Chapter 4
Gender Matters

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Everywhere in the developing world, women play crucial environmental roles: farmer, sylvicultural-ist, gatherer and distributor of water, fuel, fodder, and traditional medicines. Women not only use natural resources; they manage and protect them as well. So women's participation in environmental project planning can make the difference between success and failure.

In the past, women often participated in environmental projects only as volunteer helpers. Planners assumed that simply working on a project would advance women's interests. In reality, since men tend to dominate decision-making in local government and community-based organizations, women's needs were ignored, and women benefited little from projects like these.

WHEN GENDER ANALYSIS IS MISSING

An example of what can happen in the absence of gender analysis comes from Madagascar. Policies there explicitly acknowledged the need to work closely with communities to maintain local interest and offset the loss of income resulting from park establishment. Buffer zone strategies would provide alternative employment for communities. But no gender research guided the development of the program.

Madagascar officials hired men as salaried guards or foresters in the park or the newly created Association of Tourist Guides. When men became salaried employees, they passed the work on their family agricultural plots to women, adding to the women's burden. Program planners asked few questions about where women would get fuel and water once tradi-

tional sources in the park became off-limits, or about how much more time it would take. They failed to consider where women, often the traditional healers for the community, would obtain the herbs and medicinal products that they used to get in the forests, or whether the income from traditional medicines or forest products would disappear. They also failed to find out which tasks the women would have to neglect to carry out these additional burdens. (Often, it turned out, women had to cut their time with young children, meaning older daughters had to assume family responsibility earlier.)

This example indicates some of the gender questions that environmental education and communication (EE&C) research should ask at the beginning of the project planning or policy formulation process. Such research can bridge the gap between planners, policy makers, and stakeholders, and can help ensure a successful and equitable policy or project (see Box 4.1).

The tools of gender analysis distinguish between practical and strategic gender needs of women:

Practical gender needs are concerned with inadequacies in living conditions such as water provision, health care, and employment. Practical gender needs do not challenge the gender divisions of labor or women's subordinate position in society (Moser, 1993).

Strategic gender needs, on the other hand, relate to gender divisions of labor, power, and control and include issues like legal rights, domestic violence, equal wages, and women's control over their bodies. Meeting strategic gender needs helps women achieve greater equality by changing existing roles and challenging women's subordinate position (Moser, 1993).

The most basic precaution a researcher must take is to ensure that the methods employed, and the wording of questions, do not bias against women.

BOX 4.1

How Gender Research Can Shape Project Design

Gender analysis was integrated into all GreenCOM's programs in El Salvador. For example, one study examining the use of fuel wood by rural populations indicated that two gender-linked reasons drove the high demand for fuel wood:

> While women primarily used wood for household fuel, they did so at the direction of their husbands, who expected that freshly made tortillas would always be available. The fire must be kept stoked to be able to make these tortillas. Husbands' ideas of a warm and loving atmosphere in the home included the constant presence of a lit hearth.

> Based on these findings, GreenCOM worked with women to promote fuel-efficient stoves and prepared messages for men that addressed their concerns as well.

"ENGENDERING" EE&C PROGRAMS

Integrating gender concerns starts with understanding gender roles. After exploring the different spheres of men and women, we can ask vital questions about the impact and equity of a new program. By changing how people do things, will men or women be more affected? Who will get more, or less, work? Who will get more, or less, money? Who will get more, or less, power or status? Who will get any new jobs? Who will lose jobs? What in fact constitutes equity in this situation? Can the community assimilate these changes, and what will it take to ease the transition? (see Box 4.2).

Gender analysis helps us get more and better information about people's knowledge, attitudes, and behaviors. Again and again we've found that a gender component helps us design better programs that further both environmental protection and equity. But using gender analysis in a meaningful way entails more than disaggregation of data. Gender awareness plays a part in each step of needs assessment, research, planning, implementing, and evaluation (see Box 4.3).

GENDER-SENSITIVE NEEDS ASSESSMENT

When investigating an environmental problem in a community, it is essential to solicit the views of men and women independently to assess their needs and concerns. Women often hesitate to express opinions when both sexes are present, and males tend to dominate the conversation. It is therefore advisable to interview women alone or in groups of other women using female interviewers and moderators.

Data should be collected from equal numbers of men and women (disaggregated) using gender-sensitive techniques and a mix of research methods. But the most basic precaution a researcher must take is to ensure that the methods employed, and the wording of questions, do not bias against women. Methods involving written responses tend to be biased against women, who generally have less education than men. Additionally, research conducted when women may be unavailable also excludes them.

Non-traditional research methods can expose problems that may not emerge from either quantitative (surveys) or qualitative (focus group) research. Such methods include participatory exercises, use of traditional media (dramas, songs created by women), modern technology such as videos or Polaroid cameras, etc. (see Box 4.2).

Qualitative research can contribute towards developing a quantitative survey that is gender-sensitive and better tailored to the local situation. Initial qualitative research can:

♦ Identify gender issues that local people think are important
♦ Identify the language people use to describe their opinions and concerns

Making Voices Heard: Video Communicates Women's Messages to Policymakers

In Egypt, GreenCOM used video to capture male and female farmers discussing ideas for cleaning up the local irrigation ditches *(mesqas)* and for resolving other community issues. In one village research helped define a communications intervention to encourage farmers to organize themselves to clean up *mesqas*.

Focus group discussions were held with four groups of adults responsible for making farming decisions: women under 40 years; women over 40; men under 40; and men over 40. In-depth interviews were conducted with 21 key informants, including the deputy mayor, supervisors from the cooperative, the village doctor, the Iman, the irrigation

inspector, the irrigation engineer, members of the village council, and male and female farmers. The discussions and interviews covered the largest problems facing the village, opinions about the agricultural and waste disposal systems, the amount and quality of water in the *mesqa,* social issues such as village gatherings, community actions, health care in the village, and gender issues such as women's work.

The innovative part of this research was the use of a video camera as a research tool. The resulting video was critical to developing an understanding of the attitudes, perceptions, and behavior of farmers and key informants, to identify barriers and ways to overcome them.

The video also helped determine what action the community would take regarding the maintenance and improvement of *mesqas*. Finally, the video communicated these findings to national government ministers.

For the first time, village women had a direct link to national policymakers—who listened to their concerns. What the women revealed in this film was that mesqas were clogged because women did not have anywhere else to put the family's garbage. This intervention helps to demonstrate both the importance of listening to women as well as the role of communications and research techniques in facilitating community action for environmental improvement.

♦ Assess the difficulty of discussing the environmental issue of interest with community members.

The household, in its myriad cultural forms, is generally viewed as the basic unit of social organization and often used as the unit of analysis when conducting quantitative social science research. But domestic gender relations are often characterized by an unequal distribution of power favoring males, mirroring broader gender inequities in political influence and access to resources that are structurally entrenched.

Males and females in the same household may not only have divergent environmental priorities but also separate avenues for effecting change. It

may be useful to conduct *intra-household* research, by independently interviewing at least one male and female from the same home and comparing their views, in addition to comparing men and women across households.

VARIABLES IN GENDER ANALYSIS

Studying the variables listed below may help program planners develop a better understanding of women's triple roles (productive, community management, and reproductive) and men's dual roles (productive, community management) and how these roles might affect their receptivity to, participation in, and benefits from EE&C interventions

(Pfannenschmidt and McKay, 1997). The variables are intended to help assess both women's practical and strategic gender needs (also see Box 4.3).

Variables of potential interest, depending on site-specific needs, include:

Personal Characteristics
♦ Age

♦ Occupation
♦ Education
♦ Marital status
♦ Ethnicity
♦ Religion
♦ Seniority in household
♦ Membership in community organizations
♦ Seasonal allocation of time

BOX 4.3
Engendering Data Collection

Missing Information in the Philippines

In the Philippines, a Green-COM desktop review of five local environmental case studies demonstrated that women's subsistence strategies are driven by the family's basic need for food and the barest essentials, and that they manage their activities relative to the tasks of other members of the family. Thus, to understand women's roles one has to understand the roles played by other members of the household (Abregana, 1997).

Several information gaps were identified: there was a lack of information on women as resource managers, sources of information and channels of communication had not been adequately identified, and an intergenerational perspective was missing—particularly important in a country that puts a premium on strong family values passed on to the next generation. Patterns were emerging that showed women's entry into spheres of activities

traditionally handled by men, such as raising corn. The seasonality of fishing and farming as related to gender roles was not adequately explored either.

Gender Differences in Jordan

In Jordan, GreenCOM assisted with a school-to-home water-conservation project implemented through school-based environmental youth clubs. Jordan's sex-segregated schools were an ideal place to investigate different attitudes and behaviors between girls and boys, female and male teachers and administrators, mothers and fathers. Preliminary qualitative research showed that women sensed a greater personal responsibility for water conservation than men did—women offered more alternatives for saving water and avoiding waste. In contrast, men perceived the lack of water as a government problem, blamed the Israelis, felt entitled to as much water as they thought they needed, and evidenced little

personal responsibility for water use and abuse. In sum, water was viewed by men as a women's issue.

One way of looking at the data is to assume that if women's environmental behavior is more responsible than men's, environmental specialists should focus on women. In these particular projects, however, GreenCOM assumed that bringing men up to the women's level of responsibility would substantially reduce negative impact on the environment. Therefore, much of the curriculum content was designed to focus on the ways that men could improve water conservation in the home, such as using drip irrigation instead of a hose in the family garden; repairing leaky faucets, pipes, and storage tanks; building storage tanks for grey water; putting in simple water catchment facilities for rain runoff; washing the car with a bucket of water, not a hose; and turning off the tap while shaving.

♦ Environmental knowledge, attitudes, beliefs, and practices

Household Characteristics
♦ Hierarchy of household
♦ Family size
♦ Number and ages of children
♦ Social class/caste
♦ Gender-based division of labor (adults and children)
♦ Sources of income (including out-migration)
♦ Spending patterns
♦ Financial responsibilities and control
♦ Intra household decision-making/conflict-resolution processes
♦ Location (rural/urban)

Community/Societal Characteristics
♦ Location (rural/urban)
♦ Gender-based access to resources and legal framework (e.g., education, training, information, new technologies, extension services, administrative and government services, land tenure, traditional rights and official ownership laws, credit, infrastructure, markets, transportation, labor rights)
♦ Social institutions (relevant existing neighborhood and community groups, including membership composition and rules)

The information gathered through gender analysis enables program planners and implementors to answer the following two questions (World Bank, 1992):

What are the *constraints* to environmental action that affect men and women differently?

What are the *opportunities* for either men or women in a specific environmental area or sector?

In deference to the many false expectations created in developing countries by previous assessment activities, the purpose for gathering information from respondents should be clear from the outset so that ethical problems may be avoided.

DATA ANALYSIS CONSIDERATIONS

Gender analysis should describe similarities and differences between men and women in various subgroups within the community. It is important to recognize that women are not a homogenous group but have differing generational perspectives: the needs of teenagers are not the same as the needs of the elderly; single mothers have different needs from married women. Information on age can often provide insight into educational attainment by generation and supports arguments for better access to education for women. (There is generally a change in knowledge and attitude across the board between women under and over 26 years old, due to improved access to education.) Thus, it is vital to disaggregate information not only by sex, but also by age categories and socio-economic status. Based on results of the analysis, specific EE&C strategies may be developed for women and men.

Research findings should be shared with respondents. This can be done by drawing them into the design phase of the program.

DESIGNING AND IMPLEMENTING THE PROGRAM

Education and communication programs reaching women should consider the following key issues:

Literacy: The literacy level of women in developing countries is often much lower than that of men. Therefore materials aimed at rural women need to use minimal text and be appropriately simplified. In addition, words need to be familiar to women and culturally appropriate.

Language: Women in developing countries are often less fluent in the national language, speaking only the dialect in their area. National languages are introduced into the formal school system after third grade, by which time many girls have already dropped out.

Pictorial Convention: Women have far fewer opportunities to view printed material than men do. Consequently they are not always familiar with the conventions associated with pictorial

literacy. This includes understanding the sequence of pictures if more than one picture is on a page, being distracted by unfamiliar objects or persons, not personalizing a message if the pictures are unfamiliar, not understanding common pictorial conventions such as perspective, foreshortening, close-ups. These challenges heighten the need for pretesting materials directed to a female audience.

Context: Women are socialized from an early age to submit to peer pressure and to conform to community norms. If women are to make individual decisions, they often need the security of knowing that their peers are making similar decisions. Involving women in a group setting is more productive, from the communicator's point of view, than trying to deal with women individually. Additionally, women may need some time to come to a decision, and that may mean consulting with their husbands or families.

Timing: Timing an event or a training to best involve women and girls is crucial, since leisure time for participating in extracurricular activities is usually not available. Girls have after-school chores; women have morning and evening chores. Women have major seasonal responsibilities associated with farming or hiring out their services to reach the family's economic goals. In India, a project that looked at women's time over a period of a year found only two months in the year when women could participate in project activities. The rest of the year, their time was fully engaged.

Commitment: Communicators in EE&C will readily notice the eagerness of women to involve themselves in activities that will improve conditions for their families or their communities. Women will often assume tremendous sacrifices to assure their families a benefit. By the same token, however, if women do not perceive an immediate benefit to their families, they will not commit their time and efforts to promote a project. In natural-resources activities, the communicator has the additional problem of demonstrating to women that conservation or sustainable use will benefit their families.

PRETESTING BY GENDER

Whether the intervention is a media campaign to support a technical program, a formal curriculum for children, or an adult training course, it should be pretested in three settings: women/girl only groups; men/boy only groups; and mixed sex groups. If the needs assessment finds that audiences should be further segmented, then they should be segmented for the pretest.

MONITORING AND EVALUATION

Creating appropriate, gender-sensitive indicators of success is no easy task. Indicators must reflect the local social and cultural context within which the project operates. The time-frame within which the project is implemented and results are expected must be realistic. For example, indicators may not focus on environmental outcomes and benefits to women, but on changes in the local power structure which may help women's voices to be heard. Since many EE&C activities in both rural and urban areas focus on supporting the development and strengthening of grassroots organizations to manage resources, program evaluations should assess the involvement and role that men and women have in decision-making within these organizations. In addition, economic benefits for women can be especially difficult to measure in communities where most local income comes through barter or trade.

Three Measures of Impact

♦ *Head counts:* The number or percent of men and women who: participate in or are exposed to project activities, are members of local counterpart organizations, participate in training, recall communication messages, perform a specific behavior, hold positive attitudes and beliefs about a practice, etc.

♦ *Type of benefit:* The number or percent of men and women who joined the Board of Directors; received allocation titles, obtained salaried jobs, benefitted from alternative employment schemes, and so forth.

♦ *Average benefit by gender:* Differences in benefits for female-headed versus male-headed households.

Monitoring
As the project proceeds, useful questions include:
♦ Are all data disaggregated by sex, age, and socio-economic status?
♦ Were women employed and trained by the project? Did women participate equally with men and were they paid equally as men?
♦ Were appropriate indicators developed to measure the on-going impact of the project on men and women (short-term, medium-term, and long-term where appropriate)?
♦ Does the project use the extent to which women's relations with men have improved as an indicator of effectiveness?
♦ Are women and men treated with equivalent respect—both as participants and staff personnel?
♦ Are women and men segmented into different target audiences? Are there age segments within groups? Where appropriate, were gender-specific messages developed for each group and sub-group?

Impact Evaluation
Ideally, after the project has been completed, gender-sensitive indicators that were developed during the project design phase are either: 1) measured again to compare with baseline measurements taken prior to project implementation (pre-test/post-test design) or 2) are measured in the target community and a control community to assess project impact (post-test only design).

Impact evaluation questions are divided into five categories below, though not all will apply in every EE&C program.

1. Impact on Gender Equity
♦ Has the project increased women's involvement in decision-making within their households and community?
♦ Are their decisions made independently or are they serving as a proxy for their husbands?

♦ Has the project improved women's access to, and control over, social services, environmental resources, or infrastructural facilities? What new resources/services are available to them?
♦ What impact has the project had on relationships between men and women?
♦ Has the project increased women's ability to act collectively and organize within the community?
♦ Has the project had any influence on the gender-based division of labor? Has it increased or decreased the women's workload?
♦ Has the project improved women's status in the community or influenced social norms in any way?
♦ Are there direct economic benefits for women resulting from their participation, or the participation of men, in the project? Are the benefits reaped by men and women comparable?

2. Policy-Related Impact
♦ Has the project strengthened linkages between research findings on gender issues and the formulation of environmental policies?
♦ What gender-sensitive procedures and policies have been learned and adopted by local government officials?

3. Influence on Local Capacity
♦ Has the number of women members of participating organizations and institutions increased?
♦ Has their attendance/involvement increased or are they merely serving as proxies for their husbands?
♦ Has the number of women serving as officers in participating organizations during project implementation increased?
♦ Has the number of women in participating organizations and institutions who received technical or managerial training increased?

4. Changes in Environmental Knowledge, Attitudes, Beliefs and Practices
♦ To what extent has the project impacted environmental knowledge differently by gender?
♦ To what extent has the project impacted environmental attitudes differently by gender?

♦ To what extent has the project impacted environmental beliefs differently by gender?
♦ To what extent has the project impacted environmental practices differently by gender?

5. Implications for the Environment and Livelihoods
♦ Has the project enhanced men's and women's roles as environmental managers?
♦ What impact has this had on project participants access to natural resources and sources of income?

If a follow-up study is possible, ask:
♦ What are the participation rates for the project by sex, age and socio-economic group?
♦ Is this an improvement over baseline or control group measures?
♦ Is the project sustainable? Replicable?

Sometimes our best efforts to seek womens' opinions are frustrated. What if women don't come to group meetings or won't speak with an interviewer? Experience shows trust is worth the trouble of going the extra mile to seek womens' perspectives (see Box 4.4).

BEYOND PROJECTS: PROMOTING GENDER-RESPONSIVE ENVIRONMENTAL POLICY

Policymakers have long recognized that gender and environment are inextricably linked and that programs and projects should formalize that connection.

EE&C can assist in gender-sensitive policy formulation in a number of ways: by promoting and supporting policy through targeted information campaigns to policymakers, by creating an ambience in a country where a particular policy is favored, by creating feedback loops that allow the sharing of stakeholder opinions, and finally by developing fora so that all stakeholders are drawn actively into the policy formulation process.

In 1995 GreenCOM provided technical assistance to USAID/Niamey to support government-led land reform. The project recommended ways to establish a dialogue on land tenure, including a program to inform women of their rights to own land, and a communication/education program showing how women could take advantage of the opportunity being afforded them by land reform.

A country's national education policy can also play a major role in linking gender and environment. Where policies encouraging women's access and participation in formal and non-formal education exist, the programs tend to be more sustainable than where such policies do not exist. The policy can provide the framework to infuse environmental content into gender-sensitive school curricula, literacy programs, and teacher training.

"ENGENDERING" SCOPES OF WORK

NGOs working in EE&C often hire short-term consultants and collaborate with local counterpart organizations to work with communities in designing and carrying out EE&C programs. Steps must be taken to ensure that all project staff—permanent and temporary—understand the need to be gender sensitive. Beginning with GreenCOM's first project in El Salvador, for instance, every consultant hired by GreenCOM has been asked for specific gender information related to their scope of work.

References

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BOX 4.4
What Happens if You Can't Involve Women as You'd Like?

One of USAID's goals in Morocco includes the development of partnerships between residents and local governments to solve urban problems. A parliamentarian from Fez proposed an exercise in partnership development around the problem of waste management in two peri-urban settlements near Fez: Zouagha Haut and Zouagha Bas. Having only recently been incorporated into the urban boundaries of the city, these neighborhoods received municipal waste-collection services that residents considered woefully inadequate. Neighborhood associations were trying to solve the waste-collection problem, but were hampered by a lack of coordination with others in the community.

GreenCOM convened a participatory workshop of local stakeholders, residents, association members, and municipal government officials, to discuss and agree upon a common problem-solving strategy. The workshop participants included a representative of the executive branch of government, the parliamentarian from Fez, elected municipal officials, technicians from the municipality and other government institutions in charge of urban problems, and representatives of the neighborhood associations.

Of the 30 participants, only two were women, an educator and a government employee. Neighborhood associations, whose membership is open only to men, objected to inviting women to the meeting at all. Therefore, female researchers were sent into the community to fill the information gaps identified in the discussions and to bring the women's point of view to the table. Male workshop participants interviewed other stakeholders not present at the workshop, such as local officials of Ministry of the Interior and waste collectors.

The research findings revealed the importance of obtaining women's perspectives on the problem. Women said that they were paying the waste collectors, though they are not association members. Women often do not know that waste collectors work for the neighborhood association. Women described how waste collectors are impolite and/or refuse to collect waste when there is a short delay in paying the waste-collection fee. Good records of who pays and who does not are not kept. Waste collectors may come more than once in the same month to collect the fee.

An action plan was developed, including a working committee composed of stakeholders. To incorporate gender concerns, a female social promoter and a local project advisor also became members of this committee, and the communication and education component included the development of social networks for women and training for women in development issues.