



Gender Mainstreaming

A Key Driver OF Development IN Environment & Energy

TRAINING MANUAL

UNITED NATIONS DEVELOPMENT PROGRAMME

© Copyright UNDP 2007

All rights reserved.

United Nations Development Programme
Environment and Energy Group
Bureau for Development Policy
304 East 45th Street, New York, NY 10017, USA
Website: www.undp.org/energyandenvironment

UNDP is the UN's global development network, an organisation advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP is on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As countries develop local capacity, they draw on the people of UNDP and its wide range of partners.

The views expressed in this publication do not necessarily represent those of the member countries of the UNDP Executive Board or of those institutions of the United Nations system that are mentioned herein. The designations and terminology employed and the presentation of material do not imply any expression or opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or of its frontiers or boundaries.

Design and layout: Green Communication Design inc. (Canada)

Editing and production coordination: Gail Karlsson

Copy editing: Tracy Sutton



Gender Mainstreaming

A Key Driver OF Development IN Environment & Energy

TRAINING MANUAL

Editors Ines Havet, Franka Braun and Birgit Gocht

Advisors Kamal Rijal and Elisabeth Clemens

November 2007

Contents

Foreword	iv
Acknowledgements	v
Introduction	1
Purpose of the manual	1
How to use this manual	2
Module 1: Gender and gender mainstreaming	3
Section 1.1: What do we mean by 'gender' and 'gender roles'?	3
Section 1.2: What are 'gender gaps'?	3
Section 1.3: What is 'gender mainstreaming'?	5
Module 2: Overview of gender issues affecting environment and energy	11
Section 2.1: What is the role of gender in the environment and energy practice areas?	11
Section 2.2: How can gender mainstreaming improve environmental and energy initiatives?	13
Module 3: Gender mainstreaming in environment and energy organisations	19
Section 3.1: Gender roles within organisations affect staff, programmes and activities	19
Section 3.2: Promoting gender sensitivity in environment and energy organisations	20
Module 4: Gender-sensitive strategies for environment and energy projects	27
Section 4.1: Integrated development strategies	27
Section 4.2: Participatory approaches	28
Section 4.3: Use of gender-specific data and analysis	30
Section 4.4: Attention to gender disparities in access to training and financing	31
Module 5: Mainstreaming gender into environment and energy project cycles	35
Section 5.1: Project identification, formulation and appraisal	36
Section 5.2: Implementation	37
Section 5.3: Monitoring and evaluation	38
Module 6: Gender mainstreaming in environment and energy public policy	45
Section 6.1: What are gender-sensitive policies?	45
Section 6.2: Why are gender-sensitive policies important?	47
Section 6.3: Developing gender-sensitive environment and energy policies	48
Section 6.4: Gender budgeting and the results-based framework	49
Appendices	55
Appendix 1: Gender-related concepts and definitions	55
Appendix 2: Organisational assessment tool	56
Appendix 3: Mali Multifunctional Platform and National Poverty Reduction Strategy	58
References	60

Foreword

Achievement of the Millennium Development Goals requires urgent action to address land and forest degradation, chemical pollution, water scarcity and contamination, loss of biodiversity and lack of access to sustainable energy resources. These critical environment and energy concerns are clearly linked to widespread poverty and threats to global security.

What is not always so clear is the interplay between environmental, energy and sustainable development issues and pervasive inequalities between men and women in terms of rights, responsibilities and opportunities. But in fact gender inequalities help to perpetuate poverty and hunger, as well as injustice in the world, and failure to recognise and address that fact undermines efforts to promote sustainable livelihoods and healthy ecosystems.

This training manual is intended to help build greater understanding among UNDP staff and UNDP partners concerning the essential gender dimensions involved in ensuring environmental and energy sustainability. Although much of the emphasis is on why and how including a gender perspective can make UNDP environment and energy programmes more effective, it is important to remember that gender equality is itself a core value of the United Nations Charter and one of the internationally agreed-upon Millennium Development Goals.

For over a decade, gender mainstreaming has been part of UNDP's official corporate policy, and the Environment and Energy Group is committed to strengthening gender mainstreaming in all of its programmes. Gender mainstreaming is a strategy that requires assessment of any planned action to identify the differing implications for men and women, so that both will be able to benefit and existing gender inequalities will not be perpetuated or exacerbated. Looking at relationships between men and women in this way may at first glance seem to be outside the scope of expertise of UNDP experts in the environment and energy practice areas. However, it is well within the capability of all development practitioners to design and support gender-sensitive programming both within their respective thematic areas and broader cross-sectoral activities.

Preparation of this training manual was supported by the Gender Thematic Trust Fund, and presented a valuable opportunity for collaboration among the staff from different segments of the Environment and Energy Group. UNDP hopes that it will prove to be a useful resource for all staff members, and that it will be supplemented by additional insights and case studies as more and more examples of successful, gender-sensitive programmes and initiatives are documented and shared.



Olav Kjørven

Assistant Administrator and Director
Bureau for Development Policy
United Nations Development Programme

Acknowledgements

The information and materials contained in this training manual are based on the expertise and valuable contributions of UNDP Environment and Energy practitioners in many countries, as well as staff within the Bureau for Development Policy at UNDP Headquarters. Their collective experiences and insights have provided both practical and inspirational guidance on how to mainstream gender considerations into environment and energy practice areas.

This work was initiated under the direction of the former Environment and Energy Director, Olav Kjørven, and UNDP Gender Team Director Winnie Byanyima, with support from the Gender Thematic Trust Fund established by the Netherlands. It owes much to the vision and dedication of Susan McDade, Aster Zauode and the Gender Team in the Bureau for Development Policy.

UNDP is grateful to Kamal Rijal, Elisabeth Clemens and Hannie Meesters for their diligent and skilful efforts in guiding, coordinating and managing the compilation and preparation of the manual. Critical inputs and comments were also provided by Suely Carvalho, Yannick Glemarec, John Hough, Maryam Niamir-Fuller, Charles McNeill, and Minoru Takada.

UNDP would also like to acknowledge the contributions of the consultants who worked with UNDP staff to compile and consolidate the many components of the manual, including Ines Havet, Franka Braun and Birgit Gocht. The final revisions and editing by Gail Karlsson and the work of Green Communication Design inc. in creating a distinctive look for the manual are also much appreciated.

Finally, the training manual was subjected to a rigorous peer review process. Grateful thanks are extended to the following individuals for their thoughtful and valuable comments: Sergio Feld and Roohi Metcalfe (UNDP Regional Centre in Bangkok), Katie Halm (UNDP, Nicaragua), John Hough (UNDP GEF, New York), Leida Mercado (UNDP, Panama), Anvar Nasritdinov (UNDP, Uzbekistan), and Thinguri Thomas (UNDP, Timor-Leste). Their comments greatly enhanced this publication.

Special thanks to all those who have supported and encouraged UNDP's efforts to integrate gender sensitivity into all aspects of its development work. We hope that this training manual will encourage greater understanding and commitments with regard to gender mainstreaming in the environment and energy practice areas, and ultimately contribute to new programmes and policies that integrate gender equality, energy access and environmentally sustainable development.



Introduction

UNDP hopes that this manual will 'demystify' gender mainstreaming for environment and energy practitioners and their colleagues, and make a case for the relevance of gender considerations to UNDP staff directly or indirectly involved in work related to environment and energy.

The general challenges involved in mainstreaming gender in development are in some ways magnified for UNDP staff working in the fields of environment and energy. Since actions to address environment and energy issues are not always strongly reflected in national development plans and poverty reduction programmes, environment and energy practitioners have the task of mainstreaming these issues into the development agenda. When these practitioners are then called upon to also mainstream gender, it creates a 'double-mainstreaming' challenge.

In addition, many environment and energy experts come from technical or scientific backgrounds, and therefore may have little exposure to gender issues, which are more commonly raised in political and social contexts. They may not think that the concept of gender mainstreaming is particularly relevant to their work, and may find the inherently political and personal nature of 'gender training' unfamiliar and unsettling.

In response to these challenges, the 'Strengthening Gender Mainstreaming in Environment and Energy' project aims to guide UNDP staff, and build UNDP's and its partners' capacity for gender-sensitive programming. It is hoped that this project will help experts realise the added value of incorporating gender into their work and view gender mainstreaming as a way to strengthen the replication and sustainability of environment and energy initiatives. The manual does not specifically address gender issues related to climate change mitigation and adaptation – which is a broader topic and would warrant a separate training course – but there are clearly areas of overlap between climate activities and the environment and energy practice areas.

Purpose of the manual

This manual examines environment and energy development projects, policies and decision-making processes from a gender perspective. It was written for UNDP staff working with national counterparts in governments and non-government organisations, but it can also be used by other development practitioners working in the field of environment and energy. This training manual aims to:

- Improve awareness of: gender-specific roles and responsibilities in different societies; gender-related differences in access to and usage of natural resources and energy services; and the different levels of impact that environmental degradation and conservation efforts may have on men and women.
- Identify gender-specific measures that will: increase the effectiveness and impact of UNDP's environment and energy projects; benefit both men and women by increasing gender balance through environment and energy projects; and leverage the results of environment and energy projects to serve other development objectives, such as economic development and poverty reduction.
- Highlight target entry points for mainstreaming gender in UNDP environment and energy activities through advocacy, project and policy development, implementation, and monitoring and evaluation.

The training manual does not intend to provide an exhaustive discussion of gender, environment, energy and development. It should be viewed as a tool to promote discussion, insight and critical thinking.



How to use this manual

The manual is divided into two parts.

Part 1 is available as a hard-copy publication, whereas Part 2 will only be available on the companion CD and online at www.undp.org/energyandenvironment/gender/htm.

Part 1 provides the basic text for participants in training sessions. It presents a brief overview of the issues, explaining why they are important and how to address them in practice. At the end of each Module there are discussion topics, case studies, and resources for further reading, as well as a list of the assignments that are set out in detail in Part 2.

Part 2 provides additional materials for use in conducting training courses, including instructions and guidance for training facilitators, detailed descriptions of assignments, and handouts.

Each part is divided into six topics or modules:

1. Module 1 introduces gender-related concepts and gender mainstreaming.
2. Module 2 introduces gender issues affecting the environment and energy practice areas.
3. Module 3 focuses on gender mainstreaming in organisations.
4. Module 4 introduces gender-sensitive approaches to environment and energy projects.
5. Module 5 presents guidance on mainstreaming gender at different stages in the project cycle.
6. Module 6 introduces some approaches for mainstreaming gender in policy development frameworks.

The assignments in Part 2 are intended to take the trainer and participants through a guided learning process by:

- Reflecting on existing personal insights and experiences regarding gender, as well as environment and energy practice areas;
- Exchanging ideas and views, incorporating new information and experiences of others;
- Engaging in group analysis, role-playing exercises, and presentations of ideas; and
- Applying ideas and insights to participants' own work situations and activities.

The trainer's role is that of a facilitator rather than a teacher imparting specific knowledge to trainees about technical issues. Teaching gender sensitivity, in particular, is not suited to that approach. Gender, environment and energy concerns are complex, multifaceted, and interpersonal, requiring participants to reflect upon what the issues mean and relate them to their own work contexts.

Additional information for participants is available in the **'Gender Mainstreaming – A Key Driver of Development in Environment & Energy'** series posted on the UNDP website, which includes the following papers:

- Conceptual Overview
- The why and how of mainstreaming gender in Biodiversity
- The why and how of mainstreaming gender in Chemicals Management
- The why and how of mainstreaming gender in Sustainable Energy Services
- The why and how of mainstreaming gender in Sustainable Land Management
- The why and how of mainstreaming gender in Sustainable Water Governance
- UNDP Portfolio: Review and Assessment

It is recommended that users of this manual read these documents prior to taking the course.

■ ■ **MODULE 1:**

GENDER AND GENDER MAINSTREAMING



■ ■ Module 1: Gender and gender mainstreaming

Gender inequality is pervasive throughout the world, although the nature and extent of gender differences varies considerably across countries and regions. In most countries, men and women experience substantial disparities in their legal rights, access to and control over resources, economic opportunities, power, and political voice. Women and girls bear the greatest and most direct costs of gender inequalities, but there are adverse impacts that affect all of society, ultimately harming everyone. 'Gender mainstreaming' is a strategy for redressing these inequalities.



Section 1.1: What do we mean by 'gender' and 'gender roles'?

The term 'gender' is often confused with 'sex'. However, 'sex' generally refers to male and female biology and anatomy, whereas 'gender' refers to a set of qualities and behaviours expected from men and women by society (Groverman and Gurung, 2001). 'Gender roles' are therefore socially determined and can change over time, since social values and norms are not static.

Gender roles are learned, and they vary widely within and among cultures depending on socio-economic factors, age, education, ethnicity and religion. Yet, throughout the world, boys are expected to behave and act according to norms expected of men, while girls are expected to act in ways considered appropriate for women. The ways parents

educate their children depend to a large extent on what the family and the wider society consider proper roles, responsibilities and activities for men and women (Groverman, 2005).

Women everywhere are generally expected to fulfil gender roles related to raising children, caring for other family members, and managing the household. When food is prepared and served in the home it is often done by women, and in many developing countries women are expected to grow the food as well. While women are generally associated with reproductive roles, men are more likely to be linked to productive roles, especially paid work and market production. Women's overall participation rate in the formal labour market is increasing, but they tend to be confined to a relatively narrow range of occupations or are concentrated in lower grades than men (Reeves and Baden, 2000). Women tend to work in the support sector, while men have technical jobs, and men are more often elevated to decision-making positions in organisations, community groups and/or political parties than women.

Section 1.2: What are 'gender gaps'?

In every society there are differences between men and women that can be identified as 'gender gaps'. These gender gaps are manifested in many different ways (see Box 1.1, p. 4). For example, there are some situations in which men are socially subordinated to women, such as young men in some parts of Africa who must pay respect to older women (Kanji, 2003). Generally, however, women and girls have fewer opportunities, lower status and less power and influence than men and boys (DFID et al., 2002).

Box 1.1: Examples of gender gaps

While there are many gender gaps, some key measures are that:

- Women earn only ten percent of the world's income, but are responsible for 66 percent of overall working hours.
- Two-thirds of children who are denied primary education are girls, and 75 percent of the world's 876 million illiterate adults are women.
- Worldwide, women hold only fourteen percent of parliamentary seats, and only eight percent of the world's cabinet ministers are women. Only 11 countries have met the UN target of thirty percent female decision-makers.

Source: Oxfam (2007)

Gender discrimination and the denial of women's basic human rights are important factors in women's poverty. Millions of women around the world have to work harder than men to secure their livelihoods, and women's productive roles have been historically ignored or under-valued. In addition, women have less control than men over their income and assets, have a smaller share of opportunities for human development, have subordinate social positions, and are poorly represented in policy and decision-making processes (DFID, 2002). Men tend to represent the family in decision-making bodies within communities and are more likely to benefit from available resources. For example, this occurs when the services of extension workers and agricultural inputs are targeted at men, even when women work longer hours in the fields.

The fact that relations of power between women and men tend to disadvantage women is often accepted as 'natural'. But power relations are primarily determined by society, not nature, and are subject to change over time.



Gender inequality represents a huge loss of human potential, with costs for men as well as for women. However, since women generally are more subject to gender discrimination, efforts to reduce gender discrimination have tended to focus on women. As a result, initiatives have often targeted women only, without addressing the underlying social relations between men and women. It is important, though, to recognise that 'gender issues' are not synonymous with 'women's issues'. Furthermore, women do not comprise a single interest group in all contexts.

Existing power relations determine to a large extent how resources are distributed, or who obtains access to and control over resources (Reeves and Baden, 2000). Access represents the right to use a resource or benefit, while control represents the right to make decisions about the use of a resource or benefit. For example, a woman may have the right to use family labour to assist with growing a vegetable garden, but her husband decides who will help her and when the labour is available. See Box 1.2.

Box 1.2: Women's limited control over agricultural resources in Syria

In Syria, farming is usually a household activity, except among wealthier farm households. Information on labour in agriculture shows that women are usually responsible for caring for livestock and poultry. Grazing is the exception, with men doing an estimated 37 percent of the work. Women's farm work usually includes planting, seeding, weeding, harvesting, fruit collection, crop residue collection and pruning, animal feeding, milking, and egg collection. However, Syrian women have little role in marketing and sale of the products – in 91 percent of households this is a male task. Rural women in Syria also tend to have little decision-making power within the household regarding the disposal of family income. Limited control over agricultural resources is a barrier to access to credit, equipment and other resources. Male control of marketing further reinforces women's lack of control over income.

Source: Food and Agriculture Organisation (2004)

Gender-based differences in access to and control over resources are based on prevailing societal norms, values and rights, and exist at all levels of society. However, it is possible for changes in gender relations to alleviate existing social inequalities, depending on the context.

At the international level, the importance of equal rights for women has been highlighted by agreements such as the 1976 Convention for the Elimination of Discrimination Against Women (CEDAW) and the Beijing Platform of Action, which was approved at the Fourth World Conference on Women in 1995. See Box 1.3.

Closing the gender gap is essential to development efforts. For example, a study using data from 99 countries for the years 1960 and 1990 found that gender inequalities had a significant negative effect on economic growth. This was particularly true for South Asia and sub-Saharan Africa, the two poorest regions (Kabeer, 2003). The Millennium Development Goals adopted by the UN General Assembly

in 2000 specifically called for promoting gender equality and women's empowerment (MDG 3). Other goals include targets to ensure that all boys and girls complete primary education (MDG 2), and to improve maternal health (MDG 5), and all of the goals require concerted efforts to close existing gender gaps if they are to be achieved.

Section 1.3: What is 'gender mainstreaming'?

'Gender mainstreaming' was a key element of the 1995 Beijing Platform for Action adopted at the Fourth World Conference on Women. It was defined by the UN 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."

Box 1.3: Beijing Platform of Action: Some strategic objectives

Women and poverty

- Revise laws and administrative practices to ensure women's equal rights and access to economic resources.
- Provide women with access to savings and credit mechanisms and institutions.

Women and the economy

- Promote women's economic rights and independence, including access to employment and appropriate working conditions and control over economic resources.
- Facilitate women's equal access to resources, employment, markets and trade.
- Provide business services, training and access to markets, information and technology, particularly to low-income women.
- Strengthen women's economic capacity and commercial networks, and eliminate all forms of employment discrimination.
- Promote harmonisation of work and family responsibilities for women and men.

Women in power and decision-making

- Take measures to ensure women's equal access to and full participation in power structures and decision-making.
- Increase women's capacity to participate in decision-making and leadership.

Institutional mechanisms for the advancement of women

- Create or strengthen national machineries and other government bodies.
- Integrate gender perspectives in legislation, public policies, programmes and projects.
- Generate and disseminate gender-disaggregated data and information for planning and evaluation.



Gender mainstreaming is meant to be a strategy for promoting empowerment of women by enabling women to critically assess their own situations, gain skills, build confidence, move into decision-making roles and organise with others to effect change. It requires the transformation of gender power relations by the women who are affected by inequalities and discrimination. The goal is for women themselves to become active agents of change in transforming gender relations (Reeves and Baden, 2000).

Empowerment cannot be 'done to' women, but appropriate external support can be offered, such as by funding women's organisations that work locally to address the causes of gender subordination, and promoting dialogue between such organisations and those in positions of power (DFID, 2002). As a result of increased awareness, women, individually or collectively, can themselves assess, develop and voice their needs and interests, then build their capacity to challenge the current situation (Kanji, 2003).

The concept of gender mainstreaming grew out of frustration with strategies for integrating women into development devised in the 1970s, which included the establishment of separate women's units or programmes within state and development institutions. By the 1980s, these strategies had resulted in little progress towards improving gender equity (DFID, 2002).

With a mainstreaming strategy, gender concerns are seen as important to all aspects of development, for all sectors and areas of activity, and are a fundamental part of the planning process. Responsibility for the implementation of gender policy is spread across organisational structures, rather than concentrated in small central units.

Development programmes generally follow one of two approaches for mainstreaming gender:

- The **Women-in-Development (WID)** approach aims to integrate women into existing development processes in order to counteract the exclusion of women. It often involves special women's projects, or women's components in integrated projects, designed to increase women's productivity or income, or to help ease their household tasks roles and responsibilities.
- The **Gender-and-Development (GAD)** approach focuses more on the relations between men and women, with the goal of redressing the unequal relations of power that prevent women's full participation. It aims to achieve equitable and sustainable development in which both women and men are decision-makers.

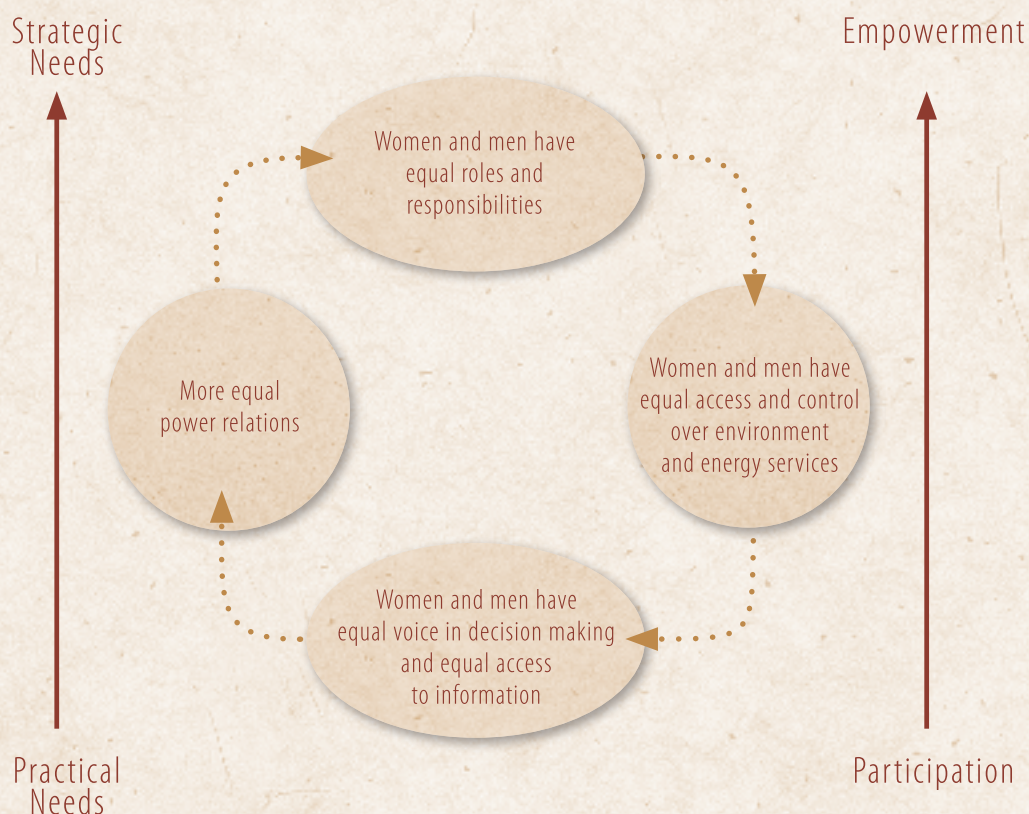
In general, the Women-in-Development approach addresses women's 'practical needs', while the Gender-in-Development approach addresses gender-related 'strategic needs'.

- **Practical needs** relate to people's basic, material needs for day-to-day survival. Projects working towards meeting these needs are often concerned with improving the conditions of women and men through more efficient resource use, and are not designed to challenge existing gender roles and divisions of labour.
- **Strategic needs** are addressed through initiatives designed to challenge existing gender roles and relationships between women and men. In meeting strategic gender needs, a programme sets out to change the relative positions of women and men in order to promote empowerment and gender equity.

The distinction between practical and strategic needs is not clear-cut, however, and projects or programmes may address either or both, depending on the context.

Box 1.4: Environment and Energy Services seen through the “Gender Lens”

The diagram depicts the desirable outcome of gender mainstreaming, that is, gender equality.



Gender norms and practices lead to a **gender division of labour**, that is, **socially constructed roles and responsibilities**. These gender roles and responsibilities give rise to different levels of **access and control**, that is, women and men's opportunities to obtain or use resources (food, credit, water, energy, technology, etc.) or services (education, health, etc.) The ability and opportunity to acquire resources do not necessarily imply that people will have the power to control the benefits that derive from these activities. Therefore, we need to distinguish between “use of” and “control over” a resource. Women may have access to land, seeds, water, and/or credit, etc., but do not necessarily have control over that resource. The person that has control over a resource also tends to be the decision-maker. The person that has the **decision-making power** reinforces the existing unequal **power relation**, which then further underlines the socially constructed roles and responsibilities, leading to a vicious cycle of reinforcing gender inequality. Interventions are necessary to break the cycle and the existing stereotyped division of labour. It is important to identify entry-points that depend on prevailing gender norms and practices in a given society or context. This requires meeting practical needs (immediate needs that can be met in the short term) as well as strategic needs (beyond practical needs, for example, common laws may need to be reviewed before gender equality can be achieved) for both men and women, and moving away from simple participation towards meaningful participation and empowerment.

Assignments in Part 2 of the Manual

Available on the companion CD, and online at www.undp.org/energyandenvironment/gender.htm.

Assignment 1.1: Introducing gender terms and concepts

Aim: To ensure that participants are familiar with basic gender concepts (30 minutes)

Assignment 1.2: More on key gender concepts

Aim: To review the concept of gender, drawing on personal experiences (30 minutes)

Assignment 1.3: Demystifying gender-related concepts

Aim: To understand the reasons for gender gaps (60 minutes)

Assignment 1.4: Access to and power over resources

Aim: To introduce relevant gender differences (30 minutes)

Assignment 1.5: The challenge of gender empowerment

Aim: To understand the practical and strategic needs of men and women, and the role of gender relations (60 minutes)

Discussion topics

1. Existing gender gaps in labour force participation in many countries should be reduced as quickly as possible, and consistent actions at all levels should be made to allow women to undertake paid labour.
2. In decision-making bodies, from the community to the national level, a fixed quota for women's representation should be set to ensure that women's issues are brought forward.
3. Empowerment of women requires men to give up some of their decision-making authority.



CASE STUDY 1.1: Changing gender roles and empowerment through a project intervention in the Nile (general)

In two small towns on the eastern banks of the Nile, an NGO implemented a project aimed at improving the living conditions of the population and helping farmers develop solutions to daily problems.

The project began with a needs assessment in which both men and women actively participated. The most important problem women faced was the disposal of household waste and garbage, while men farmers gave priority to reducing the cost of chemical fertiliser. In these towns, cattle were kept inside the home and there was little or no organised collection or disposal of manure, or stable and household wastes. Each day women brought soil from the fields to dry the stable. The soil and manure mixture was taken to the fields by the men, and used as low-quality fertiliser. Women dumped their household wastes beside the river or along the irrigation and drainage canals.

Men's groups and women's groups were set up to discuss how to address the problems and how to take action. The women's groups decided to collect manure, straw and urine from the stable and to combine it with organic waste and kitchen ash in a pit prepared in the stable itself. For the women, this saved a lot of time previously spent in going to the fields, getting soil to mix with the manure, and disposing of the household wastes outside. They were also relieved of their daily task of cleaning the animals in the river because the stables were cleaner. Additionally, cleaner stables and animals made it possible to collect much cleaner milk, which benefited both animal and human health. Men benefited because they did not have to carry manure to their fields every day. Less weeding work was also required. The richer manure increased the yields only slightly, but the costs of chemical fertilizer were reduced. The streets, canals and other waterways are now also less polluted.

These changes in the age-old system of handling cattle manure had important gender implications. The existing division of labour in the household did not change. However, women engaged in a new activity: the building of the improved stable with a pit to collect garbage and manure, with the help of their husbands. Women also started to play an important role in discussions and decision-making. Many women developed skills in dialogue, analysis and problem solving, while a number of them developed leadership and management skills. Not only did women's self-esteem increase, but the women's groups were also recognised in the community as key players in other developmental activities.

Over time, more and more women joined the groups. In some groups discussions started about issues and roles of the women in the community, the sharing of decision-making at home and in the communities. Women were more empowered, but the men farmers too felt they had acquired new skills and abilities to act for themselves and cooperate in well-functioning groups.

Source: Groverman (2005)



CASE STUDY 1.2: Self-Employed Women's Association (SEWA) of India: Paving the way for women's economic progress (general)

SEWA was founded in 1971 in Gujarat, India as a trade union movement for women in the informal sector. A few thousand women subsequently established the SEWA bank as a cooperative to empower poor self-employed women by providing them with access to credit and financial services and reduce their dependence on exploitative moneylenders. The goal of SEWA, to allow women to reach their fullest potential by using resources effectively, has made it grow rapidly.

Sub-sectors of the economy that SEWA's members have identified and developed are dairy farming, gum-collection, embroidery, salt farming and plant nurseries. Since Gujarat is a dairy-farming state and one where non-unionised work and smaller cooperatives have little chance of survival, one of SEWA's biggest successes has been in the dairy cooperative sector. Women's groups that received loans also received training in financial management, legal rights and business management, as well as other support services. The benefits in these sectors have been both economic and social. Activities like embroidery, normally considered women's work and non-wage earning, have been successfully converted into wage labour. Due to resulting increased income and greater status in their communities, these women have a much stronger voice in village-level decisions normally made by male leaders. SEWA has also succeeded in minimising seasonal migration due to lack of employment by encouraging women to form self-employed producer groups and then finding new markets for their products.

SEWA has also concentrated on empowering women to use their resources more effectively. Principles of collective organisation have made women able to meet their needs for income (or higher income), better health services, childcare, and common forms of insurance to protect their lives and livelihoods. Many SEWA groups have begun health cooperatives and child-care facilities. In the villages of Gujarat and in the city markets of Ahmedabad, women are speaking out more, taking leadership roles, and realizing how far they can go when they have collective bargaining power for wages, better working conditions, combating domestic violence, or improving education and family health.

SEWA also began its own bank to give women access to micro-loans. SEWA has been successfully giving small loans to resource-poor women. Women are encouraged to hold accounts in their own names, which is revolutionary for traditional Indian society, where financial accounts are almost always managed by or passed down along patriarchal lines. Bank clients are largely hawkers, vendors and those working in the tobacco and dairy producing areas of Gujarat state in Northwest India. Since many women clients are very poor, illiterate, and cannot sign their names, photo IDs are provided and transactions made using this means instead. The women are shareholders in the SEWA Bank.

Source: Adapted from the Self Employed Women's Association
<http://www.gdrc.org/icm/sewa.html>.

Further resources

Department for International Development (DFID), 2002. *Gender Manual: A Practical Guide for Development Policy-Makers and Practitioners*.

Groverman, Verona et al., 2005. *Gender Equality and Good Governance: A Training Manual*, Coptic Evangelical Organization for Social Services (CEOSS).
<http://www.groverman.nl/newsitem2.php>

ENERGIA, 2005. *The Gender Face of Energy: Training Modules*.
<http://energia-africa.org///TrainingModules>

Kabeer, Naila, 2003. *Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: A Handbook for Policymakers and Other Stakeholders*. Commonwealth Secretariat.

Kanji, Nazneen, 2003. *Mind the Gap: Mainstreaming Gender and Participation in Development*. IIED and IDS Institutionalising Participation Series.

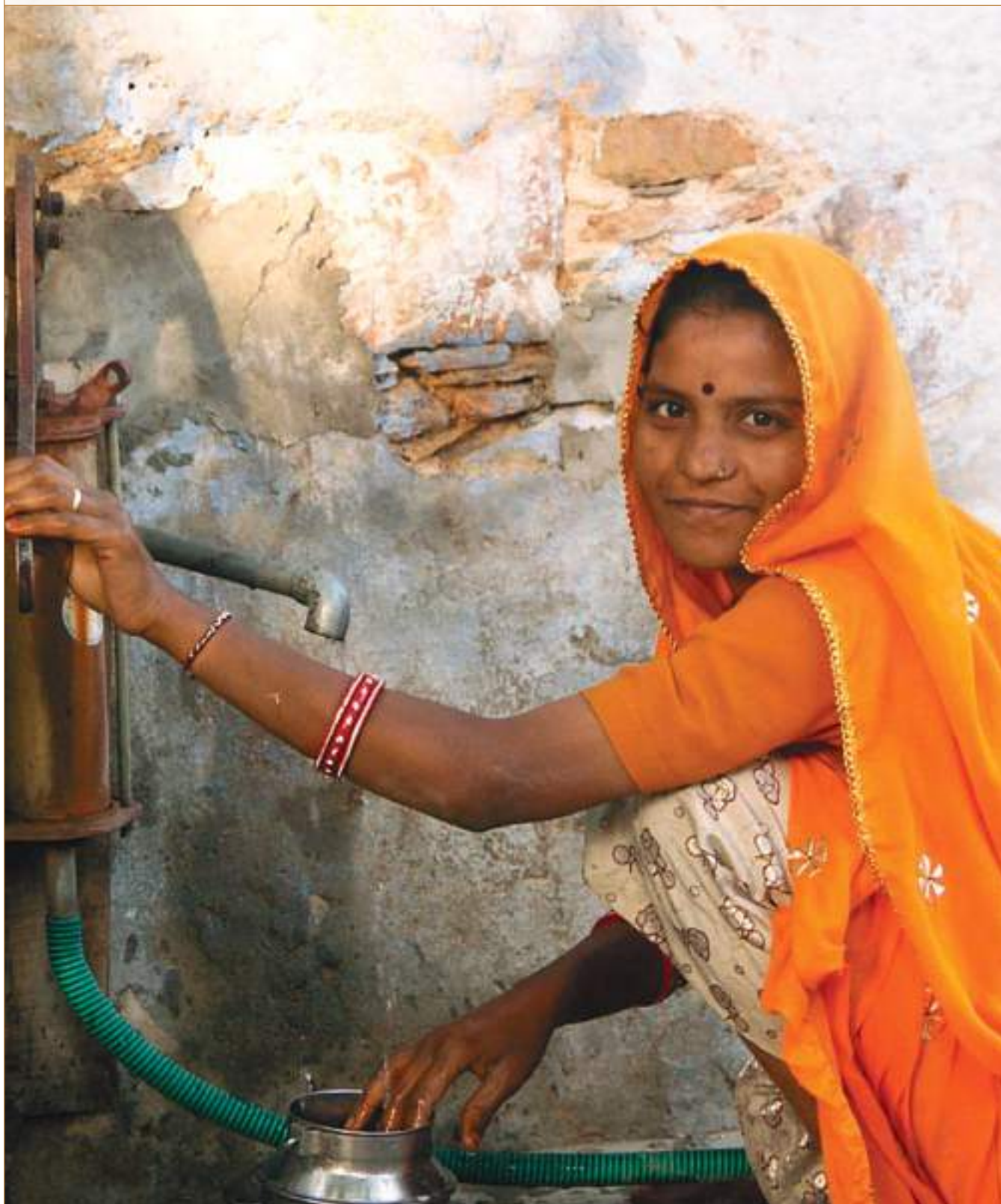
Reeves, Hazel, and Sally Baden, 2000. *Gender and Development: Concepts and Definitions*. Prepared by Bridge for DFID, Report No 55.

UNDP, 2000. *Learning & Information Pack: Gender Mainstreaming*. Gender in Development Programme.

UNDP (undated). *Gender Mainstreaming in Practice, Regional Bureau for Europe and the CIS (RBEC)*.

■ ■ **MODULE 2:**

OVERVIEW OF GENDER ISSUES AFFECTING ENVIRONMENT AND ENERGY



■ ■ Module 2: Overview of gender issues affecting environment and energy

This module briefly reviews the relevance of gender issues to the environment and energy practice areas. The information is primarily taken from the *Guidance Notes on Mainstreaming Gender into UNDP's Environment and Energy Practice*. Readers are encouraged to refer to these documents and become familiar with them.



Section 2.1: What is the role of gender in the environment and energy practice areas?

The primary concerns about gender differences in these practice areas are related to the fact that adverse environmental conditions and lack of energy services tend to have a more negative effect on women than on men, especially in areas where people are directly dependent on natural resources for their livelihoods. This is largely due to women's traditional roles and responsibilities, and conditions of gender inequality that limit women's control over and access to environmental and energy resources as compared to men. This situation perpetuates disproportionate conditions of poverty for women, and also contributes to growing problems involving land degradation, over-exploitation of natural resources and scarcity of energy services. Because of women's gender-based roles, they are particularly affected by the following:

Differences in land ownership and control over natural resources: Land tenure and access to natural resources are key factors affecting the sustainability of resource use, the efficiency with which resources are used, the distribution of the benefits derived from resource use, and the empowerment of users. In many developing countries, women – as farmers and pastoralists, with primary responsibility for household food production – are the principal users of certain types of land and natural resources. However, the women generally do not own the land or control the allocation of natural resources, and they are often allotted the most marginal lands with the least secure rights of tenure.

Women's ownership and control of land is limited by the common practice of registering land in the name of the 'head of the household', as well as biased land reforms, and men's greater control over economic assets in general. For example, in parts of sub-Saharan Africa, men's rights to trees and their products tend to override women's rights since men have full disposal rights while women have user rights only for gathering fuel.



Box 2.1: Use, control and management of household resources by sex

At a household resource management workshop held in Namibia in November 1998, participants from various countries in Southern Africa disaggregated typical household resources by sex – in terms of ownership, use, control, access and management – and came up with the following general consensus (from Farmers Weekly 05/02/99). Their analysis clearly shows that women have access to resources and make use of them, but that control and ownership generally remains in the hands of men.

Assets	Own	Control	Use	Monitor	Access
Land	M	M	W/M	M	M/W
House	M	M/W	M/W	W	M/W
Water		W	M/W	W	W/M
Fuelwood	W	W	W/M	W	W
Livestock	M	M	M/W	M	M/W
Finances	M	M	M/W	M	M/W
Labour	M/W	M	M/W	M/W	M/W

(M = men, W = women)

Source: Food and Agriculture Organisation (2004)

Women's greater dependency on common property resources has been well documented (Masika and Joekes, 1997). This high dependence on common property resources is being curtailed by changes in increased privatisation. In addition, commercial pressures in many places are leading community institutions to re-interpret customary rights and obligations, moving away from collective use to individualised rights, a process that often adversely affects women.

Differences related to access to water resources: Women and girls are disproportionately burdened by lack of access to water due to their traditional roles in household management and food production and preparation. They are the ones typically responsible for water collection for family use. In areas where there is no pumped water, and supplies are scarce due to seasonal dry periods or drought conditions, women can spend many hours per week trying to get enough water. See Box 2.2. Women's responsibilities with regard to water, combined with differences between men and women with regard to control over land use, often give rise to differing priorities for the use of water. For instance, women tend to prioritise water for domestic uses like cooking and washing, whereas men place a higher value on water for irrigation. Improved water and sanitation facilities can give women time for productive activities, and girls more time for school, besides safeguarding their safety, dignity, and physical well-being.

Box 2.2: Time women spend getting water (hours/week)

Country	Hours/week
Africa	
Kenya villages, dry season	4.2
Rainy season	2.2
Ivory Coast, rural	4.4
Botswana, rural areas	5.5
Mozambique villages, dry season	15.3
Rainy season	2.9
Senegal, farming village	17.5
Asia	
West Bengal, age 10-14	2.5
Age 15+	2.9
India, Baroda Region	7.0
Nepal villages, age 10-14	4.9
Age 15+	4.7
Nepal hills, dry season	11.2
Rainy season	6.3
Yemen, Arab Republic	19.3

Source: Wach and Reeves (2000)

Differences related to energy sources: In addition to getting water, women in developing countries also spend a great deal of time collecting traditional biomass fuels – such as wood, dung and agricultural wastes – for household needs. Over 1.6 billion people rely on these fuels, and the collection and management of these fuels is primarily done by women. When environmental degradation makes fuel supplies more difficult to find, women have to spend more time and effort searching for fuels long distances from home – with consequently less time for other responsibilities, or rest. They are also at greater risk of rape, animal attacks and other threats as they travel farther away from home. As this work requires more and more effort, girls are increasingly likely to be kept home from school to help their mothers. Improved access to energy services can have a dramatic impact on women's lives.



Differences related to chemicals and pollution: Due to traditional gender roles, men are more likely than women to be working in mines or on commercial plantations where they are exposed to hazardous chemicals and pesticides. Men are at higher risk of direct exposure to chemical pesticides when they are applied, while women's contact may be less direct, such as during planting and harvesting times. Women collecting water, however, are more exposed to chemical pollutants and biological pathogens in water sources, and women using traditional biomass fuels have greater exposure than men to indoor air pollution. Physiological differences between men and women also affect their relative susceptibility to adverse health impacts from exposure to toxic chemicals.

Differences related to biodiversity: In many areas, rural women and men have different types of knowledge, and value different things, about natural resources and biodiversity conservation. For instance, women, much more than men, have extensive knowledge of the household and medicinal uses of plants and animals. Herbalists in traditional societies are invariably women, and this knowledge has been passed down from mothers to daughters. Women, therefore, may place more value on forests for the collection of fruits, nuts and medicinal plants, whereas men may be more interested in potential sources for logging. Deforestation not only leads to loss of valuable health and food resources, but also affects the amounts of time and distances women must travel to secure fuel and water.

Section 2.2: How can gender mainstreaming improve environmental and energy initiatives?

The goal of gender mainstreaming in the environment and energy context is to widen the range of options and livelihoods available to women, as well as men, and to promote equitable and sustainable human development for all. It is increasingly recognised that sustainable development will be difficult to achieve if development efforts do not consider all relevant economic and social factors, including gender. Gender-sensitive development approaches are ones designed to ensure that all citizens or clients of an agency or organisation benefit equitably, and that resources are managed in a productive and sustainable way for all.

Box 2.3: Irrigation and landownership in Burkina Faso

Studies of irrigation projects in west Africa suggest that the practice of allocating registered land plots only to men is one of the main causes of disappointing project performance, and that it might be more effective to also allocate individual plots to women. A 1995 case study from Burkina Faso showed that the productivity of both land and labour is higher where both men and women have plots. Women's motivation to invest labour in irrigated production increases significantly when they have their own plots.

Source: Food and Agriculture Organisation (2004)

Box 2.4: Key links between gender, environment, energy and the Millennium Development Goals

Millennium Development Goal	Examples of gender, environment and energy linkages
1. Eradicate extreme poverty and hunger	Women represent the majority of those in extreme poverty and their livelihood strategies, and food, water and fuel supplies, often depend directly on healthy ecosystems
2. Achieve universal primary education	Time spent collecting water and fuel wood by children, especially girls, reduces school attendance
3. Promote gender equality and empower women	Women's time constraints and burdens related to collecting water and fuel wood, and unequal access to land and other natural resources, limit their ability to be active in social and political organisations
4. Reduce child mortality	Women's inability to provide clean water for their families results in deaths from diseases such as diarrhea and cholera, especially among children under the age of five
5. Improve maternal health	Indoor air pollution from burning biomass fuels and injuries from carrying heavy loads of water and fuel wood adversely affect women's health and add to risks of complications during pregnancy
6. Combat major diseases	Environmental risk factors, such as water contamination and lack of sanitation, may have differing impacts on men and women, boys and girls
7. Ensure environmental sustainability	Men and women both have important roles to play in environmental conservation efforts

However, environment and development initiatives do not always recognise women's knowledge or promote their interests. For example, in Comoe, Burkina Faso, women were in charge of rice production on the lowlands and men worked on higher-value crops on the rainier uplands. Development practitioners nevertheless deferred to the men for inputs on the design and management of new rice irrigation works, despite the fact that the men had limited knowledge of irrigated rice (Masika and Joeke, 1997). Similarly, women's concerns and inputs may be overlooked in emergency planning processes and responses to environmental disasters. For example, during the 1991 Bangladesh cyclone, women's needs were neglected and women suffered higher mortality rates than men.



In addition, current environmental and energy initiatives often do not consider women's time constraints and heavy workloads. Indeed, some policies and projects rely heavily on women's inputs but do not ensure that women's time and labour is properly valued.

Effective natural resource management approaches will emphasise the different activities of household members and ensure that different uses and impacts related to natural resources are recognised and taken into account (Masika and Joeke, 1997).

Gender considerations are particularly relevant for public institutional reforms that result in decentralisation and devolution of powers to provincial, municipal and local authorities – including the devolution of responsibility for natural resources to local communities. There is widespread consensus within international development circles that environmentally sustainable development should be based on local-level solutions derived from community initiatives. However, results in terms of gender equity often fall short of expectations when community-based approaches ignore differences in power relationships and social status. In terms of bargaining power, interests and needs, community-based organisations can, like other institutions, unintentionally perpetuate relations of unequal power and authority unless gender considerations are incorporated.

Assignments in Part 2 of the Manual

Available on the companion CD and online at
<http://www.undp.org/energyandenvironment/gender.htm>

Assignment 2.1 Gender in environment and energy

Aim: To understand the different levels and interventions affecting women (30 minutes)

Assignment 2.2 Intersection between environment and energy and gender

Aim: To understand the negative effects of environmental degradation and lack of energy services on men and women (60 minutes)

Assignment 2.3 The values-roles-access-power cycle

Aim: To understand gender differences in access to and power over environment and energy resources (90 minutes)

Assignment 2.4 Barriers to the Millennium Development Goals

Aim: To understand the negative effects of poor natural resource management, environmental degradation, lack of clean water and basic energy services for men and women in all areas of development (30-45 minutes)

Assignment 2.5 Gender gaps in sharing of benefits of initiatives

Aim: To understand how men and women may benefit differently from the delivery of services and resources (30-60 minutes)

Discussion topics

1. Women often have special knowledge regarding natural resource management and should thus be the principal partners for project interventions in this area.
2. Where the effects of environmental degradation and pollutants are more severe for women than men, initiatives should be taken to provide women with special protection.
3. Women's lack of access to resources, and the male-based power structure in local communities, are obstacles to successful interventions in the environment and energy areas that should be overcome.



CASE STUDY 2.1: Sustainable craft project: Women, conservation and development in Mpigi, Uganda (biodiversity)

The Mpigi district in Uganda boasts about 40 forest reserves, all of which have been invaluable to the people living around them. Most of these reserves have been heavily encroached upon and, as a result, biological diversity has been drastically affected. Over-exploitation of resources in these forests has affected the ability of the forest reserves to recover. The forests constitute a major catchment area for the rivers emptying waters to Lake Victoria, an international water body serving hundreds of millions of people. Only one forest remains intact in the district, Mpanga forest.

In 2002, women in the district began seeking out resources and decided to form a steering committee to oversee a crafts programme. At the time of inception of the Friends of Mpigi Forests Conservation and Development Organization, the major objective was to conserve forests and wetlands in Mpigi district. The programme realised, however, that there were other problems associated with deforestation that had to be tackled in order to achieve conservation goals. The HIV/AIDS pandemic had increased the burdens on many families and there were many households now headed by widows and children. It would be difficult to convince families not to encroach on the forest, as they often relied on the forests for food and other resources. Involving women and youth in eco-tourism was considered to be a way of educating them on alternative ways in which income could be generated without damaging the biodiversity of the forests. Men were also encouraged to participate in programmes such as bee keeping.

Initially the people sabotaged the eco-tourism programmes by felling trees because they felt they were being denied access to the forestry resources they had historically enjoyed. To enable the people to understand that the programme was beneficial to the Mpanga forests, an environmental education programme was initiated for both schools and the community. The importance of the forest was not widely recognised, especially the fact that it provides the only local source of clean drinking water through its network of underground streams. Partnership with the local administration was important in supporting the delivery of the environmental education messages. The programme was aimed at women as the major consumers of the forest products.

The project was able to train 200 women in making export-quality crafts using local materials in a sustainable manner. These are exported to Europe, or sold in the local tourist destinations, at fairer prices than they would fetch if sold locally. The existing eco-tourism site played a key role in providing employment and encouraging revenue generation for local people. Villagers have also benefited by providing catering facilities to visitors, while nearby traditional shrine owners earn direct income from visits by tourists.

Source: UN Department of Economic and Social Affairs
<http://esaconf.un.org/WB/default.asp?action=9&boardid=30&read=2056&fid=311>



CASE STUDY 2.2: Occupational exposure in health care (chemical management)

In developing countries, women health care workers (such as nurses) receive low remuneration and face difficult working conditions. They are also exposed to numerous safety and health hazards that can lead to occupational cancers, respiratory diseases, neurotoxic effects and other illnesses caused by chemical agents. Because of their generally low status, women in many developing countries have less control than men over promoting safety in their work environments and reducing the risks they face.

The health sector is a major source of dioxins (classified in international agreements as persistent organic pollutants [POPs]) mostly as a result of medical waste incineration, and of mercury (identified as a persistent toxic substance), due to the breakage and improper disposal of mercury-containing devices such as thermometers. As developing country health care systems are strengthened and coverage expanded through efforts to meet the MDGs, the release of these toxic chemicals could increase substantially, increasing the risks faced by health care workers, and the general public, even more.

The Global Environment Facility (GEF) is supporting a UNDP global programme in seven countries (Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam) to promote the use of alternative waste treatment technologies, improve waste segregation practices and support the use of alternatives to mercury-containing devices. The introduction, dissemination and acceptance of these practices and techniques, if replicated nationally and sustained, could substantially reduce the release of dioxin and mercury into the environment each year.

As the programme is implemented, awareness about the links between workers, public health and waste management will be enhanced, and special attention will be focused on the health implications of dioxins and mercury on vulnerable populations (such as women workers, pregnant women and children). Main partners in the programme, besides concerned national ministries, hospitals and health clinics, are health care professionals, waste workers, waste service providers (among the most vulnerable) and NGOs/CSOs that operate in the area of health, women and environment. Women represent a large portion of workers employed in health care services.

Source: <http://www.undp.org/chemicals/pops/programmeactivities.htm#Project>



CASE STUDY 2.3: Clean energy for remote communities of Uzbekistan (sustainable energy services)

Villagers in more than 1,000 rural communities in Uzbekistan live without electricity, unconnected to the central power grid. The energy situation is especially acute in Karakalpakstan, the country's biggest region, which has also been hard hit by the Aral Sea eco-catastrophe. Lacking electricity to generate light and heat, or pump well water, residents are forced to rely on expensive and polluting alternatives such as coal, kerosene and diesel fuel, or to burn wood gathered from local forests, which has contributed to deforestation and further land degradation. In addition to burdening an already fragile environment, these practices negatively impact the health of the region's impoverished residents.

A project was established to enable villagers to use solar power to produce electricity. The project financed the domestic production of 25 photovoltaic (PV) systems that were installed, with the help of the regional government and local authorities, in Kostruba and Koibak, two remote settlements in northern Karakalpakstan. Instruction manuals in the Karakalpak language were produced, and some residents with technical know-how received training in PV systems maintenance.

In Karakalpakstan, women are the primary managers of domestic energy use. Due to a kerosene shortage, diesel fuel has been used to fill lamps, causing emissions of harmful substances, polluting the natural environment and affecting people's health – especially women and children, who spend more time indoors in the evening and consequently have higher rates of acute respiratory illness than adult men. As a result of the project, a villager in this remote area is now able to turn on an electric light in her house. Children can do their homework after dark and women can produce handicrafts, such as rugs and wallets, which are then sold in the local markets. People can read books at night, watch satellite TV channels and listen to audio tape players.

In addition, in one village solar power also helps provide safe drinking water, with obvious health benefits, particularly for women and children who have higher levels of anaemia, kidney disease and water-borne diseases.

However, an assessment of the project noted that the project was not designed or implemented in a gender-sensitive manner. This patriarchal society discourages women from working directly with machinery or equipment such as the new solar hardware. Therefore, only the men in Kostruba were informed about the project's objectives and able to participate in discussions about project implementation, and only men were included in the targeted group for training and instructions about the systems. If women had been explicitly included in decisions made about what would be most useful for this village's social and economic development, a range of different alternative strategies might have been considered.

Source: UNDP (unpublished)



CASE STUDY 2.4: Roles, ownership and participation in reforestation (sustainable land management)

Senegal's reforestation project's entry point was to work directly with villagers. In most cases, however, village authority was exercised by the male village and religious chiefs. Women were traditionally not involved in decision-making, though the eldest were consulted before final decisions were made. Nevertheless, with the backing of village authorities, the project was able to build a partnership with village organisations, including women's advancement groups. Since men migrate to urban areas for most of the year, it was the women who were organised into collectives for the majority of reforestation and cultivation activities, including orchard management.

Deforestation, abandonment of the practice of land fallowing, and repeated rainfall deficit have led to serious wind and water erosion, followed by a fall of at least 50 percent in yields. At the same time, the population has faced a shortage of firewood and utility wood, and a precarious water supply due to the drying up of numerous wells during the dry season. The project intervention area, concentrated in the northwest groundnut basin, covers the departments of Tivaouane and Thiès, with a population of 658,862 inhabitants.

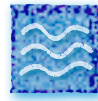
The aim of the first phase of the project was to re-establish the importance of trees in the maintenance of ecological equilibrium by improving and maintaining soil fertility, integrating trees into the agrarian system, and improving forest product supplies. From the outset, the project opted for a strategy of community involvement, including awareness and education programmes, land use planning for agricultural, pastoral and forestry activities, and institutional reinforcement of the forestry service and the training of officers. The participatory approach during the first phase revealed that the concerns of people related to forests go well beyond the simple framework of rural forestry.

The second phase of the project focused on reintroducing trees into the agricultural system, within a larger framework of land management. The project developed a land development and management plan whose programme activities were intended to reconcile different people's interests and policy orientations within the sector with the need for restoration and conservation of the environment and improved, sustainable production. The third phase (1995-1999) focused on consolidating lessons learned, extending activities within the department and setting up a working system of follow-up analysis. It also opened up the project for eventual takeover by farmers' organisations, governmental structures and NGOs.

The project stimulated both men and women villagers to analyse their situations, identify their priorities and decide which actions to undertake. As a result, women as well as men were able to mobilise their own resources and know-how in order to realise specific objectives.

Source: FAO

www.fao.org/WAICENT/FAOINFO/SUSTDEV/Wpdirect/Wpdirect/Wpre0060.htm



CASE STUDY 2.5: Empowerment, decision-making and self-esteem in Nigeria (water and sanitation)

The Obudu plateau is home to tropical forests with unique flora and fauna, as well as large pastures. The top of the plateau is also home to the Becheve agricultural communities and the Fulani pastoralists. In 1999, the Cross River State Government established a luxury tourist destination, the Obudu Ranch Resort, on the plateau. Large-scale construction of the hotel and other facilities resulted in immense deforestation. Combined with pre-existing pressures on the environment, such as overgrazing and unsustainable agricultural practices, the development exacerbated the stress on available water resources. Although the communities saw the development as a welcome source of income, conflicts arose due to the multiple demands on a limited water supply. The Becheve women complained about poor family health, wasted time in collecting water, and poor quality and quantity of water.

As a result of the deterioration in the water situation, the Nigerian Conservation Foundation (NCF), a non-governmental organisation working on the plateau, started a Watershed Management Project. In January 1999 a multi-stakeholder management committee for the Obudu plateau was formed. Members were from the NCF, Development in Nigeria (DIN), Cross River National Park, the Obudu Ranch Resort, Becheve Nature Reserve, and the Fulani herders. After a series of discussions, it was agreed that one out of three management committee representatives from every village, including the Becheve, should be a woman. At its first meeting, the management committee conducted a two-day workshop analysing current problems in order to plan a long-term solution for the sustainable management of the plateau's watershed. The NCF used the meetings as a forum to educate the communities about participatory watershed management and the dangers of unsustainable practices to ecosystems, as well as to sensitise the Becheve communities and Fulani herdsmen about gender biases and the important role of women in collecting water for families.

The first stage of the project produced a watershed and watercourse mapping survey, identifying drinking water sources on the plateau. During the second stage, between 2002 and 2003, NCF produced a manual on watershed ecology and monitoring. Six groups of women and a small group of young people were trained on preserving watershed ecology, and the temporary nature of the benefits of sand mining. One of the recommendations was that fruit trees be planted around the headwaters of drinking water sources to prevent erosion and siltation, and to provide an income source. Conservation clubs were started to increase awareness about environmental education. Most significantly, women were encouraged, not only to attend management committee meetings, but also to participate actively in this predominantly male domain. In the third stage, from 2003 to 2004, discussions were held with the local health clinic on water-related health issues, especially diarrhea, and the two reservoirs were built.

The project had the following impacts on women's empowerment and gender equality:

- Women's voices were heard for the first time as they contributed to the decision-making process within the community; women were encouraged not only to attend management committee meetings but also to participate actively in this predominantly male domain.
- Electing women leaders on the management committee became a source of great pride for all women in the community.
- Women were involved in the construction and maintenance of the reservoir.
- The time required for women to collect water was considerably reduced and women were able to spend more time on income generating activities, farming and marketing.
- Women's health care burden was reduced with a 45 percent reduction in cases of diarrhea in 2004.
- The time available for both girls and women to go to school was increased.
- The community's men were sensitised to the necessity of women's participation and were shown how it benefited them directly.
- The Fulani herdsmen and the Becheve women were able to accommodate each other's water resources requirements through a negotiated process.

It has also resulted in empowerment of the whole community:

- The project taught a greater awareness of sustainable watershed ecosystems and their importance to the environment and nearby communities.
- Community participation increased as the community felt they owned the process and the project.
- The community learned how to approach the government to aid community development.
- The project led to improved health and cleaner and closer water resources.

The key factors for success were twofold. First, the four volunteers working with local staff had a very positive effect on the outcome. Two of the volunteers were Canadians (2000-2003) while the other two were Nigerian (2003-present). Three of them were women, which made access to the Becheve women easier for project leaders. The female volunteer presence also provided role models that demonstrated that women could be in positions of leadership and contribute to the decision-making process. Second, the male volunteer facilitated a process where the Fulani herdsmen realised that they were discriminating against the women in denying them timely access to water. This new awareness led to an agreement that the cattle would be watered at lower points to avoid contamination once the reservoirs were built.

Source: Majekodunmi (2007)

Further resources

Food and Agriculture Organisation (FAO), 2001a. *Irrigation Sector Guide, Socio-Economic and Gender Analysis Programme* (SEAGA).

FAO, 2004. *Rural Households and Resources: A Guide for Extension Workers, Socio-Economic and Gender Analysis Programme* (SEAGA).

Fong, Monica S., Wendy Wakeman and Anjana Bhushan, 1996. *Toolkit on Gender in Water and Sanitation*. Gender Toolkit No. 2, The World Bank.

Masika, Rachel and Susan Joekes, 1997. *Environmentally Sustainable Development and Poverty: A Gender Analysis*. Report No 52. Prepared by Bridge for SIDA.

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

UNDP, 2007. *Guidance Notes on Mainstreaming Gender into UNDP's Environment and Energy Practice*.

UNDP and ENERGIA, 2004. *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide*.

■ ■ **MODULE 3:** GENDER MAINSTREAMING IN ENVIRONMENT AND ENERGY ORGANISATIONS



■ ■ **Module 3:** Gender mainstreaming in environment and energy organisations

Specific roles, rights and responsibilities within an organisation are ascribed to men and women based on prevailing values and norms. The allocation of power and benefits within an organisation has implications for men and women working there, as well as for those receiving the organisation's services. Gender inequality within an organisation generally translates into a lack of gender sensitivity in the programmes and actions undertaken by the organisation (Groverman and Gurung, 2001). Some institutions and agencies involved with environment and energy programmes have initiated comprehensive gender-mainstreaming policies, while others have failed to mainstream gender at all, or done so only poorly.

Section 3.1: Gender roles within organisations affect staff, programmes and activities

The culture of an organisation will influence its mission and strategy, as well as its structures, procedures, information flows, recruitment processes, staff evaluations, reward systems, openness to participation, conflict resolution methods, and opportunities for staff creativity. Through a socialisation process, male and female staff members learn – often unconsciously – to act according to the organisational culture in terms of clothing, relationships with managers and subordinates and communication styles, including the acceptable language and jokes (Groverman and Gurung, 2001).

Levels of awareness about gender roles differ among organisations and among staff members. See Appendix 2, p. 56. In most organisations, gender differences are reflected – consciously or not – in policies and procedures, and patterns of staffing, training and promotion. Organisational views about gender roles can either provide opportunities for advancement or present barriers to staff members' careers, for example by determining whether they do field or desk work (Groverman and Gurung, 2001).

There is a direct, though often invisible, link between the attitudes of male and female staff members about gender roles and relations at the organisational level, on the one hand, and the impact of their programme activities on women and men at the community level on the other

(Flintan, 2003). Interestingly, in many development organisations more attention is paid to gender needs in projects and programmes than to gender issues within the organisation.

Addressing gender inequalities not only benefits programmes, but also the organisation itself. However, this requires a willingness to become aware of deep-rooted gender inequalities and critically analyse one's own organisation. Persuading those in positions of power and authority to take gender equality and women's empowerment seriously is key to making progress. This is the role of 'gender advocates' within governments, civil society and donor organisations, and they can be men or women, individuals or organisations (UNDP,





2007). Gender advocates need the ability to think strategically and take advantage of unexpected opportunities (DFID, 2002). Adapting arguments to the specific audience also makes for more effective advocacy. An engineer might be most receptive to efficiency arguments, for example, whereas someone working for a relief organisation affiliated with a religious or spiritual group might find a welfare or poverty alleviation argument more persuasive (UNDP, 2007).

Section 3.2: Promoting gender sensitivity in environment and energy organisations

Gender mainstreaming within an organisation depends largely on the skills, knowledge and commitment of the staff. However, gender sensitivity is not viewed as a 'core competence' for environment and energy development practitioners in most organisations, who generally come from technical and scientific backgrounds.

Technical experts in environment and energy may not be comfortable with gender advocacy or consultative processes because of the inherently political and social nature of the issues. Questions about relationships between women and men may seem far removed from the work of protecting the oceans, climate, and biological diversity of the planet (UNDP, 2007). Consequently, environment and energy organisations often fail to implement commitments to gender equity successfully or achieve significant change (DFID, 2002). Gender-related analysis has rarely been supported with adequate staff and budgets, or monitored and reviewed using appropriate indicators of change (UNDP, 2007). Moreover, even when steps have been taken to include women in decision-making, gender issues have sometimes merely been given lip service, and women have been token representatives with passive roles and few real responsibilities. (DFID, 2002).

Due to lack of relevant gender expertise, professional staff may be unaware of the different roles, responsibilities and experiences of women and men in relation to the environmental or energy issues addressed by their programmes. As a result, their decisions about policies, programmes and project development often do not explicitly include gender considerations. One critical first step is simply raising awareness about the different needs of women and men. For example, in programmes to support small businesses by expanding access to energy, it is important not to just consider electricity generation and overlook the needs of women micro-entrepreneurs who rely on process heat for

Box 3.1: Lack of gender awareness in Himalayan poverty organisations and programmes

In 1995, the International Centre for Integrated Mountain Development carried out a fact-finding mission on the status of women in mountain areas of eight Himalayan countries (Afghanistan, Bangladesh, Bhutan, China, India, Nepal, Myanmar and Pakistan). The researchers noted significant gaps between the stated programme goals of organisations and the realities at the mountain community level.

Most institutions involved in agriculture and natural resource management in the region (including NGOs) had not formally incorporated gender concerns into their research, extension, and training programmes. Indeed many of their staff were not aware of the meaning of 'gender' and demonstrated a gender blindness, leading to unintended but widespread exclusion of rural women from participation in research and extension activities, and limiting the degree of sustainability that these outreach actions could achieve.

The common problems that women from this region experienced – heavy workloads, poor education, little access to financial and health services and new technologies, and limited control over resources – have mostly not been addressed directly by those institutions responsible for rural poverty alleviation through improved land use.

Source: Groverman and Gurung (2001)

home businesses (such as food preparation, brewing, or pottery-making) for which electricity is not the cheapest option (UNDP, 2007).

Changing the culture of an organisation requires significant resources, as well as high-level commitment and authority. Successful institutional change usually requires a combination of management strategies and activities. For example, a combination of catalytic central gender units and a web of gender specialists throughout the institution can be particularly useful (Reeves and Baden, 2000).

Gender focal persons: Evaluations of gender mainstreaming repeatedly and consistently conclude that effective gender mainstreaming in any context requires staff (not just consultants) or gender focal persons who will take responsibility for spearheading, supporting and sustaining gender work (DFID, 2002). Their role is not to take full personal responsibility for gender work, but to act as catalysts supporting and promoting gender-related skills and approaches among professional colleagues. Depending on the context, their activities may include:

- Advocating for the relevance of gender mainstreaming to the organisation and its activities;
- Facilitating the development and monitoring of gender policy and action plans;
- Developing and monitoring systems and procedures for mainstreaming gender; and
- Developing and supporting gender-mainstreaming skills, knowledge and commitment with professional colleagues and partners, i.e. through training, guidelines and support.

Mission statement and strategy: An organisational mission statement is a useful starting point for gender mainstreaming (DFID, 2002). Policies should include strategies or action plans with clear procedures and targets, as well as designated roles and responsibilities for promotion, implementation and monitoring. These must be based on a clear, realistic analysis and understanding of the organisation or department, including its decision-making structures, incentive systems, planning routines and history with respect to gender equality.

Much of the value of a gender mainstreaming policy lies in the process of formulating it. This is a critical opportunity to involve as many staff as possible (and, where appropriate, stakeholders external to the organisation) and promote widespread 'ownership' of the policy. It is important to try to ensure that everyone in the organisation, both male and female, is comfortable with the policy.



Gender training and follow-up: Gender training is most effective when it is used as part of a broader strategy for influencing the climate of opinion within an organisation (DFID, 2002). Participants who expect some sort of follow-up activity, and whose supervisors support and promote gender equitable practices, are more likely to transfer what they have learned to their own work. Activities complementary to gender training will vary with different circumstances. Some possibilities include: follow-up discussions and feedback workshops; activities to develop a participatory gender policy with clear, measurable and achievable objectives; and provision of back-up access to gender expertise and professional support for staff members.

Management support: A constant theme in effective gender mainstreaming is the importance of the commitment and leadership of senior management (DFID, 2002). Only senior managers can properly oversee a crosscutting theme that, by definition, affects all the structures and work of the organisation. Their support for staff members assigned to spearhead gender equality work is essential for success, since this is a highly sensitive issue and often meets with staff opposition. The authority of senior management can enable gender focal points to continue in the face of resistance. Senior management can demonstrate commitment to gender equality, for example, by soliciting information and ideas from all staff members, and providing recognition for innovations and achievements related to gender mainstreaming. At the same time, gender focal points can provide critical information and enlist senior management support through gender training or briefings specifically for senior management.

Recruitment of women: Since many environment and energy institutions are male-dominated, hiring more women and improving their status can help bring greater gender awareness into environment and energy programmes – although this is no guarantee of gender-sensitive policies.

Support for professional networking groups and outreach to women and girls in science and technical schools can help attract more women to jobs in environment and energy fields.

Mechanisms for consulting with women's groups. In order to design and implement gender-sensitive policies and programmes, it is important to ensure that more women's voices are heard at the substantive decision-making level. For example, in 2003 Uganda introduced a Water Sector Gender Strategy mandating that all administrative bodies should include at least thirty percent women, and village water facilities improved considerably (UNDP, 2007).

Networks linking individuals and groups working for gender equality: When initiating gender mainstreaming in an organisation, it is particularly valuable to establish an informal support network of like-minded people; it is professionally ineffective and personally undermining for those seeking to promote gender equality and women's empowerment to work alone rather than collaboratively (DFID, 2002). More

formal networks of gender focal points, donor representatives and working groups can also be established, with people attending in their professional capacity and reporting back.

Assignments in Part 2 of the Manual

Available on the companion CD and online at <http://www.undp.org/energyandenvironment/gender.htm>

Assignment 3.1: Barriers and disincentives for women's participation in decision-making

Aim: Introduction to characteristics of gender-sensitive decision-making (40 minutes)

Assignment 3.2: Recognising and dealing with resistance

Aim: Learning about ways to deal with different forms of resistance in processes designed to promote more gender-sensitive programs and policies (40 minutes)

Box 3.2: Practical strategies for making an organisation gender-sensitive include:

- Affirmative action policies aimed at creating a balance of female and male staff at all levels of the organisation. For example, promoting from within and training in-house staff to take on new responsibilities.
- Reorganising working hours so that staff are better able to attend to family responsibilities. For example, establishing a definite 'quitting time' or allowing staff the option of 'flex-time'.
- Setting up policies on maternity and paternity leave.
- Providing appropriate facilities that respond to gender-based needs including childcare or lavatories.
- Demonstrating gender sensitive behaviour. For example, in the language used, comments that are made, images or materials displayed, meeting practices.
- Spreading travel responsibilities widely among staff.
- Posting spouses to the same community or region so that the family is not separated.
- Securing the health and safety of staff. For example by establishing mechanisms to deal with sexual harassment, providing safe transportation for women, limiting travel pregnant women are required to do or giving staff the right to refuse assignments that pose undue risk.
- Addressing gender issues in all interviews, job descriptions and performance reviews.
- Encouraging a gender sensitive management style and promoting mutual respect for diverse working or management styles.

Source: CARE (2002)

Box 3.3: Gender in organisations: More than a numbers game

The Working for Water programme in South Africa is a unique poverty alleviation programme in that it provides an intersection between the environment, poverty and gender. The programme has been very successful in targeting women workers, and has provided health care and child care interventions that address women's needs. However, there is much room for improvement. While some women hold senior positions within the programme, such as contractors and foreman, the majority of women hold unskilled, lower paying jobs. The programme has set itself the objective of paying 60 percent of the wages to women. This involves shifting women to semi-skilled jobs, and for this to happen, high-quality training programmes are needed. The quota should also be instituted for contractors, as this is where a large proportion of the wage bill goes.

Source: Sadan (2005)

Assignment 3.3: Preparing the organisation for gender mainstreaming

Aim: To understand gender as an element in every organisation, and the role of staff and managers (60 minutes)

Assignment 3.4: Organisational change

Aim: To understand enabling and constraining factors for gender-sensitive organisational change (60 minutes)

Assignment 3.5: Tools for change in decision-making

Aim: To understand ways to empower women and men using some practical tools (3 hours)

Discussion topics

1. Only organisations headed by women and with a majority of women staff can be gender sensitive.
2. There should be equal representation of men and women at every level of responsibility within an organisation, including senior management.
3. The reason why gender has not been mainstreamed into the programmes of many organisations is that men have been resistant to change.



CASE STUDY 3.1: Engendering organisational change (general)

CIMMYT, the International Maize and Wheat Improvement Centre in Mexico City, is one of a consortium of 16 international agricultural research centres supported and funded by the Consultative Group for International Agricultural Research (CGIAR), which represents more than 40 donors. CIMMYT had a long history of low female representation in the professional ranks and resistance to gender equity, with only one woman in a senior management position. Leaders did not consider gender equity to be a priority.

During the early 1990s, a group of women at CIMMYT was interested in fostering gender equity, and found that a more hospitable work environment developed, in part because attention to gender within CGIAR provided legitimacy for their concerns. CGIAR began to support the research centres in their efforts to strengthen gender equity by providing technical advice, resources and knowledge. The Deputy Director General established a Gender Task Force, hired a consultant to examine possible gender inequities in salary and position classifications, and commissioned research to identify aspects of the work culture that could be changed to enhance both gender equity and organisational effectiveness.

The explicit commitment of the donor community to strengthen attention to gender in research, training, and staffing provided a powerful incentive for CIMMYT to address gender staffing. The availability of external funding made it less risky for managers to take on the initiative, and external support and recognition by CGIAR helped managers and staff to sustain their efforts even when the change process was challenging. Major discrepancies in salaries were corrected and the organisation initiated a process for developing a more systematic and transparent system of position classifications and criteria for promotions. The new system resulted in 40 percent of the internationally recruited women being reclassified.

The results were more mixed in terms of staffing. By 1997, women comprised 24 percent of all staff but they still constituted only 16 percent of the internationally recruited professional and scientific staff, and there were no women at the senior management level. However, some women have been appointed to middle-management positions heading administrative departments, such as finance and human resources, and two-thirds of the internationally recruited women are employed in research, the core business of the organisation.

Source: Merrill-Sands (1999)



CASE STUDY 3.2: IUCN's gender policy (biodiversity)

Starting in 1984, IUCN-World Conservation Union began a comprehensive programme for mainstreaming gender throughout the organisation and its work. That year, recommendations from IUCN's General Assembly led to the creation of a team to promote the involvement of women in all the levels of the organisation.

In 1987, a 'Women and Environment' team developed a programme on 'Population and Sustainable Development at a Global Level'. Then, following the recommendations of the General Assembly in 1988 in Costa Rica, the 'Programme of Women and Natural Resources Management' was created to develop more effective conservation initiatives through recognition of the roles women play in conservation. The programme undertook training activities, participated in international events, and established several networks. However, an evaluation of the programme concluded that its objectives were not reached because IUCN lacked a gender policy and a clear organisational structure reflecting its commitments. Gender activities were then integrated into the Social Division (which afterwards became the Social Policy Group), and the IUCN Regional Office for Mesoamerica initiated a Gender Programme.

In 1993-1995, IUCN's new director worked to ensure that the structure of the organisation was more gender-sensitive. Different working teams were created, two of which – Equity of Opportunities, and Human Resources – dealt directly with increasing gender awareness among staff. These teams drafted a policy on human resources development, which was approved by the Council in 1995. IUCN also sent a delegation to the Fourth World Conference in Beijing, China.

A resolution at the 1996 World Conservation Congress asked IUCN's General Director to establish a multidisciplinary team to design a strategy that could integrate a gender perspective into the work of the organisation. The General Director created a team to work on Gender and Sustainable Development that met for the first time in Costa Rica the following year.

In 1998, IUCN endorsed its first gender policy statement, calling for an effective mainstreaming strategy to integrate a gender perspective into IUCN's policies, programmes and projects, and promotion of equity and equality as crucial factors for environmental sustainability and conservation: "IUCN recognises that gender equality and equity are matters of fundamental human rights and social justice and a pre-condition for sustainable development and the achievement of its mission.... Only with a gender perspective can a complete picture of human relationships and ecosystems be built up."

IUCN then appointed a Senior Gender Advisor with a sufficient budget to initiate a gender action plan, and each IUCN Regional Office appointed gender focal points responsible for regional

gender work programmes. IUCN also developed an 'Alliance for Change' to help organisations implement gender-based programmes, overcome institutional resistance to change, build understanding of gender-mainstreaming, and acquire necessary skills, methodologies, tools, and funding. Through this alliance IUCN expects to foster greater gender equity in the workplace, and more successful environmental and social projects in the field.

Sources: Adapted from Flintan (2003) and <http://www.genderandenvironment.org>.



CASE STUDY 3.3: Men and women in Nepal's rural energy development programme (sustainable energy services)

Nepal's Rural Energy Development Programme (REDP), initiated in 1996, enhances rural livelihoods and environment conservation by supporting the installation of micro-hydro power systems in places not served by the national electricity grid. As of June 2003, 120 micro-hydro demonstration projects had been installed in remote hilly areas of Nepal.

Funding was made available to communities for micro-hydro systems in the form of investments to be repaid when the systems became profitable. Repayments were possible because community members were able to pay for electricity from the micro-hydro systems using new income they generated by using the power for productive activities.

At the beginning of a community project, villagers are given an orientation on active participation in the installation and operation of the micro-hydro systems, and separate male and female community organisations are formed to ensure that women and men are both actively engaged in the process.

Development experience in Nepal's particular social and cultural context has clearly indicated the strategic advantages of organising women and men into different groups. The segregation of women and men into separate community organisations encourages men and women to discuss and analyse specific problems they face. Women are less likely to feel overpowered and more likely to be actively involved in the programme. Women's community organisations have become places where women's leadership qualities and confidence can be developed.

The women in community organisations have a distinct voice in local affairs and their self-confidence has increased, as has their capability for independent and collective action. For many women living in the remote rural areas served by the programme, the training they received was their first exposure to the outside world. The changes brought about in the daily lives of participants, especially the women, have resulted in reduced drudgery in household tasks and an increase in productive and community roles. The women are emerging as leaders and decision-makers inside the programme, the community and their households.

Source: Adapted from UNDP (2001) and <http://www.redp.org.np/>



CASE STUDY 3.4: Drought, desertification and the women of Neuquén, Argentina (sustainable land management)

The Association of Women Mapuches Kilapi is based in a Patagonian community in the Province of Neuquén, Argentina. Forty-five women make up the association. Ninety families live in the community, with a total of 530 people. The communal land is marginal and of poor productivity. Strong, dry winds are very frequent in springtime, and in summer there is insufficient water. Drought has caused an increasing loss of cattle, and poor productivity from domestic gardens. As a result, families of the community have difficulties during the winter, exacerbated by a lack of fuel for heating.

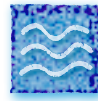
In addition to poverty, the women of this community suffer from discrimination. Women work a greater number of hours than men because they are forced to fulfil domestic, community and economic activities in addition to raising their children.

The women banded together and created the Association of Women Mapuches Kilapi of Chorriaca to combat desertification and mitigate drought. Eighty percent of them are illiterate or semi-literate. Although most of them have attended primary school, they do not have the opportunity to read or write, and so have become illiterate. The association helps them through training in managing plant and water resources, avoiding erosion and soil degradation, and pursuing economic activities. They have also engaged in a revaluation of their own culture. In collaboration with the Department of Culture of the Municipality of Chos Malal, a photographic competition was held celebrating the topic of women and desertification, and a radio show was created was to raise awareness about the problem of desertification.

Since efforts began to engage women in the national action programme to combat desertification (1995 to 2004) the women of this community and their families have improved their cultural and socio-economic conditions, hygiene and security. In addition, women's participation in community activities and decision-making has increased. In a study of 70 women, 80 percent declared that they wanted to work in order to have their own money and the power to educate and clothe their children. In the same study, 90 percent of the women thought that the men did not value their decisions.

The Association of Women has carried out a number of activities to improve their livelihoods and reduce desertification: improvements in irrigation management for family domestic gardens; construction of sheds and tunnels; development of traditional crafts and food for sale; and use of once-lost traditional methods of weaving using natural dyes. The activities of the association contributed to the strengthening of the standing of the Mapuches Kilapi women in their community, and at the same time to the protection of the land against desertification.

Source: UNCCD (2005)



CASE STUDY 3.5: Building gender-responsive water associations in Nepal (water and sanitation)

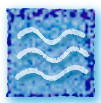
Past efforts to improve agricultural productivity by the Government of Nepal concentrated on expanding irrigation facilities. However, the completed infrastructure was neither maintained nor operated efficiently. As a result, the schemes performed poorly and heightened inequalities and inefficiencies in the distribution of irrigation water.

The government responded in 1992 with a major policy shift focusing on improving management and farmer participation in all stages of project implementation, operation and maintenance. It also transferred the management of some irrigation facilities to water users associations to encourage users to take full responsibility for managing the technical and financial aspects of the irrigation systems. The degree of success, however, has varied. One of the reasons was unequal participation of male and female users. Women's roles as irrigators, water users, and farmers were often overlooked. Contrary to the prevailing belief that irrigation tasks are confined to men, irrigated agriculture here is a joint responsibility of husband and wife. In areas where men have migrated in search of seasonal labour, women also participate in water allocation and distribution tasks.

Getting women involved in water user associations was a challenge. Therefore, in 1997 the government amended the irrigation policy to mandate a minimum woman's representation of 20 percent. A small grant-based pilot project was started in 2000 to test how gender concerns could be effectively addressed. At the start of the pilot project, women comprised 25 percent of the users association, and most of them felt they had been included simply to meet the government's mandated quota for women. The group created a Women's Facilitator Group, composed mostly of women leaders, which identified its own training needs – building technical capacity for canal operations, maintenance, water distribution and management; increasing gender sensitivity; strengthening the group's organisational development skills; and observing improved farming practices firsthand by visiting agricultural centres, farms and research stations. Women were found to be particularly interested in pursuing technical topics such as water management, cropping patterns, and canal protection. Capacity-building training has enabled women to get a firm handle on the irrigation system. This in turn has helped build their confidence to participate in decision-making and speak up in users association meetings.

At the end of the project, 80 percent of the households were paying the irrigation service fee, thus demonstrating user interest in sustaining the benefits. There was increased support for regular canal-cleaning activities, thereby reducing operations and maintenance costs and improving water productivity. Water theft was controlled as both women and men exerted coordinated social pressure. The project offered new opportunities for women to be represented, and improved agricultural production.

Source: Asia Development Bank (2004)



CASE STUDY 3.6: Mainstreaming gender in integrated rural water supplies and sanitation in Zimbabwe (water and sanitation)

Zimbabwe has been implementing integrated rural water supplies and sanitation programmes since the late 1980s. The programme focuses on three components: water supplies, sanitation and hygiene. It was initially largely implemented through inter-ministerial committees established at the national, provincial and district level. The inter-ministerial committee at the national level, known as the National Action Committee, is a policy-formulating body, defining standards and operational approaches and monitoring the national programme.

In the late 1990s the National Action Committee, through its gender task force, decided to develop a strategy to mainstream gender within the national programme. One of the problems identified was that women were performing unskilled and non-paying jobs. To address this, it was decided that women would be trained as well sinkers. The first experiment involved pairing women and men, and the teams spent up to three months in the bush sinking wells. The teams were provided with protective overalls and one tent that they were to share. When the committee went to review the work, they found that the women were cooking and cleaning the tents and the men were doing the digging. The women commented that the men usually took off half the overalls for comfort when digging, as it would get very hot. The women also wanted to do the same but could not do so in the presence of men. Furthermore, they stated that women and men could not share the same tent.

The National Action Committee then decided to form an all-woman team. Allegations soon arose that the women (who were all single) had been selected for their beauty and not their ability. Furthermore, the supervisor (who was a man) was also accused of visiting the women's team more regularly than other teams. The women on the team still felt that they did not have privacy, as the supervisor could visit any time.

Next, the committee decided to form an all-woman team comprised of married and widowed women. These women were expected to spend three months away from their families sinking wells. They were given work suits that were designed for men and were therefore tight around the hips, and the women refused to wear them. Also, because the women had to visit their families regularly, it took them more time than men to finish the wells and get paid. Consequently the women dropped out of the well-sinking teams.

In consultation with local committees and communities, the committee then decided to ask how women could be better involved in performing paying jobs. The communities indicated that training them as latrine builders would ensure that they stayed within the village, were paid faster, and acquired skills that would extend beyond sanitation. It was then agreed that the

National Action Committee would relax its restrictions stating that only those with appropriate experience could be trained as latrine builders, thus allowing women to have access to training.

Source: UNDP (2003)

Further resources

Department for International Development (DFID), 2002. *Gender Manual: A Practical Guide for Development Policy-Makers and Practitioners*.

Flintan, Fiona, 2003. *'Engendering' Eden Volume I: Women, Gender and ICDPs: Lessons Learnt and Ways Forward*. IIED Wildlife and Development Series No. 16.

Groverman, Verona and Jeannette D. Gurung, 2001. *Gender and Organisational Change Training Manual*. International Centre for Integrated Mountain Development (ICIMOD).

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

UNDP and ENERGIA, 2004. *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide*.

■ ■ **MODULE 4:** GENDER-SENSITIVE STRATEGIES FOR ENVIRONMENT AND ENERGY PROJECTS



■ ■ **Module 4:** Gender-sensitive strategies for environment and energy projects

Gender-sensitivity in environment and energy development programmes is not only an issue of equity but also of efficiency, because involving both women and men has been shown to enhance results, increase cost recovery, and improve sustainability. For example, a review of more than 100 rural water supply projects found that women's participation was among the variables strongly associated with project effectiveness in water infrastructure programmes (Masika and Baden, 1997).

Projects are more likely to succeed when their socio-economic context, including relevant gender roles and inequalities, are taken into consideration. Looking beyond purely technological issues, project managers must be able to understand the social and cultural context they are working in; this will affect who manages the project, who makes the decisions, who performs the work, and who takes responsibility for ongoing maintenance and repairs. This sort of analysis clarifies the relevance of gender roles and relationships in what may seem like primarily technical contexts. It may require a different type of expertise than environment and energy experts currently possess, but nevertheless it is needed to promote the success of project interventions.

Section 4.1: Integrated development strategies

Environment and energy projects are often designed to address a very specific problem or need. In many cases, though, they might be more effective if they were incorporated into broader, integrated development approaches that make it possible to address a number of issues simultaneously. This is a complex process, since it involves first determining the overall priorities of the people who are the intended beneficiaries, both men and women, and then working with them to design projects that will assist them in improving their livelihoods and making them more sustainable. It also requires coordination with other development experts and organisations. The range of activities can be quite broad, since there is no vested interest in a particular issue or technology.

One of the challenges presented by the integrated development approach is that the project managers are usually not specialists in any particular area, and may not fully understand all the critical interconnections. For example, integrated rural development projects may fail to recognise the role of sustainable energy resources in certain agricultural production and processing initiatives, or to consider the full range of technological options.

Most projects fall short of a fully integrated development approach focused on overall community needs. Organisations and programmes, as well as government ministries, are divided by sectors, which makes it hard for them to work in an integrated way, especially when they are charged with addressing very specific issues, such as rural electrification, improved sanitation, or setting up protected areas to preserve biodiversity. In addition, within specific sectoral programmes, such as energy for sustainable development,



many organisations focus primarily on one type of technology – for example, solar panels, biogas, improved stoves, micro-hydro systems, or mini-grids.

However, even in the single-issue type of project, it is still possible to consider the overall socio-economic context of the project, and to determine the priorities of both men and women so that the intervention is more likely to have a positive impact on the livelihoods of both men and women. For example, a review of gender issues in the water and sanitation sector (Masika and Baden, 1997) recommends that project professionals should try to understand:

- What men and women in communities want;
- How much they are willing to pay and for what;
- The context in which they live; and
- The barriers, such as illiteracy and poverty, which hinder their participation in projects.

Box 4.1: What to consider when introducing alternative businesses

- In collaboration with rural people, selecting the type of enterprise that has the greatest potential for improved household resource management based on the capabilities and interests of household members.
- Developing essential business skills, such as marketing (market survey and information on opportunities), financing (credit, record sales, expenditure and reinvestment for business expansion), production (such as skills in household budgeting), organisational and managerial skills, and bookkeeping skills (balance sheets, profit and loss statements and cash flows).
- Providing information on linkages to farmers' organisations and cooperatives specialising in marketing or production to facilitate access to other productive resources and services.
- Monitoring and evaluating the enterprise performance, which requires indicators for measuring progress against the planned objective of increased income.

Such efforts may require longer project formulation periods and special communication strategies yet they are crucial for providing access to improved facilities, their effective use, and project sustainability and replicability.



Coupling potential enterprise development schemes with appropriate labour-saving technologies (such as piped water or convenient wells and energy sources that reduce time and effort devoted to fuel collection), can help reduce women's daily burdens while at the same time facilitating common income-generating activities, such as food production, brewing and agricultural processing enterprises. However, efforts to improve income-generation opportunities for women have often increased women's workloads by just adding new activities to their existing responsibilities. Understanding and reducing existing time constraints is critical for improving diversification strategies and income-generation opportunities if women are to benefit from them. In addition, women are likely to need better access to training in accounting, marketing and business management skills to make their activities profitable.

Section 4.2: Participatory approaches

The relationships between experts and clients are fundamentally changed when clients are recognised as resources for finding solutions to their own problems. Traditionally, women have been excluded from decision-making as a result of attitudes concerning their roles and status, and also due to aspects of women's own work burdens, knowledge, skills and confidence. This is particularly true in environment and energy activities, which often require technical knowledge and training, and are traditionally male-dominated (UNDP, 2007).

Box 4.2: Food security project in Uganda also meets income generation needs

In Uganda, a post-harvest programme recommended small-scale solar dryers for long-term storage and household consumption of fruit and vegetables. However, rural women's groups were more interested in solar dryers for income generation than for food security. Subsequently, the 'Fruits of the Nile' company was formed in 1992 to link rural producers with the market for dried fruit in Europe. Within three years, more than 50 women's groups had taken up the solar drier technology, and in 1995, the company exported more than 50 tonnes of dried fruit. The original food security concerns are also being addressed. When they are not drying fruit for profit, the women use the solar dryers to preserve vegetables and fruits for home storage and consumption.

Source: UNDP (2007)

Participatory approaches ensuring that women, not just men, are consulted have the potential to capture important gender issues, including:

- **Disadvantages that affect poor women**, such as women's greater time burdens in Africa (which are linked to increased environmental degradation), the dowry costs in Bangladesh, and use of women as 'assets' in coping with hardship (e.g. being sold in times of family need).
- **Separate household income streams**: In some countries men and women have substantially different bases for their livelihood activities, a high degree of separation of income streams in the household, and an associated separation of family responsibilities, which is generally not considered in mainstream economic analysis.
- **Gender differences in priorities**. A Zambian study found that women emphasised the importance of meeting basic needs while men emphasised ownership of assets. Across sub-Saharan Africa, distance from and quality of drinking water sources were concerns almost exclusively voiced by women.

- **Women's lack of access to resources**. In Vietnam, despite the 1993 Land Law, which protects women's rights to inheritance, sons continue to inherit land in accordance with earlier customs. In Cameroon, the trend towards privatisation of land has undermined women's traditional rights to use land for gathering resources.

However, participatory approaches can also be either gender-blind or gender-sensitive depending on the people who manage them. The questions asked, the issues explored and the range of information explored depend on what is considered relevant. There are many practical measures to promote women's involvement in decision-making:

- **Consultation processes sensitive to women's constraints** can be organised so that project information reaches women, they are able to attend meetings, and the meetings provide a forum in which women can actively participate. Open discussions involving both men and women may not be adequate to facilitate women's participation; specific measures may be needed to overcome social prohibitions against women speaking out in front of men (DFID, 2002). It may also be necessary to follow up large meetings with smaller planning groups, where women's roles, responsibilities, priorities and constraints can be elaborated in more detail. One approach has been to arrange meetings in situ at, for example, water supply sites (Flintan, 2003).
- **Consultations that build support from men**, particularly community leaders, can promote positive attitudes towards women's active participation in decision-making processes. Men's negative attitudes towards women's increased involvement have often shifted once the real benefits to the community, households, and women themselves have been demonstrated (DFID, 2002).



- **Ensuring women's involvement in management committees**, such as in the water sector, gives them practical opportunities to take an active role in community-level decision-making (UNDP, 2003). For women who are not used to assuming positions of authority, considerable groundwork and experience may be needed for them to develop the self-confidence and assertiveness skills necessary for dealing with village authorities (DFID, 2002). Therefore, women representatives may need special training in leadership skills, confidence building and communication (UNDP, 2001).
- **Building gender-sensitive partnerships** between community representatives and local authorities can be an effective way to raise awareness concerning women's needs (DFID, 2002). With appropriate support and training, community representatives can negotiate effectively for gender-sensitive services; at the same time, staff in municipal authorities can increase their understanding of gender issues and accept their responsibility for delivering gender-aware activities (UNDP, 2007).



Section 4.3: Use of gender-specific data and analysis

Insufficient documentation of gender disparities is a barrier to recognising and addressing gender issues effectively. Collecting sex-disaggregated data allows decision-makers, environment and energy institutions, and development agencies to better understand who is using existing resources, such as land, forest and water, and what they are doing with it. Information about women's time and work

Box 4.3: Participatory approaches and gender

Attention to gender differences and inequalities is required if participatory development initiatives are to involve women as well as men. Specific issues include:

- **Power imbalances in communities.** Communities are not harmonious groups with a common set of interests and priorities. There are often strong divisions along the lines of age, religion, class and gender. These power differentials make it difficult for some people to voice opinions that contradict general views. Power differentials may even affect who participates in specific meetings. Outside officials may only invite 'community leaders' (generally men) to participate in consultations.
- **Intra-household and intra-family relations.** Some women may find it difficult to speak out in front of their husbands or fathers. They may also believe that discussions relating to family matters (even issues relating to workloads) are not for public forums.
- **Different constraints to participation.** Men and women have different responsibilities and workloads, with women often having less time to devote to new activities. Attending specific meetings may raise problems for women if meetings are scheduled for times of the day when women tend to be occupied. Women's responsibilities for childcare may also make it difficult to participate.
- **Different abilities to participate.** Given gender biases in education, women and men often have varying literacy levels. Men may also have more experience putting their arguments forward to outsiders and more confidence dealing with new people.
- **Perceived benefits of participation.** Women and men may make different calculations about the costs and benefits of their involvement in participatory processes. Given the already high demands on most women's time, they often find little time to participate.

Source: UNDP (2003)

profiles is particularly critical in environment and energy initiatives, as is information on women's control over resources, such as data on women's status with respect to land tenure, credit availability and activities that lead to land degradation or deforestation (UNDP, 2007).

Where patterns of gender difference and inequality are revealed in sex-disaggregated data, gender analysis is used to examine why the disparities are there, whether they are a matter for concern, and how they might be addressed (DFID, 2002). Understanding men's and women's roles and responsibilities as part of the planning of interventions helps targeting of actions, improves project effectiveness and ensures that women, as well as men, can play their part in national development. A gender 'efficiency' approach emphasises that gender analysis makes good economic sense in the overall development context (DFID, 2002). Targeted analyses help to generate discussion and critically assess needs, while examining policy alternatives, formulating effective policies and programmes, monitoring progress, and evaluating results (UNDP, 2007).

Section 4.4: Attention to gender disparities in access to training and financing

Technical training: Operating equipment and machinery is often considered to lie within the domain of men's work, so technical experts, educators and extension workers may not include women. However, programmes can be designed to make training more accessible to women, if it is offered at times and locations compatible with women's family roles, and adapted to women's levels of skills and confidence. Trainers can be coached on gender concerns, or selected for their support of women's enterprises and social advancement. Trainers also need to be sensitive to the fact that women often feel more comfortable in women-only environments when acquiring new technical skills.



Micro-financing: Both women and men require access to credit and savings facilities for productive purposes, such as buying seeds or fertilisers, or investing in new technologies. Women often face special constraints regarding access to financial services, especially since their rights to own land and other collateral may be limited. In collaboration with government extension services, many NGOs and donors have encouraged the development of women's rotating credit and savings activities to generate cash for income-generating programmes. An analysis of credit schemes in Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe revealed that women receive less than 10 percent of all credit earmarked for smallholder farmers and only one percent of the total credit to agriculture (FAO, 2001b).

Assignments in Part 2 of the Manual

Available on the companion CD and online at <http://www.undp.org/energyandenvironment/gender.htm>

Assignment 4.1: What is a gender-sensitive project?

Aim: To distinguish a gender-sensitive project from one that does not take gender roles into account, and to understand how to improve projects for gender sensitivity (60-75 minutes)

Assignment 4.2: Different approaches to gender in projects

Aim: To understand the difference between 'women only' and 'gender mainstreaming' projects (60-75 minutes)

Assignment 4.3: The gender-sensitive project cycle

Aim: To identify entry points for gender mainstreaming in the project cycle, information needed to develop a gender-sensitive project, and differences in impact a project can have on women and men (60-75 minutes)

Discussion topics

1. In project development and implementation, women (staff) are better at dealing with social issues, and men with technical and financial matters.
2. Projects should ensure implementation of decision-making bodies from community to national level with a fixed quota for women's representation to ensure that women's issues are brought forward.
3. Every project should remove barriers for women to participate in project-related activities such as by providing child-care facilities, adjusting the length and timing of meetings to allow women to attend to domestic tasks after work, using women-friendly language, appreciating women's efforts, etc.



CASE STUDY 4.1: Gender and biodiversity management in India (biodiversity)

In 1997, the M.S. Swaminathan Research Foundation conducted a research project on 'Gender Dimensions in Biodiversity Management' in different locations throughout India, focusing primarily on socially determined gender roles in agro-biodiversity management.

Considerable variations were found in the work done by men and women in different locations, with the same tasks, such as seed selection or winnowing, being done by women in some communities but not in others. In areas of traditional agriculture, among communities and classes that did not practice gender seclusion, women's participation in biomass-related activities was high and their knowledge and interest in conservation was apparent.

Women's involvement with conservation practices, such as preservation of high-quality seeds, was strong in communities where they were the main food producers. The same was true of areas where women shared joint responsibility, such as among the Mizos, Nagas and some hill tribes of the Western Ghats. The project found that this traditional knowledge base was being eroded by changes related to age and gender in parts of Orissa. In agriculturally developed areas where market forces had penetrated deeply, such as Tamil Nadu, women were less involved in conservation practices but continued to play a role in seed preservation.

In the tribal areas, there are considerable genetic resources. Women play a critical role in conserving traditional varieties of food crops and medicinal plants, yet concepts of purity and pollution govern women's roles and restrict their entry into sacred groves. For instance, the central Indian tribal belt has contributed rich genetic diversity in minor millet, pigeon pea, rice, niger, sesame and forage grasses. In the Western Himalayan tribal belt, there is considerable genetic variability in buckwheat, amaranth, soybean, lentil, cowpea and pome, and stone fruits.

The varied landscapes of the Kolli Hills of Tamil Nadu are an area of considerable agro-biodiversity. Women here play a major role in seed selection and seed storage. Traditional systems of resource use and cultivation are now being replaced by cash crops in order to meet the people's needs. The forested hills of the Jeypore tract of Orissa are known for diversification of rice and are home to different tribal communities. Both women and men are involved in conservation but their knowledge is being eroded. Polygamy is widespread and some roles are demarcated by gender, although many activities are jointly undertaken in families.

The exercise represents an initial attempt to understand the links between gender and biodiversity in India, highlighting a number of gender considerations in conservation and resource use. It has undoubted potential to influence the programming of biodiversity management by local community groups and to motivate national and regional initiatives.

Source: UNDP Special Unit for South-South Cooperation
<http://tcdc.undp.org/sie/experiences/vol5/Gender.pdf>



CASE STUDY 4.2: Battery-operated lamps produced by rural women in Bangladesh (energy)

Starting in 1999, a project aimed at providing renewable energy technology to an island area in Bangladesh where electric grid extension is not economically viable. Team leaders supervising a survey of local needs (who were women engineers) took a special interest in the voices of the rural women, gathering information about their priorities and energy usage patterns. In response to comments made by the local women, the project designers considered how to utilise their skills and ideas in designing effective energy service delivery mechanisms.

Previous studies by the designers of solar electrification projects showed that there was a market for battery-operated lamps as an alternative to kerosene for lighting. These lamps were popular because they used small batteries and could be charged with a diesel generator, or with solar power, if that was available. The lamps were energy efficient and reduced the risks of fires from kerosene lamps, as well as smoke, pollution and greenhouse gas emissions.

Meetings were held with the women, the local market committee, and NGOs during preparation of the execution plan. Women were invited to share their thoughts on establishing project objectives and developing a detailed execution plan. Women were selected for participation in the project based on their interest in the potential activities, levels of education, present occupations and aptitude for business. Most of the women selected for the project were young and had at least a primary education, but none of the women had been employed before. The women making the lamps earned the equivalent of the daily wages of a skilled labourer, thereby raising their income and social status.

In 1999, the project began training rural women to produce the lamps in a micro-enterprise manufacturing facility and distribute them through rural markets. Technical training for the women included training on identification of electronic components, identification of tools, printed circuit board assembly, and quality control and testing. The next year extensive training in accounting, bookkeeping marketing and quality control was given to group leaders who were to manage the manufacturing plant.

Lamp manufacturing is being scaled up to meet demand beyond the islands in the region, and the micro-enterprise will diversify with new electronic product assembly for solar home systems. The government also plans to procure DC lamps for its programmes. The project is following a business plan to reach financial stability. The NGO plans to withdraw after two years, as it expects the cooperative will have become a self-supporting enterprise.

Source: UNDP (2001)



CASE STUDY 4.3: Gender training in Honduras for agricultural and forestry land management (sustainable land management)

In Honduras, the Rural Land Management Project (Proyecto de Administracion de Areas Rurales or PAAR), has been working towards modernising the system of rural land registration, strengthening forest administration, improving agriculture and forestry practices in upland farms in order to stabilise income and decrease forest encroachment, and rationalising the national protected areas system.

Gender has been an integral component of the project, beginning with the design phase of PAAR. A social assessment conducted prior to the project identified key gender issues regarding access to land, access to rural extension services and natural resource management. It recommended gender training for project staff, service providers and beneficiaries.

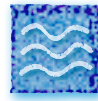
Additionally, a gender strategy was developed to provide opportunities for men and women farmers in the project area. The strategy includes measures to: market the project to men and women through appropriate communications materials and channels; select technical providers with the capacity and experience to successfully reach and work with male and female community members; provide gender analysis training for technical providers; and establish gender-related performance indicators.

The project has a coordinator responsible for gender as well as social and ethnic components. Although no specific budget line exists for gender, social and ethnic activities, the component coordinator has been successful in forging alliances with the project's other coordinators in order to secure funds for gender activities. Training modules have been presented to staff through workshops, in-house training activities, and on-the-job training. In addition, some service providers have acquired additional materials on gender to complement the PAAR methodology and improve their understanding of gender issues.

An important aspect of this training methodology is the fact that it is non-threatening. It builds on the fact that men and women recognise the importance of family as the cornerstone of their communities, and few would oppose a more central role for families in community and agricultural development. Most extension agents have now also accepted the concept of providing technical assistance to families (as opposed to men only).

Source: World Bank

<http://wbln0018.worldbank.org/MesoAm/UmbpubHP.nsf/917d9f0f503e647e8525677c007e0ab8/9eb51684614b094e8525682c006efcaf?OpenDocument>



CASE STUDY 4.4: Gender and the value of household toilets in Cambodia, Indonesia, and Vietnam (water and sanitation)

Women in Cambodia, Indonesia, and Vietnam put a greater value on their household toilets than men do. This is one of the findings of a study of multi-country sanitation experiences. The study documents field research in 36 rural communities with unusually high sanitation coverage rates. The benefits that women valued more highly than men were convenience, privacy and a clean home environment.

This finding suggests that those promoting sanitation schemes should treat women as 'valued customers' and give them a greater voice in how toilets are planned and installed. The study also showed that the extra work involved in keeping toilets clean and ready for use was falling on the women in the family.

Women's greater interest in sanitation was also evident from the fact that they initiated the process for acquiring family latrines in 18 out of 24 communities in Indonesia and Cambodia. Men rarely initiated a discussion about acquiring a family latrine. In Vietnam, men made the final decision after a joint discussion between men and women. In Cambodia and Indonesia, men and women decided together in half the cases. When there was no joint decision, men were more likely to take the decision in Indonesia and women were more likely to do so in Cambodia.

In general, in Indonesia and Vietnam people agreed that the value of the benefits from household latrines exceeded the costs of construction and maintenance. In Cambodia, the value of the benefits was perceived to be marginally lower than the costs.

In view of women's greater interest and influence on family decisions regarding sanitation improvements, projects should ensure that women are fully informed of options and costs. They should also more actively promote women's access to credit for sanitation, and offer women training in income-generating skills related to building latrines, such as construction and masonry.

Source: UNDP (2003)

Further resources

ENERGIA, 2005. *The Gender Face of Energy: Training Modules, Gender Tools for Energy Projects*. <http://energia-africa.org///TrainingModules>

Food and Agriculture Organisation (FAO), 2001a. *Irrigation Sector Guide, Socio-Economic and Gender Analysis Programme* (SEAGA).

FAO, 2001b. *Project Cycle Management: Technical Guide, Socio-Economic and Gender Analysis Programme* (SEAGA).

FAO, 2004. *Rural Households and Resources: A Guide for Extension Workers, Socio-Economic and Gender Analysis Programme* (SEAGA).

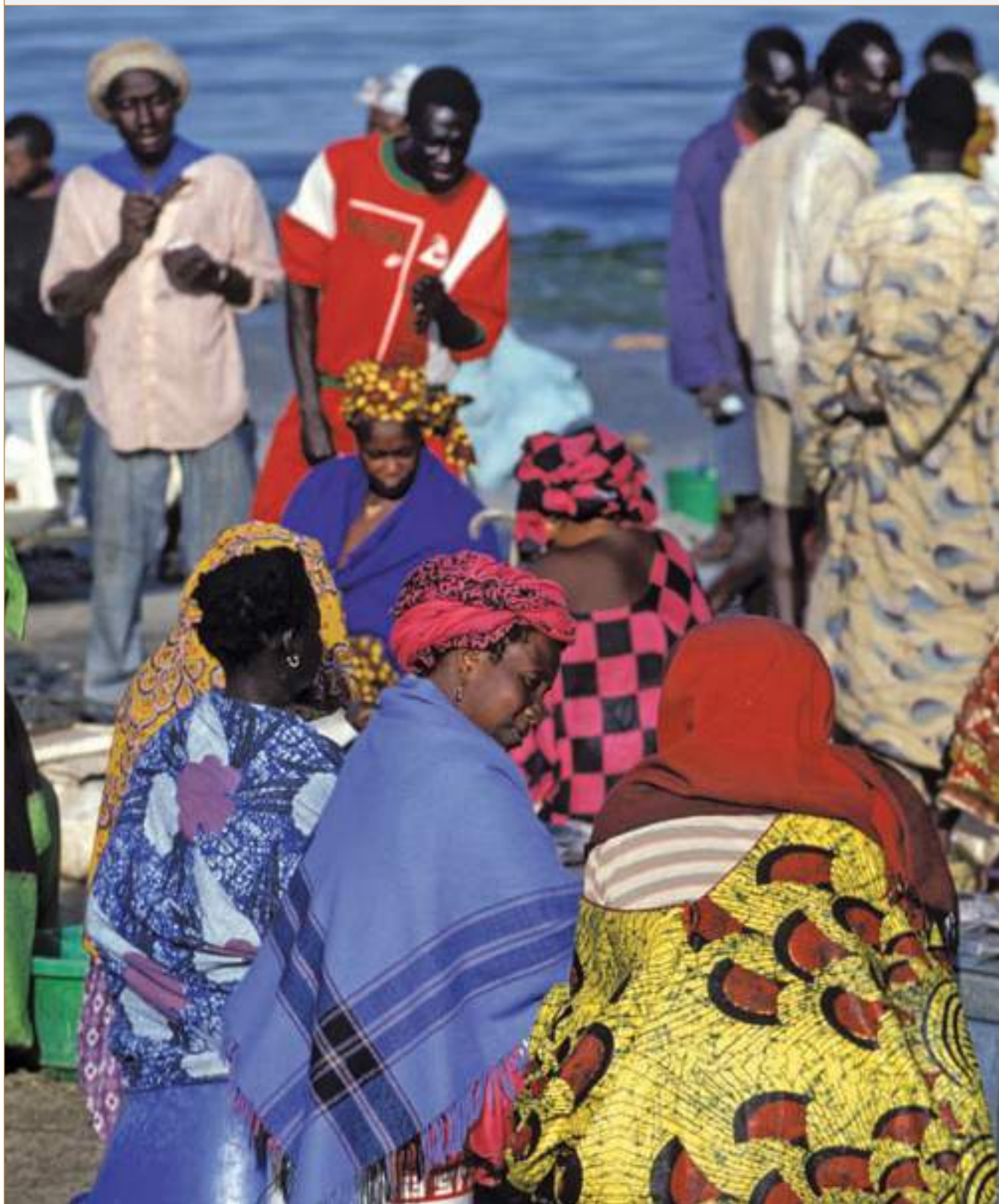
Fong, Monica S., Wendy Wakeman and Anjana Bhushan, 1996. *Toolkit on Gender in Water and Sanitation*, Gender Toolkit No. 2, The World Bank.

UNDP, 2001. *Generating Opportunities: Case Studies in Energy and Women*.

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

UNDP and ENERGIA, 2004. *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide*.

■ ■ **MODULE 5:** MAINSTREAMING GENDER INTO ENVIRONMENT AND ENERGY PROJECT CYCLES



■ ■ Module 5: Mainstreaming gender into environment and energy project cycles



Mainstreaming gender into project planning should begin with collection and analysis of sex-disaggregated data that can highlight significant social and economic variables. This is also the time to assess the gender sensitivity of project staff involved in problem identification and development planning, and to offer appropriate training where necessary (UNDP, 2004). Stakeholder participation is a key element in problem

identification, and attention to gender issues is important in this context so that it is not only men who have the time and opportunity to present problems and potential solutions. Framing questions, and listening the responses, in a gender-sensitive way, will reveal points where there are significant differences between men and women in terms of existing economic and social conditions, priorities for action, planning approaches, implementation abilities, training needs, and hoped-for outcomes. This discussion can help establish project objectives as well as indicators of success that directly address the perceived needs of the participants.

Box 5.1: Checklist for project design

Project design:

1. Has the project purpose been identified correctly?
2. Are there logical linkages between activities, outputs, purposes and goals?
3. Are there sufficient activities to achieve the outputs?
4. Are the 'if and then' statements necessary and sufficient to progress to the next stage?
5. Have any new 'killing' factors arisen during project design? If so, what corrective action should be taken?
6. Are the indicators appropriately targeted?
7. Will the benefits be sustainable beyond the life of the project?

Gender in the project design:

1. Does the project recognise differences in the roles and needs between women and men?

2. Will the project activities improve the productivity of women and men?
3. Whose access to resources will be improved?
4. Whose control of resources will be improved?
5. Who will share in the project benefits?
6. Whose control of the benefits will be increased?
7. Whose participation in decision-making will be strengthened?
8. Is the project meeting practical or strategic gender needs?
9. Will the project empower women?
10. Do the indicators differentiate between the impact of the project on women and men?
11. What factors may inhibit women's full participation in the project? How may they be overcome?
12. What will be the likely impact of the project on workloads? Will it be necessary to take any remedial measures?

Source: FAO (2001b)

Section 5.1: Project identification, formulation and appraisal

The motivation to formulate a project is often to address a specific problem or to take advantage of a new opportunity. This requires identification of the entry point and/or the problem to be addressed. Any proposed project should be reviewed from a range of perspectives to determine whether to proceed to writing a formal proposal and seeking funding. Consideration of gender perspectives should be part of a broader review of policies, institutions, infrastructure, socio-economic and cultural issues, and the state of the economy. The project formulation stage also represents an opportunity to improve the project design prior to implementation by conducting a gender analysis of the project design. See Box 5.2.

Many analytical tools have been developed to assess projects from a gender perspective, and many of them are identified as 'participatory'. These tools reflect the view that participation is essential and that outsiders (such as extension and community workers) should play the role of facilitators rather than teachers. Participatory tools and approaches can be used to collect and share information, to facilitate learning and community planning and to empower people to take charge of their own development.

Stakeholder analysis

With this tool, particular attention is paid to the likely impact of the project on different stakeholders, including men and women, their opportunities for participation, and the project's contribution to development. Stakeholder analysis reviews the following:

- Who are the different stakeholders? Are men and women represented?
- What are their interests? How do they differ for men and women?

- How will men and women be affected by the proposed project?
- What are the project priorities for men and women?
- What is the capacity for men and women to participate in the project?

Male and female stakeholders may have different abilities to influence the outcome of a project. For example, target beneficiaries are often in a relatively weak position in terms of influencing projects (FAO, 2001b). They may be frustrated by a lack of access to information or be placed in a weak social position due to traditional hierarchies. Other interested stakeholders may have the time, money, organisational capacity or political power necessary to influence the project; however, if they are not interested, they could pose a risk to the project's success by withholding support. The inclusion of additional project activities might ensure that influential stakeholders support a project and enable important yet weak stakeholders to become more influential. Subdividing men and women into separate groups is – or should be – a common step in stakeholder analysis (FAO, 2001b).

Gender analysis

Gender analysis involves a systematic approach to identifying and examining the expected impacts of development on men and women in the community. The main questions addressed are:

- Who does what work? How does the work differ for men and women?
- Who has access to and who has control over environmental and energy resources?
- Who has access to and control over the benefits from environmental and energy resources?
- Who participates in decision-making?
- Which needs are being met?

Box 5.2: Gender analysis matrix

	Tasks and skills	Workload	Resources/benefits	Socio-cultural
Women				
Men				
Household				
Community				

Source: FAO (2001b)

The purpose of the analysis is to determine whether:

- The existing situation contributes to the well-being and development of the household;
- The existing situation contributes to the well-being and development of the economy;
- The existing situation is sustainable.

Where possible, use is made of sex-disaggregated data collected during the situational analysis.

Analysis may be used at the planning stage to determine whether the potential gender impacts of a project are desirable and consistent with the project purpose and goal. The impact of the project is examined in terms of:

- Tasks and skills: changes in tasks performed, levels of skill required and labour requirements (how many people).
- Workload: changes in the amount of time it takes to carry out tasks.
- Resources/benefits: changes in access to resources and benefits as a result of the project, and changes in control over resources and benefits.
- Socio-cultural factors: changes in social aspects of participants' and the community's lives as a result of the project.

Analyses that focus on gender relations differ in emphasis from those that simply accept existing gender roles (FAO, 2001b). They give more prominence to the connectedness of men's and women's lives, and to the imbalances of power embedded in male-female relations. They also emphasise the interaction of gender relations with other hierarchical social relations such as class, caste, ethnicity and race.

Section 5.2: Implementation

Much of the emphasis in gender-sensitive development is focused on increasing the participation of women in implementation of initiatives. Although this is a vital goal, it does not come without challenges. The difficulties faced by poor women and the costs of participation should be clearly understood and addressed.

Barriers to involvement: The involvement of men and women requires attention to gender differences and inequalities. Women's responsibilities for childcare, household maintenance and family welfare often make it difficult for them to participate in community meetings and activities. Men are more likely to be consulted as community leaders, and even when



women are included, they may lack the education, experience and social standing to speak up. Therefore special efforts should be made to facilitate women's participation. (See Box 4.3, p. 30)

Construction: If participants are involved in construction activities, stakeholders' commitment to the scheme can be increased. This makes it more likely that they will have a sense of commitment toward future operations and maintenance activities. Specific attention needs to be paid to how rights to use resources, such as irrigation water and land, are created and enforced, with an emphasis on possible gender differences in both the willingness and the ability to invest labour or other resources in construction work and maintenance. In addition, women who participate in construction activities need to receive compensation equal to that received by men.

Operations and maintenance: As participants and beneficiaries, women and men are increasingly responsible for managing operations and maintenance activities, even though until recently the need for women's involvement in operations and maintenance was not widely recognised. User groups sometimes collect fees on a fee-for-service basis that are used to cover the costs of maintenance activities, such as clearing canals or drains, or repairing solar panels. In other cases, community members themselves contribute their own labour according to certain agreements. It might sometimes be difficult for women to contribute labour for maintenance activities as they may already suffer from labour constraints. Therefore, the operation and maintenance system that best suits most users should be decided upon through a consultation process with those users.

Training and extension: Training and extension services are often an integral part of an environment or energy project. To ensure that women feel comfortable in using tools and equipment, they need to be included in project training sessions. Training programmes need to be flexible, and this requires consultation with the community before training sessions are organised to identify constraints and ways to

overcome them. For example, training far away from home is often less convenient for women, which can result in a lower participation rate by women compared to that of men. Alternatively, the most appropriate time for meetings and training could vary, for example, in a farming community early morning, or late afternoon, when women have completed most of their tasks.

Section 5.3: Monitoring and evaluation

Monitoring and evaluation are integral stages in the project cycle. Monitoring is an ongoing process during project implementation, whereas evaluation occurs periodically, typically once a project has been completed. Both should incorporate measurable targets and gender-sensitive indicators.

Monitoring considers the question ‘Are we doing the project correctly?’ Its purpose is to alert project managers to any problems that arise during implementation. It ensures that inputs are made available on time and are properly utilised. Monitoring typically reports, for example, on financial or physical progress, such as the amount of money spent on an activity or the number of women and men attending a field demonstration. While quantity is important, the quality is also important. For example, women may be involved in project implementation doing low-wage activities, and may not be represented in any significant way in project management.

A different kind of monitoring – *impact monitoring* – also works within the existing project design, focusing on the transformation of inputs and activities to outputs. However, it is concerned with progress of the project towards achieving its purpose, and the impact of the project on different groups of people. Gender-sensitive monitoring ensures that the impacts of a project are assessed for both men and women. If any unexpected negative results are observed, their causes can be identified and corrective action taken to bring a project back on track.

Key questions that an impact assessment should answer are:

- What benefit (financial, human) will the option bring to both men and women?
- What costs (financial, human) will the option incur for both men and women?
- How do both male and female stakeholders perceive the option in terms of its costs, benefits, acceptability and practicality?



Evaluations differ from monitoring because they adopt a broader perspective by challenging the original assumptions of the project design and considering ‘Are we doing the correct project?’ Evaluations focus on progress towards realising a project’s purpose and goal, and even if a project does not have specific gender-related goals, its impact on and relevance to men and women should always be considered. This will help to inform new initiatives that can benefit from the experiences of the project.

Attributing gender, development and empowerment impacts to specific interventions can at times be a challenge. For example, the goal of a project may be to improve income-generating opportunities for men and women, but attention needs to be paid to ensure that any measured increases in income levels are due to the project activities and not other factors (such as a one-time bumper crop).

Gender-sensitive targets and indicators

Measurable targets and gender-sensitive indicators should be developed at an early stage in the planning process and included in planning documents. Unless gender considerations are included throughout the design and planning process, and specifically included in the project objectives, they are not likely to be tracked carefully in the monitoring and evaluation of the project’s success.

Collection of separate data on men and women ideally should be done at the beginning of the project cycle, starting with gender-differentiated baseline assessments of existing conditions. Then it will be easier to determine whether there are differing impacts on men and women throughout the project implementation period. Looking at ‘households’ as a category, for example, without differentiating between the separate needs and concerns of the men and women in the household, or identifying female-headed households, can result in misleading data both about baselines and about project impacts.

Quantitative indicators measure changes over time that can be presented in terms of numbers, percentages, or ratios, such as the number of women working in an environmental organisation. Quantitative indicators are useful because they are relatively easy to track. In many instances, however, projects collect information related to the project's financial or physical progress (such as the amount of money spent on an activity, or the number of women and men attending a field demonstration) rather than assessing the impacts of the project on the target group or the livelihoods of the project beneficiaries – such as increases in their income levels or access to resources.

Qualitative indicators, such as changes in opinions and attitudes over time due to project activities, are more difficult to obtain and measure since they may require interviews with participants or surveys of target beneficiaries. Collection of this sort of information, however, can provide important perspectives on the actual effectiveness of a project concerned with an abstract goal, such as gender empowerment, and on why measurable changes occurred. Qualitative analysis might, for example, indicate what sorts of obstacles keep women from occupying more seats in local community associations or other decision-making positions, or information on why mainly men participated in a specific field demonstration. Sometimes, however, this type of information is not gathered because it is considered too complex and situation-specific.

Box 5.3: Mali multifunctional platform

The Multifunctional Platform project, initiated in Mali, introduced diesel engines mounted on platforms to provide off-grid energy for rural villages. The engines can be hooked up to equipment to provide a variety of services, including grinding, milling, husking, pumping water, charging batteries, running lights, and powering tools such as welders and saws. By providing a cheap and simple source of energy for rural enterprises, the platforms have improved the quality of people's lives in rural areas and created new income-generating opportunities for both men and women.

As part of an assessment intended to provide substantive input regarding expansion of the platform project into other countries, a comprehensive gender-sensitive study of the impacts of the platform was undertaken, which found the following:

- Women in villages where platforms have been installed cite time saved as one of the most important results of having access to motorised power. Over a week's time, mechanical milling of maize, millet, and sorghum can save women the equivalent of an eight-hour day. The platform saves women almost four hours of shea nut milling and grinding time over the traditional pounding and crushing.
- Time saved due to the availability of the platform allowed women to spend more time maintaining their individual farms, to increase and diversify their farm production, and to develop small trading operations in agricultural and fish products and prepared condiments. For example, in some regions of Mali, the increase in planted areas on individual farms has allowed women to double or triple their rice production, thereby improving household food security.
- Girl's school performance improved, with fewer delays in arriving at school due to relief from early morning duties such as pounding grains and drawing water, more regular attendance because mothers kept them home less often to help with domestic chores, girls were less tired when they arrived at school and had more time for lessons and homework. Women's increased revenues also allowed them to spend more on children's education and school supplies.
- Because the platform requires that the platforms be requested, acquired, and managed by village women's committees, women are necessarily engaged in decision-making processes for the community and in operating equipment which provides essential services for the entire community.
- Revenues from the platform operations become important sources of capital for village development.

Source: UNDP (2004)

Assignments in Part 2 of the Manual

Available on the companion CD and online at <http://www.undp.org/energyandenvironment/gender.htm>

Assignment 5.1: Stakeholder role-playing

Aim: To understand the different roles played by stakeholders and others involved in project development (90 minutes)

Assignment 5.2: Developing a logical framework

Aim: To understand how to develop gender-sensitive project goals and indicators (60 minutes)

Assignment 5.3: Identifying an implementation plan

Aim: To consider tools and mechanisms to ensure gender balance during the implementation phase of a development project (60 minutes)

Assignment 5.4: Evaluating a project

Aim: To consider gender-sensitive tools and indicators for project evaluation (60 minutes)

Discussion topics

1. Men and women can help in project implementation by being part of construction, operations and maintenance.
2. Project monitoring is best served if both men and women are involved in defining results and outcomes.
3. Every project should include measures disaggregated by sex to ensure that gender is properly mainstreamed.



CASE STUDY 5.1: Gender-sensitive social forestry project in India (biodiversity)

The Deccan Development Society (DDS), an NGO dedicated to alleviating poverty in Zaheerabad, encouraged disadvantaged groups to get involved in social forestry. The area faced an acute shortage of fuel wood and fodder, and the lack of assured irrigation made agriculture more a gamble than a dependable occupation. Dry farming was limited and unemployment widespread. The reserved forests adjoining Zaheerabad stood ruthlessly denuded from decades of misuse.

Impressed by the work of local women's self-help organisations, the Social Forestry Division encouraged six villages in the area to raise seedlings and make them readily available to villagers for forestation of the reserved area. People in the villages, having been sensitised earlier by DDS, were receptive to the idea, but it was the women that came forward to take up the challenge. Initially there was a problem in getting land with a source of water to irrigate the nursery. The women of Algole suggested that individually they could manage small nurseries in their backyards, drawing the water needed for the seedlings from the hand pumps in the village. Participants divided themselves into five groups and, helping each other in the work, raised a phenomenal 5,000 seedlings each over a period of seven months. The Social Forestry Division supplied the inputs and technical assistance.

Tree planting started in 1990, when each participant was allocated four hectares of the reserved area for planting over a period of eight years. During this time, participants earned a monthly wage, and they had the prospect of a 50 percent share of the crop at the time of harvesting. The women had some difficulties with this arrangement so they came up with the idea of managing the work as a cooperative. The area was planted with subabul, bamboo, cashew, pongamia, glyricidia, eucalyptus, tamarind and sissoo, a mix of species from which they could harvest secondary products. To get more fodder and improve soil quality, seeds of stylosanthus were sown in between the rows. Participants received training in horticulture, fodder development, and fuel saving through the use of appropriate stoves. The DDS ran evening classes in the village school, which combined literacy, numeracy and transfer of technology. Nursery managers learned mango grafting at the Fruit Research Station. Afterwards, they trained other women in their villages in grafting. Now, each woman raises about 100 mango grafts per year, worth 1,500 rupees.

Fruit trees were planted to provide shade and conserve nursery water. Flowers and vegetables are grown as well, adding privacy and beauty to the modest dwellings and nutrition to families' diets. While re-greening and regenerating the forest resource base, the project is alleviating rural poverty and raising awareness of environmental issues, not only among the women but the entire community.

Source: CIDA (1992)



CASE STUDY 5.2: Non-pesticide agriculture in the Deccan plateau of India (chemical management)

Traditional small farmers in India used organic manures, resulting in crops that were remarkably free from pests and diseases. They also used predators like ducks and frogs to reduce pest attacks. Unfortunately this knowledge is disappearing with the introduction of modern agricultural techniques. As chemical fertilisers and pesticides have become more widely used, they have led to problems such as direct toxicity to the applicator, destruction of parasites, predators and other beneficial organisms, accumulation of pesticide residues in the agricultural commodities, and poisoned food, water, air and soil.

The use of pesticides has also led to the development of pesticide resistant strains in insects and resurgence of pest species. In 1997, an outbreak of *Helicoverpa armigera* led to suicides of more than 250 farmers. Many farmers had invested heavily in pesticides, but were unable to control the outbreak. Some had heavy debts they saw no way of repaying, and hence committed suicide.

The Deccan Development Society (DSS) works with marginal farmers from dalit ('untouchable') groups and has been active in 75 villages in the Zaheerabad region on sustainable agriculture and food security issues for the last 15 years. DSS has engaged in discussions with women farmers about pest control practices, including in relation to the *Helicoverpa armigera* outbreak in pea crops. At meetings with women, alternative traditional methods for controlling *Helicoverpa* were discussed, based on their experiences with pest management.

DDS is attempting to reintroduce traditional knowledge about pest control in a systematic way through a non-pesticide management programme for pea crops supported by the Centre for World Solidarity (CWS). Working with CWS has increased local knowledge about beneficial and non-beneficial insects, and some new methods of control using pheromone traps and botanical pesticides.

More than a thousand farmers of the region are directly involved in this movement, covering an area of around 600 hectares. The results reveal that the average pea crop production of farmers in the programme was 283 kg/ha compared with 208 kg/ha for those who did not participate. The average plant protection cost for non-pesticide farmers was Rs150/ha and for chemical farmers it was Rs 980/ha. The average net income of the non-pesticide farmer was 1,623/ha and for chemical farmers Rs 900/ha.

As a result of focused and long-term efforts, non-pesticide management is becoming increasingly accepted. Women, especially dalits, have become leaders in non-pesticide management practices, and other village members learn from them. There is now a large group of trainers both in the organisation and also in the farming community who can play a vital role in horizontal spread of the non-pesticide management concept.

Source: Deccan Development Society, <http://www.ddsindia.com/www/default.asp>



CASE STUDY 5.3: Demonstrating the viability of micro-hydro in Kenya (sustainable energy services)

The considerable potential for micro-hydro in Kenya remains largely underdeveloped. In 1998, a group of organisations began an effort to demonstrate how micro-hydro systems can be installed and supported in rural areas of Kenya. Despite high initial costs, micro-hydro systems are, in many areas, the best option for delivering adequate, clean and reliable energy services to rural communities and can provide multiple benefits to women and communities if designed with the needs of both men and women in mind.

A Sustainable Livelihoods Analysis (SLA) was undertaken before the projects' initiation, which showed that women identified water as a top priority, while men were more interested in the benefits of electrification. Women in the area spent approximately 3.5 to 4 hours a day engaged in collecting water from the nearby river. The analysis also found that children, especially girls, spent time collecting water, with negative impacts on their education. Other analysis showed that women visit the river three or four times a day with 20-litre containers, bringing back 60 to 80 litres per household per day, which is slightly over the quantity needed for survival (5 litres per person per day).

Micro-hydro technology was selected based on information derived from the SLA. The micro-hydro turbine chosen was able to produce mechanical power that would drive various end-use applications, including water pumping. It was also able to receive an add-on in the form of a mini-grid for electrification.

A major part of the micro-hydro initiative was to carry out a pilot project demonstrating the benefits a micro-hydro system can have when technical and institutional supports are in place. Information and awareness-raising activities were important components of the strategy to advocate for micro-hydro energy, and to support the development of technical standards.

The participation of the Renewable Energy Department of the Ministry of Energy was an important part of the process, as it provided a direct link to policy-makers. Specifically:

- The Kenyan Parliament, learning of the project through the Ministry of Energy and other sources sought to learn more about the issues surrounding private and community ownership of micro-hydro systems.
- Parliamentary discussion of the need for separate policy for micro-hydro systems led to agreement that small systems, less than 10MW, would not have to undergo the same rigorous process of licensing as the larger systems.
- The Renewable Energy Department of the Ministry of Energy began working with the Kenya Bureau of Standards to develop standards for micro-hydro systems, such as standards for transmission poles, wires and installation specifications.

Source: UNDP (unpublished)



CASE STUDY 5.4: Sustainable and participatory environment management project in Senegal (sustainable land management)

Between 1997 and 2004, the government of Senegal undertook a 'Sustainable and Participatory Energy Management' project. At the time the project was initiated, forest-based traditional fuels (firewood and charcoal), mainly used for household cooking purposes, represented 53 percent of Senegal's final energy consumption. The bulk of the consumption of charcoal (76 percent) took place in large urban areas. Over the years, the use of charcoal in Senegal had resulted in the gradual loss of forest cover (approximately 30,000 ha per year) and thus of the ecosystem's carbon sequestration capacity and biodiversity. Degradation of the rural environment (particularly soils) and resulting impoverishment of the rural areas led to an acceleration of the exodus from rural areas, and a massive transfer of wealth from the rural communities to a few urban-based wood fuel traders. These negative impacts disproportionately affected the rural women and children.

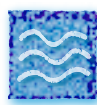
The project focused on demand side management activities, fuel substitution, improved stoves initiatives, and capacity development activities for institutions involved in the management of the sector. Efforts were made to promote the participation of civil society in the operation of the energy sector, with a special focus on gender development and mobilisation opportunities at the village and regional level.

Beyond its energy objectives and targets, the project is credited with having significantly reduced rural poverty, using a socially and environmentally sustainable framework. It has had a particularly positive impact in terms of gender development and welfare (new employment and incomes, training in organisational and management skills, economic diversification, and improved health and nutrition). Follow-up at a national scale is under consideration.

The sustainable woodfuels supply management component of the project resulted in the establishment of sustainable community-managed forest systems (378,161 ha). Participating rural communities and NGOs produced and marketed woodfuels and multiple other non-wood products, with strong participation by women. Community-based micro-enterprises were established, including beneficiary-operated improved carbonisation units, apiculture cooperatives, collective and individual agricultural diversification systems, livestock and poultry raising, arts and crafts units, etc. While men mostly led the woodfuel and large livestock activities, all other activities were generally managed and operated directly by women, in groups and individually.

The demand management and inter-fuel substitutions options component directly benefited some 250,000 families in the principal urban and peri-urban areas of the country, with particular health improvements (especially reduced indoor pollution) and time saving benefits to women.

Source: <http://siteresources.worldbank.org/INTGENENERGY/Resources/SenegalPROGEDEBRIEF.pdf>



CASE STUDY 5.5: Separate women's meetings a key to participation in water management in Indonesia (water and sanitation)

In Indonesia, an increasing population and the growing use of irrigation of paddy fields in Java is expected to create water demand problems by 2020. In the early 1990s, a pilot programme was conducted to include women farmers in the planning of a project. It had become clear by then that women's lack of participation was hampering water management projects from achieving their true potential.

Indonesian women have traditionally played a critical role in rice cultivation, but female farmers have seldom been involved in all the stages of irrigation development. Surveys conducted by the Cidurian Upgrading and Water Management project showed that, in fact, women were actively involved in irrigation: they monitored water conditions in the fields to check illegal intake and outlet of irrigation water; they controlled the buffaloes that damaged the canals; and they used tertiary irrigation water for household purposes. Special efforts were therefore made to integrate women into the water management programme of the Cidurian project.

There were not strong women's organisations in the villages, and social barriers prevented women from attending extension meetings. Separate meetings and special training sessions for woman farmers were therefore organised, with agricultural information strategies devised to take into account the women's low educational levels. The aim was to provide the women with basic information on the programme, overcome their initial shyness, assess their interest in participation, prepare concrete plans, and identify potential leaders and representatives for water users associations.

A later evaluation by a team of agricultural extension and community development experts noted that separate meetings helped the women develop confidence and reduced their shyness when they eventually attended joint meetings with men. Women were well represented at later consultations when mutual agreement with the men was reached about the division of labour and payments. This further increased the women's confidence and led to greater participation in water users associations.

By the end of the pilot project, it was not difficult to encourage women to become members of the boards of water user associations. In fact, rural women soon began occupying important posts, such as treasurer, assistant treasurer and secretary of such boards. They took on responsibility for the administration of male and female water users, the collection and registration of irrigation service payments, and the establishment and maintenance of a communication and information network among the female members of their associations.

The ultimate result was a reduction in the number of illegal off-takes from the irrigation canals. The project also triggered other women's self-help activities. In one village, they organised female literacy classes. In two others, women's groups started a collective saving scheme and dry field-crop cultivation project on community-owned fields.

Source: <http://www.genderandwater.org/page/5523>

Further resources

ENERGIA, 2005. *The Gender Face of Energy: Training Modules, Gender Tools for Energy Projects*. <http://energia-africa.org///TrainingModules>

Food and Agriculture Organisation (FAO), 2001a. *Irrigation Sector Guide, Socio-Economic and Gender Analysis Programme* (SEAGA).

FAO, 2001b. *Project Cycle Management: Technical Guide, Socio-Economic and Gender Analysis Programme* (SEAGA).

FAO, 2004. *Rural Households and Resources: A Guide for Extension Workers, Socio-Economic and Gender Analysis Programme* (SEAGA).

Flintan, Fiona, 2003. *'Engendering' Eden Volume I: Women, Gender and ICDPs: Lessons Learnt and Ways Forward*, IIED Wildlife and Development Series No. 16.

Fong, Monica S., Wendy Wakeman and Anjana Bhushan, 1996. *Toolkit on Gender in Water and Sanitation*. Gender Toolkit No. 2, The World Bank.

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

UNDP and ENERGIA, 2004. *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide*.

■ ■ **MODULE 6:** GENDER MAINSTREAMING IN ENVIRONMENT AND ENERGY PUBLIC POLICY



■ ■ **Module 6:** Gender mainstreaming in environment and energy public policy

Public policies are expressed in the body of laws, regulations, decisions and actions of governments. General government policies supporting gender equality are important factors in successfully promoting gender mainstreaming in development programmes, and more specifically in environmental and energy management activities.



Policies adopted and implemented at all levels of government can have gender impacts. Examples include:

- At the macro level, a legal system that restricts women's rights and access to land;
- At the intermediate level, agencies that allocate water and irrigation services primarily to male farmers;
- At the local and community level, natural resource decision-making bodies that exclude women.

These policies interact with each other and therefore cannot be considered in isolation of each other.

Section 6.1: What are gender-sensitive policies?

Despite decades of research and advocacy, policy makers continue to operate with the notion of the male breadwinner and the male head of the household.

Although most policy makers view environmental and energy issues as gender-neutral, men and women are affected differently by environmental and energy policies

because of their different roles and distinct needs and consumption patterns. In many countries, women perform most of the work in subsistence agriculture and gathering and managing fuel and water, but because their work is usually unpaid and labour intensive, this is generally not adequately reflected in national statistics. It is therefore overlooked in policy analysis and the policy development process (UNDP, 2001). For example, the rural female labour force participation rate of Pakistan was estimated to be fourteen percent using standard measures of labour force participation, compared to an estimated forty-six percent when post-harvest processing, livestock rearing, construction work, water and firewood collection, cloth making and other domestic work was included (Kabeer, 2003).

Where policies have been developed to improve the situation of women they have typically focused on women's household needs alone and neglected their roles in income-generating activities, the labour force and decision-making processes (UNDP, 2001). For example, rural electrification policies generally do not focus on women's needs for income generation. Policies to promote effective distribution networks for Liquefied Petroleum Gas (LPG) would offer an energy form more compatible with women's need for affordable access to process heat used in small home-based enterprises (UNDP, 2001).

Research has shown that critical gender-sensitive policies can improve natural resource management, infrastructure delivery, access and affordability, choice and flexibility, and decision-making. Gender-sensitive policies include:

- ***Policies to support delivery mechanisms that directly benefit women and the poor***, especially household, productive and social sector uses (such as farming, small business and health). These policies should take into account the distinct needs for specific resources and services identified by men and women, and how their availability impacts men and women in economic and social terms. For example, water conservation

measures have been shown to free up women's time from the burden of water collection as well as improve agricultural productivity.

- **Policies to improve the affordability and availability of ecosystem and energy services used by women**, such as clean water, cooking fuels and biodiversity resources. For example, women benefit particularly from the reduction of the first-cost burden of LPG/kerosene stoves/cylinders and the incremental recurring costs associated with the use of modern fuels (UNDP, 2004). At the same time, cost-recovery mechanisms such as fee-for-service ensure the financial health of the service delivery entities so that they can provide expanded and more reliable services (UNDP, 2003).
- **Policies to support choice and flexibility in selecting from a wide range of technologies and institutional structures** for the delivery of ecosystem and energy services (UNDP, 2004). For example, policies should recognise the contributions of women as users and managers of technologies and solutions, such as pollution control and mitigation technologies, which are proven, cost-effective technologies that can be implemented on a larger scale. In agriculture, empowering female farmers to adopt and adapt new technologies and to pass their knowledge on to their peers has been successful, for example, with water harvesting techniques and the use of natural products to eliminate pests.

- **Policies to support the gender-sensitive management of resources.** There should be greater recognition of women's central roles in the provision, management and safeguarding of resources. Governments can facilitate and enable gender-sensitive resource management through regulatory frameworks that can be managed at the lowest appropriate level (for example, women's community associations that manage irrigation).

Gender sensitivity in environmental and energy policies is most likely to be advanced as part of a more general approach to gender equity and gender empowerment rather than as an add-on separate from existing policies. Policies in environment and energy can interact with policies in other areas to either enhance gender empowerment or reinforce gender inequity. Unless other policies support the improvement of the legal status of women or the economic and political participation of women, environmental and energy policies will be less effective in achieving gender equality. Important supportive policies will:

- expand financing and credit to enhance women's economic opportunities, including policies that specifically target women and women's organisations.
- identify and enhance market opportunities, especially in rural areas, such as by providing improved information on markets and consumer demand for products produced by women.

Box 6.1: The 'feminisation' of poverty in India

Given the fact that the majority of poor women in India are agricultural workers, it would seem logical to target poverty at least in part through programmes designed to strengthen women's position as agricultural workers. In fact, however, programmes for women in agriculture often appear to be based on some unrealistic assumptions:

Most of these programmes reflect the assumption that women play a subsidiary role in agriculture as helpers to the men in their families, rather than being farmers in their own right. This assumption flies in the face of reality: women perform the majority of tasks in agriculture and constitute the core of agricultural competence in the country.

Mainstream agriculture programmes assume that so-called 'modern methods', which involve high-input and chemical-intensive techniques, are essential for increasing production. They ignore the growing body of research indicating the economic and ecological potential of low-input methods of subsistence agriculture, methods that women have traditionally practiced.

The overwhelming acceptance of these assumptions by successive generations of agricultural policy planners has resulted in critical issues being pushed off the agenda, such as the increasing rate of unemployment in agriculture, degradation of the natural resource base, and consistent denial of land rights and wage entitlements to women farmers.

Source: Menon-Sen (2003)

- support gender equity and participation of women in policy formulation processes in all economic sectors, including dissemination of technologies that are used by women (grinders, presses, water pumps, kilns, etc.).
- remove barriers to the full participation of women in economic, social and political life, such as barriers that affect women's legal status, land tenure opportunities, property rights, and access to public services and facilities.

Section 6.2: Why are gender-sensitive policies important?

To be effective, gender mainstreaming requires political commitments that are reflected throughout the national development policy framework, as well as in strategies and policies specific to each sector, such as industrialisation, small business, education, health, energy and environment. It is the national strategies that set overall objectives for the country and provide direction to sectors. They also guide the planning for government actions and programmes, and budgetary allocations to carry out those actions, supported by laws, regulations and other guidelines.

National development policy frameworks, and Poverty Reduction Strategy papers (PRSPs) form the basis for broad poverty eradication and development agendas. These are the outgrowth of increased attention to basic needs, rural productivity and the informal sector, and these are areas that involve a number of gender issues.

However, a review of PRSPs indicated that gender issues were not discussed in any detail and were poorly reflected in the diagnosis of poverty in countries (Kabeer, 2003). Where gender was analysed in depth, the analysis tended to focus on reproductive concerns, such as health, nutrition and population, rather than productive income-generating concerns. Even fewer integrated gender analysis into their strategy, resource allocation and monitoring and evaluation sections.



Box 6.2: Gender, land and water in Cambodia's PRSP

Some Poverty Reduction Strategy papers (PRSPs) presented detailed analysis of the impacts of gender on environmental income opportunities, as well as detailed proposals for remedying gender-based inequities in countries where women traditionally have not been accorded equal rights and access to ecosystems.

For example, the 2002 PRSP for Cambodia notes that, with women accounting for 65 percent of agricultural labour and 75 percent of fisheries production, poverty reduction cannot succeed unless it addresses the roles and needs of women. The PRSP sets an explicit goal of ensuring that women and girls receive full legal protection and education about their legal rights to access to land and natural resources. Equal numbers of women and men are to be included in all consultative processes and on all monitoring and evaluation teams.

Cambodia sets a goal of ensuring that women, the primary collectors and users of water, ultimately make up half of all members of water user associations, and at least 20 percent of such members within three years. The government also pledges to address gender disparities through budget allocations as well as policies and programmes.

Source: World Resources Institute (2005)

At the same time, environment and energy issues are sometimes also poorly reflected in poverty reduction and development strategies. And when they are addressed, they are rarely gender-sensitive. For example, energy policies tend to focus on building large-scale infrastructure rather than providing energy access at the community level (where women are often most affected by lack of energy services) and neglect energy from sources other than the grid that may be more important for women (such as fuels for cooking or mechanical power for agro-processing).

There is further scope for improvement where priorities and strategies are translated into sectoral policies. For example, women often spend long hours collecting water and a lack of clean water increases the likelihood of disease and illness, imposing additional demands on the time of women who must care for family members. Cutbacks in health services

reduce the time women can devote to farming, and may require them to take their children, often girls, out of school to help with domestic chores.

Closer attention to the environmental and energy needs of poor men and women in national policies can result in cost-effective strategies for poverty reduction, health improvements and economic development through expanded access to natural resources, clean water, fuel wood, and environmentally friendly power sources (UNDP, 2006).

Section 6.3: Developing gender-sensitive environment and energy policies

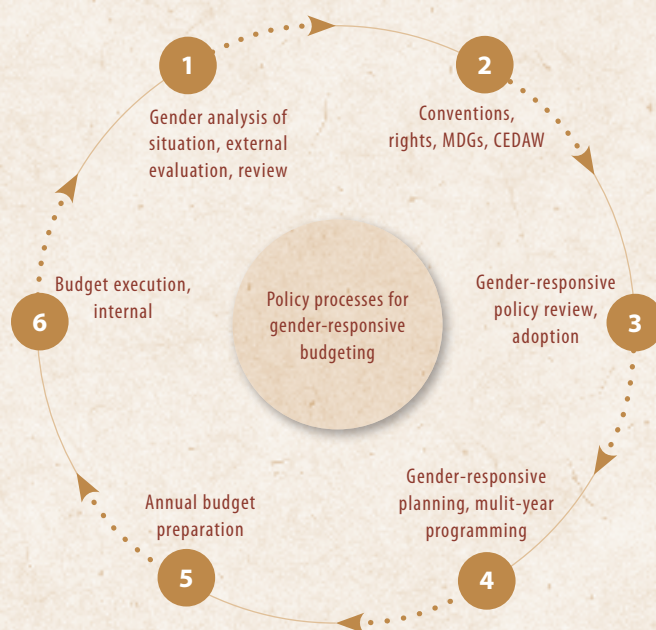
To be responsive to gender issues, environment and energy policies should be linked to broader goals such as economic development, health and education.

The policy development cycle shows the steps in policy formulation, design and implementation. The main components of the policy cycle are:

- **Problem definition:** An environmental or energy-related problem is identified and examined, and possible solutions are explored through research and analysis.
- **Agenda setting:** Efforts are made to raise the profile of the environment or energy problem and seek possible solutions among the public and decision-makers.
- **Policy adoption:** Policy-makers discuss options and possible solutions and adopt new policies or amend existing policies. Specific commitments to environment and energy are made at this stage.
- **Implementation:** This phase is often ignored because it is not as visible to the general public, but critical decisions are made that ultimately determine the policy's effectiveness. This is a particularly sensitive area for both environment and energy, where experience has shown 'lip service' is often paid to these issues without the appropriate tools for implementation.
- **Evaluation:** After a policy is implemented, it is important to evaluate whether the policy meets its original intents and if there are any unintended outcomes. Policies in other areas, such as industrialisation, small business or health, often neglect to assess the effects of initiatives on the environment and energy sectors.

Mainstreaming gender in the policy cycle means that gender issues are recognised in the identification of the problems or needs, incorporated into the development goals and taken into account throughout implementation. See Box 6.3.

Box 6.3: The gender-responsive policy cycle



Source: Burn (2006)

The main steps in assessing and including gender in the environment and energy policy cycle are:

- Step 1: Start with a situation analysis that yields information on the socio-economic and environmental conditions governing the lives of women and men.
- Step 2: Compare this information with development norms and standards, such as human rights conventions, and goals and targets on environment and energy.
- Step 3: Respond with gender-responsive policies and intervention strategies, through a more inclusive process of identifying options and making choices.
- Step 4: Translate these into medium-term expenditure and annual budgetary measures and actions.
- Step 5: Monitor the performance results.
- Step 6: Feed the monitoring information back into performance evaluations, in order to achieve the desired outcomes.

Approaches to policy-making intended to improve gender outcomes can be categorised into two types: a gender-specific or equity approach, and a transformative approach (Taylor, 1999). An equity approach usually responds to meeting the practical needs of women, whereas a transformative approach responds to meeting strategic needs:

- An equity approach takes into account gender differentials, and targets women or men specifically, but leaves the current distribution of resources and responsibilities intact.
- A transformative approach seeks to change existing gender relations by redistributing the division of resources, responsibilities and power between women and men more evenly. This policy approach is politically challenging since it requires men to give up certain privileges.

The potential of gender policies to transform gender relations and the gender-biased distribution of resources is greatly enhanced if that policy is developed through a participatory process that includes key decision-makers within the department concerned and in other related sectors, as well as with the groups and communities the policy is intended to benefit. A gender policy formulated through such a participatory process is far more likely to gain wide-ranging acceptance, and sufficient commitment to its implementation (Kabeer, 2003).

Section 6.4: Gender budgeting and the results-based framework

Like other components of a development strategy, the budget is a policy statement that reflects government's priorities, but in monetary terms. While ensuring that appropriate budgetary resources are allocated in a gender-sensitive manner is only one component in this process, it deserves special attention.

The gender-responsiveness of budgets has come under increasing scrutiny in recent years. Although national budgets may appear to be gender-neutral policy instruments, government expenditures and revenue collection have different impacts on women and men. Gender-responsive budgeting (GRB) requires an analysis of the impact of actual government expenditures and revenue on women and girls as compared to men and boys. It does not require separate budgets for women, nor does it aim to solely increase spending on women-specific programmes. Instead, it helps governments decide how policies need to be adjusted, and where resources need to be reallocated to address poverty and gender inequalities.

Gender-responsive budget analysis provides a way to hold governments accountable to their commitments to gender equality and women's human rights by linking these commitments to the distribution, use and generation of public resources.





Government expenditures are often assessed in terms of:

- Expenditures specifically targeted at women (for example, income-generating projects for women).
- Expenditures intended to promote gender equity in the public sector (for example, training of women).
- Gender impacts of mainstream budget expenditures (for example, impacts on users of water or electricity services).

Examples of gender-related budgeting related to environment and energy are still rare. However, the Mali multifunctional platform programme (MFP), which introduced rural energy systems managed by village women's associations, offers some useful lessons. The success of the gender-sensitive project led to its incorporation into national policy and budget allocation. The Mali Ministry of Industry was able to use formal institutional channels to position the MFP as a priority programme in the country's Poverty Reduction Strategy, which was adopted in 2002. Following initial success in scaling up the project into a national programme, the government formulated a 10-year plan with a target of installing an additional 10,000 MFPs in villages across Mali – supported programme budgets intended to be consistent with the PRS. See Appendix 3, p. 58.

Assignments in Part 2 of the Manual

Available on the companion CD and online at <http://www.undp.org/energyandenvironment/gender.htm>

Assignment 6.1: Policy at the micro, intermediate and macro level

Aim: To understand how gender can be addressed at different levels depending on the nature of the problem (e.g., legal, policy, institutional, infrastructure, household or community, etc.) (40 minutes)

Assignment 6.2: Addressing gender inequities through policies

Aim: Understanding how to address gender needs through policies (2 hours)

Assignment 6.3: Gender-responsive budgets

Aim: To learn about alternatives to top-down, supply-driven approaches to making public expenditures and ways to initiate a gender-sensitive budgeting process (60 minutes)

Discussion topics

1. In order for gender equity to be achieved, women should be in senior management positions in decision-making organisations, including government.
2. Policies should be developed in such a way as to incorporate the perspectives of men and women users of natural resources regardless of the macroeconomic consequences.
3. Policy development should focus on the outcomes in terms of the gendered uses of environment and energy resources rather than long-term sustainability, since it is important to first lift people out of poverty before worrying about the state of environmental resources.



CASE STUDY 6.1: Engendering the national Moroccan budget provides examples of useful tools and processes (general)

Morocco is one of the few examples of a gender-responsive budget (GRB) initiative that has been able to generate sufficient support within the ministry responsible for budgeting.

The democratic transition at the end of the 1990s ushered in a process of political, institutional, social and economic reforms. Before that, anti-poverty programmes were generally not grounded in an understanding of local conditions, and tended to be supply driven and poorly coordinated. The government's efforts to change from an input-based to a results-based budgeting system was a major challenge in a context where national budgetary systems and processes were highly centralised and encumbered by administrative procedures, and at the same time subject to only weak controls and auditing. With regard to gender-specific budgeting, public sector professionals tended to view any proposals for differences in treatment on the basis of gender as discriminatory and divisive.

The successful Moroccan experience started with a gender analysis of the national budget as a component of a Public Expenditure Review (PER) in 1998. The key findings were that:

- The existing budget classification system limited gender analysis, and further analysis was required, with close involvement of the programme managers and budget professionals, after awareness-raising and capacity building in gender analysis.
- There were gaps and weaknesses, not only in terms of gender analysis and inclusive participation, but also in overall policy, planning and budgeting articulation, and in the existing information system for diagnosis, monitoring and evaluation.
- Gender-responsive budgeting would only be possible as part of a shift to a more responsive, results-based approach.
- A gender budget statement presented annually to Parliament as part of the regular budgetary debates would make budget information more transparent and open to scrutiny, promote engagement with the budget process, stimulate debate over budgetary allocations and dialogue between internal and external stakeholders, and initiate more a gender-responsive formulation.
- A better and more systematic production of gender-disaggregated data was also needed for gender-aware macro-economic modelling and policy impact analysis.

By the end of 2002, the leading stakeholders in the Directorate of Budget and the Chief of Cabinet in the Ministry of Finance initiated a gender-responsive budget. The main starting point was sensitisation and capacity-building workshops, including sensitisation of parliamentarians. These workshops brought together the different ministries and different divisions within ministries and led to the designation of target persons responsible for budget programming. The workshops were strongly endorsed by senior management, including the Minister of Finance.

While part of the success of the workshops was the sharing of experiences, much of it was the questioning of established ways and the progressive exploration and discovery of new approaches by using a package of gender analysis tools. Energy was used as an example. Some key activities and information presented at the workshops were:

- The production by the participants themselves of daily calendars of different women and men, boys and girls living in different households (urban, rural, energy and infrastructure poor) to initiate discussions on gender.
- The opportunity costs of time and energy (time budgets) revealed what people were or were not able to do in an allotted time, and the relationship of time and energy constraints to broad sectoral issues: working, eating, going to school, travelling, etc.
- The analysis was applied at different levels – micro, meso and macro. Participants were encouraged to use the analysis to challenge their own assumptions and preconceptions.

The initiative to date has produced the desired effects. The Directorate of Budget produced a first draft of a manual for GRB and results-based budgeting. Time use surveys and their

links to the state budget have been accepted and promoted by the Director of Budget. Linkages have been identified between expenditures of funds on water, road and electricity programmes, and outcomes in terms of the time budgets of women and girls.

As a result of the policy-level endorsement of GRB within the Ministry of Finance, a second four-year phase to the Morocco GRB Initiative is being supported by UNIFEM. In this second phase the GRB will continue the process of institutionalisation within the Ministry of Finance by involving the Directorate for Research and Financial Forecasting, which is responsible for the macro-economic framework, policy evaluation and impact analysis. As of 2006, the GBR Initiative had produced the first Gender Budget Statement in partnership with the Directorate of Budget, for presentation to Parliament. The strategy for the second phase is to move to concrete operations, as well as deepen the understanding of GRB and its implications.

Source: UNDP (unpublished)



CASE STUDY 6.2: Regional environmental programme for Central America (biodiversity)

In August 1994, the various governments within Central America adopted the 'Central American Alliance for Sustainable Development' (ALIDES). This partnership "is an initiative related to short, medium, and long-term policies, programmes, and actions, outlining a change of development scheme, and of our individual and collective attitudes, along with local, national and regional policies, and actions aiming at the political, economical, social, cultural, and environmental sustainability of society" (ALIDES, 1994). Despite the existence of this partnership, regulating bodies have carried out a series of actions that, up to the late 1990s, did not translate into major changes at an institutional level.

In 1997-1998, IUCN's Regional Office for Mesoamerica received requests from El Salvador, Honduras and Costa Rica's Ministries of Environment and Natural Resources requesting cooperation to incorporate a gender perspective in their activities. As a result, representatives of non-governmental organisations worked with the countries' environmental regulating bodies to assess the possibility of a regional process aimed at linking gender and environment. As part of these efforts, Guatemala and Mexico joined the Mesoamerican initiative.

For IUCN's Social Area, these requests were highly significant – the result of eight years of hard work throughout the region to facilitate the incorporation of gender equity as an essential element for achieving sustainable development.

A series of meetings were held in response to these requests, and it was decided that the Social Area would support the elaboration of a policy on gender equity, and a corresponding action plan, for each country. Thanks to the financial support provided by the Ford Foundation, in July 1998 a Mesoamerican workshop was conducted. Policy drafts were generated for El Salvador, Mexico, Guatemala, Costa Rica, Panama, Nicaragua and Honduras.

The Participants in this workshop were the officials responsible for gender within each ministry, as well as representatives of civilian groups from each country. They agreed to continue strengthening women's participation in the various environmental activities carried out at the national and regional level, and support processes currently being undertaken by the various ministries to integrate a gender equity perspective into policies and action plans. They also encouraged international cooperation organisations to participate in this process.

Once prepared, each country began enacting its policy in accordance with national legislation. This was not a simple process; it entailed a series of consultations within each country, and their various ministerial departments. Formulation of the action plans began by:

- Acknowledging the Ministry of the Environment's weaknesses and needs with respect to the incorporation of this perspective.
- Identifying a desirable future by answering the following questions: What does the institution expect to achieve regarding gender equity? What would an institution where gender equity is mainstreamed look like?
- With this vision in mind, defining the steps or actions to be taken in order to move from the current situation to the desired goal.

During the analysis conducted prior to the formulation of the policy declarations and action plans, the following difficulties were identified with respect to the incorporation of gender equity in environmental activities. Major weaknesses or needs included:

- Lack of gender units or departments with sufficient capacity to influence environmental strategies and training
- Lack of gender-disaggregated data and gender-related indicators
- Lack of practical methodologies for applying a gender equity perspective
- Weak implementation of the gender equity values
- Lack of human, financial and material resources to implement gender equity
- Unwillingness on the part of officials and technicians to accept gender equity as an institutional mandate.

Gender was also viewed as a component with no connection to other areas, not as an issue that must be mainstreamed. There was a general belief that gender issues are the responsibility of one particular 'specialist', and that it was unnecessary for everyone to receive training on this subject.

After more than seven years, it is now more widely accepted that women and men have differentiated needs and interests and rights and responsibilities over natural resources, and that they experience different impacts from conservation processes and interventions for development. Gender policy has also permitted the promotion of balanced gender participation in environmental

management processes. In the internal institutional sphere, having a gender policy has improved relations between the people who make up technical, administrative and hierarchical teams. It has been understood that an equitable institutional environment promotes the participation of women and men and a fair distribution of resources, which significantly contributes to the quality of their performance and raises levels of efficiency in environmental management.

To date, and based on the results of the countries' action plans, IUCN is now tackling the elaboration of a regional initiative aimed at mainstreaming gender equity perspectives at all levels of the Mesoamerican bodies responsible for regulating environmental activities. Some results have been that: all of the regulatory organisms for the environment have a gender equity policy and respective plan of action; all national mechanisms have a gender unit that forms part of the institutional structure; and institutional, strategic and operating plans have incorporated actions aimed at gender equity. Recommendations regarding the incorporation of a gender equity perspective have been made for laws, regulations, strategies and other instruments.

Also, at the regional level, greater efforts have been made to support incorporation of the gender equity perspective in activities conducted by the Central American Commission for Development and Environment (CCAD.) In August of 2001, a gender policy and an action plan were formulated. Also, the ministers of environment have requested that all regional proposals CCAD submits to international cooperation agencies must include the mainstreaming of gender.

Source: Aguilar (2002).



CASE STUDY 6.3: Advocacy by civil society groups raises gender profile in South Africa (sustainable energy services)

In South Africa the period from 1990-1994 heralded an unprecedented wave of democratisation that provided opportunities for previously disadvantaged groups, including women, to have greater input into government planning than ever before. The South African national energy strategy in place did not take into account women's concerns. The challenge at the time was to incorporate women's concerns into the national energy strategy, so that energy policies would take their needs into consideration through greater representation and input in decision-making processes. This challenge was taken up by a small group of women activists, the Women's Energy Group (WEG), who sought to develop their own and other women's technical expertise, to develop alliances in order to be heard, and to learn to lobby successfully.

Following the creation of WEG, an opportunity soon arose to contribute to the shaping of the national energy agenda with what became known as the 'Green Paper' discussion document starting in 1994. This draft policy document included a section on domestic and household energy use, which reflected some of the

progressive research that had been done since the late 1980s, and brought it into the national decision-making process for the first time.

WEG set out to mobilise the poor through community consultations around the country. In preparation for these community consultations, WEG simplified the discussion document and put it in more accessible language. The consultations were aimed not only at women, but also at small-scale farmers, and poor urban and rural men and women running small enterprises. They proposed far-reaching measures – that women must be able to own land, women must have the same rights as men to inherit land, oppressive customary laws must be changed, and women must be represented in all development structures.

A subsequent Summit preparatory meeting was held for the 150 community participants. The meeting was designed to enable delegates to discuss strategies for their participation in the Summit. During the plenary community, participants took issue with the technical language, which they felt excluded them. They argued that they were not being taken seriously by the 300 more powerful delegates.

The Green Paper consultative process was demanding and time consuming. The WEG lost its focus on women, gender and technical skills when it had to organise around broader, more general, categories that included the poor, previously disadvantaged people and low-income households. Most members agreed, however, that the participation of WEG in the Green Paper process and the National Energy Summit was meaningful and had prepared them for the next step – drafting of the White Paper for the Minister's approval.

The subsequent Energy White Paper marked a paradigm shift from the previous emphasis on energy security and self-sufficiency towards a focus on equity, efficiency and environmental sustainability in energy service provision. The policy priorities stated in the Energy White Paper were: increasing access to affordable energy services; improving energy governance; stimulating economic development; managing energy-related environmental impacts; and securing supply through diversity. For the first time, energy services for low-income households were addressed in a South African policy document.

Although the final 1998 Energy White Paper reflected a significant shift from the old supply side paradigm towards considerations of demand-side management and social equity, it contained only a watered-down version of what had been suggested earlier with regard to women and gender issues. It focused little on women, and mentioned women infrequently (six times in 120 pages), despite an explicit acknowledgement of women's subordinate position.

After the National Energy Summit, an editorial team consisting of six men and two women was chosen to write the White Paper. WEG sought to increase the number of women on the team, but without success. Finding themselves in a small, male-dominated forum, the women involved were unable to hold onto the decisions and the progress that had been made in the Green Paper and the Summit. According to the two women, they were gradually

excluded from the decision-making process and most suggestions for gender sensitivity and policies to benefit women were simply edited out, despite heated arguments from the WEG members.

The resulting energy policy remains somewhat weak from a gender perspective. Nonetheless, the government supports widening of access to a safe and effective energy package affordable to low-income households. Aspects of the Energy White Paper have had an impact on women, such as its acknowledgement of the need for social forestry programmes, subsidisation of the extension of the grid and the electrification programme to previously disadvantaged customers, and its support for renewable technologies to supplement grid electrification. The changes have impacted individual women differently depending on whether they received grid connections, or whether they could afford to buy electricity and the appliances necessary for cooking and cooling. Some benefited from solar lighting but still have to use wood or kerosene for cooking.

Since 2000 there has been a period of implementation and consolidation. The national electrification programme has connected over 4 million households to the grid and women have benefited from the improvement in quality of life that electricity brings. There is also a substantial reduction of drudgery in areas where women can afford to use electricity for cooking and micro-enterprises. The introduction of integrated energy centres in rural areas has targeted women as energy entrepreneurs and sought to improve access to modern energy services in remote areas.

According to an audit of women in the energy sector conducted in 2005, the number of professional women employed in the sector has increased in public and private institutions, thanks to proactive recruitment of women by the Department of Minerals and Energy and by the national electricity utility, and scholarships for young women scientists. Women remain under-represented, however, in academic institutions and the petroleum industry. There has been a proliferation of NGOs, such as the Energy Caucus and the Energy Policy Unit, where women have mobilised around particular issues such as the development of nuclear pebble bed reactors and energy service delivery.

Source: UNDP (2001) and UNDP (unpublished).



CASE STUDY 6.4: Land, agrarian and environmental reforms in Zimbabwe (sustainable land management)

From 2001 to 2003, Zimbabwe carried out land, agrarian and environmental legislative reforms to redress equity issues and mitigate poverty and environmental degradation aimed at benefiting the landless people of the country. The land reform focused on land redistribution and the reorganisation of communal areas in order to reduce high population densities, which exceeded the capacity of the land to support them. It also focused on tackling the problem of over-cultivation, which had resulted in land degradation and high poverty levels, particularly in the marginal semi-arid regions where 70 percent of the

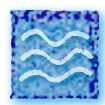
peasant farmers eked out a living. The subsequent agrarian reform set out to increase agricultural production and enhance the economic development of the country.

Environmental degradation was most acute in the communal lands sector due to poverty, landlessness and land-use pressure, coupled with ineffective institutional arrangements for natural resource management. The magnitude of the constraints made reforms necessary not only in the land and agrarian sector, but also in the environmental sector. In this context the Environmental Management Act (EMA) (chapter 20:27) provided an opportunity for implementation of the national action programme at the community level. The legal framework made provision for the participation of a wide range of stakeholders to contribute to environmental management at various levels of government, and included the private sector and NGOs.

Among them were the Women and Land Lobby Group, the Zimbabwe Farmers' Union, the Zimbabwe Environmental Law Association and the Institute of Environmental Studies. The Women's Group participated in Parliament at the national level to integrate gender into the land and agrarian reforms before, during and after the fast track resettlement programme. The aim was to ensure that women who had previously been marginalised with respect to access, control and ownership of land would now benefit from the land redistribution process. The Group worked closely with the Parliamentary Portfolio Committee in the areas of law, justice, gender and youth, and in conjunction with ministries of rural development and local government, to ensure that the policy framework took gender needs into account.

To achieve these objectives at the grassroots level, the Women's Group was involved in promoting irrigation projects, as well as sustainable land and water resource management projects in the dry areas of Zimbabwe. Project activities include conducting training workshops on land degradation, agricultural extension, agro-forestry and organic farming. The pilot project benefited 50 households through improved food security and livelihoods. The Group took a more proactive involvement in the reform programme by means of a strong awareness-raising effort. This included dissemination of information through the mass media on legal, policy and administrative frameworks governing access to, management and use of land. The campaign was aimed at the general public, especially female-headed households, which constitute the bulk of the poorest due to lack of access to a productive resource base.

Source: UNCCD (2006)



CASE STUDY 6.5: South Africa's national water policy and gender (water and sanitation)

South Africa stands out as a country where the focus on gender and poverty permeates all aspects of water policy. After apartheid, the national water policy process was thrown open. To develop a new law, the new government published information booklets to inform the public about the principles and rights of the newly

drafted water law, and to invite comments. The two publications gave rise to a series of public workshops, including provincial workshops, focus groups with stakeholders, expert consultations, public awareness campaigns and public or invited comments on draft documents. Stakeholders involved in the consultation process ranged from organised agricultural and industry groups to rural community groups.

The initial discussion document said nothing about gender, but the subsequent White Paper included many references to gender and poverty. It stressed the importance of providing women with information on issues of specific interest to them, such as water purification, and having women represented on water committees, and called for women to be represented at all levels and in all spheres of water management activities, in political, technical and management positions. Another key issue addressed was balancing of the division of work opportunities in water sector agencies for men and women, with equal payment.

The National Water Act specifies that the Minister who appoints the Board members of the Catchment Management Agencies should aim to have a balance between different water user interests, potential water users, local and provincial governments and environmental groups. The Minister is also required to appoint members in such a way as to achieve 'sufficient' gender representation and representation of those historically marginalised in relation to access to water.

Source: Global Water Alliance (2003) <http://www.dwaf.gov.za>

Further resources

Burn, Nalini, 2006. 'Gender-Responsive Budgeting: Concept and Interface with PB at the Local Level' in *Achieving Results: Performance Budgeting in the Least Developed Countries*, UNCDF.

ENERGIA, 2005. *The Gender Face of Energy: Training Modules, Engendering Energy Policy*. <http://energia-africa.org//TrainingModules>

Kabeer, Naila, 2003. *Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: A Handbook for Policy-Makers and Other Stakeholders*, Commonwealth Secretariat.

Millennium Project, UNDP, ESMAP, and World Bank, 2005. *Energy Services for the Millennium Development Goals: Achieving the Millennium Development Goals*.

UNDP, 2006. *Expanding Access to Modern Energy Services: Replicating, Scaling Up and Mainstreaming at the Local Level*.

There are many websites on gender-responsive budgeting. A comprehensive one is www.gender-budgets.org

Appendices

Appendix 1: Gender-related concepts and definitions

The **Gender-and-Development (GAD)** approach focuses on the relations between men and women. It is designed to redress the unequal relations of power that prevent equitable development and women's full participation. It aims at equitable and sustainable development in which both women and men are decision-makers.

Gender refers to roles, responsibilities, rights, relationships and identities of men and women that are defined or ascribed to them within a given society and context – and how these roles, responsibilities and rights and identities of men and women affect and influence each other. These roles, etc., are changeable over time, between places and within places.

Gender division of labour concerns the allocation of the tasks and responsibilities of men and women at home, at work and in society according to patterns of work that are felt to be acceptable in a particular place and time.

Gender equality refers to equal rights, voice, responsibilities and opportunities for men and women in societies, at work and in the home.

Gender equity refers to fairness between men and women in access to society's resources, including socially valued goods, rewards and opportunities.

Gender gaps refer to societal differences between men and women that are felt to be undesirable.

Gender mainstreaming refers to the consideration of gender equality concerns in all policy, programme, administrative and financial activities, and in organisational procedures, thereby contributing to organisational transformation.

Gender roles refer to how men and women should act, think and feel according to norms and traditions in a particular place and time.

Gender valuation of work refers to the social and economic values attached to different tasks and responsibilities of men and women.

Gendered access to resources, facilities, services, funds, benefits and decision-making refers to the differences between men's and women's rights and opportunities to make use of these resources and to take part in decision-making, due to norms and values existing in a particular place and time.

Gendered control over resources and decision-making processes refers to differences between women's and men's rights and power to decide on the use of resources, gain benefits, and take part in decision-making processes, due to norms and values existing in society.

Gender sensitivity or using a gender perspective means that:

- A differentiation is made between the needs and priorities of men and women
- The views and ideas of both men and women are taken seriously
- The implications of decisions on the situation of women relative to men are considered: who will gain and who will lose
- Action is taken to address inequalities or unbalance between men and women.

Sex refers to the biological nature of being male or female. The biological characteristics of men and women are universal and obvious.

Sex roles are those that are bound to one particular sex due to biological factors, for example, giving birth.

Women's empowerment refers to the process in which women reflect upon their reality and question the reasons for their situation in society. It includes developing alternative options and taking opportunities to address existing inequalities. It enables them to live their lives in the fullness of their capabilities and their own choices in respect of their rights as human being. At the Beijing Declaration, it was agreed that "women's empowerment and their full participation on the basis of equality in all sphere of society, including participation in the decision-making process and access to power, are fundamental for the achievement of equality, development and peace" (para. 13).

The **Women-in-Development (WID)** approach aims at integrating women into the existing development process to counteract the exclusion of women in this process. It focuses on women and, therefore, suggests women's projects or women's components in integrated projects to increase women's productivity or income or to ameliorate their household tasks and responsibilities.

Sources: Groverman (2005) and UNDP (2000).

Appendix 2: Organisational assessment tool

ORGANISATIONAL ASSESSMENT TOOL			
1. Clarity of the Mandate			
	Yes	No	Partly
The organisation has a mandate written in its official papers			
The mandate contains a paragraph which indicates what it wants to achieve to reduce gender gaps and why it feels it is urgent to do so			
The mandate is included in publications issued by the organisation, such as brochures, administrative documents and annual reports			
2. Accountability and Transparency			
The organisation produces periodical reports about its activities and distributes them to relevant partners			
The organisation reports differentiate between men and women in description of activities, outputs, results, etc.			
The organisation conducts an annual survey on the clients' satisfaction (men and women) and submits its results to its clients			
The organisation publishes annual reports including achievements and closing accounts, in which information is differentiated according to gender			
3. Rules and Procedures			
The organisation has a guidebook, which includes job descriptions for its staff at different levels			
The organisation provides maternity leave and nursing hours to female employees			
The organisation has categories for salaries for all the tasks which do not discriminate against women or men			
4. Effectiveness and Efficiency			
The organisation assesses the needs of men and women to design the working programmes			
The organisation collects data about activities and prepares relevant reports about its achievement categorised according to gender for monitoring and evaluation purposes			
The organisation has a data base system that includes a list with the consultants' names and specified experienced persons from males or females that have a relationship with the organisation			
The organisation's working schedule is designed, implemented and evaluated from a gender perspective			
The organisation implements public activities about gender issues with different private sector organisations			

5. Participation and Representation

The organisation's leaders are chosen by periodic elections			
The organisation adheres to the principle of rotational leadership			
One or more women are members of the managerial bodies			
The management decisions are made by voting, and the voting results are listed in the minutes of the meeting			
Male and female members of the organisation have the right to express their opinion on the issues put forward in the management meetings and they make use of this right			
The management organises a meeting with all staff on regular basis			
The agenda of the management-staff meeting is prepared and distributed to the staff before they convene			
The management gives the male and female employees the opportunity to express their opinion about decisions made			
The organisation has an active working group with the task of raising public awareness about gender issues through educational and development programmes			
Two or more members of the management have attended training courses on how to address gender issues in decision-making processes			
The organisation actively promotes women's participation in all activities			
The organisation has one or more working groups chaired by a woman			
All the working groups pay attention to gender issues related to their tasks			
The organisation builds cooperative relations with mass media, private sector and civil society organisations addressing gender issues and good governance			

Source: Groverman and Gurung (2001).

Appendix 3: Mali Multifunctional Platform and National Poverty Reduction Strategy

How the Multifunctional Platform project was integrated into the National Poverty Reduction Strategy: Areas of complementarity						
NPRS	Economic, legal social and cultural environment	Financial services and other factors of production	Income-generating activities	Agro-processing supply chains	Access to education and training	Primary health, nutrition, drinking water and sanitation
Priority actions of NPRS that facilitate MFP objectives and outcomes	A larger share of budget allocation towards basic social services, public goods and infrastructure that are pro-poor and target poor women specifically	Access to credit and financial services by poor women in rural areas	Support to private investment in the agro-processing sector, reducing transport costs to rural areas	Post harvest preservation, marketing (identification of greater value-added markets)	Diversification of training programmes	Master Plan for managing water resources
Partnerships that would create synergy and reinforce MFP programme effectiveness	Public partnership modalities at communal level-for sustained investment in rural energy services	Financial institutions targeting poor women clients	National Programme for Rural Infrastructure	Forward and backward linkage partnerships for shea butter, rice, peanuts, sesame seed	Partnerships with NGOs, private sector institutions, projects specialising in enterprise formation and technical training for artisans and MFP clientele	At the commune level, partnerships with rural hydraulic agencies

Source: UNDP (unpublished)

How the Multifunctional Platform contributes to the National Strategy for Poverty Reduction

MFP	Economic, legal social and cultural environment	Financial services and other factors of production	Income-generating activities	Agro-processing supply chains	Access to education and training	Primary health, nutrition, drinking water and sanitation
The MFP is an instrument of poverty and inequality reduction	Ownership and management of MFP by women's organisations Stimulation and support for the rural private sector, providing commercial, technical and training services	Energy services provided by decentralised source and variety of end-use equipment geared to specific productive needs	Time and metabolic energy savings permitting other income-generating activities Cash crops processing, textile processing Productivity gains in agro-processing, and metallurgy	Mechanised processing: Shea butter, rice, millet, peanuts, jatropa oil as biofuel plus other derivatives	MFP capacity building in functional literacy, book-keeping and operational management Technical training of operators and mechanics Time and energy savings facilitating schooling for girls specifically	Time and energy savings (including in water related activities) enabling: Rest. Timely preparation of meals and better nutrition, care of children and of the sick. Time for food/vegetable production especially by women on own plots Water pumps and points. Safe drinking water Increased income permitting: out of pocket health expenditures

Source: UNDP (unpublished)

References

- Asia Development Bank (ADB), 2004. *Bringing Water to the Poor: Selected ADB Case Studies*.
- Aguilar, Lorena, 2002. *The Unavoidable Current: Gender Policies for the Environmental Sector in Mesoamerica*, The World Conservation Union (IUCN).
- Burn, Nalini, 2006. 'Gender-Responsive Budgeting: Concept and Interface with PB at the Local Level' in *Achieving Results: Performance Budgeting in the Least Developed Countries*, UNCDF.
- CARE, 2002. *Gender Equity Building Blocks*. <http://www.careinternational.org.uk/download.php?id=144>
- Canadian International Development Agency (CIDA), 1992. *Community Participation in Forest Conservation*, Forestry Advisors Network. <http://www.rcfa-cfan.org/english/issues.7.html>
- Department for International Development (DFID), 2002. *Gender Manual: A Practical Guide for Development Policy Makers and Practitioners*.
- DFID, EC, UNDP and The World Bank, 2002. *Linking Poverty Reduction and Environmental Management: Policy Challenges and Opportunities*.
- Elson, Diane, 1997. 'Tools for Gender Integration into Macroeconomic Policy', *Gender and Development*.
- Economic and Social Commission for Asia and the Pacific (ESCAP), 2003. *Putting Gender Mainstreaming into Practice*. UN Publication ST/ESCAP/2254.
- ENERGIA, 2005. *The Gender Face of Energy: Training Modules*. <http://energia-africa.org//TrainingModules>
- FAO, 2001a. *Irrigation Sector Guide*, Socio-Economic and Gender Analysis Programme (SEAGA).
- FAO, 2001b. *Project Cycle Management: Technical Guide*, Socio-Economic and Gender Analysis Programme (SEAGA).
- FAO, 2004. *Rural Households and Resources: A Guide for Extension Workers*, Socio-Economic and Gender Analysis Programme (SEAGA).
- Flintan, Fiona, 2003. 'Engendering' Eden Volume I: Women, Gender and ICDPs: Lessons Learnt and Ways Forward', *IIED Wildlife and Development*
- Fong, Monica S., Wendy Wakeman and Anjana Bhushan, 1996. *Toolkit on Gender in Water and Sanitation*. Gender Toolkit No. 2, World Bank.
- Gender and Water Alliance, 2003. *Gender and Water Development Report 2003: Gender perspectives on policies in the water sector*.
- Groverman, Verona and Jeannette D. Gurung, 2001. *Gender and Organisational Change Training Manual*, International Centre for Integrated Mountain Development (ICIMOD).
- Groverman, Verona et al., 2005. *Gender Equality and Good Governance: A Training Manual*, Coptic Evangelical Organization for Social Services. <http://www.groverman.nl/newsitem2.php>
- Kabeer, Naila, 2003. *Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: A Handbook for Policymakers and other Stakeholders*. Commonwealth Secretariat.
- Kanji, Nazneen, 2003. *Mind the Gap: Mainstreaming Gender and Participation in Development*, International Institute for Environment and Development and IDS Institutionalising Participation Series.
- Lewis, Kristen and Neeraja Havaligi, 2007. *Mainstreaming Gender in UNDP's Environment and Energy Practice: A Conceptual Overview*, UNDP Environment and Energy Practice Gender Mainstreaming Guidance Series.

Majekodunmi, A. A., 2007. 'Nigeria: Using Gender Mainstreaming Processes to Help Protect Drinking Water Sources of the Obudu Plateau Communities in Northern Cross River State', in *Gender, Water and Sanitation: Case Studies on Best Practices*, UN Office of the Special Adviser on Gender Issues and Advancement of Women.

Masika Rachel and Sally Baden, 1997. *Infrastructure and Poverty: A Gender Analysis*, by Bridge for SIDA, Report No 51.

Masika, Rachel and Susan Joeques, 1997. *Environmentally Sustainable Development and Poverty: A Gender Analysis*, by Bridge for SIDA, Report No 52.

Menon-Sen, Kalyani, 2003. 'Beyond the feminization of poverty' in *Putting Gender Mainstreaming into Practice*. ESCAP, UN Publication ST/ESCAP/2254.

Merrill-Sands, Deborah et al., 1999. *Engendering Organizational Change: A Case Study of Strengthening Gender Equity and Organizational Effectiveness in an International Agricultural Research Institute*. Consultative Group on International Agricultural Research, Gender Staffing Program, Working Paper No. 21.
<http://www.worldbank.org/html/cgiar/publications/gender/gender21.pdf>

Millennium Project, UNDP, ESMAP, and World Bank. UNDP. *Energy Services for the Millennium Development Goals: Achieving the Millennium Development Goals*.

Reeves, Hazel and Sally Baden, 2000. *Gender and Development: Concepts and Definitions*, by Bridge for DFID, Report No 55.

Oxfam, 2007. Millennium Development Goals Gender Quiz,
http://www.oxfam.org.uk:80/generationwhy/do_something/campaigns/healthandeducation/quiz/index.htm

Sadan, Mastoera, 2005. *Gendered Analysis of the Working for Water Programme: A Case Study of the Tsitsikama Working for Water Project*. Institute for Democracy in South Africa (IDASA).

Taylor, Vivienne, 1999. *Gender Mainstreaming in Development Planning: A Reference Manual for Governments and Other Stakeholders*. Commonwealth Secretariat. http://www.thecommonwealth.org/shared_asp_files/uploadedfiles/{1357D343-5DB1-4A82-A47E-660525E0137A}_gmdp_ref.pdf

UN Convention to Combat Desertification (UNCCD) Secretariat, 2006. *Implementing the United Nations Convention to Combat Desertification in Africa: Ten African Experiences*.

UNCCD, 2005. *Women of the Earth: Nurturing the Future*.

UNDP, (undated). *Gender Mainstreaming in Practice*. Regional Bureau for Europe and the CIS (RBEC).

UNDP, 2000. *Learning & Information Pack: Gender Mainstreaming*, Gender in Development Programme.

UNDP, 2001. *Generating Opportunities: Case Studies on Energy and Women*.

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

UNDP, 2006. *Expanding Access to Modern Energy Services: Replicating, Scaling Up and Mainstreaming at the Local Level*.

UNDP, 2007. *Guidance Notes on Mainstreaming Gender into UNDP's Environment and Energy Practice*.

UNDP and ENERGIA, 2004. *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide*.

Wach, Heike and Hazel Reeves, 2000. *Gender and Development: Facts and Figures*. By Bridge for DFID, Report No 56.

World Resources Institute (WRI), 2005. *The World Resources 2005 – The Wealth of the Poor*.

Photo Credits

MODULE 1

Separator page – Julio Etchart/The World Bank

Page 3 – Scott Wallace/The World Bank

Page 4 – Ray Witlin/The World Bank

Page 5 – Gennadiy Ratushenko/The World Bank

MODULE 2

Page 11, column 1 – Curt Carnemark/The World Bank

Page 11, column 2 – Yosef Hadar/The World Bank

Page 13 – Eric Miller/The World Bank

Page 14 – Tran Thi Hoa/The World Bank

MODULE 3

Separator page – Gennadiy Ratushenko/The World Bank

Page 19 – UNDP Guyana

Page 20 – UNDP Bhutan

Page 21 – UNDP Bhutan

MODULE 4

Page 27 – UNDP Costa Rica tree nursery project

Page 28 – UNDP Palestine bee keeping project

Page 29 – UNDP India briquette project

Page 30 – UNDP Jordan

Page 31 – UNDP Suriname

MODULE 5

Separator page – Curt Carnemark/the World Bank

Page 35 – UNDP Jordan

Page 37 – Scott Wallace/The World Bank

Page 38 – UNDP India

MODULE 6

Page 45 – UNDP

Page 47 – UNDP Malaysia

Page 49 – UNDP Tajikistan silk producing project

Page 50 – Julio Agosto/UNDP Bolivia weavers group



**United Nations Development Programme
Environment and Energy Group
Bureau for Development Policy
304 East 45th Street,
New York, NY 10017, USA**

www.undp.org/energyandenvironment