

# WOMEN IN FORESTRY: CHALLENGES AND OPPORTUNITIES

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Food and Agriculture  
Organization of the  
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# MAIN MESSAGES

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- Men and women play different roles in forestry and agroforestry systems in developing countries. Compared with men, women are frequently disadvantaged – for a range of interrelated cultural, social, economic and institutional reasons – in their access to and control over forest resources, and in the economic opportunities available to them.
- Many women have highly specialized knowledge of trees and forests in terms of biological diversity, sustainable management and use for various purposes, and conservation practices. Women are aware of the food and medicinal values of forest products, which are particularly important during food crises.
- Women make specific contributions to forestry and agroforestry value chains. These are important for their incomes, and in turn for the well-being and food security of their households. However, women's roles in value chains tend to be poorly supported by policy-makers and extension services. The perpetual lack of gender-disaggregated data hampers the development of policy interventions to address the issue.
- Policies and practices empowering women in the forest sector yield significant benefits to food security and nutrition and the sustainable management of forests. Facilitating women's participation in forest user groups, improving their access to modern sources of energy, and enhancing their access to processing techniques and markets have been found to make a major difference in the livelihoods of forest-dependent people and their societies.

# KEY GENDER DIMENSIONS IN THE FOREST SECTOR

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## FOOD FROM THE FOREST

Forest foods – wild leaves, fruits, roots, tubers, seeds, nuts, mushrooms, saps, gums, and forest animals and their products (like eggs and honey) – supplement the foods produced by agriculture and obtained from other sources. While hunting and fishing are typically the domain of men, women tend to collect edible forest plants, fruits and medicines (Shackleton *et al.*,

2011). Also, women often have substantial knowledge regarding the identification and preparation of nutritious forest foods to enhance the nutrition and health of their households (FAO, 2012). In addition, income generated from these activities by women can add significantly to their households' purchasing power.

## WOMEN AND FOREST VEGETABLES IN THE UNITED REPUBLIC OF TANZANIA

In the East Usambara Mountains in the northeast of the United Republic of Tanzania, the consumption of traditional leafy vegetables is the best predictor of children's overall micronutrient intake. The majority of leafy vegetables consumed in the area are wild, collected by women from fields, field margins, fallows and agroforests. Survey data show that, in the wet season, 46% of children aged

2–5 years consume vegetables on a daily basis, while in the dry season only 22% of children are able to do so. Proximity to the forest is a key determinant of vegetable consumption, particularly in the dry season. Local women report that those who are poor and live far from the forest must spend a significant amount of time travelling to and from the forest to collect vegetables (Powell, Hall and Johns, 2011).

## **FUELWOOD AND HOUSEHOLD ENERGY**

Approximately 3 billion people worldwide rely primarily on wood for cooking, residential heating and hot water (WHO, 2006). In many places, particularly in Africa, it is women and girls who are the main collectors of fuelwood (Sunderland *et al.*, 2014). They may have to walk many hours, sometimes under highly perilous conditions, especially where accessibility of resources near the home is affected

by deforestation, natural disasters or conflict (WFP, 2012). Fuelwood collection requires physical effort and time, and the resulting “time poverty” for girls and women restricts their ability to engage in education, paid work or other productive activities. In addition, women may face serious health problems from carrying heavy loads of fuelwood and from cooking over smoky fires.

## **FODDER FOR LIVESTOCK**

In many regions, women (and, often, children as well) play a crucial role in providing livestock with tree-based fodder, thereby contributing to domestic livestock production and sustaining draught animals for ploughing and producing manure. For instance, data from East African highlands (Franzel and Wambugu, 2007) show that it is mostly women who plant and manage agroforestry

fodder shrubs. These activities support domestic livestock production, enhance milk and meat supply and contribute to higher household incomes. The analysis by Franzel and Wambugu (2007) further found that although women in East Africa do not always control the earnings from dairy cows, this income contributes significantly to household budgets to pay school fees and buy food and clothing.

## WHO IS DOING WHAT IN THE FOREST SECTOR?

Gender-specific data on forestry are scarce, and the few country studies available are largely unsuitable for cross-country comparison. Sunderland *et al.* (2014) used a large multi-case dataset to test conventional assumptions about gender differences in forest product use. Overall, they found significant gender differentiation in the collection of forest products, which seems to confirm that men and women play distinctive roles in the forest sector. However, they also found that the gender patterns of forest use and management are much more nuanced than previously thought, with men

playing more important and diverse roles in the contribution of forest products to rural livelihoods than often reported. A key finding of the study is that regional differences are strong. The commonly held view that women are the main collectors of forest products holds true only in Africa. In Latin America, men contribute greater income shares from unprocessed forest products than women, while in Asia the contribution is roughly equal. This regional differentiation is consistent with previous analyses in which the marketing systems of forest products in Latin America have been described as “specialized”, those in Asia as “diversified”, and those in Africa as “subsistence-oriented”.

## FORESTRY VALUE CHAINS

Activities along the forestry value chain tend to be differentiated along gender lines. Men are mostly engaged in planting, maintaining and harvesting trees for commercial purposes, while women mainly take care of products for subsistence use, such as food, medicines, fuelwood, fodder, and those for soil fertility improvement. One reason for this distribution of labour is that production of commercial forest products such as timber and charcoal requires physically

taxing “technologies” (machetes, axes, saws) that are commonly regarded as a male domain. In addition, forested areas are often considered to be more unsafe for women than for men. Consequently, women can be pushed to shorten the time spent in the forest, which may in turn limit their options to those categories of forest products that can be quickly harvested and transported for processing at home, such as fuelwood, forest foods, medicine, resins and dyes.

## NON-WOOD FOREST PRODUCTS (NWFPs)

NWFPs include essential oils, medicinal plants, gum arabic, rattan, bamboo, natural honey, edible nuts, mushrooms, various types of fibre, shea, wild nuts and seeds, wild fruits, and other types of forest products used for cooking, skin care and other

purposes. There are over 150 NWFPs of major significance in international trade. The related value chains involve millions of workers and producers, including many indigenous women and men in remote areas of developing countries.

Engagement in forestry value chains is often crucial for rural women's livelihoods and the well-being of their households. For instance, in Ethiopia sorting and cleaning gum and resins is the primary source of income for 96 % of the women involved, while in Burkina Faso, women engaged in sorting gum arabic report that this is the most important source of income for 3–4 months of the year (Shackleton *et al.*, 2011).

Although women often make significant

labour contributions to forestry value chains, particularly with respect to the collecting, processing and marketing of non-wood forest products (NWFPs), most of the activities they engage in tend to have rather low returns. This is true in part because many key stakeholders (e.g. policy-makers, market players, extension services) pay little attention to the potential of NWFPs for local markets. This relative neglect is compounded by the paucity of data and analytical work on gender differences in forestry value chains.

## THE GUM KARAYA VALUE CHAIN IN INDIA

In Gujarat, thousands of very poor women rely on gum karaya collection for their incomes. Most do not have collection licenses and are forced to sell at very low prices. An intervention by the Self Employed Women's Association (SEWA) helped female gum collectors to organize into

groups. These groups secured collection licenses for their members and were able to negotiate higher selling prices with the Gujarat State Forest Development Corporation. Eventually, the women also won the right to sell on the open market, where prices are higher (Carr, Chen and Jhabvala, 1994; SEWA, 2000).

## FORESTRY ASSOCIATIONS

Rural organizations can play catalysing roles in overcoming the social and economic obstacles that women face in rural settings. A sizeable body of literature provides evidence that women are generally under-represented in forest user groups, such as village forest committees and community forest associations (Agarwal, 2001, 2010; Coleman and Mwangi, 2012). Rules allowing only one person per household to participate in forest user groups tend to exclude women, thus adding to the host of other barriers to women's participation such as sociocultural norms, gender segregation in public spaces, social perceptions of women's roles, women's lack of bargaining power, and men's entrenched claims and control over natural resources. Consequently, these groups may enforce rules, regulations and practices that do not reflect women's needs and interests. For example, of the 87 community forest groups in India visited by Agarwal (2001), 60 had a ban on fuelwood collection, 21 did not permit entrance to the forest at all, and 24 only allowed entrance for a few days annually for dry wood collection. As a result, many women were forced to travel long distances in search of fuelwood.

Evidence shows that women's participation in the decision-making processes of forest institutions leads to more equitable rules that take into account women's particular needs, and thus reduce gender-based conflicts over forest access and use (Agarwal, 2001). More gender-balanced groups can capitalize on the complementary roles of men and women, mobilize people for collective action, and enable better access to information and services offered by external partners. Such groups also have been found to handle forest regeneration and protection of biodiversity and watersheds better than male-dominated groups (Pandolfelli, 2009; Coleman and Mwangi, 2012).

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# HOW CAN FORESTRY POLICIES SUPPORT WOMEN?

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It is now widely recognized that mainstreaming gender in policy processes can improve both developmental and environmental outcomes. Ultimately, policies and programmes that empower women in the forest sector are an essential prerequisite for building economies based on social justice and environmental conservation. Specifically, forestry policy-makers should concentrate on the following:

- ensuring that women's work in forestry (both paid and unpaid) is captured in national statistics, and increasing the availability and use of sex-disaggregated data for the forest sector;
- improving women's safe access to fuelwood, supporting the use of healthier, more energy-efficient technologies and equipment (e.g. improved stoves), and enhancing access to alternative energy sources (e.g. solar energy, electricity);
- designing forestry and agroforestry programmes that recognize women as users of forests (along with men) and acknowledge women's valuable knowledge, experience, and specific needs;
- enhancing the understanding of gender roles along forestry value chains, supporting value chain activities performed by women, and working with existing processing and marketing groups in which women participate;
- aiming to achieve gender balance in forestry associations and forest user groups, and enabling women to participate fully in decision-making within these associations/groups, e.g. through formal education, training, and support for income generation;
- systematically integrating gender into policy frameworks through gender-specific needs assessments, gender audits, gender-sensitive data collection systems and budget allocations, and support to women's active participation in policy processes.

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