

genderaction

A Newsletter of the USAID Office of Women in Development—Vol. 2 No. 1 Winter 1997-98

From the Director

USAID OFFICE OF WOMEN IN DEVELOPMENT

That natural resources are harvested by women as well as men may not seem, at first, a newsworthy discovery, but it is beginning to change the thinking of development planners concerned with designing effective resource management programs. It is also emphasizing the need to address the root causes of women's poverty. Hunger knows no gender and it is not surprising that those who hunger value food, shelter, and other necessities of life above "sustainable resource use."

This issue of *Gender Action* focuses on efforts to ensure women's full participation in natural resource management. Resource conservation projects sponsored by the U.S. Agency for International Development (USAID) are addressing the issues of women's poverty in developing nations, including lack of property rights, the extent of women's unpaid labor, and women's participation in public decision-making forums. Some of the factors contributing to women's poverty are identified in this issue's lead article, along with the impact of poverty on the environment. Other articles focus on ways USAID is responding to gender concerns in its natural resource management projects.

Understanding the environmental roles and responsibilities of women in developing economies is critical to resource conservation and sustainable use. Overcoming the barriers to women's full participation in the management of resources is also a necessary first step toward the ultimate goals of poverty alleviation and sustainable development.

Margaret A. Lycette

Women and the Environment

The Role of Gender in Effective Natural Resource Management

In countries where development pressures have degraded the environment and put ecosystems at risk, the U.S. Agency for International Development (USAID) and other international donors are joining with host countries to conserve natural resources and promote sustainable development. USAID, in its environmental programs, recognizes that ignoring the pressures of daily life in developing countries will result in a failure to engage local residents in protecting the environment.

The Agency has identified a host of factors associated with women that project planners must take into account when developing environmental projects. The most pressing is women's poverty. More than 1.3 billion people live in poverty, surviving on less than (U.S.) \$1 a day, and more than half of these are women.

Poverty is particularly acute among rural women. Over the past 20 years, the number of rural women living in extreme poverty has increased by 47 percent; for men, the increase has been less at 30 percent. Because of poverty, women are unlikely to worry about the long-term implications of destructive environmental practices.

Women's lack of education must also be taken into account by natural resource management planners, along with their limited access to renewable energy sources, and lack of property rights. Too often, however, project planners fail to recognize these and other gender constraints as critical concerns, ignoring the environment related roles that women play in the subsistence and market economies of both congested cities and rural communities. As a result, they fail to develop projects that are participatory in nature and assure both women and men benefit equally from project activities (see sidebar articles on pages 3 and 4).

Women's Role in the Environment

In rural and urban areas, women collect water for cooking and cleaning; they manage household sanitation needs; they farm the land; they gather food and fuel from forests; they fish coastal waters. As users of natural resources, women contribute to the pressures that have pushed so many resources onto the "critical list."

Yet women are repositories of a wealth of information that can help shape strategies for the sustainable use of the environment. Ignore the roles of women as resource users and conservation programs will fail to address the needs of those very individuals who are key to the sustainable use of the environment. Ignore the knowledge women have acquired as central actors in their communities' economies or overlook the economic pressures that shape their use of critical natural resources, and programs will not succeed in addressing the long-term needs of communities and households.

Constraints to Women's Sustainable Use of Resources

Poverty is an obvious constraint to the sustainable use of resources. As land has become less productive in rural areas because of overuse or greater opportunities for work have opened up in urban areas, men have left the land and migrated to cities in search of jobs. This has added to women's poverty since those who remain behind as heads of households are often at a disadvantage within the community. For cultural reasons they may lose access to land; even if they retain property rights in the absence of a husband, they must work longer hours to make up for the lost labor of the spouse.

Constrained by poverty, women are often forced to make short-term decisions that deplete natural resources. They feed themselves and their families today, putting at risk their ability to do so in the future. Natural resources are either severely damaged or completely destroyed as a result. This is true whether the resource is firewood from the forest or fish from rivers and estuaries.

Poverty also means that poor women fortunate enough to have access to plots of land for cultivation often find themselves too economically insecure to risk experimentation with unfamiliar crops or new farming techniques. Instead, they rely on traditional crops and methods of cultivation, despite the possibility that these will exhaust the available land or that other crops would fetch higher prices in local markets. Even if women farmers are willing to risk their well-being and that of their families on improved farming methods and crops, they have fewer opportunities to get the specialized technical training needed because of gender bias in agriculture extension programs.

Lack of Property Rights

In many developing countries, land ownership is often regulated by customs that give preference to

men over women. Even in those countries where land reform has occurred, the new laws often fail to recognize women as having enforceable rights to own or lease property. Instead, ownership has gone to men as heads of households.

The lack of enforceable property rights carries repercussions through-out the rural economy. Without these rights, women cannot pledge property as collateral for loans; without borrowed capital, women have fewer opportunities to invest in improvements that could serve their immediate economic interests as well as the communities' long-range environmental security. Neither do they, contribute to preserving resources for the future.

Access to Information

Women are constrained further from effectively using natural resources because they have fewer opportunities to learn about new seeds, safer methods of pest control, efficient irrigation techniques, or crops with higher nutritional value. Such information is provided to farmers through extension services, and because this service is often offered only to landowners or to male heads of households, women are excluded. Thus, female farmers are less productive and more likely to use natural resources in ways that are damaging over the long term.

Valuing Women's Ideas

In many societies, women's ideas are not valued and their initiatives do not carry as much weight as those of men. This becomes an issue when communities are given responsibility to decide how local resources will be managed.

Since women are primary users of resources, their ideas about managing resources are critical. If they cannot participate in decision-making about how forests, rivers, or communal lands are used, they may not engage in executing plans that will have a positive, long-term benefit to preserving natural resources. Failing to engage women in decisionmaking roles also means that their unique knowledge about natural resource management is lost to the community

Addressing Gender Constraints

Poverty, illiteracy, lack of technical training, and tenuous property rights combine with other factors to shape the way women interact with the environment. Because women are users of natural resources and because they are constrained in using resources for the long term, natural resource management projects risk failure if they do not take women into account and offer them options to mitigate the impact of the constraints. In the end, participatory resource management projects that include women as well as men hold the greatest promise for achieving sustainable development.

Design Options for Creating Participatory Natural Resource Management Projects

Because women in many developing societies are often constrained from sharing fully in property rights, natural resources, and community responsibilities, involving them in natural resource management projects requires developing interventions that alleviate the constraints.

By analyzing women's role in society, development planners can design projects that break down the barriers to their participation. This might mean developing projects that are solely for women, or it

could mean mainstreaming gender within a project by giving equal opportunity for participation to both women and men. Or, it could require the development of a hybrid project that has a “women only” component within a larger project or a separate budgeting and reporting of objectives by gender within a mainstream project. The choice for project design depends on community characteristics and project goals.

There are advantages to each type of project design. Mainstreaming means there is an identifiable budget and a reporting structure to identify how women benefit. This type of project also allows women to draw on all project resources, increasing the chance that interventions that extend to women will be sustainable. Mainstream projects can also raise community-wide awareness of gender issues. There is the risk, however, that measuring a mainstream project’s impact on women specifically becomes more difficult.

Mainstream projects that have gender-specific components allow women’s needs to be met directly. Because the components are designed to benefit women, they can be fine-tuned to women’s needs, while being linked to the other non-gender specific components of the project.

However, on the negative side, gender-specific components within a project may receive low priority from implementing organizations. In addition, the gender components may be small in scale and receive limited funding, risking the marginalization of women within the larger project.

Finally, developing free-standing, women-only projects can mean addressing women’s specific needs. These types of projects are easy to monitor. However, they often tend to be small in scale, adding to their invisibility within the community. For this reason, they can fail to raise awareness among development planners for the need to be gender sensitive in future project planning. On the other hand, free-standing projects can successfully meet the needs of women in situations where there is no constituency for gender-integrated projects.

Integrating Gender into Natural Resources Management Projects:

USAID Lessons Learned

Environmental Health in Peru

In a low-income urban area in Lima, Peru, USAID/ Peru is using a hybrid approach to integrating women into a solid waste management project. With the assistance of the Environmental Health Project of the Bureau for Global Programs, Field Support and Research, Office of Health and Nutrition, the project provides targeted funds to encourage women’s involvement in reducing the local trash stream.

Six microenterprise interventions have been set up to lend money directly to women entrepreneurs who collect household waste, transfer it to a landfill, and provide additional sanitary disposal. The women receive payment through direct fees from households or through service contracts with municipalities.

Had women not been targeted for microenterprise lending, they would not have had the means to buy the equipment necessary to become involved in trash collection. Lending money to women

eliminated this constraint and they were able to benefit from the project to improve the quality of the urban environment. At the same time, the impact on women was measurable.

Soil Conservation in the Philippines

A participatory approach to environmental project planning requires project designers to pay attention to women's needs and interests, within a mainstream project. USAID learned this in its Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM/CRSP) in Mindanao, the Philippines. The project, located in a watershed area, aimed to reduce the amount of silt running into a lake used to generate electricity. The silt buildup in the lake, due to logging activities (a male-dominated activity) and increased farming (a female-dominated activity), was interfering with the generation of electricity.

Soil conservation techniques to reduce the amount of silt running into the lake were taught to both women and men; both were asked to monitor the lake's water quality to determine if conservation efforts were working. The men showed no interest in monitoring and the women also were not interested until project planners learned that the women were interested in health issues. They adjusted the program to teach women about the effect that clean water has on the health of the family. Project staff expanded the water inspection to include monitoring for E. coli bacteria.

With these changes, women began to participate in efforts to reduce the silt runoff into the lake. They also became involved in other environmental activities and their enthusiasm for managing the community's natural resources helped engage the men in soil conservation efforts.

ECOGEN in Kenya

Experience also indicates that knowledge about the relative bargaining power of women and men can assist project planners in developing programs that do not lead to a deterioration in women's access to and control over natural resources. A USAID evaluation of its ECOGEN (Ecology, Community Organization, and Gender) project in the Rift Valley of Kenya illustrates the need for project planners to be concerned about bargaining power disparities between women and men.

The project aimed to help a landless community resettle around Lake Nakuru and sustainably manage natural resources. Facilitators worked closely with the community to generate ideas about how to accomplish the goal. Women, for their part, focused on immediate, smaller-scale issues such as fuel wood supplies and water tanks. The men focused on infrastructure development and larger-scale activities such as road building.

Because the relative bargaining position of the women was lower than that of the men, project planners realized they needed to improve women's capacity to push their issues onto the agenda. They began by raising awareness among the women that although their needs were different from the men, their interests were equally important. Project facilitators organized capacity-building workshops and found ways to strengthen women's networks.

In addition, the interests of the Lake Nakuru women in harvesting water, accessing fuel wood, and increasing food production were shared with regional groups that reinforced their importance to sustainably managing resources. These groups, in turn, enhanced the voice that the Lake Nakuru women had in setting the local natural resource management agenda.

The Link Between Access to Urban Environmental Infrastructure Services and Health

USAID/Indonesia Shifts Program Emphasis

Development professionals have long theorized that female-headed households in urban areas of the developing world are more adversely affected by the poor delivery of water and sanitation services than male-headed households. Little empirical data exists, however, to support this hypothesis and most development programs providing urban environmental services are planned without considering gender.

In 1996, the U.S. Agency for International Development (USAID) Mission in Indonesia observed a higher incidence of illness among female-headed households in urban areas than male-headed households. Although female-headed households accounted for only 6.5 percent of total households, they were reporting 27 percent more illnesses than male-headed households.

This discrepancy led USAID/ Indonesia to undertake a study to determine if there was any link between the sickness among female-headed households and the quality of urban environmental infrastructure services available to these households.

Linking Urban Environmental Infrastructure and Health

Urban planners have long assumed that the health-related problems faced by female-headed households were attributable to the age of the women heading these households (planners assumed they were over 50) and to their poverty, not to their gender. The Mission's review of data, however, debunked the assumption about age. More than half the urban, female-headed households in Indonesia were headed by women younger than 50, and more than 17 percent were headed by women younger than 30.

Poverty, however, was a factor. The data showed that female heads of households made less money and had lower educational levels than male-headed households. Their illiteracy rates were higher and they owned fewer consumer goods.

Making the Link

Data on access to urban environmental infrastructure services such as water supply and waste water disposal drew the link between gender, lack of access, and health problems. Female-headed households had less access to clean water than male-headed households. In the urban areas of Indonesia, 55 percent of male-headed households had access to the cleanest drinking water while only 48 percent of female-headed households did.

Access to bathing facilities revealed the same pattern. Ten percent more male-headed households used private facilities—the healthiest water source—than female-headed households. Data on access to toilet facilities showed that 51 percent of female-headed households used amenities associated most with illness—ponds, rivers, and ditches—compared with 43 percent of male-headed households. Again, nearly 10 percent more male-headed household had access to private facilities than female-headed households.

USAID/Indonesia Makes Program Adjustments

From the review of data, USAID/Indonesia concluded that there was a link between access to quality water and sanitation services and lower incidences of illness. The Mission determined that its gender neutral approach to providing services was not reaching the neediest group, and if it wanted to promote better health among female-headed households, it would have to develop programs that provided them greater access to healthy urban environmental infrastructures.

In addition, because the data showed that younger, more active women were running households, USAID/Indonesia concluded that these women needed different types of services than the assistance that had been given on the assumption that female heads of household were old and widowed.

USAID/Indonesia redesigned its urban environmental infrastructure program to take gender into account. It added funding to ensure that a greater number of female-headed households received improved water and sanitation services. The Mission also decided that involving women in influencing the planning and management of urban environmental infrastructure services was an effective way to ensure that more female-headed households received better services.

Because it felt that involving women as decision makers was central to changing how urban water, sanitation, and solid waste services are provided, the Mission targeted about 20 percent of its overall program funds for community participation efforts that would involve women. In addition, the Mission assigned staff specifically to ensure that women participated in these activities.

Although the program shift is in its infancy, the focus on women's participation is key. Work is underway to identify gender differences in the contributions made by local residents to decisions about how services are provided. Information on what types of projects women are active in and what responsibilities they have in these projects is also being gathered. The research will include recommendations that highlight how the role of women in urban service delivery—particularly in decision-making processes concerning water, waste water, and sanitation—can be enhanced.

The Case for Africa: Gender Is Key to Halting Africa's Resource Depletion

Halting the rapid depletion of Africa's natural resources is critical to the continent's economic development, and engaging women in the effort is vital since they are the major users of natural resources. Women, however, are often invisible in this role and their needs ignored. Custom or law bars them from land ownership. Because men control the production of cash crops, women farm less desirable land. They also suffer from limited access to inputs such as improved seeds or fertilizer. Extension services that would improve agricultural productivity and increase household income are rarely available to women.

Aware that African women face obstacles in the sustainable management of natural resources, the U.S. Agency for International Development (USAID) has focused on integrating gender concerns into its natural resource management projects there.

The Agency has learned, over the past ten years, that project planners who understand women's relationship to the environment have taken the first step toward finding solutions that will result in more sustainable use of resources. USAID has also found that those project planners and managers

who consider the constraints that women face and who find ways to reduce them have greater success at engaging the entire community in using natural resources sustainably.

Planning that Reduces Women's Constraints

Productive farmland is scarce in Africa. Forty-five percent of the continent is described as dry and only 19 percent is free from the effects of soil erosion. Although women are responsible for 70 percent of food production on the continent, they are, for the most part, barred from land ownership, either through custom or through recent privatization laws that have given ownership to men as heads of households.

Constraints to land ownership and access to extensive services and agricultural inputs affect how well women manage natural resources. Poverty also affects resource management: Poor women, out of necessity, often choose short-term household consumption needs over long-term preservation of resources.

USAID has a long history, of land tenure research in agriculture, and its projects in Africa give considerable attention to the gender dimensions of land tenure. Most environmental projects appreciate the implications that lack of ownership will have on project assumptions, including the fact that women will not invest in the land.

The Agency has not, however, been sensitive to the fact that women in Africa are more likely than men to farm marginalized land. There are several reasons for this. Women have not shifted to producing cash crops, an activity that continues to be dominated by men. Instead, they grow the food consumed by the household. Since male farmers grow cash crops on more fertile land, female farmers are left with the less fertile acreage. Male migration also plays a part. When men leave for jobs elsewhere, their property rights do not always convey to the female head of household but to another male family member. As a result, the wives of men who migrate farm less-productive communal land.

Women are also at a disadvantage in receiving inputs or services—something the Agency needs to address. Traditionally, women have not been introduced to cash crop farming or other new technologies. Neither have they received market information that would open new trade and investment opportunities. Women may not receive these services because extension workers in Africa are male rather than female. Or, the gap between supply and demand for extension services may be the cause. Studies indicate that in Africa there is only one extension agent for every 2,000 to 3,000 farmers.

Another reason that women have limited access to inputs is lack of property ownership. Without land as collateral, women cannot obtain loans to purchase seeds or fertilizer. Projects that understand these barriers develop interventions that provide women access to inputs such as seeds and fertilizer, to credit, education and marketing supplies, and to rural employment opportunities.

Community-based Resource Management Approaches

Addressing women's property rights in Africa has become a more pressing issue as community-based approaches to natural resource management have gained greater acceptance. Women have close ties to communal lands. This is where they gather fuel wood and forest plants for use within the household. Because they depend on these resources, women need to be involved in decisions about how communal lands are managed. Unfortunately, in Africa as in other places, status

within the community derives from land ownership. Since women seldom enjoy property rights, they rarely have the same status as men in decision-making bodies or public forums.

Because of government efforts to decentralize decisionmaking, the Agency must find ways to break down barriers to women's involvement in local groups. Projects, for example, can require that grant recipients spell out how women will be involved in both the design and activities of newly constituted resource management groups. Funds can also be withheld until women are fully involved.

Strategies for Involving Women

Project planners and managers have opportunities to reduce the constraints that women face in the sustainable use of Africa's natural resources. To succeed, however, they must first put aside a misconception that sociocultural barriers to women's participation in natural resource management in Africa are insurmountable. In the African context as elsewhere, gender relations are continually changing and adapting to outside conditions. Dealing with the changing roles directly and enhancing women's participation is not only possible but critical to project success.

To break down barriers and integrate women into natural resource management projects, development practitioners should ask certain questions. For example, since status within the community derives from property rights, are women mobilizing to acquire legal rights over land and the natural resources they rely on within the household? If so, how are they going about it? How and where have they been successful? Projects can support these efforts. They can also strengthen women's groups and political organizations that support legal reform. And, where laws exist but are not enforced, project planners can support groups and organizations that have property rights' enforcement as a goal.

Because natural resource management is devolving to the local community, how are women and men interpreting and assimilating into the newly constituted institutions and processes that are controlling community based resources? If, as has been noted, women are at a disadvantage because they lack status, what adjustments in natural resource management projects could offer women a role within local governing bodies? In addition to mandating that women have a role, project planners can be sure women have equal access to the technical training and education necessary to play a role in local management.

Finally, since women are economically disadvantaged, projects can focus on increasing or diversifying their income. This could mean developing project components that give women the opportunity to generate income either through direct employment or access to credit.

This article highlights research from a 1996 report, "A Guide to the Gender Dimension of Environment and Natural Resource Management: Based on Sample Review of USAID NRM Projects in Africa," by Mary Picard, USAID/W Africa Women in Development Project Advisor. The publication (SD Technical Paper no. 30, August 1996) is available from Outreach Systems Manager, USAID/AFR/SD/PSGE, 1111 19th Street, Room 515, Arlington, VA 22209-1704, USA. It can be downloaded from the Internet at <http://www.info.usaid.gov/sdpsge/pubs/pubs.html> (139K). A companion publication, "A Selected Bibliography on Gender in Environment and Natural Resources: With Emphasis on Africa" (SD Technical Paper no. 31, August 1996) is also available in print on the Internet (221K).

WID Works

Hours Women Spend Drawing and Carrying Water

REGION	HOURS PER WEEK
AFRICA	
Botswana (rural areas)	5.5
Burkina Faso, Zimtenga region	4.4
Ivory Coast (rural farmers)	4.4
Ghana (northern farms)	4.5
Mozambique villages	
Dry season	15.3
Wet season	2.9
Senegal (farming village)	17.5
ASIA	
India (Borodo region)	7
Nepal (villages)	
Ages 5 - 9 years	1.5
Ages 10 - 14 years	4.9
Ages 15+ years	4.7
Pakistan (village)	3.5

Source: United Nations, World's Women, 1970-1990. Trends and Statistics (UN, New York, 1991). p. 75

Hours Women Spend Gathering Fuel

COUNTRY	HOURS PER WEEK	EXPLANATION OF WORK
Southern India (6 villages)	1.7	Women contribute 0.7 hours, children contribute 0.5
Gujarat, India	3	In family of 5, 1 member often spends all his/her time gathering fuel
Nepal	1 to 5	Often, 1 adult and 1 to 2 children collect fuelwood
Tanzania	8	Traditionally women's work
Senegal	4 to 5	Fuel is often carried approximately 45 km
Niger	4 to 6	Women walk up to 25 km
Kenya	3.5	Women do 75% of fuel gathering
Ghana	3.5 to 4	A day's search provides fuelwood for 3 days
Peru	2.5	Women gather and cut wood

Source: Sheila Lewenhak, *The Revaluation of Women's Work* (Earthscan, London, 1989) p. 147.)