

# Community forestry depends on women

Marilyn W. Hoskins

My first awareness of forestry as a special concern for women in developing countries came from women in Upper Volta. I was holding seminars there and although forestry was not on the agenda it dominated one of the most animated discussions of the programme. The women who participated in these conferences were social workers, schoolteachers, lawyers, doctors, and others who were in leading or essential occupations. They were all educated women, but none of them had been trained in forestry or agriculture. Nonetheless, they spoke with great authority and knowledge about the growing scarcity of leaves, nuts, and fruits needed for traditional dishes essential to the family diet. They talked of the scrub-bush land that looked so useless to developers, and which had been cleared to plant fast-growing exotic trees. Even when no trees identified as valued species were cut, these women considered the clearing of the "useless" bush a very serious loss. It is this scrub growth that formed the basis of emergency supplies, especially for the poor rural women and their families, by providing leaves, roots, seeds and bark for food, medicines and crafts. It also

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furnished fuel for cooking and heating that was extremely important to them. This "useless" bush was also food for humans and animals in times of scarcity or drought. Exotic fast-growing trees, they said, might fill the needs for urban fuel or building supplies more quickly than the bush, but these trees usually offered no secondary products and were even declared off limits to local residents who had previously had access to that land. It seemed to them to be a trade-off that was to the disadvantage of local people and their families, and especially to women, and to the benefit of the distant urban dweller. Wood products, they said, are needed by the population, certainly, but more thought should be given to at least minimizing the loss that results for the rural family.

The women spoke of species of trees which were preferred for firewood and of other relations between trees, soil, water, and crops. They obviously had a wealth of knowledge about the place of trees in their environment because they had grown up using these resources. They also had concerns about the local and national loss of ground cover resulting in impoverished soil and in diminishing forestry production. They were frustrated because they felt that the needs, the knowledge and the concerns of women and, therefore, of families had not been considered in the design of policies and programmes (SAED, 1978).

### Importance of trees to rural women

From the time of that conference I have been asking questions and learning

about the uses of trees and their products. I read especially about rural women in non-industrial societies and found that the relationship of women to their environment was similar all over the world. A sexual division of work emerged based on the woman's role as bearer of children and nurturer of the family.

Historically, women all over the world have taken on the tasks that are built around this role. While men might go great distances to hunt, women gathered

One of the first articles in *Unasylva* written by a woman, and the first full-length article to address women's contributions to forestry.

seeds and plants near their camps or homes. Almost everywhere women got the water and wood, they prepared the grains and vegetables, built the fires, and cooked. People lived as conveniently close to water and wood resources as possible. In settled areas some women also raised vegetables and fruit around the home or in the compounds. They fished in ponds and streams, or raised small animals that grazed on nearby bushes and grass. They helped in house construction, made mats and baskets, medicines, fish nets, cloth and dyes. All this they did with the vegetation that grew about them.

In many places, this is still the pattern. In one evening conversation, women in a village in Sierra Leone mentioned 30 items that they gather or make from the bush growing on their fallow fields



 $\label{eq:Atanational} At \ {\rm A} \ {\rm NATIONAL} \ {\rm tree} \ {\rm planting} \ {\rm scheme} \ {\rm in} \ Lesotho$  women don't appear in project documents, but they show up on the job

or from the surrounding wooded areas. Local men did some of the same activities but they were neither focused on nor limited to the use of resources found near the home, as were the women.

The dual economic and nutrient role works only in situations in which local resources are abundant. This is less and less frequently the case. The problem of expanding deserts and degradation of soils in semi-arid as well as more humid areas has resulted in a serious decline in the carrying capacity of land at the same time that demands for produce are growing. A recent World Bank publication reports:

"Although the forest area in developing countries exceeds 1 000 million hectares, it is being consumed at such a rate for agricultural settlement that it could disappear within 60 years – unless some fundamental changes occur to alter the current trend, or unless extensive reforestation programmes are undertaken to offset the losses. Between 1900 and 1965 about half the forest area in developing countries was cleared for agriculture, and more than 3 000 million hectares (or 30

percent of the world's exploitable soils) are currently under shifting cultivation" (World Bank, 1978).

## The effect on women of the scarcity of trees and forest produce

Statistics on the worldwide loss of vegetative cover coupled with information about the need for that vegetation are frightening. But it is more frightening to realize that home consumption of forestry resources is almost always underestimated. This is true even though a currently accepted estimate is that 90 percent of the annual wood consumption in developing countries is used for fuel. Most of the raw materials, including fuels, that are derived from trees and used daily by rural women do not come from areas that are officially classified as forest, the total amount of these necessities of life that come from trees being seldom measured. In themselves, all the figures related to fuelwood use and deforestation do not tell us much about how this

loss of vegetative cover actually affects rural women.

A woman in a small village in the groundnut production area of Senegal described what happened to women in her village as fuelwood became more scarce. She remembers only a few years ago when she could pick up wood just around the village. Then more fields were cleared to cultivate more groundnuts, and there was less and less wood. The women found themselves walking four hours to find dead branches. Then the distances and time spent in foraging for fuelwood became greater. They took their daughters along with them so as to bring back more wood and then they needed to make the trip only two or three times a week instead of every day. In this way they managed to find the time to care for the gardens, the children, and household tasks, and still collect wood. The women also become more parsimonious in their use of wood for cooking and they used alternate fuels, including the stalks of plants. Sometimes they cut branches from valued trees though they knew they needed those trees and that the green wood did not give off as much heat as dry wood. They used cow-dung, though there were few cattle in the area and they knew the dung was valuable for fertilizing their gardens. The Senegalese woman who told me all this said that in some neighbouring villages the men had carts and went out to collect wood but this did not happen in her village. In other villages the women bought wood from vendors, strangers who collected it in distant places. But, in general, wood was not often available to buy in the villages of the countryside because the vendors could make more money by selling it in the cities. This woman and her friends told of changing their meals from two hot meals a day to one. Then they changed to a hot meal every other day, serving their families uncooked millet flour mixed with water when there was no fuel with which to cook. The spokeswoman for the group I was talking to finally ended by saying, "A person can starve with a full granary if there is no wood with which to cook."

As changes occur in the availability of fuel, the health and nutrition of the whole family are affected. They eat more food that cooks rapidly, more uncooked food, and fewer vegetables because there is less time to take care of gardens and there are fewer fertilizers. And, of course, as fuel prices increase there is less money to buy food. In Niger there is a saying, "It costs as much to heat the pot as it does to fill it." And indeed in some places fuel prices are half again or more of the total food bill and prices are continually rising.

Spending more time collecting fuel also affects other aspects of family life. A film made in Nepal showed a girl standing outside a school she could no longer attend because she must help her mother collect wood from more distant areas. One study pointed out that women may choose to have larger numbers of children based on the knowledge that they will need more hands (and feet) to collect fuel. A Lobi potter reported that her husband had left home in search of work since his blacksmith trade had become uneconomical due to the scarcity of fuel. She herself had given up making

large pots and was wondering how much longer she would be able to support her family as a potter because it was becoming difficult to get fuelwood to fire even the smaller pots. Many women in developing countries depend upon wood fuel not only to cook for their families but also to earn money by processing foods such as the snacks that are sold in the markets. Many work in small industries that depend on fuelwood, for example, smoking fish.

However, fuel is not the only forestryrelated issue for women and the life of the family. A woman in Upper Volta told me that she could no longer make the medicinal recipes her mother had taught her because the plants that had once grown around her village were no longer there. A Peul woman said that she had to give up raising small animals for her family's food and income because the forage plants were no longer available close to the village. In another area the women who fished could no longer do so because the denuded area surrounding the pond had become eroded and had silted up the fish pond. Many women complain that they have smaller and smaller garden plots and poorer and poorer soil, because of the disappearing ground cover throughout the countryside around many villages and rural communities.

## What is forestry for local community development?

In the early 1970s, FAO called international attention to the possibility of local community participation in selecting, directing, and benefiting from forestry projects. It organized a series of expert consultations of foresters from around the world and held a session at the 8th World Forestry Congress in Djakarta on the issues involved. Out of all this expert advice and experience came a movement called Forestry for Local Community Development (FLCD), which they define as follows:

"... any situation which intimately involves local people in a forestry activity. It embraces a spectrum of situations ranging from woodlots in areas which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income, to the activities of forest-dwelling communities. It excludes large-scale industrial forestry and any other form of forestry which contributes to community development solely through employment and wages, but it does include activities of forest industry enterprises and public forest services which encourage and assist forestry activities at the community level. The activities so encompassed are potentially compatible with all types of land ownership. While it thus provides only a partial view of the impact of forestry on rural development, it does embrace most of the ways in which forestry and the goods and services of forestry directly affect the lives of rural people." (FAO, 1978a)

Foresters and community developers became aware that projects that did not include local participation might not be able to have much effect on certain specific economic, social or environmental situations within a community. For instance, in some communities cashew trees are considered dangerous, in others only young women can put seeds into the ground, among some people competition is considered good while in a neighbouring group individual success is looked upon with suspicion. These individual community variations, not readily known by an outsider, often determine whether or not a project will be successful. Therefore, they need to be taken account of in the project design. Planning cooperatively, using the knowledge of local residents combined with the technical information of the forester, is not easy. Forestry services have traditionally been isolated from community development issues and have focused their concern on protecting the environment of the forests from local people. Understandably, it is difficult to convince villagers, who have little land and little time, to invest their scarce resources in long-term tree planting; but it is twice as difficult to get the official

agencies and the rural dwellers themselves to focus on the special concerns and needs of women in projects involving community development.

Reading project descriptions, it is difficult to find out what roles women are actually playing in planning, participating or benefiting from forestry projects. Generally, these descriptions use a neuter term — "farmers" or "residents" — to describe the participants or beneficiaries. There are some examples, however, where women's contributions have been cited. These projects can be roughly divided into three kinds: conservation, forestry production, and more efficient wood use mainly related to stoves.

#### Conservation

Conservation projects have special problems. It is not always easy for economically oriented planners – and for that matter the farmers themselves – to see the long-term and indirect benefits of conservation as being worth an investment of time, labour and land. In fact, the benefits of conservation projects often accrue to people living in distant areas. For example, planting trees on hillsides may reduce the amount of land locally available for growing food while protecting the farms of those living in the distant river valley where siltation is becoming a problem.

In Cape Verde where the drought has destroyed much of the vegetation and the majority of the men have migrated elsewhere for employment, the women form the backbone of all efforts to terrace and plant the hillsides. They work as paid labourers. In Honduras, men were not interested in conservation projects even as paid work. They agreed to join in this work only after several groups of women who had understood its importance had started on the project. In Lesotho women receive only food rations from the UN/FAO World Food Programme while they work on building roads, doing soil conservation activities and planting trees. These examples, especially the first two, are not FLCD; however, they do demonstrate how women can successfully do heavy planting and terracing work that project planners had originally thought impossible for women. The last two examples also show women taking the lead in work to improve their environments.

Examples from China, El Salvador and Honduras show a different model of participation.

In China in 1954, women planted a shelterbelt along the coast in Guangdong Province. In this area the men are fishermen and the women raise the crops. They had experienced crop failures over many consecutive years due to sandstorms. Women commune members led others in forming voluntary tree planting groups so that their crops would grow better (FAO, 1978b).

Exotic fast-growing trees might fill the need for urban fuel or building supplies faster than "the bush." But it seemed to these women to be an uneven trade-off that was to the disadvantage of local people and their families, and especially to women who depended upon the bush for all sorts of basic needs, first of all fuel.

In El Salvador in 1971 the government purchased a private estate and turned it over to the 130 families that had worked there. Some of the women formed homemaker groups, others joined the farmers' association. They discussed their tasks: procreation, preparing meals, washing clothes, carrying water and wood; broadly speaking, tending to the family and homemaking. They then discussed how they could better their lives and

decided on a project of soil conservation and reforestation. They organized a group and planted vegetables and fruit trees around terraces, and reforested small areas for firewood and timber.

In Honduras the government called on farmers to collaborate in the replanting of an area destroyed by a hurricane. They were surprised, but did not object, when a group of women also presented themselves for work. The women had the motivation to reestablish the farmland, they had lightweight and easily obtained tools, and they had flexible working schedules easily adjusted to household duties. These women reforested 40 hectares as well as doing other conservation work. The officials noted that they set a good example for the men (Wiff, 1979).

The "Embrace a tree" movement in India could certainly be considered a successful conservation effort by a group of rural women and it is famous throughout the world. Still another conservation effort was made by a group of urban women in Kenya. This women's organization recognized deforestation as a major national problem and designed a programme to solicit money from people for planting memorial trees. The money covers not only planting the trees but caring for them for five years. The idea is that because they are a memorial, there is less chance that they will be cut down or damaged. Often rural women are hired to plant and care for these trees, thereby providing additional employment and family income.

Two other examples of conservation projects in which women were not consulted at the planning stage are instructive. The first is a forest-service project of fixing sand dunes in Senegal. After foresters had planted several vegetation bands, the project directors wanted villagers themselves to plant trees around their small garden plots. The people were polite but would not plant any trees. Some of the officials considered it laziness or lack of understanding of the way trees would help to save their garden plots from the encroaching sand. However, in a short conversation with local women, it became clear that they



Terracotta stoves in Benin stoves are usually designed by men who don't consult women

understood quite well the relation of sand and trees. One reason for their lack of motivation stemmed from not being able to sell the vegetables they raised and, therefore, finding those gardens of limited value. Their attitude was, why should we do the forest service's work if the forest service does not do something for us? And why should we plant trees on our land if we feel that the trees will not benefit us? Incentives such as the provision of better roads or marketing infrastructure might have provided the motivation to plant the trees.

Officials, i.e. men, are in the habit of ignoring or not taking women into account. In Mali a young forester had a plan to build berms along the hillside contour in a forestry service area. He then planned to plant trees every three metres. The object was to save the soil for farming instead of allowing it to wash down into the town below. The forester said he had talked with the farmers who had permits to farm this land, and they had supported the idea. The written description had received its first approval. However, at the site it was found that the hills were already planted and did not appear to be badly eroded. They were, in fact, already terraced with crude stone walls. Women described spending the dry season collecting animal fertilizer and mixing it in the soil. They then built stone walls to help prevent erosion and

watched every rain. When they saw areas that began washing away they built them up with stones. Since only men held farming permits, and these women were gardening on their husbands' lands, they had never been consulted, nor had they heard of the proposed project.

This project would have cut through their stone banks into their vegetable gardens and, in a year or two, would have shaded the land too much to continue using it for planting. Fortunately, the project was redirected in time, but many conservation efforts have similar negative consequences for rural women farmers.

#### **Production forestry**

Involving women in production forest projects raises different issues. Here the main issue for women is valued benefits and their distribution. Why should women plant trees on someone else's land if they know that the trees will not be available for their use? It has been difficult to convince planners that women need to be involved in all aspects of resource development. Their participation may differ, as these examples demonstrate. In Cameroon the women in maizemilling societies discussed the fact that the forest service wanted to plant woodlots but the local men did not trust the

project and destroyed the fences. The women, however, needed fuelwood close to their village, so they helped the foresters to repair the fences and plant the trees. This act dissolved a traditional hostility that had existed between the villagers and the foresters and the men joined in support of the project.

In Senegal, women have worked with the forest service in growing seedlings to sell. Some have individual home nurseries and others grow the seedlings in communal plots, using the profits for community owned enterprises or equipment. An integrated development project at Lagbar, Senegal, has been cited as one of the most successful projects in which herding communities planted trees. In this project women as well as men were consulted about tree preference, and they chose shade-, forage- and income-producing trees. Women took their traditional roles and watered the trees that the men planted. In some areas where women were not involved, the trees have died from lack of water. The project designers had not recognized the importance of this local tradition in the division of labour.

In Lesotho women plant woodlots of their own, whereas in Guinea women requested that trees be planted communally. If the women worked along with the men they felt that their contribution would be appreciated. If they worked alone, they feared that their husbands would be resentful if dinner were late or their wives busy with their own work.

Appropriate secondary forestry activities can also interest women. A bee-keeping project in Kenya could not get the support of women until a project director realized that local women would not climb to reach the hives. Once he introduced hives close to the ground the women participated. In China women are reportedly very involved in small wood-based industries, and in Senegal they also produce the pots used in forestry nurseries.

An example of problems which arise when women's contribution in product processing is not considered comes from Sierra Leone. Here large communal plantations of oil palm and coffee were planted by men without realizing that their harvest and processing would come at a time when crops were also being harvested. Much of this processing could be done only by women, who were too busy with the food crop at that time. This overtaxing of women's time resulted in a great deal of the project produce being lost.

#### Wood stove projects

The third category of project involving women concerns the move to more efficient wood stoves. If stoves can, as some claim, cut fuel needs by half, this is obviously an important avenue to explore. However, changes in the use of stoves have been slow in most parts of the world and developers often blame the old-fashioned or traditional attitudes of women. There are exceptions, as in Honduras where energy-efficient earthen stoves have become very popular. One researcher attributed the acceptance of this innovation to the fact that women were trained to make them and, therefore, women were introducing this technology to other women. Also, credit facilities through a cooperative made loans available for which the monthly payment for both the stove and the kitchen shelter amounted to the same as the monthly savings on fuel (Elmendorf, 1980). A stove project proposed for Nepal has suggested sending Nepalese women to India to learn to build stoves; they would then teach other women these skills at home in Nepal. In Niger a new programme by the Church World Service plans to introduce improved stoves to urban women through a women's organization.

But no matter who introduces the stoves, if they are not appropriate to local conditions they will not be accepted. A stove project in Ghana that was reported to be very successful at the time that it was going on was found a decade later to have been a failure. Not only had more new stoves not been built, but the first stoves were not being used. It turned out that they had not been designed for making the local dishes and that they sometimes used more, not less,

fuel than the traditional and supposedly less efficient models. In certain areas of Upper Volta, the government is putting great emphasis and pressure on women to build stoves and the women's extension service is promoting the project. Because stoves are being advertised as the "modern" thing, no one criticizes them. However, I have a picture of one that is said to be marvellous, but which was being used to hold the wood for a three-stone fireplace built next to it. There are a number of bilateral and multilateral international development agencies which are prepared to put money into fuel saving programmes based on more efficient stoves; but we, as women, should insist that stoves be designed not for the laboratory but for our use. Only then will this money not be wasted. A basic precept of research and development for stove making ought to be that, in the areas of the world for which the stoves are intended, local women be involved at the design stage.

## Foresters, women and community forestry

In many countries foresters are completely unfamiliar with or even oblivious to the goals and methods of community development. They find it difficult to change their approaches from technical and regulatory ones to activities that support or serve local community efforts. Furthermore, forest services, especially in developing countries, receive a low priority in government budgets and usually have neither the infrastructure nor the personnel to launch new programmes in social forestry. Social forestry projects require imagination, patience, policies that are flexible and officials who are capable of dealing not merely with land resources but with other people.

A forester friend of mine says, "Actually, foresters and women have a lot in common. We are both given inadequate resources and we are ignored when it comes to policy making and conservation planning." No one can disagree with that.

Foresters have professional and tech-

nical skills and women have a realistic knowledge and experience of local community needs. If community forestry projects are going to get anywhere, these two will have to recognize each other and work together.

#### References

ELMENDORF, MARY. The human dimension: 1980 energy survey methodology. National Academy of Science International Workshop.

FAO. Forestry for local community develop-1978a ment. Rome.

FAO. Women of New China are an important 1978b force in forestry development. Submitted to the 8th World Forestry Congress, Djakarta.

SAED. Social and economic development in 1978 Upper Volta: woman's perspective. AID, Ouagadougou, Upper Volta.

WIFF, M. 1979 La mujer en el desarrollo 1978 agroforestal en América Central. Submitted to an FAO/SIDA seminar, Oaxtepec, Mexico.

WORLD BANK. Forestry sector policy pa-1978 per. World Bank, Washington, D.C.