordinate the Gender and Agriculture Research Network, which will direct greater attention to gender in CGIAR programmes both in the field and in the workplace. Please consult the CGIAR website for more information.

In addition, many organisations, including CIFOR, have developed toolkits to support their staff and researchers in integrating gender and other social dimensions into forestry related research and projects. The list below includes some resources available for consultation, although we urge you to ask your peers and colleagues to recommend material and toolkits they have used.

CIFOR tools and resources

- CIFOR's Forests and Gender page has the most recent publications and documents produced by the organisation related to gender issues in forests. <http://www.cifor.org/gender>
- The grab bag – supplementary methods for assessing human wellbeing. The Criteria and Indicator Toolbox Series #6. <http://www.cifor.org/online-library/browse/view-publication/publication/766.html>
- The BAG – basic assessment guide for human wellbeing. The Criteria and Indicators Toolbox Series #5. http://www.cifor.org/livesinfores/publications/pdf_files/toolbox-5c.pdf
- ACM. <http://www.cifor.org/acm/>

Other forestry specific tools and resources

- International Union of Forests Research Organizations (IUFRO), gender and forestry task force. www.iufro.org/science/divisions/division-6/60000/60800
- World Wildlife Fund (WWF) Conservation Strategies Unit. 2001. Social dimensions in a biological world: integrating gender and conservation in priority ecoregions. WWF, Washington, DC. http://awsassets.wwf.org.au/downloads/mc_wwf_social_dimensions_in_a_biological_world_2011.pdf

- Thomas-Slayter, B., Esser, A.L. and Shields, M.D. 1993. Tools of gender analysis: a guide to field methods for bringing gender into sustainable resource management. ECOGEN Research Project. Clark University, Worcester, MA. <http://rmpportal.net/library/content/tools/biodiversity-conservation-tools/putting-conservation-in-context-cd/gender-issues/3-1.pdf>
- Hill Rojas, M. 2000. Working with community-based conservation with a gender focus: a guide. Gender, Community Participation and Natural Resources. Managing Ecosystems and Resources with Gender Emphasis (MERGE). Also available in Spanish and Portuguese. http://pdf.usaid.gov/pdf_docs/PNACK550.pdf
- Aguilar, L., Castañeda, I. and Salazar, H. 2002 In search of the lost gender: equity in protected areas. World Conservation Union (IUCN). http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_pubsubject/wcpa_equitypub/?2070/In-search-of-the-lost-gender-equity-in-protected-areas
- Wilde, V.L. and Vainio-Mattila, A. 1995 Gender analysis and forestry training package. FAO. (Chapters are available on the USAID Library of Natural Resource Management and Development Portal. See below)

CGIAR centre tools and resources⁶

- International Food Policy Research Institute <http://www.ifpri.org/book-20/ourwork/researcharea/gender>
 - IFPRI. 2012. A toolkit on collecting gender and assets data in qualitative and quantitative program evaluations. http://gaap.ifpri.info/files/2010/12/GAAP_Toolkit_Feb_14.pdf
- International Livestock Research Institute <http://www.ilri.org/PovertyGender/>
 - ILRI. 2011. Gender, livestock and livelihood indicators. <http://mahider.ilri.org/bitstream/handle/10568/3036/Gender%20Livestock%20and%20Livelihood%20Indicators.pdf?sequence=4>
- Participatory Research and Gender Analysis Program. www.prgaprogram.org
- WorldFish Center frameworks and tools for gender analysis. <http://www.worldfishcenter.org/our-research/research-focal-areas/gender-and-equity/tools>
- Climate Change, Agriculture and Food Security (CAAFS), CGIAR and FAO. 2012. Gender and climate change research in agriculture and food security for rural development. <http://www.fao.org/docrep/015/md280e/md280e.pdf>

⁶ This is not a complete list of the works and resources available through the CGIAR system. Many of the CGIAR centres have integrated gender analysis into specific research and this can be found on individual websites. This list is meant only to be illustrative.

Value chain tools and resources

- Chan, M. 2010. Improving opportunities for women in smallholder-based supply chains: business case and practical guidance for international food companies. Prepared for the Bill and Melinda Gates Foundation. <http://www.gatesfoundation.org/learning/Documents/gender-value-chain-guide.pdf>
- Dulón, R. 2009. Gender in value chains: manual for gender mainstreaming. <http://www.genderinag.org/ginag/sites/genderinag.org/files/gender%20in%20value%20chains%20-%20manual%20for%20gender%20mainstreaming.pdf>
- Rubin, D., Manfre, C. and Nichols Barrett, K. 2009. Promoting gender equitable opportunities in agricultural value chains: a handbook. USAID, Washington, DC. http://www.usaid.gov/our_work/cross-cutting_programs/wid/pubs/GATE_Gender_Ag_Value_Chain_Handbook_11-09.pdf
- Gender in value chains. Agri-ProFocus Learning Network. <http://genderinvaluechains.ning.com/>
- Mayoux, L. and Mackie, G. 2009. Making the strongest links: a practical guide to gender mainstreaming in value chain development. ILO, Geneva. http://www.ilo.org/empent/Publications/WCMS_106538/lang--en/index.htm

Other tools and resources

- FAO. 2001. Socio-economic and gender analysis (SEAGA) publications:
<http://www.fao.org/gender/seaga/en/>
 - Field level handbook
 - Intermediate level handbook
 - Macro level handbook
- USAID. Library of USAID's natural resources management and development portal <http://rmportal.net/library/content/tools/biodiversity-conservation-tools/putting-conservation-in-context-cd/gender-issues/>

2.5 Building the right team

Some consideration should be given to examining the capacity and composition of research teams. While this manual is meant to help you understand some of the key gender issues related to conducting forestry research, it will not immediately provide you with the technical expertise required to conduct a gender analysis. It is a first input to help you understand some of the initial decisions you will need to make about how to 'engender' your research. You will need to assess whether the research you are about to undertake requires the technical expertise of a gender

analyst. Nonetheless, here are several guiding principles to follow when you are building your team.

- **Ensure a common understanding of gender, as well as the goals and objectives of the research.** While not everyone on the research team will need to have the same level of knowledge in all technical areas, it is important that teams build a common understanding of key concepts and objectives. This includes being clear about the definition of gender (i.e., it is not the same as sex or just about women) and the gender related objectives of your research. These definitions should be shared with the lead researchers as well as any facilitators or enumerators used to collect data in the field. Technical guides should include a definition of gender that can be referred to by enumerators.
- **Determine the need for men and women facilitators and enumerators.** Some contexts will require that you have women (or men) collecting data or facilitating group interviews. In determining research sites, you should consider the social norms that guide men's and women's behaviours in public and private. In some places women may not be able to talk to unknown men. Men and women may also prefer to discuss sensitive issues with interviewers of the same sex. Preparing for diverse contexts will facilitate the data collection process and contribute to improving the quality of responses.
- **Pay attention to the gender composition of the team.** While this is considered a human resource concern, it is also the concern of all researchers at CIFOR and its partner institutions. It demonstrates that, as an organisation, CIFOR is doing what it can to support equal opportunities for women and men in research. The inclusion of women (or men) on your research team will not ensure that the research outcomes are more gender sensitive. It is nonetheless important to make efforts to promote equal opportunities for men and women in the research process.

2.5.1 Maintaining professionalism in the field

This manual has discussed many gender issues in forestry research, yet these issues are of equal importance for our conduct in the field. We will find ourselves at times in positions of power relative to our partners because of our sex, race, ethnicity or occupation. It is our job as researchers and programme managers to set an example of appropriate behaviour. If we are serious about supporting gender issues through our research, then we must demand that certain standards of behaviour are upheld in the way we work (Box 14).

2.6 Monitoring results

Measuring the effects that forest policies, initiatives and other changes have on men and women is important for understanding how progress toward

Box 14. CIFOR code of conduct

The CIFOR is a global knowledge organisation committed to enhancing the benefits of forests for people in the tropics. We, who work for or in association with CIFOR, hereby endeavour to foster an institutional culture that:

- Is driven by a commitment to eradicating poverty and protecting the environment
- Is outcomes oriented and committed to the equitable provision of knowledge as an international public good
- Emphasises scientific partnership based on mutual respect and sharing of credit
- Stimulates intellectual growth by promoting creativity, a spirit of enquiry and constant questioning and conventional wisdom
- Fosters professionalism and excellence by promoting adherence to the highest scientific and ethical standards
- Respects the intellectual property rights of others
- Honours hard work and draws the best from each one of us
- Fosters a team spirit while defending independence of thought
- Emphasises understanding of local realities, but brings to bear a global perspective for the benefit of communities that depend on forests
- Avoids discrimination or harassment on the grounds of race, religion, sex, nationality, ethnic origin, age, political affiliation, sexual orientation, marital status or hierarchical status
- Strives to realise the benefits of diversity
- Values accountability, honesty, transparency and the fair sharing of information
- Expects discretion and demands respect for others in the conduct of all activities
- Respects the laws, customs and cultural values where we work
- Permits consultants to exercise their personal rights of citizenship while protecting the non-political nature of CIFOR
- Expects exemplary citizenship from the staff in the communities in which we work and live.

environmental conservation and human wellbeing has been achieved. Indicators can be designed specifically to measure the changes in men's and women's lives, as well as changes in their relationships to each other, and to forests and forest resources. These are known as **gender sensitive indicators** (Box 15).

Box 15. What is a gender sensitive indicator?

“Gender sensitive indicators have the special function of pointing out gender-related changes in society over time. Their usefulness lies in their ability to point to changes in the status and roles of women and men over time, and therefore to measure whether gender equity is being achieved. Because use of indicators and other relevant evaluation techniques will lead to a better understanding of how results can be achieved, using gender-sensitive indicators will also feed into more effective future planning and program delivery.”

Source: CIDA 1997.

Gender sensitive indicators are important in four ways:

- They allow us to know if we have achieved gender equity or equality goals
- They allow us to communicate achievements towards these goals
- They allow us to monitor whether or not we have created or exacerbated gender inequalities
- They allow us to generate evidence of effective approaches to address gender inequalities in forestry initiatives and policies.

Gender sensitive indicators should be designed to capture both quantitative and qualitative achievements. Such indicators will require the methodological pluralism previously mentioned. They will also allow progress towards reducing measurable inequalities between men and women that make up one aspect of a gender based constraint to be monitored.

- “**Quantitative indicators** are defined as ‘measures of quantity’ (CIDA 1997), for example the numbers of men and women adopting technologies or the numbers of men and women trained. Formal surveys, such as censuses and households surveys, are used to collect quantitative data.
- “**Qualitative indicators** capture people’s judgments and perceptions about a subject” (CIDA 1997), for example levels of satisfaction with extension services or forest committees. Qualitative data are generally collected through participatory means, such as focus groups or community level mapping exercises. They can be presented in narrative form, but can also be quantified using ranking, scoring and scaling. For example, a project can quantify the level of women’s and men’s satisfaction with forest access rules by using a six point scale, with 1 being least satisfied with services and 6 very satisfied.

2.6.1 Tips for designing gender sensitive indicators

- **Seek to compare differences over time.** Much of what we want to know is how people's livelihoods change as the world around them changes. In forestry research, we want to understand how forests change people's lives, and how people can change forests. In order to understand these dynamics it is important to establish the *status quo* at the start of your research and to measure changes over time. When addressing gender issues in forestry we want to understand how forests change men's and women's lives over time, and vice versa. Be sure to capture specific data on men and women at the beginning of the project in order to measure differences over the life of the project. For example, collect baseline information about what products men and women use prior to establishing forest committees (or new rules) in order to measure whether these change after new rules have been instituted.
- **Check your assumptions.** Ask yourself whether the indicators you have identified will help you understand the differing effects of the activities on men versus women. If not, look for an alternative or additional indicator that can help you better capture them. For example, does an increase in household income benefit all household members equally? Also consider measuring the increase in income that is under women's control.
- **Move beyond measuring men's and women's participation.** Many gender sensitive indicators simply disaggregate numbers or percentages by the sex of the individual. While these indicators help to capture data on men's and women's participation in activities, it is important to also use indicators that reveal how they are benefiting from project activities. To what extent are women using new technologies? Has the women's time spent collecting firewood or NTFPs increased after new rules on forest access?
- **Capture quality and quantity.** Capturing the quality of men's and women's experiences can range from their satisfaction with new policies and governance structures, to changes in their behaviour. If your research is working with forest management committees, measure the number of times women volunteer to speak or the number of questions asked by women in group meetings.

Table 10 provides illustrative gender sensitive indicators that can be used or modified for your research. The table provides only a handful of suggestions on potential sources of verification. Other means of monitoring the indicators in this table may also be appropriate.

Table 10. Illustrative gender sensitive indicators

Indicator	Sources of verification
Proportion of annual household income (or consumption) derived from agroforestry or forest activities (disaggregated by sex of head of household)	Household surveys
Number of (and/or per cent change of) men and women actively participating in natural resource management committees	Committee meeting minutes Interviews with stakeholders
Changes in perceptions of men and women regarding the importance of forest protection and management, measured before and after activity	Focus groups Stakeholder interviews
Number of (and/or per cent change of) women and men community extension workers and professional forestry extension workers	Forest department records Project records
Level of satisfaction among women and men with access to, and quality of, extension and training services	Sample surveys (e.g., client satisfaction surveys) Stakeholder interviews
Satisfaction of men and women with the changes in forest access and forest resources dispute treatment	Sample surveys Group interviews or focus groups Interviews, before and after
Changes in time spent collecting firewood daily, before and after activities	Participatory monitoring
Number of men and women benefitting from employment opportunities as a result of natural resource management initiatives	Forest management group records Stakeholder interviews
Changes in access rights for women and men to common property resources (timber and non-timber) in forests	Sample surveys Stakeholder interviews Participatory rapid appraisals

Adapted from World Bank *et al.* 2009.

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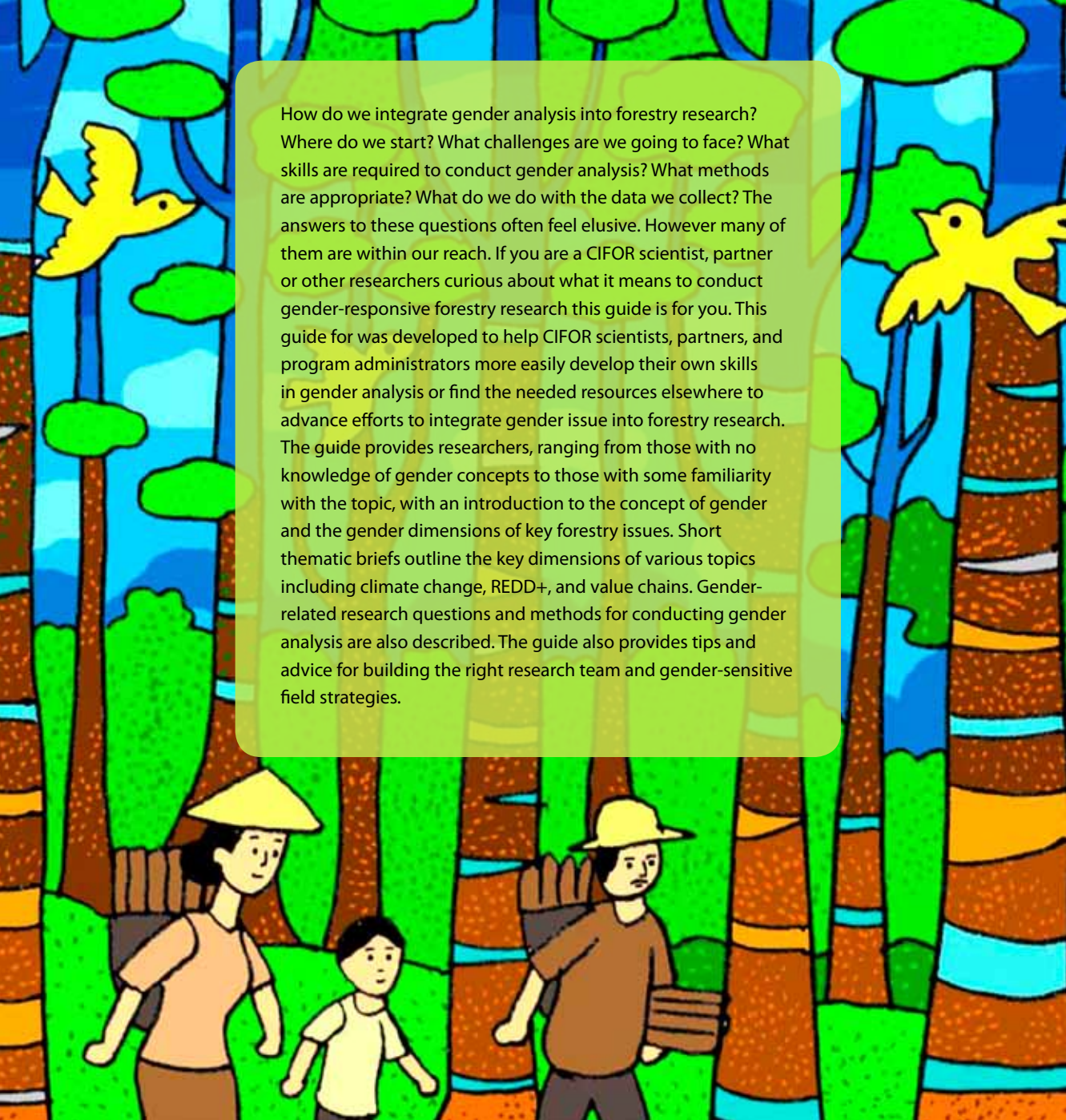
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How do we integrate gender analysis into forestry research? Where do we start? What challenges are we going to face? What skills are required to conduct gender analysis? What methods are appropriate? What do we do with the data we collect? The answers to these questions often feel elusive. However many of them are within our reach. If you are a CIFOR scientist, partner or other researchers curious about what it means to conduct gender-responsive forestry research this guide is for you. This guide for was developed to help CIFOR scientists, partners, and program administrators more easily develop their own skills in gender analysis or find the needed resources elsewhere to advance efforts to integrate gender issue into forestry research. The guide provides researchers, ranging from those with no knowledge of gender concepts to those with some familiarity with the topic, with an introduction to the concept of gender and the gender dimensions of key forestry issues. Short thematic briefs outline the key dimensions of various topics including climate change, REDD+, and value chains. Gender-related research questions and methods for conducting gender analysis are also described. The guide also provides tips and advice for building the right research team and gender-sensitive field strategies.

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