

## **Role of Women in the Use of Non-Timber Forest Produce: A Review**

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### **INTRODUCTION**

The National forest policy (1988) of our country emphasizes that forests not to be looked upon as a source of revenue only. Forests are renewable natural resources. They are the national assets to be protected and enhanced for the well being of the people and the nation. The forests make a significant direct and indirect contribution to human life and particularly to people living in and around forests.

The forest output can be classified into three categories, viz., i) timber, ii) non-timber and iii) environmental services as reported by Tewari (1995). The timber output is the national property and contributes to the revenue of the nation. Here the concentration is on the other two outputs, i.e., the non-timber output and the environmental services. The non-timber output includes the forest products like fuel, fodder for livestock, food security & nutritional supplies, employment opportunities for the rural poor especially for women through the development of forest based small scale enterprises, use of medicinal herbs, gum extraction and other income generating activities. The environmental outputs are basically intangible and include the soil and water conservation, melioration of micro climate, bio-diversity conservation, nutrient cycling etc.

Brinkman (1989) reported that the people who live near the forests depend on the products from forests as major source of income generation, food and herbs for medicine. The study conducted by Julia Falconer, (1989) revealed that forests also contribute indirectly to household food security through cash income generated from sale of gathered and processed forest products, thereby improving people's access to food supplies. More than timber it is the non timber forest produce which cater to the needs of people living in and near the forests.

The study conducted by Tewari, (1995) on Gujarat forests revealed that a number of non-timber forest products were gathered and processed from the forests, which were grouped

into 7 categories- 1. bamboo, 2. fuel wood, 3. grasses, 4. timru and other leaves, 5. flowers and seeds, 6. gums and tanning materials, 7. Herbs and medicines.

The role of women in management of non-timber forest products is very important. Most of the times it is the women who gather the forest products, process them and either sell them to support the family economically or use them for family consumption. Women all over the world form majority of the labour force in forest based small and household enterprises.

The benefits of the non-timber forest products and the role of women in it can be reviewed under the following heads.

### **I. Forest Based Small Scale Enterprises (FBSSEs)**

According to FAO document (1988) forest based small scale enterprises represent the major source of forest based employment for rural people. The forest based small scale enterprises are often seasonal and household based. They provide the much needed supplemental income when alternative means of income generation are not available or when time is available outside of the household activities (Campbell, 1991).

Because of the special characteristic of FBSSEs of being small in size and household based, these are often important to women. Women are invariably busy with a wide range of subsistence activities and domestic responsibilities. These help women to earn supplementary income for the family. Women undertake these enterprises as an extension of household activities.

Falconer (1990) expressed that, the available data indicates that women all over the world form majority of the labour force in FBSSEs, particularly those that are rural and household based. In the West African humid forest region women dominate the collection, trade and processing of the majority of non-timber forest products.

It is estimated that women constitute 51 percent of total workforce involved in FBSSEs in India, amounting to over 518 million days

annually. Ninety percent of the forest based employment for women are generated in FBSSEs. Table-1 gives a breakdown of total male and female employment figures for small and large scale forest based enterprises. There are more female than male workers in rural areas and 66 percent of the total female workers involved in the FBSSEs sector are based in rural areas.

In Karnataka FBSSEs accounts for approximately 10 percent of the total number of workers

**Table 1: Employment in forest based enterprises**

<i>Enterprise</i>	<i>Males (million man days)</i>	<i>Females (million man days)</i>	<i>Total</i>
FBSSEs	545.2	517.5	
1062.7	Large scale		
forest enterprises	505.7	54.2	559.9
Total	1050.9	571.7	
1622.6			

other than cultivators and agricultural labourers. Of this 51 percent are women. FBSSEs provide almost a third (27%) of all employment for women workers outside of agricultural labour and cultivation. Women in Karnataka outnumber men by a ratio of 1.03 state wide in FBSSEs (ISST 1987b, 1988a).

The characteristics of FBSSEs in which Women's participation is most common are,

1. Rural women participate significantly more often than urban women.
2. Women participate more frequently when they are self employed and when the unit of production is small, either household and family based or a non household cottage industry.
3. Women dominate FBSSEs in which employment is seasonal or temporary.
4. Participation rates are highest for FBSSEs that work with non timber forest products and involve local skills and local collection, extraction and processing technology.
5. Women's participation rates decline sharply when extraction and processing become mechanized and processing is organised in factory type establishments.

### Case Studies on FBSSEs

Women and children are involved in safety match industry to a great extent and match making by hand is a labour intensive industry.

A number of operations in the production process can be easily undertaken at home in match production and participation of women in this enterprise is quite significant.

The uppage collection and ghee preparation involves women completely. The uppage seeds have been traditionally collected and processed by women. The uppage ghee is either consumed at home or sold in the local village at little bit higher price than the ordinary ghee as presented by Campbell (1991).

In the lac turnery and lacquer ware industry women participation is quit high in Karnataka. In this FBSSE more urban than rural women are involved and produce traditional products required for the local market.

Hasalkar (1992) in her study on entrepreneurship qualities of members of women cooperative societies in rural areas of Dharwad taluka found that maximum percentage (26.82%) of women were interested in the leaf plate production business, which is a forest based enterprise. They had the skill in preparation of leaf plates and it was a seasonal activity.

Important key conclusions emerged based on the studies on role of women in Forest Based Small Scale Enterprises are,

1. Household and location specific socio-economic factors play a key role.
2. Commercialization stimulates competition, attracts men and may sideline women.
3. Increasingly organised collection restricts access to raw materials.
4. Access to technology is often biased.
5. Change in technology, especially mechanization may displace women.
6. Institutional support and training frequently favour men.
7. Increasing utilization threatens the natural resource base.

### II. Forests-Nutritional Supplements and Health

The forests make a significant direct and indirect contribution to the food security and nutrition of rural population (FAO,1989). The direct contributions includes the foods collected from forests and are important in following ways.

- As supplemental foods, increasing diet diversity and providing snack foods which are often important sources of nutrients, especially for children.

- As seasonal foods which are eaten during seasons when food from other sources is scarce.
- As emergency foods, for example in years of crop failure.

The report on Forestry and Nutrition by FAO (1989) revealed that forest food supplement the staple diets, contributing flavour, essential proteins, vitamins and minerals. They make significant contribution to the overall diversity and nutritional quality of the diet. Some forest foods enhance the digestibility of the nutrients from the foods, like oils and fats for absorption of vitamins like A, D and E. Many scientists have found that the common causes for dietary deficiencies appear to be the decreasing diversity of traditional diets.

Forest foods traditionally provide a food buffer during emergency periods, especially during drought, famines and wars. The roots, tubers and rhizomes were the main energy sources during famine periods and also animal foods were consumed during such time (FAO, 1989).

Saowakontha et al. (1989) in his study on roles of foods gathered from the forest in self-reliance and nutritional status of villagers in North-East Thailand revealed that poor households gathered food more often from forests than moderate households, i.e., on an average 5-6 days per week and 3 days per week respectively. Brinkman (1989) also reported that each household collected an average of 3 kgs of food from the forest. Forest was the primary source of vegetables, providing over 40 percent of the total weight of vegetables consumed followed by the animal foods from forests. Food was collected from the forests provides important nutrients and eases household budgets because less food needs to be bought.

Ngamsomsuke et al. (1987) estimated that more than 80 percent of the households in the Phu Wiang valley are involved in the consumption and use of forest products. The food collected from the forests also provides extra cash as surplus food collected is sold in the local market (Brinkman, 1989).

Malhotra et al. (1992) found that totally 36 different plant species from the forests were used as food and around 17 different species were used for medicinal purposes. The different types of foods included are mushrooms, tubers, leafy vegetables, fruits etc. Women are the one who go to forests during seasons and collect the products.

The links between forests, nutrition and medicines are extremely important. Many plant species taken as medicines or tonics are added to cooked meal or consumed directly. Plant medicines may be used for nutrient related health disorders. Forest provides medicines for a majority of the population in the developing world.

### III. Fuel and Fodder Needs and Forests

Fuel wood is the main energy source in the rural areas of most of the developing countries. Fuel is another important forest product on which the households are dependent. The twigs, branches of the most of the forest species and the bushes and other wastes are collected from the forests and used for the fuel purpose by the households in and near the forests. Fuels gathered by the households constituted around 39 percent of the total forest products in terms of both biomass and money value according to Malhotra et al. (1992). Another major contribution from the forests in the form of non-timber is the fodder biomass. Its contribution to the livestock maintenance is significantly high. The mean fodder contribution accounts to almost 45.93 percent, which includes both grazing by the cattle and fodder gathering.

### IV. Other Non-timber Forest Products

Some of the other non-timber forest products gathered from the forests are soap nuts like shikakai, antuwala, gums, honey, seasonal fruits, masalas like pepper, cinamon etc. which have high economic value in the near by urban markets, apart from household usage. Women play a most prominent role in collection, processing and sale of these products. The income raised by women is most of the times directly supplements the family food needs.

### CONCLUSION

Non-timber forest products (NTFPs) are the important source of income, employment and food security for the rural households. These NTFPs attribute to 55 percent of the total employment generated and are a source of livelihood to nearly 500 million people living in and around forests (Tewari, 1995). The management of forest resources for NTFPs may be more sustainable for ecological, economical, gender and social perspectives.

Traditionally women have been responsible for subsistence and survival economies and culturally accepted for contribution of labour within the families, and hence leaves the collection of fuel, food and water for household needs to women. The role of women in the collection, processing, consumption and trade of non-timber forest products is very important and most of the activities involved in forest based enterprises, especially the fact that they can be often under taken at home in harmony with the domestic activities and they contribute directly to household income.

**KEYWORDS** Women; family economy; nutrition, employment; fuel

**ABSTRACT** Forests are the renewable natural resources. The forest output can be classified in to three major categories, viz. timber, non-timber, and environmental services. The timber output is the national property and contributes to the revenue of the nation. Here the concentration is on the non-timber output and the environmental services of the forests to the human life. The non-timber output includes the forest products like fuel, food security and nutritional supplies, employment opportunities, medicinal herbs etc. The environmental outputs are basically intangible and include soil and water conservation, melioration of microclimate, biodiversity conservation, nutrient cycling etc. More than timber it is the non-timber forest produce (NTFP), which caters to the needs of people living in and near the forests. These people depend on product from the forests as major source of income generation, food and herbs for medication. Most of the times it is women who gather the products from the forests, process and either sell them to support the family or use for the family consumption. In West African humid forest region women dominate the collection, trade and processing of the majority of non timber forest products.

It is estimated that women constitute 51 percent of the total work force involved in forest based small scale enterprises. Hence, the women living in and near the forests are the major contributors to the family economy. These women need help in organizing their trades and training in developing their enterprises.

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