



Mother earth



Gender mainstreaming guidance series

Women & sustainable land management



Environment & Energy Practice
Gender Mainstreaming Guidance Series
Sustainable Land Management

Environment and Energy Group
Bureau for Development Policy
United Nations Development Programme
304 East 45th Street
New York, New York 10017
<http://www.undp.org/>



Acknowledgements :

Neeraja Hevaligi, Kamal Rijal, Elisabeth Clemens, Maryam Niamir-Fuller, Hannie Meesters, Mirey Atallah, Mauritius country office (Elena Gari).

Production coordination:

Mahenau Agha, Jay Dowle.

Cover photography:

Front cover: Asian farmer workers in plantation near Dalat, Vietnam.

Photo: Istockphoto.

Inside cover: Dinka women in southern Sudan.

Photo: Maryam Niamir-Fuller.

Design: Sandra Rojas.

© Copyright United Nations Development Programme, August 2007.
All rights reserved.

Foreword

At the United Nations Development Programme (UNDP), we are committed to supporting sustainable land management for the benefit of both people and the ecosystems they depend on. UNDP's portfolio of projects funded by the Global Environment Facility (GEF) spans 120 countries, of which some 75 have received GEF and UNDP support in developing their national action plans to combat desertification and identify priority areas of intervention. Guidelines to mainstream land management issues in national development planning were produced to ensure the full integration of desertification issues in the development agenda. UNDP has also affirmed its commitment to tackle the most controversial and crucial issues hampering development by hosting the High Level Commission for the Legal Empowerment of the Poor and gearing up to tackle the issues of tenure, property, and land rights around the world.

Across the developing world where charcoal and fuel wood are still the main sources of energy, UNDP's work on the conservation and sustainable management of forest resources and energy efficiency contributes to maintaining carbon stocks and providing more equitable levels of access to energy. By nurturing pro-poor economic growth, we endeavor to ensure that the market potential of dryland products and their economic returns are opened up, thus providing the poorest of the poor with financial resources, dignity and independence.

As we reach mid-point in the timetable for the achievement of the Millennium Development Goals, the importance of SLM cannot be overstated. UNDP's monitoring of SLM projects across the world show impacts way beyond the technicalities of SLM. In Africa, SLM has reduced children's workload in the fields, freeing their time to attend schools; it has also supported countries to shift from dependence on food aid to more sustained and predictable food supplies. In Asia, SLM has raised women's income and empowered them to take their destiny in their own hands. In Latin America, sustainably managed forests contribute to watershed management, carbon sequestration and the conservation of traditional knowledge. In the Arab States, UNDP supports SLM initiatives that further civil society engagement, public participation by both men and women, and good governance in decision-making.

Within the UN and development families, UNDP has been raising the profile of gender empowerment and mainstreaming gender considerations in development. Human development, as a process of widening people's choices, cannot occur when the choices of half of humanity are restricted. This is particularly true in SLM as gender disaggregated data are showing that although women are the main caretakers of the land and its resources they have less access to extension services, do not fully benefit from credit schemes and are often penalized by the accumulation of domestic and productive chores.

This publication is a joint initiative of UNDP's Environment and Energy Group and the Gender Unit through the Gender Thematic Trust Fund (GTF). The study was based on a review of the portfolio of UNDP-GEF projects. The GTF supports programme countries in their efforts to mainstream gender throughout all of their programme work. It works to enable institutional and cultural transformation processes, including: i) eliminating gender biases in development frameworks and paradigms; ii) incorporating gender awareness into policies, programmes and institutional reforms; iii) involving men in the movement to end gender inequality; and iv) developing gender-sensitive tools to monitor progress and ensure accountability.

We hope that this publication will provide practitioners and policy-makers with practical guidance on the mainstreaming of gender considerations in SLM. At UNDP we are confident that such approaches will not only provide women with a platform to fully engage in development, but will also enhance the delivery of impacts and effectiveness of our interventions.



Olav Kjørven
Assistant Administrator & Director
Bureau for Development Policy, UNDP

What is gender mainstreaming?

‘Gender mainstreaming’ has been defined by the United Nations Economic and Social Council as ‘a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of the policies and programmes in all political, economic, and societal spheres so that women and men benefit equally and inequality is not perpetuated.’ The relative status of men and women, the interaction between gender and race, class, and ethnicity, and questions of rights, control, ownership, power, and voice – all have a critical impact on the success and sustainability of every development intervention.

In practice, gender mainstreaming means identifying gaps in gender

equality through the use of sex-disaggregated data, developing strategies to close those gaps, putting resources and expertise into implementing strategies for gender equality, monitoring implementation, and holding individuals and institutions accountable for results. Gender mainstreaming is not an end in itself, but rather a process whose ultimate goal is to achieve gender equality.

Expanded freedoms for all – women and men, girls and boys – is UNDP’s goal, not only because it is necessary for development effectiveness, but also because equality is a core value of the UN Charter, which all UNDP staff have pledged to protect as representatives of the UN system.

MIGRATION FORMS PART OF THE AGRO-PASTORAL CULTURE OF THE DINKA TRIBES IN SOUTH SUDAN. IN THE DRY SEASON DINKA LIVE IN RIVERSIDE CAMPS AND HERD CATTLE, WHILE AROUND MAY-JUNE, AT THE ONSET OF THE RAINY SEASON, THEY RETURN TO THEIR FIXED SETTLEMENTS ABOVE FLOOD LEVEL, WHERE THEY CULTIVATE CROPS OF MILLET AND OTHER GRAIN PRODUCTS. LABOUR IS DIVIDED ALONG GENDER LINES, WITH YOUNG MEN ATTENDING TO CATTLE-HERDING WHILE WOMEN, WHO HAVE A MUCH SMALLER VOICE IN DINKA SOCIETY, ARE RESPONSIBLE FOR GROWING CROPS, ALTHOUGH MEN CLEAR NEW FIELDS FOR PLANTING. WOMEN ALSO COOK AND DRAW WATER.

DINKA WOMEN ON THE MOVE, SOUTHERN SUDAN.
PHOTO: M. NIAMIR-FULLER

‘Gender’ refers to the socially constructed rather than biologically determined roles of men and women as well as the relationships between them in a given society at a specific time and place. These roles and relationships are not fixed, but can and do change.



Why is gender relevant to policy-making & programming in Sustainable Land Management?

Land degradation, which affects more than 900 million people worldwide and as much as two-thirds of the world's agricultural land, has important gender dimensions.

In many developing countries, women – as farmers and pastoralists, with primary responsibility for household food production – are the principal users and managers of land. However, within productive landscapes, women are often allotted the most marginal lands with the least secure tenure rights.

When land becomes so degraded that it no longer supports crops or pasture, women are forced to find alternative areas for food production. This expansion not only exacerbates agricultural land conversion and degradation of land resources; it also adds to the pressure on women farmers, who may face higher risks to their health and physical safety as they are compelled to venture further and further away from their homes to find productive land to meet their families' needs.

Women also tend to be disproportionately burdened by the indirect effects of land degradation. For instance, when water resources are damaged by high levels of silt in river waters (a typical side-effect of increased soil erosion from degraded land), women and girls are often more severely affected, as they are usually responsible for fetching water to meet household needs.

Land degradation, gender, and development

The term 'land degradation' refers to natural and human-induced processes – including declining quality of soil, water, and/or vegetation – that negatively affect the capacity of land to function effectively within an ecosystem. Land degradation affects more than 110 countries, with the impacts felt most severely in the poorest rural communities (UNEP 1992). By 2025, an estimated 1.8 billion people – more than half of them women and children – will be adversely affected by land degradation and desertification. Agricultural expansion, unsustainable



IN UGANDA GIRLS STILL WALK LONG DISTANCES FETCHING AND CARRYING WATER. PHOTO: E. AUGÉ

cultivation methods, overgrazing, and deforestation are the primary causes of land degradation in rural areas. Land degradation leads to the loss of genetic and species diversity, including plants and animals that are important sources of medicinal, commercial, and industrial products.

As pastoralists and agriculturists, women are disproportionately affected by land degradation. Women farmers are responsible for 60–80 percent of the developing world's food production; in many countries they are the primary income producers, earning their livelihoods mainly from agriculture and other land-based activities (Howard 2003; Baumgartner and Högger 2004). Land degradation adds to the pressure on women to support their families under

increasingly difficult physical, social, and economic conditions. Physically women, as bearers of children, are more vulnerable to lack of food or water. In social, economic, and political contexts, women's relatively weak status and busy schedules with household and fieldwork often leads to marginalization of their concerns and realities.

Besides the direct impacts on agricultural livelihoods, land degradation also has indirect effects, which likewise tends to have a greater impact on women and girls. For instance, increased siltation of river waters due to land erosion and degradation often renders water unusable, forcing women and girls to spend more time and travel farther to fetch water. Increased deposition

of silt also negatively impacts on electricity generation. In the Sudan, siltation from the Blue Nile resulted in a 40 percent fall in power generation from the Roseires reservoir (Conway and Hulme 1996, Conway 2005) adding to women's workload as they search for alternatives to meet household energy needs.

Studies have shown that involving women in participatory land management promotes more sustainable land use, reversal of desertification, and improved socioeconomic conditions (Aswani

decision-makers who determine land management practices. Women are also most directly impacted by public decisions, laws, and planning related to land management.

When SLM projects enjoy only moderate success, it is often because they have failed to engage with women in their roles as the principal managers of land. Mainstreaming gender considerations into SLM is not only important for the success of the programme and/or project, it can also help pave the way for

It is important to determine the structural roles of women and men in a society in order to target the right stakeholders. For example, in parts of Micronesia, it would be wrong to address men over land-based issues, as they are responsible for marine issues while women are responsible for land-based activities.

and Weiant 2004; Nyssen et al. 2004), which in turn contributes to achievement of the Millennium Development Goals, UNDP's core mission. Involving women in the design and implementation of programmes and projects aimed at promoting sustainable land management (SLM) is crucially important, since in many cases women are the principal day-to-day

greater progress in achieving full gender equality. This is because empowering women in the context of SLM may be perceived as less 'threatening' than women's political empowerment, and hence can be a useful entry point for beginning to change social and cultural attitudes towards women and achieving full gender equality beyond SLM.

Constraints to engaging women in SLM

Women often face formidable barriers in their efforts to claim an equitable role in decision-making concerning land resources. Some key constraints to engaging women in SLM are:

- **Insecurity of tenure.** Despite women's role in household food production, in most developing countries they have limited ownership and control of land resources. For example in Southeast Asia, women provide up to 90 percent of labour for rice cultivation, but fewer than 10 percent of women farmers in India, Nepal, and Thailand own land¹. Secure tenurial rights enable landholders to make long-term decisions on the use of land resources and invest in management practices that promote sustained land productivity. Conversely, lack of secure tenure can lead to degradation of land resources by users who have no incentive or capacity to manage the land for long-term productivity. All too often, women's inequitable access to secure property rights forces them onto marginal, fragile, highly degradable lands. In order for women to use land sustainably, protect its ecological health, and thereby contribute to long-

term environmental and food security, they need equal access to land ownership and control over land-based resources.

- **Lack of 'value' assigned to labour and subsistence farming.** Given their central role in food production, women in developing countries often face enormous workloads to provide for their families. In addition to their responsibility for childcare and overall household management, women's work typically includes tending livestock, sowing, weeding, harvesting crops and post-harvest tasks. This work is continuous throughout the day and year, while men's work tends to be periodic and seasonal. In essence, although women's workload is higher than men, almost all of it is unpaid and excluded from economic and financial accounting frameworks (Howard 2003). Men not only receive higher economic returns for their work, but also retain the vast majority of land ownership rights and associated decision-making powers. Women's workload hinders their participation in community decision-making, including decisions related to natural resources management. Decreasing women's workload (for example, through childcare arrangements, provision for

¹ <http://www.fao.org/Gender/en/agrib4-e.htm>.

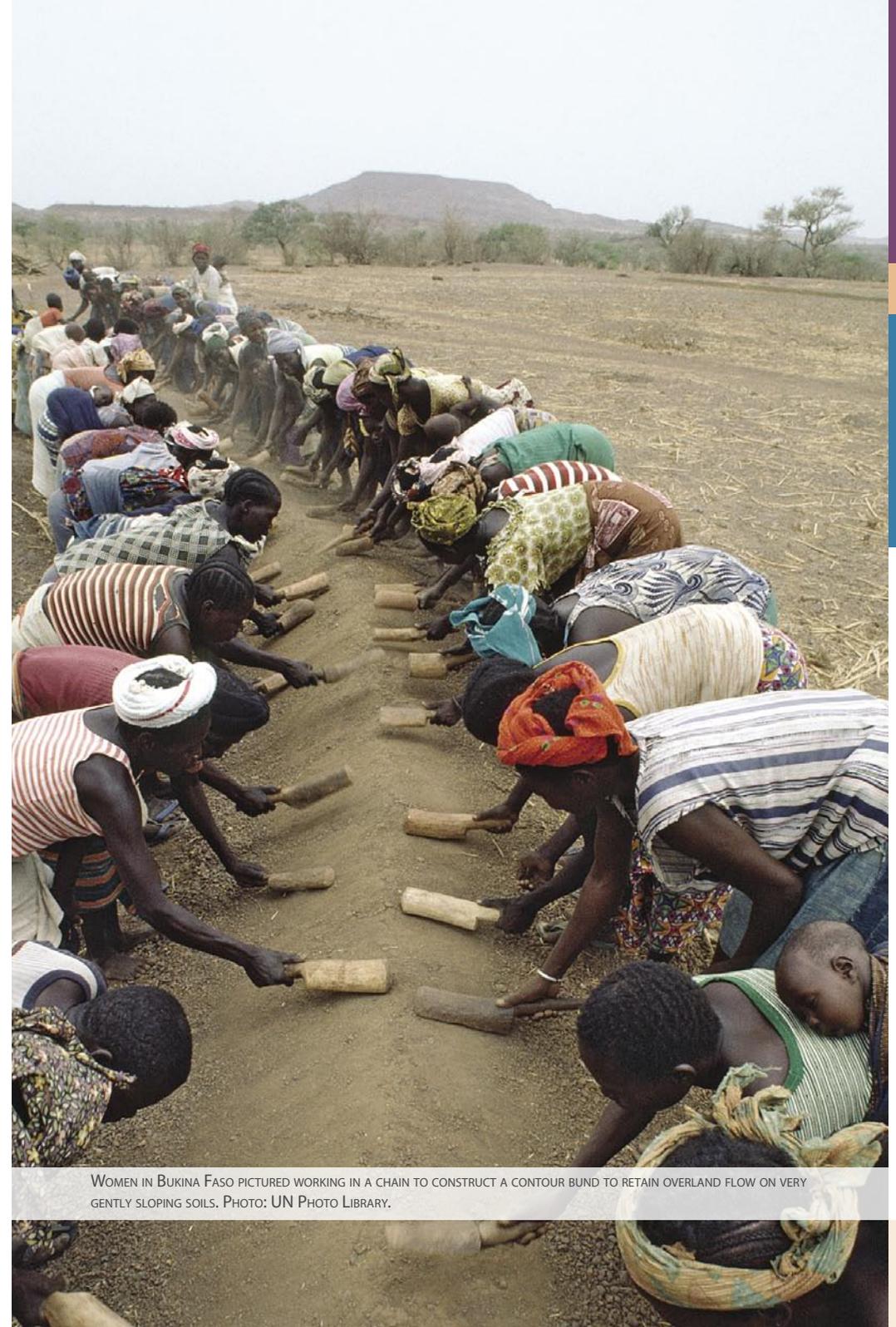
water and energy requirements, etc.) and increasing the visibility of women's contribution to household income are important steps in empowering women to participate in management and decision-making regarding land use and conservation.

- **Lack of credit.** An important consequence of women's lack of equitable access to land ownership and control is their lack of access to credit. Without secure property rights to the land they cultivate, women farmers lack collateral and so are often denied credit for which they might otherwise be eligible (Baumgartner and Högger 2004). An analysis of credit schemes in five African countries shows that women received less than 10 percent of the credit awarded to male smallholders.² Other factors limiting women's access to credit include lack of education, lack of recognition of women's economic contribution to households and the farming sector overall, and social restrictions.
- **Lack of opportunities to gain and share technical knowledge on SLM.** In some countries, societal norms restrict women from interacting with males other than family members. Since the vast majority of agricultural extension agents are male (only

² <http://www.fao.org/Gender/en/agrib4-e.htm>.

about 15 percent worldwide are women, according to FAO), women farmers in such cultures are effectively denied opportunities to participate in and gain from extension programmes and other means of transmitting technical knowledge about SLM options, such as soil management techniques, land restoration methods, mixed cropping systems, water recycling, and others. Women are likewise restricted in their ability to share their own knowledge of land management.

In Nepal there are marked gender disparities in literacy rates: 52 percent of males are literate as compared to 24 percent of females. Using printed manuals for extension and education would therefore exclude 75 percent of the target population, reducing the potential uptake of proposed SLM solutions.



WOMEN IN BUKINA FASO PICTURED WORKING IN A CHAIN TO CONSTRUCT A CONTOUR BUND TO RETAIN OVERLAND FLOW ON VERY GENTLY SLOPING SOILS. PHOTO: UN PHOTO LIBRARY.

How

can UNDP strengthen the gender dimension of its work in sustainable land management at the **policy level**?

UNDP has a key role to play in addressing the gender dimensions of managing land, natural resources, and the vital services provided by natural, healthy, intact ecosystems. The organization can fulfill this role by working with partners to empower women and increase their access to equitable property rights, enhance their opportunities to gain and share technical knowledge, and strengthen their ability to have an effective voice in decisions about land use and management. Of particular importance are efforts to support the formulation and implementation of gender-sensitive policies concerning SLM policies. Specifically, UNDP can engage with its partners to:

- **Raise awareness of, and advocate for, gender-sensitive policy-making processes.** Integrating gender-based perspectives at all levels of policies and projects – including input from stakeholders, project managers, national policymakers, and local and provincial decision-makers – provides a more complete

and accurate picture of local conditions, land use and management trends, and priorities and needs for more sustainable options. It is important to identify the most vulnerable sectors of local communities and the macro-level policies that influence the behaviour of communities concerning land management practices. These should be targeted in the design of project activities, since such policy reforms are critical for achieving equitable, as well as effective, development interventions. As experience with GEF-SGP India and elsewhere has shown, there is significant scope for greater sensitization of government and private-sector officials on the gender dimensions of land management and use, and how to translate these into action on the ground.

- **Collect and use sex-disaggregated data in making policy choices.** Sex-disaggregated data enables decision-makers, research institutes, and development



WOMEN PLANTING TULIP BULBS. PHOTO: GEF SMALL GRANTS PROGRAMME, TURKEY.

agencies to better understand who is using the land, in what ways, the results of their actions, and any differences in the roles of women and men. Such understanding is critical to assessing needs, examining policy alternatives, formulating effective policies and programmes, monitoring progress, and evaluating results. According to the Millennium Ecosystem Assessment, information on land degradation in drylands is extremely limited, and development of a consistent, scientifically credible baseline of information on the state of land degradation and desertification is a key priority (Millennium Ecosystem Assessment 2005). However, such a baseline will only reflect the actual status

on the ground if it incorporates information on land uses by the full variety of land managers and users, including women as well as men, from all communities and socioeconomic groups. Within this context, it is critical to collect and use data on women's access to secure land tenure, their access to credit, and their relationship to practices and activities that lead to land degradation. Such sex-disaggregated data can be collected qualitatively or quantitatively, by various techniques according to community and/or project requirements – for instance, through such qualitative instruments as participatory assessments, community forums, or stakeholder analysis, or through quantitative surveys

groups can help develop their capacity for marketing products and for retaining the income generated through such enterprises. Micro-credit schemes targeting poor women with little or no collateral are also critically important for empowering women to explore and capitalize on alternative livelihood options that promote SLM. Note that, to maximize their potential for financial success and long-term sustainability, alternative income-generating

needs of the family, and women are incapable of traveling long distances like men to meet the family needs) or income to meet the family's basic nutritional needs. In such cases, exploring alternative income-generating activities, such as owning cattle and selling products derived from them, could help enable women and men to pursue more SLM practices (see Box 1). Lack of tenure security will also encourage women farmers' reluctance to leave the land

In Africa, women account for more than 60 percent of the rural labour force and contribute up to 80 percent of food production, yet receive less than 10 percent of credit provided to farmers

activities should be based on local knowledge and experience. Some experts have observed that, in investing their energies in off-farm income generation, women may end up compromising their traditional knowledge as farmers and sustainers of the soil (Verma 2001).

fallow for long, for fears that it will be usurped. Secure tenure laws will build confidence in women farmers to rest their land before using it for cultivation again. Since many resource-poor rural women have traditionally engaged in subsistence farming, they may lack access to credit to finance development of alternative income-generating activities, as well as access to local markets for selling the goods they produce. Organizing women farmers into self-help

an understanding not only of the complex design and content of national budgets, but also of the different roles played by women and men in the various activities (such as agriculture, micro-enterprises, etc.) towards which public expenditures are directed.⁴

Successful initiatives on gender-sensitive budgeting share several characteristics (Balmori 2003). They ensure accountability, transparency, and sustainability as well as bringing women into budgetary debates by building alliances with a variety of civil society organizations. They are embedded in ongoing capacity-development efforts and capitalize on windows of opportunity opened by larger processes of political change. In 2004, UNDP supported gender-sensitive budget analysis in 35 countries.⁵

- **Promote novel approaches and innovative financing schemes.** Alternative livelihood options can play an important role in empowering women and men and channeling their activities in directions that support SLM. For instance, women farmers may be reluctant to fallow their land, based on concerns about the impacts on their families in terms of lack of food (especially if women's farming provides for the daily

of income and expenditures, use of time, attitudes and preferences, etc.³ These data can be combined with spatial data information on land uses, derived from remote sensing and other land-use planning tools, in order to provide a detailed picture of land degradation and options for better SLM practice.

- **Introduce gender-sensitive budgeting.** Identifying and addressing the ways in which apparently neutral policies can, in practice, entrench inequality is an important step toward better policy-making. This entails analyzing national budgets from the perspective of their impacts on different groups in society. For instance, most of the budgeted expenditures to support farmers may be directed towards conventional and/or large-scale agriculture, which tends to be undertaken by men, while little or none of the budget may be targeted to support small-scale, subsistence producers, who are more likely to be women. Achieving greater equity in public expenditures will require introducing gender-sensitive budgeting processes, based on gender-disaggregated accounting systems (Budlender et. al. 1998). Initiatives to promote gender-sensitive budgeting must be founded on

⁴ APEC Guide on the Collection and Use of Sex-Disaggregated Data', online at http://www.gender.go.jp/english/apec/frame_work/2.html, Gender stats in <http://devdata.worldbank.org/home.asp>.

⁴ Gender budgets, online at <http://www.idrc.ca/gender-budgets/>; 'Tools for a gender sensitive analysis of budgets', online at http://www.idrc.ca/uploads/user-S/11279431651Tools_for_Gender-Sensitive_Analysis_of_Budgets.pdf; Women-Economy List Archive: Gender Sensitive Budgeting, online at <http://www.sdn.org/ww/women-economy/msq02682.html>.

⁵ See example from Malaysia, online at http://www.undp.org.my/index.php?navi_id=191.

How

can UNDP Strengthen the Gender dimension of its programming in SLM

Below is a list of basic actions to consider at each stage of programming.

Project conceptualization

- Assess the situation using data disaggregated by sex, income, ethnic origin, and age.
- Involve community women and women's NGOs in strategy development and agenda setting.
- Perform gender-sensitive land management needs assessment (who is currently using land and for what purposes; how are rights and responsibilities distributed between the sexes, etc.?).

Problem identification

- Ensure that women from the community are able to take an active part in the stakeholder analysis, for example by dividing women and men into different groups based on the social norms, ensuring times and locations of meetings are convenient and culturally acceptable for women, etc. (UNCCD 2006).
- Collect historical and current information about livelihood strategies, and the role of land conditions and land-use practices in those strategies.
- Collect detailed household data (number of women-headed households in rural areas; decision-making by women and men concerning use of household income; number of working and earning members of household; number of dependents, etc.) and other socioeconomic information, disaggregated for women and men.
- Identify the priorities of women and men in terms of improving their livelihoods, enabling and constraining factors in families in terms of various livelihood opportunities, and determine how sustainable land management can address these.
- Identify factors – such as lack of employment, changes in



IN SURINAME WOMEN RECEIVE HANDS-ON TRAINING IN OPERATING SMALL MECHANICAL EQUIPMENT FOR SOIL TILLING. PHOTO: GEF-SGP.

land use, transformation in the political economy, and land scarcity – that affect the ability of women and men to meet the monetary and non-monetary requirements of their families.

- How do inadequate family earnings affect women's lives, their personal security, and their ability to sustain their soils and farms?

Project formulation

- Document the different roles and responsibilities of women and men, and how land resources are used in these different roles.
 - Capture and reflect women's specialized knowledge related to land use and management, water dynamics, biodiversity, and energy.
 - Ensure that factors (such as discriminatory attitudes and lack of time) that could limit women's participation and/or benefits are well understood and measures are in place to address them.
 - Assess whether the initiative will increase the workload of women and girls or men and boys.
 - Seek the views of both women and men on the value of proposed interventions.
- Identify gender differences in access to and control over resources related to land and SLM services.
 - Identify potential benefits and risks to women and men of proposed interventions; formulate strategies to mitigate risks.
 - Seek the views of women and men about proposed technology

and land management options so that gender-specific constraints, as well as benefits, can be anticipated.

- Determine for both women and men: who is likely to make decisions about the land use choices; who will be involved in field work and what training will be necessary; who controls relevant resources; who has the willingness and ability to contribute labour, material or money to the project?
- Consider how project design will address external constraints in policies, institutions and processes.
- Create a management structure that involves women and men on an equal footing.
 - Ensure implementing organizations have capacity for gender analysis and gender-sensitive programming.
 - Assess gender sensitivity of key project actors and where necessary, provide briefings and/or offer trainings on gender and SLM issues.
- Identify specific project objectives related to gender.
 - Set gender issues out clearly in the logical framework.
 - Identify activities required to ensure attention to gender issues.
 - Ensure development of a budget for gender-related analysis, expertise, training, and activities.
 - Ensure that responsibilities concerning gender aspects are clearly indicated in project documents, agreements, and contracts.
 - Develop gender-sensitive project indicators, disaggregated by sex, with the participation of men and women (see Box 1 for examples).

Project implementation

- Take all possible steps to ensure gender balance in project staff and training.⁶
- Include gender expertise in Terms of References (TORs) for project staff and/or ensure that staff undertake training on gender mainstreaming.
- Create mechanisms to promote gender balance among participants in all project meetings and gender equity in authority and decision-making.
- Explicitly require collection of sex-disaggregated data in TORs for the various studies to be commissioned (e.g., threat analysis, socioeconomic assessment).
- Do gender audits on budgets to ensure that inputs are used in ways that ensure equality of outcomes for women and men.

⁶For example, to encourage governments to nominate women participants for workshops, etc., invitations should specify that two participants, at least one of whom is a woman, are invited. If there are no qualified women participants, then only one male participant should be accepted.

Gender-Sensitive SLM Indicators

- Ownership and access to land (and/ or credit) by women.
- Number of poor households that are project beneficiaries; number headed by men/women.
- Income-producing opportunities associated with the SLM strategies introduced; used by men/women.
- Increase in non-agricultural employment and incomes of women.
- Actual income increases due to project, for men and women.
- Financing available to men and women for adopting SLM strategies.
- Effects of project on primary school enrolment, attendance, and performance, for boys/girls.
- Number of executed outputs in management proposed by women.
- Effect of project on time spent by women in household activities.
- Effect of project on total daily workload of women.
- Changes in decision-making power of women in household, community, government.
- Literacy and skills training for women/men.
- Use of biological methods to improve soil fertility and control pests; reduction in land degradation, better soil health.
- Reclamation of eroded agricultural land; forest land preserved.
- Increased access to clean water/pumped water.
- Conflicts minimized over competing land uses.
- Rate and degree of adoption of innovations by both genders.
- Revolving credit schemes managed by women (and by women and men together).
- Availability of extension services and marketing assistance; benefiting men/women.

BOX 1

Monitoring and evaluation

- Track progress on gender-related objectives; determine whether they have been met.
 - Pay attention to gender-related indicators, such as division of labour; women's time, workload, and responsibilities; access to and control of income and resources; and decision-making roles.
 - Consider project outcomes and results in light of differences in stated needs and priorities of women and men.
 - Track the type and characteristics of activities attracting more active participation by women, identify why and integrate in overall implementation approach.
- Ensure that reports reflect gender issues, use sex-disaggregated data, and identify gender gaps as well as gender-related successes.
 - Include gender expertise in TORs for evaluators.
 - Incorporate views of women and men as managers of land in all assessments.

Impact assessment

- Identify impacts of the project on women and men (such as level of economic and social benefits accrued, positive changes in national land-use policy development, progress in land adjudication and resolving land tenure issues and the effect on women and men, etc.).
- Identify lessons learned (socioeconomic, political, and technological) related to working with a gender perspective in SLM.

Capacity Building for Sustainable Land Management in Mauritius (including the island of Rodrigues) is a three-year US\$ 1.38 million project (GEF grant US\$ 600,000) being implemented by UNDP.

Testimonial

Over the past 30 years, the Mauritian economy has been substantially transformed from a mono-crop economy based on sugar production, to a much more diversified structure with rapidly growing sectors in export-oriented manufacturing agricultural products, tourism, financial services and most recently, Information and communication technology (ICT) services.

This transformation, which has been achieved with active participation from women, has at the same time, opened new wide-ranging opportunities to women and helped the country move slowly but surely towards greater equal opportunity.

In 2003, female participation in the workforce was estimated at 34 percent. This represented a 21 percent increase in female employment over the previous ten years, while male participation increased by just 8 percent.

Capacity Building for Sustainable Land Management in Mauritius (including the island of Rodrigues) is a three-year US\$ 1.38 million project (GEF grant US\$ 600,000) being implemented by UNDP. It is designed to build SLM capacities in appropriate government and civil society institutions and user groups and ensure that SLM is mainstreamed into planning and strategy development.

The project's long-term goal is to ensure that agricultural, pasture, forest and other terrestrial land management in Mauritius and Rodrigues consists of sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country.

Women participated actively in stakeholder consultations during project formulation, even though gender-specific indicators were not required in the project log-frame at that time. Women represented 31 percent of overall participation at the Inception Workshop, where they had a chance to voice their needs and contribute their perspectives.

Since then the project has ensured that there is a good balance regarding number of women and men participating in training courses and other activities, while the UNDP Mauritius country office has recruited a gender specialist whose work includes conducting capacity-building exercises to ensure that gender issues are taken into consideration in all UNDP supported projects in the country, including SLM.



Madame Olive Bon Coeur

Nouvelle Decouverte, Rodrigues

My name is Olive Bon Coeur and I'm 47 years old. I live on the island of Rodrigues, part of the Republic of Mauritius. Rodrigues has an area of just 10,000 ha and a population of about 35,000 who make their livelihoods mainly from agriculture, livestock, fishing and handicrafts.

Over the years, I've witnessed the gradual degradation of my island's limited land resources and I'm very worried for future generations, if we don't reverse this trend. More than half of our land resources are now severely degraded following deforestation and overgrazing and there is widespread erosion.

Rodrigues has an irregular annual rainfall of about 1200 mm and a shortage of water is the main factor that limits our agricultural and industrial development.

I was born into a family of farmers and herders, am married to a farmer and have been closely associated with agriculture since my childhood. During the past ten years I have had the privilege to attend several agricultural training courses in subjects such as agro-processing and hydroponics through various development projects. These training courses have helped me to gain a better understanding of the soil and good agricultural practices.

I have also benefited from a loan from the bank to buy a two-hectare plot on which I have built a greenhouse so that I can produce high-value crops using hydroponic techniques. Revenue from the farm has increased considerably and I'm now planning to invest in an agro-processing venture.

I'm also the President of the Nouvelle Decouverte Association of planters and herders, which is mostly comprised of women of my village. This year some of our members have attended training courses on topics such as Sustainable Agricultural Practices and Participatory Pasture Management, organized by the Capacity Building for Sustainable Land Management project.

I welcome such initiatives and am sure they will create greater awareness in the population on the importance of better agricultural practices and Sustainable Land Management. However, I also appeal to the authorities to increase these capacity-building initiatives, conduct pilot projects and launch an awareness campaign through television and radio programmes.

RESOURCES

Contribution to clarifying linkages between land degradation and the GEF focal areas. http://intra.undp.org/gef/knowledgemgmt/res_kit_english.htm (password protected)

Info-Repository: Multilateral Environmental Agreements. <http://www.gdrc.org/ngo/mea/mea.html/>

Data Snapshots on Microfinance – The Virtual Library on Microcredit - <http://www.gdrc.org/icm/>

United Nations Convention to Combat Desertification. <http://www.unccd.int/> Sections on Publications, Networks and Library are particularly informative.

Using gender-sensitive indicators: a reference manual for governments and other stakeholders 1999. by Tony Beck; Pub. Commonwealth Secretariat.

Note: All hyperlinks active as of August 10, 2007.

REFERENCES

Aswani, S. and P. Weiant. 2004. 'Scientific Evaluation in Women's Participatory Management: Monitoring Marine Invertebrate Refugia in the Solomon Islands'. *Human Organization* 63(3):301.

Balmori, H. H. 2003. 'Gender and Budgets Overview Report'. in *Gender & Budgets: Cutting Edge Pack*, produced by BRIDGE, the Government of Japan, and UNDP.

Budlender, D. and R. Sharp, with K. Allen. 1998. *How to Do a Gender-Sensitive Budget Analysis: Contemporary Research and Practice*. London: Commonwealth Secretariat.

Baumgartner, R. and R. Högger, eds. 2004. *In Search of Sustainable Livelihood Systems: Managing Resources and Change*. New Delhi: Sage Publications.

Conway, D. 2005. 'From Headwater Tributaries to International River: Observing and Adapting to Climate Variability and Change in the Nile Basin'. *Global Environmental Change* 15:99–114.

Conway, D. and Hulme, M. 1996. 'The Impacts of Climate Variability and Future Climate Change in the Nile Basin on Water Resources in Egypt'. *International Journal of Water Resources Development* 12(3):277–296.

Howard, P.L., ed. 2003. *Women and Plants: Gender Relations in Biodiversity Management and Conservation*. London: Zed Books/IDRC/GTZ.

Nyssen, J., J. Poesen, J. Moeyersons, J. Deckers, M. Haile, and A. Lang. 2004. 'Human Impact on the Environment in the Ethiopian and Eritrean Highlands: A State of the Art'. *Earth Science Reviews* 64(3-4):273–320.

Millennium Ecosystem Assessment. 2005. *Ecosystems and Human Well-being: Synthesis*. Washington, DC: Island Press.

[UNEP] United Nations Environment Programme. 1992. *World Atlas of Desertification*. London: Edward Arnold.

[UNCCD] United Nations Convention to Combat Desertification. 2006. *Women of the Earth: Nurturing the Future*. Online at: <http://www.unccd.int/ngo/docs/women-booklet-eng.pdf>

Verma, R. 2001. *From Gender Land and Livelihoods in East Africa: Through Farmers' Eyes*. Pub. IDRC. http://www.idrc.ca/en/ev-41562-201-1-DO_TOPIC.html