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WOMEN'S PARTICIPATION IN FORESTRY ACTIVITIES IN AFRICA: PRELIMINARY FINDINGS AND ISSUES EMERGING FROM CASE STUDIES

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ABSTRACT

This paper presents some preliminary findings from a series of case studies of women's participation in forestry activities in Africa. Case studies were conducted in Kenya, Botswana, Zimbabwe, Senegal, Cameroon, Mali, and Zanzibar. Participation and benefits are assessed in terms of access to and control over resources. The research compares constraints to, and strategies for, promoting women's participation,and recommends ways to further enhance women's forestry activities.

Women and Forestry Project

A collaborative research project on Women's Participation in Forestry Activities in Africa (hereafter referred to as the "Women and Forestry Project") is nearing completion. The Women and Forestry Project examined women's forestry activities, aiming to enhance future development efforts. The project has consisted of eight case studies of forestry projects and a workshop of non-governmental organizations on this topic. An additional NGO project in Somalia was presented at the workshop (Table 1).

The project findings are now being edited for publication. The background and rationale for the case studies has been discussed elsewhere (Williams 1988a). Issues relating to four of the case studies (in Sudan, Botswana, Cameroon, and Mali) have also been previously presented (Williams 1987; Williams 1989a; Williams 1989b; Williams 1989c). This paper summarizes some preliminary findings, issues, and recommendations from the case studies.

The case studies focus on constraints to women's participation in forestry activities, and strategies used to overcome those constraints. The case studies build upon earlier assessments of women's participation and constraints in forestry activities, undertaken by FAO (1988) and the World Bank (Molnar and Schreiber 1990). The case studies document successful strategies for promoting women's participation.

This paper is adapted and shortened from a paper entitled, "Women, Children, and Forest Resources in Africa: Case Studies and Issues," presented at the United Nations Conference on Environment and Development (UNCED) Symposium, "Women and Children First," held 27-30 May 1991 in Geneva. The original paper discussed children's issues relative to forestry, as well as issues of environmental degradation, poverty, and population, as related to the UNCED agenda items. Readers interested in the original paper may obtain a copy from the Institute of Current World Affairs.

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Table 1. Case Studies of Women's Participation in Forestry Projects in Africa

Kenya Woodfuel Development Programme in western Kenya (Chavangi 1988)
This project promotes on-farm forestry. In this region, land is controlled by men, and social taboos exist concerning women planting trees. The project helped local women and men to plant trees to produce firewood, through communication strategies, to provoke discussion of forestry issues, and through introduction of new species. The project has used live drama, video shows, and other audio-visual methods to reach community members, including children.

SOS Sahel Community Forestry Project in northern Sudan (Furfey and Osheik 1990)
This project works with agroforestry, shelterbelts, village woodlots, and homestead tree plantings. The project has a separate women's extension team that works with village women's forestry committees and individual women. In 1988, over 2,000 women in 18 villages had grown trees in home nurseries: as of 1990, the project was working with women in 29 villages. Women in some villages have planted their own woodlots. The project has a well-developed extension program, featuring puppet shows. The project also works with schoolchildren.

ENDA's Chivi-Zvishavane Community-Based Management of Indigenous Woodlands Project in southern Zimbabwe (Gumbo, Maramba, and Mukamuri 1989)
This project works with people in 38 villages on environmental rehabilitation and management of indigenous woodlands. The project grew out of a research study, which identified how local women and men used indigenous tree species. Project extension officers have worked with individual farmers, households, and groups of villagers. Although the project had not specifically targeted women, women have done most of the work in establishing the village plantations.

Thlaressele horticultural project in Thlaressele, southeastern Botswana (Walker 1990)
This project is run by a small village cooperative, with 13 women and 2 men members. The cooperative is growing timber trees, fruit trees, and vegetables, as an income-generating activity. Besides their cash earnings, members can also purchase fruits and vegetables from the cooperative for half-price. The project has provided members with access to land and water, which they would not otherwise have. Many similar projects are being launched in Botswana, primarily for women's cooperatives.

Coastal Belt Conservation Project in Senegal (Niang 1990)
This project works on sand dune fixation in the coastal zone of Senegal. The project did not employ women a few years ago, but now 25 percent of the jobs in nurseries and tree planting go to women. Village forestry activities have been undertaken by 40 women's groups. These activities focus on establishing plantations of indigenous species, particularly medicinal species.

Table 1. Case Studies of Women's Participation in Forestry Projects in Africa (continued)

CARE International's Women's Cooperative Enterprises Project, in northern Cameroon (Abega 1990)

This project was originally established as a pilot sub-project within a larger village agroforestry project. In the first two years, the women's extension agents helped 200 women in 18 villages to form women's cooperatives for income-generating activities. They began by producing fruit tree seedlings for sale, and have since expanded into vegetable production. The women are now exploring ways to further diversify their activities.

DNAS/GTZ Improved Cookstove Program in Mali (Diarre and Berthé 1991)

This project has worked to disseminate improved metal cookstoves to urban consumers in Bamako and two other large towns, and now is expanding into a pilot rural area. The women's extension team directs most extension efforts towards women, conducting cooking demonstrations in different neighborhoods. In one year, over 12,000 cookstoves were sold. Some women and youth have also been trained to build improved mud three-stone stoves. The project uses various audio-visual means to publicize the stoves.

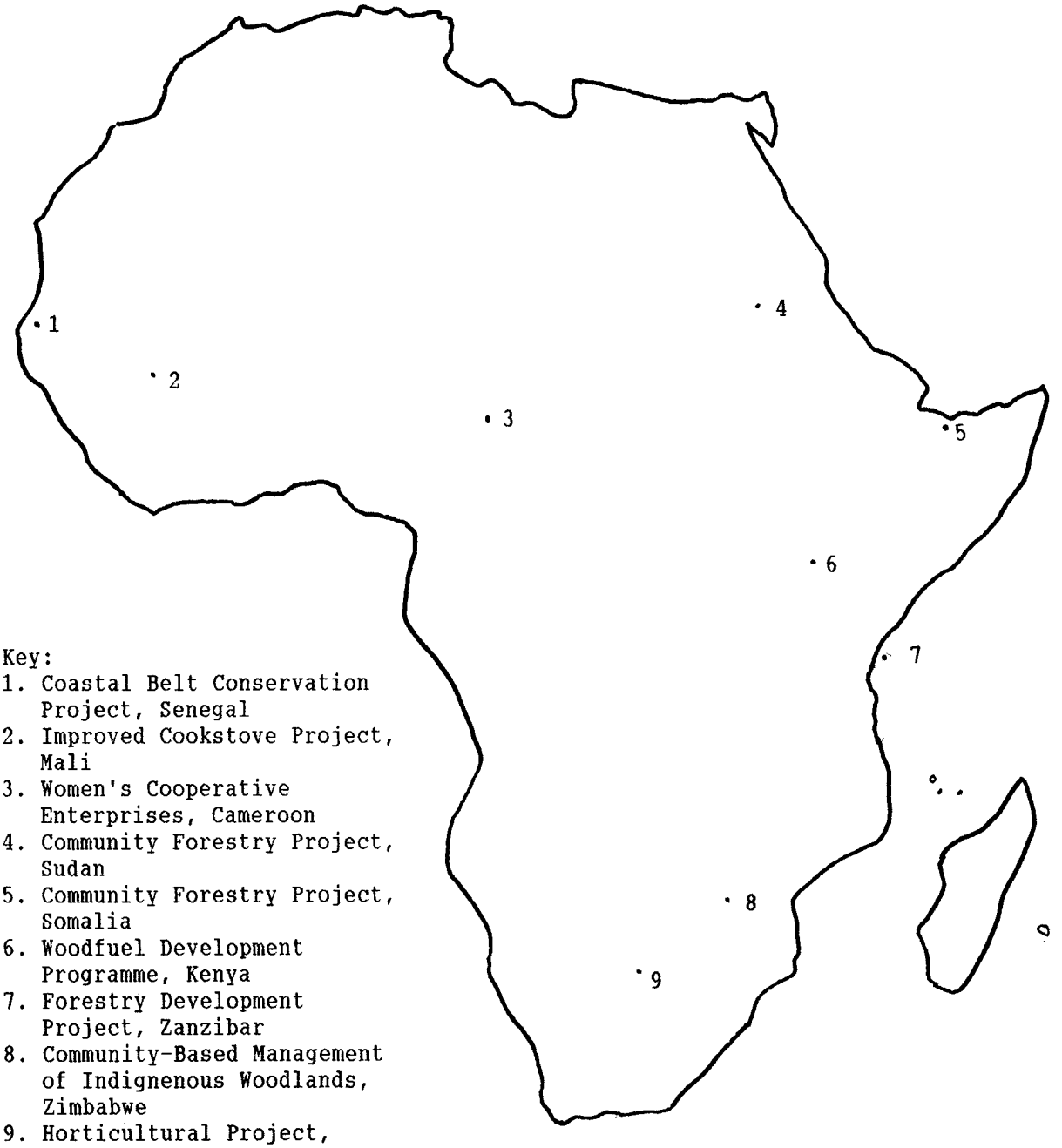
Zanzibar Forestry Development Project, Zanzibar, Tanzania (Khatibu and Suleiman 1991)

This project began in 1980, but did not have specific activities for women until 1985. Women extension officers have worked with 34 women's groups, comprised of over 1,100 members, establishing woodlots to produce firewood and poles. Some pilot activities have also trained women to manufacture and use improved cookstoves. Some women's groups have diversified their income-generating activities, such as opening small shops. The project also provides significant employment to women, who do most of the tree nursery work. Several project forestry technicians are women.

OEF International Community Forestry Project in northeastern Somalia (Lewis 1990)

This project worked with refugees and the local population. Project staff trained women to run tree nurseries and plant trees. Half the paid jobs went to women. Emphasis was placed on human skills development, and small business development. One women's group began an agroforestry plantation, and grew vegetables for market sales. Another group established a commercial fruit tree nursery. [Nine months after the project ended, civil war erupted in northwestern Somalia. Many project participants and staff are now refugees in Ethiopia.]

Map. Location of Case Study Projects in Africa



Key:
1. Coastal Belt Conservation Project, Senegal
2. Improved Cookstove Project, Mali
3. Women's Cooperative Enterprises, Cameroon
4. Community Forestry Project, Sudan
5. Community Forestry Project, Somalia
6. Woodfuel Development Programme, Kenya
7. Forestry Development Project, Zanzibar
8. Community-Based Management of Indignenous Woodlands, Zimbabwe
9. Horticultural Project, Botswana

Major issues

Two major issues are crucial to understanding women's participation in forestry activities. First, to understand why women participate, we need to carefully examine what we mean by forestry development, and what benefits women derive from their participation.

Forestry is not just about trees -- rather it concerns the use and management of trees to meet human needs (for timber, fruit, wildlife habitat, wilderness, or whatever). Sustainable forest development requires a broad participation of resource users, such as forest dwellers, pastoralists, farmers, loggers, traditional healers, landowners, landless laborers, and urban consumers of forest resources.

Development is inherently participatory. Development refers to increasing the capacity that people have to use resources to determine the shape of their own lives (Williams 1983). Simply mobilizing people to plant trees does not in itself constitute development. If, however, people thereby gain increased access to and control over resources, such as timber, firewood, income, or skills development and training, their participation yields benefits, and constitutes development.

Benefits cannot just be assumed to follow from participation, but need to be carefully assessed. If, for example, improved cookstoves save firewood, does the woman user benefit? Does she have to spend more time tending the stove, or cut the wood into smaller pieces, so that it will fit inside the stove? Can she use any time or money saved for other productive purposes? Or does any benefit just accrue to her husband or other family members?

Second, to facilitate women's participation in forestry activities, we need to understand factors that may constrain women's activities. Marilyn Hoskins (1979, 1983) and others at FAO (1988, 1989, 1990) have identified constraints to women's participation in forestry activities. Analyzing constraints and development strategies to overcome those constraints is an alternative way of examining access to, and control over, resources. What is important is not overcoming constraints to increase participation per se, but ensuring that women benefit from their participation.

Constraints and Strategies

Women often respond to problems of environmental degradation. Women realize that they suffer from declining agricultural yields, soil erosion, deforestation, and decreasing water. Many recent development efforts have involved women in forestry activities, primarily growing trees for fuelwood, and promoting fuel-efficient cookstoves to reduce fuelwood consumption.

The case studies have documented various strategies developed to enhance women's participation in forestry activities. These strategies were assessed in terms of how they address particular constraints (Table 2). Some strategies have been developed by the women themselves, and others have been suggested by project staff.

Table 2. OVERVIEW OF SUCCESSFUL STRATEGIES FOR OVERCOMING CONSTRAINTS TO WOMEN'S PARTICIPATION IN FORESTRY ACTIVITIES IN AFRICA

CONSTRAINTS (RESOURCES)	STRATEGIES	EXAMPLES
Mobility	Women's extension teams	Sudan
	Work within women's compounds	Sudan
Trees	Species produced to meet women's needs	Zimbabwe
		Sudan, Senegal
	Acceptable tree planting strategies	Kenya
Land	Negotiation with local authorities for land for women's groups	Cameroon, Zanzibar
	Home nurseries	Sudan
	Agroforestry (trees & crops)	Senegal, Zanzibar
Income/cash	Produce tree seedlings for sale	Cameroon, Sudan
	Low-cost or free improved stoves	Mali
	Sell vegetables or fruits	Cameroon, Botswana
	Produce poles for sale	Zanzibar
	Employment in forest nurseries and plantations	Zanzibar, Senegal
Time	Improved cookstoves	Mali
	Fuelwood lot	Sudan
	"Fuelwood species"	Kenya
Labor	Involve children	Sudan, Zimbabwe, Botswana, Cameroon
	Involve men	Kenya, Zimbabwe
	Hire labor (sometimes)	Senegal
Material resources	Wells, pumps	Cameroon
	Tools	Zanzibar
Organizations	Create women's groups	Sudan, Cameroon
	Work with women's groups	Senegal, Zimbabwe, Zanzibar
	Work with cooperative	Botswana
	Local political structures	Zimbabwe, Mali, Zanzibar
	Schools	Zimbabwe Mali, Zanzibar
Extension, training, information dissemination	Women's extension teams or women agents	Sudan, Cameroon, Mali, Zanzibar
	Puppet shows	Sudan
	Cooking demonstrations	Mali
	Publicity/use of media	Mali
	Competitions, prizes	Zanzibar
	Live theatre, video	Kenya

Due to social customs that segregate women's activities from men's activities in some areas, the use of women extension agents can be an effective way to reach women and facilitate their participation in forestry activities. In Cameroon, Sudan, Zanzibar, Mali, and Somalia, women extension agents have been found to be effective for working with women on forestry activities. In the Sudan and Cameroon projects, a women's extension team, consisting of six to eight agents, works separately from the men's extension team on the project. The Mali and Somalia projects focused on women, so the only extension agents hired were women. In Zanzibar, most extension staff are men, but three women extension agents specifically work with women's groups. In Senegal, some activities undertaken by village women's groups were facilitated by a woman volunteer. The Zimbabwean project, however, had difficulty in recruiting young women as extension workers.

Women's physical mobility may be constrained by lack of transportation. This constraint can hinder women in learning about new activities, participating in training, or getting their produce or handicrafts to market. The Zanzibar project arranged study tours for women, to learn about potential markets for the wood from their trees. Sudan project staff facilitated trips for village women to visit women in other villages to see their forestry activities. Several projects maximize women's participation by having extension agents visit women in their homes or their neighborhoods.

Much work has also been done through women's groups. In Zimbabwe, Mali, and Zanzibar, forestry projects worked with existing women's organizations. In Sudan and Cameroon, women's groups did not previously exist, but were started with the help of forestry project staff. Some women's groups have expanded from forestry into other activities. In Zanzibar and Cameroon, women's groups are diversifying their income-generating activities. Sudanese women are beginning to address other community concerns.

Throughout Africa, individual women have difficulties in getting access to land. Few women own or inherit land. In some circumstances, women's groups have negotiated, borrowed, or rented land for tree planting or other communal activities. Where land is scarce, some forestry projects have encouraged women farmers to adopt agroforestry practices, to intercrop trees with agricultural crops or grow fodder trees along with raising livestock.

Tree and land tenure rights are interrelated in some parts of Africa: women historically have not planted trees, since trees could give them rights to land. In northern Cameroon, some men only let their wives plant papaya trees, which are short-lived and do not confer land rights. In western Kenya, social taboos historically have prevented women from planting trees. The Kenyan project, however, introduced new "agroforestry species," which do not confer land rights and which women can plant.

It may be difficult for women to obtain trees to plant. Some projects, work with women on village-level or home tree nurseries, so that the women can grow the trees that they need. In Somalia, Sudan, and Cameroon, women earn money selling tree seedlings. In Senegal, women collect seed for, and grow indigenous tree species that were disappearing, especially medicinal plants.

Throughout semi-arid Africa, water is a serious constraint for tree growing, agriculture, and raising livestock. The Sudan project installed wells and pumps for the tree nurseries and shelterbelts, which also ease women's daily work burdens. In Cameroon, project staff helped women's groups negotiate for land near water sources for their tree nurseries and vegetable gardens, and repaired a broken pump.

Lack of access to other material resources may also limit women's activities. In Zanzibar, a tool shortage hampers women's group activities. Men will not permit women to use household tools for women's group activities. Some women's groups won tools as prizes for their tree planting efforts. Others were loaned tools by the forestry project.

Animals, insects, birds, and disease often hinder women's efforts to grow trees. It may be more difficult for women than for men to prevent animal damage. Zanzibari women are trying to gain the support of local government officials to fine livestock owners if their animals eat planted trees. In Sudan, women built mud walls to separate their goats from their trees. In Senegal, women have fenced their tree plantations with thorny bush, either doing the work themselves or hiring male labor.

In all these projects, women participants have low educational levels. The extension programs, therefore, employ audio-visual materials. In Mali, cooking demonstrations, live theatre, and radio and television extension messages are used to reach women. All projects rely heavily upon discussions and practical training courses. In several cases, the women extension staff are trained in technical forestry skills.

In Cameroon, rural women value training in new skills as a primary reason to engage in forestry activities. As women lack land rights, moving from their parents' land to their husband's land, and losing use rights to their husband's land upon divorce or widowhood, they feel that education -- particularly in income-generating skills -- is key to their survival and adapting to changing social circumstances.

Many Zanzibari women value improvements in their social status that have come with forestry activities. Some rural women's tree planting groups have become quite famous, and now receive visits and recognition from government and political party officials. The women themselves regard this change as an important benefit.

The Somalia refugee project stressed women's skill development in growing and managing trees, training other women, managing small business enterprises, and earning income through agroforestry activities. The refugees could apply these skills wherever they might be in the future. The Somalia project also addressed cultural ideas concerning gender roles, to facilitate women working in forestry, a sector historically dominated by men.

Earning income is a major concern for African women. A few projects studied offered significant employment to women. In Zanzibar, several forest technicians are women and most forest nursery jobs go to women. In Senegal,

25 percent of the nursery and tree planting workers are women: no women, however, yet hold any supervisory positions.

Other forestry projects offer women income-generating opportunities. In Botswana, cooperative members are selling fruits and vegetables, and anticipate earning income from wood sales. In Zanzibar, women sell poles and firewood. Cameroonian women earn money from vegetable and fruit tree seedling sales. Sudanese women also sell tree seedlings. Some Malian women use time saved by using improved cookstoves for other income-generating activities.

The premise of many forestry activities is that they will, in the long run, save women time and reduce their workload. Thus, if women can grow their own firewood, then they can save time spent collecting it. Other projects promote agroforestry techniques, assuming that women can cultivate trees and agricultural crops side-by-side, and thus save time and labor. Most projects, however, have not yet critically tested such assumptions.

Women's most common response to labor shortages is to work with other women. In Zanzibar, all land available for tree planting is located far from the villages, where an individual woman could not travel and work alone.

Occasionally, women gain men's assistance. In Zimbabwe, the women do most of the work on the village nurseries and woodlots, but men often fence these areas. The Cameroonian men also help women's groups with fencing. In Senegal, women sometimes hire men to put up fences.

Children may contribute labor to their mothers' projects. In both Cameroon and Botswana, children often help their mothers cultivate vegetables, fruit tree seedlings, and trees. In Botswana, if a woman cooperative member is sick, she sends a child to do her work. In the Cameroon project, most women said that their 6- to 14-year old children help water tree seedlings.

Several case study projects have worked with school children. In both Zanzibar and Zimbabwe, forestry extension staff have worked with school children and youth groups to plant trees. In Zanzibar, tree-planting competitions have been held amongst young men's football clubs, with the most successful clubs being awarded footballs and uniforms. Malian schoolgirls and schoolboys have learned to build improved three-stone cookstoves.

Forestry projects may develop extension materials for use with children as well as adults. The Sudan project developed three puppet shows for village audiences, including children, while a fourth has been written specifically for schoolchildren. The Kenyan project developed a drama, later made into a video, for community extension activities. The drama's text was printed as a booklet in both the local language and English, and used in local schools.

Strategies and responses of women

The strategies developed in these projects often resulted from collaboration between women and development workers. It is worth considering, however, what types of forestry strategies women themselves typically develop. Throughout Africa, as resources grow scarce, women find ways to cope.

Where firewood is scarce, women may find alternative fuels, use cooking methods that conserve fuel, or cook fewer meals per day. Women often use political pressure to get access to resources, such as land for a communal woodlot, water, or fencing. Women devise strategies to minimize insect, pest, and animal damage to their crops and trees.

In some areas of Africa, women now decide on their own priorities -- such as choosing what tree species they want, and requesting what technical assistance or training they want from development workers. Some women now manage their own tree nurseries, to no longer be dependent on forestry departments to supply tree seedlings.

Strategies of government and NGOs

Overall, approaches taken by governments and non-governmental organizations towards promoting women's participation in forestry activities have been relatively modest. Three general approaches are quite common.

First is a focus on promoting the voluntary efforts of women in social forestry. Most industrial or commercial forestry operations have not made serious efforts to hire women. Second, forestry projects often content themselves with "token" representation and participation of women. Third, some government or development organizations have adopted broad policies or guidelines for promoting women's involvement in development activities.

To date, however, these have had little impact on forestry activities. Most government forestry departments and forestry development projects continue to focus on traditional forestry objectives, measured in terms of the numbers of trees grown, survival rates, and hectares planted, rather than emphasizing the numbers of women participants, skills transferred, or benefits derived by individual participants.

Forestry activities undertaken by governments and non-governmental organizations with women include:

(1) efforts to address fuelwood problems, through
    (a) fuelwood plantations,
    (b) agroforestry plantings of "fuelwood species," and
    (c) "improved" (fuel-efficient) cookstoves;
(2) agroforestry trials, to promote production of forest resources in conjunction with agricultural crops or livestock;
(3) work in forest reserves and forest plantations, such as
    (a) contracts with local residents, to provide free labor in exchange for resources, e.g., women pruning trees and taking pruned branches for their firewood needs,
    (b) paid laborers, e.g., in nurseries, seed collection, tree planting, and weeding;
(4) income-generating activities for women, including
    (a) pole and fuelwood plantations,
    (b) production of fruit tree seedlings,
    (c) cultivation and sale of vegetables and fruits,
    (d) production of improved cookstoves, and
    (e) diversification into non-forestry activities.

Depending upon the institutional arrangements, forestry departments or projects may find it difficult to focus on human skills development, or to integrate forestry activities with non-forestry activities. Some non-governmental organizations have greater flexibility in this regard.

Implications for Policy Makers, Development Workers and NGOs

The African experiences on promoting women's participation in forestry activities suggest a number of important strategies for development workers, non-governmental organizations, and policy makers. These strategies also need to be incorporated into broader development efforts to combat deforestation, environmental degradation, and poverty.

Preparations for the upcoming United Nations Conference on Environment and Development (to be held in Rio de Janeiro, Brazil in June 1991) need to broaden the debates on forestry questions, to focus more on people than on trees or forests. The March 1991 UNCED document (1991b) on the conservation and development of forests made no mention of women and children. Forestry issues must be more actively linked to discussions of cross-sectoral issues, such as environmental degradation and poverty (UNCED 1991a). Other fora should also consider these concerns.

In May 1991, a special Symposium, "Women and Children First," was organized by the UNCED Secretariat. That meeting recommended a series of general principles and specific actions to ensure that women's and children's interests are more adequately reflected in the UNCED preparations. Specific forestry recommendations for UNCED's consideration were summarized in the Symposium report (UNCED 1991c; for details, see Williams 1991) as follows:

1. Forest and natural resource management and development activities need to focus on people, i.e. resource users, rather than on resources.

2. Development programmes and projects need to move away from a sectoral approach towards a more integrated approach. Forestry and natural resource management needs to be integrated not only with other land use management issues, such as agriculture and livestock, but also with human resource development, e.g., health, education, and employment, and improvement of human living conditions, e.g., safe drinking water, sanitation, and adequate housing.

3. For development efforts to be effective, they need to be broadly participatory and equitable. A wide variety of strategies are needed to work with women and children.

4. The long-term time-scale of forestry development activities needs to be carefully considered. Trees do not grow overnight. Mobilization of women in development also needs a long-term commitment. Nonetheless, efforts are needed to ensure that women derive short-term benefits, such as income, from their participation in forestry activities.

5. The goal of promoting the participation of women and children in forestry development activities is not participation per se, but

ensuring that these participants benefit through increased access to, and control over, resources. Cost-benefits analyses need to be disaggregated by gender and age.

6. Forestry development programs must offer women greater opportunities for paid employment and income-generation. Women forest workers need: greater chances for employment, equal pay for comparable work, on-the-job training and promotion, and minimized health hazards, such as pesticide exposure.

7. Education and training are central in directing forestry to a more participatory approach. Three types of education and training are needed. First, more women need to be trained and employed in forestry at all levels -- from grassroots to international policy-making levels. Second, all foresters, both men and women, need greater training in how to work with diverse resource user groups, and to reach women, children, and men resource users. Third, more focus on environmental education and forestry issues is needed in basic education programmes for children and adults.

8. Development of broad policies and legal instruments must be more participatory and people-focused, and be backed up by financial commitments. Such policies must be carefully designed to ensure that women and children can participate and benefit. Areas needing attention include land tenure issues, the socio-economic impacts of commercial (industrial) forestry operations, broad policy and funding debates, such as the Tropical Forestry Action Plan, and proposed international legal instruments (conventions), such as those on tropical forests, (climate change,) and biological diversity.

9. To ensure a more participatory approach to forestry and natural resource management, more funding is needed. In addition, various financing possibilities for forest conservation need to be assessed in terms of their impact on different social groups, including women and children.

CONCLUSIONS

The forestry development community has made a promising start towards working with women on efforts to combat deforestation and environmental degradation. By focusing more on management of forest resources to promote sustainable livelihoods, integrating forestry with other sectors and broader development concerns, and using forestry as a means to combat poverty and empower people, this effort can be greatly enhanced. The UNCED conference offers a good opportunity to link these issues together, and seek commitment for change.

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