

Women and the Environment

1. Global commitments

The Beijing *Platform for Action* notes the linkages among poverty, natural disasters, health problems, unsustainable development and gender inequalities. It notes the importance of a holistic and multidisciplinary approach in dealing with environmental issues.¹ The *Platform for Action* sets out three strategic objectives.

- Involve women actively in environmental decision-making at all levels.
- Integrate gender concerns and perspectives in policies and programmes for sustainable development.
- Strengthen or establish mechanisms at the national, regional or international levels to assess the impact of development and environmental policies on women.

The strategic objectives examine the issue of women and the environment and emphasizes the essential role that women play in the development of sustainable and ecologically sound consumption and production patterns and approaches to natural resource management, and stresses the need for women to participate in environmental decision-making at all levels. While the *Platform for Action* emphasizes that the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, it also points to the close interrelation between poverty and environmental degradation and the need to eradicate poverty in order to achieve sustainable development. The *Platform for Action* underscores that Governments and other actors should promote an active and visible policy of gender mainstreaming in all policies and programmes, including, as appropriate, an analysis of the effects on women and men respectively, before decisions are taken.

The Beijing *Platform for Action* built on earlier global commitments, including the Dublin Statement on Water and Sustainable Development, adopted at the International Conference on Water and Environment in Dublin, January 1992; and *Agenda 21* (including the Rio Declaration and the Statement of Principles for the sustainable management of forests), adopted at the United Nations Conference on the Environment and Development in 1992. *Agenda 21*, include a specific chapter on “Global Action for Women towards Sustainable Development” and contain many references to women throughout the text.² The Rio *Principle 20* notes “Women have a vital role in environmental management and development. Their full participation is therefore essential in achieving sustainable development.”³

The World Summit on Sustainable Development held in Johannesburg in 2002, confirmed the need for gender analysis, gender specific data and gender mainstreaming in all sustainable development efforts, and the recognition of women’s land rights. The summit Declaration states: “We are committed to ensuring that women’s empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium Development Goals (MDGs) and the Plan of Implementation of the Summit.”⁴

In 2002, the United Nations Commission on the Status of Women adopted agreed conclusions on environmental management and the mitigation of natural disasters, which included a comprehensive set of policy recommendations to enhance women’s empowerment and promote gender equality in situations of natural disasters.⁵

In 2005, the Governing Body of UNEP adopted a decision that called upon Government and UNEP to mainstream gender perspectives into their environmental policies and programmes, to assess the effects on women of environmental policies, and to integrate further gender equality and environmental considerations into their work.

By 2005 only three of the major conventions on natural resource issues explicitly addressed the participation of women in environmental decision-making and the need to raise awareness among women on environmental issues: the Stockholm Convention on Persistent Organic Pollutants (2004), the Convention on Biological Diversity (1993) and the Convention to Combat Desertification (1996).⁶

2. Progress at the national level

There has been increased awareness in this area since 1995. International organisations have taken steps to document women's and men's different roles in environmental issues and natural resource management. Advocacy efforts urging greater attention to gender equality issues in the environment have become more widespread.

The first Global Women's Assembly on the Environment: Women as the Voice for the Environment (WAVE), was organized by the United Nations Environmental Programme (UNEP), in close collaboration with civil society groups and the Network of Women Ministers on Environment. The Assembly that attracted 150 men and women from 65 countries was held from 11 to 13 October 2004 in Nairobi, Kenya. The Assembly, which aimed at putting women's issues at the centre of global environmental efforts, resulted in a Manifesto on Women and the Environment, recommendations on areas of concern and a series of project ideas to develop UNEP's competence in specific areas.⁷ There is more documentation on women's activism on environmental issues.⁸

Examples of progress on integrating gender concerns and perspectives in policies and programmes for sustainable development

In some cases, Governments have made advances at either policy level or at bringing gender equality considerations to specific initiatives. Several countries have carried out technical assistance activities for women, including the promotion of alternatives to firewood, such as solar energy and biogas. For example, Egypt trained women to use biogas in cooking. Mauritania reported reduced indoor air pollution and the amount of time women and children spend collecting firewood as a result of similar efforts. China assisted women in remote mountainous areas to build water tanks.⁹

Some countries adopted specific gender mainstreaming strategies and action plans in the area of sustainable development. For example, Panama established general frameworks for public policies on gender mainstreaming in environmental plans and programmes. Ethiopia developed strategies for gender mainstreaming in environmental conservation and combating desertification. Advances were also made in incorporating gender perspectives into national environmental strategies and action plans in countries such as Norway, Paraguay, Slovakia and Sweden. Other examples include:¹⁰

- El Salvador's Ministry of the Environment and Natural Resources passed a Gender Policy Declaration;

- › South Africa's 1997 Water Services Act and its 1998 National Water Act were guided by a White Paper which stressed the importance of women's representation and information in this sector;
- › Uganda's 1997 National Water Policy has the full participation of women at all levels as one of its principles;
- › Zambia's 2000 Mainstreaming Gender in Water and Sanitation Strategy recommends the formulation, adoption and implementation of internal gender policies by organisations and institutions involved in the provision and promotion of water and sanitation.

The IUCN (World Conservation Union) has produced a background document to support the development of gender equality policies and action plan inside environmental ministries: *The Unavoidable Current: Gender Policies for the Environmental Sector in Mesoamerica*.¹¹

Progress on women's environmental decision-making

Despite overall slow pace of change, some progress has been made in increasing women's participation in decision-making related to the environment. Global attention to women's role in environmental organizing and campaigning jumped a notch with the awarding of the 2004 Nobel Peace Prize to Wangari Maathai, founder of the Green Belt Movement. In 2002, a network of women environment ministers was formed with the participation of 22 female environment ministers and 28 women leaders of environmental NGOs.¹²

Network of Women Ministers of the Environment (NWME)

The NWME recognises that women constitute a majority of the world's poor, but are severely under-represented in policy-making roles. Given that women can bring to the table new ideas, new approaches and strategies for protecting people and natural resources, the Network focuses on increasing the involvement of women in sustainable development issues. Some of its activities include:

- Developing recommendations for practical salutations to environmental problems confronting nations and the world;
- Building partnership and appropriate civil society, non-governmental and intergovernmental agencies;
- Exchanging best practice experiences in order to implement more effective policies; and
- Creating a critical mass of leadership to influence international and national policy.

Source: UNEP (2004). *Gender, poverty and environment*.¹³

In addition, there are specific examples of increased participation of women in water resource management at the local level.¹⁴

- › In Nepal, a community water supply and sanitation programme involves a women-led sanitation team with responsibility for 23 tap-stands in 160 households.
- › In the Mantsoyane district of Lesotho, the village water committee elects a 'water minder' who is given the tools to maintain the water system and latrines. Up to 90 per cent of the water minders are women.
- › In Trinidad and Tobago, most of the community water projects have been started and run by women.

3. Gaps and challenges

Since 1995, there has been serious and rapid deterioration in the health of the planet: climate change, pollution, rising extinction rates (for both flora and fauna), deforestation, contaminated air and water, increase in natural disasters, and rapid urbanisation. Yet very few countries reporting on progress since 1995 identified this area as a priority for action.¹⁵ INSTRAW noted in its review of progress, “regrettably, the strategic objectives of Critical Area K [women and environment] remain well out of reach.”¹⁶ This section looks at a few of challenges that remain in implementing the *Platform for Action* strategic objectives.

Women’s Participation in Decision-Making Processes – at all levels

Despite progress, women continue to be under-represented in decision-making processes on the environment at all levels – international, national and local. Some of the reasons include their high illiteracy rates, limited access to natural resources, lack of information and training, stereotypical attitudes regarding their roles as well as insufficient research on gender equality and environment, lack of sex-disaggregated data and political commitment.¹⁷

Women’s limited participation in decision-making processes relate to almost all environmental sectors. Obstacles to their participation include the lack of secure access to land, adverse financial conditions, women’s time constraints, public policy traditionally focused on the male population as head of household and gender division of labour along socio-cultural norms.¹⁸

Gender Perspectives in Climate Change

One of the most urgent environmental issues today is climate change. The UN’s Intergovernmental Panel on Climate Change reported in early 2007 that global warming is ‘unequivocal’ and that human activity is the main driver of this activity.¹⁹ To date, however, there has been little discussion on the gender dimensions of this threat and strategies to deal with it.²⁰

Some authors have pointed out that since the poor are the most vulnerable to the impact of climate change, then women, as a disproportionate percentage of the poor, are particularly vulnerable. Given increased environmental instability, women will face particular challenges given their primary care-giving roles in times of disaster and environmental stress. Despite these challenges, many women have developed adaptive strategies to protect the sustainability of their environments and livelihoods. For example, poor nomadic women may have a relatively high adaptive capacity because of their intimate knowledge of their natural environment.²¹

Some analysts have argued that gender inequalities and roles are also relevant variables in tackling climate change in northern countries as well. Research from Germany also indicates that there are gender differences in attitudes and perceptions of climate change, and these are relevant in developing strategies to address this issue.²²

It is clear that we do not know enough about gender aspects of climate change, particularly in the north. More research and sex-disaggregation of data is required.

Gaps in environmental assessments

In many circumstances, environmental assessments are seen as technical exercises to be carried out by engineers and scientists. Significant investments have been made in the development of methodologies and tools, yet these tend to omit gender perspectives and can often fail to incorporate aboriginal women's perspectives. For example, a United Nations training manual designed to build capacity on environmental assessments has almost no attention to gender equality issues.²³

A study from Canada revealed that in the complex mix of aboriginal land claims, nickel mining and environmental assessment, both the participation of aboriginal women and gender-based analysis was weak. Analysts found that although some socio-economic data in the environmental assessment was disaggregated by sex, there was little analysis of the differential impact of the proposed development on Inuit women. There was also insufficient attention to women's concerns over the impact of the development on the levels of violence against women.²⁴

The differential impact of natural disasters on women and men

With the growing environmental instability linked to climate change, it is expected that natural disasters will increase in frequency and impact.

In the last few years, researchers have started to document the differential impact of natural disasters on women and men. For instance, during a natural disaster:²⁵

- women's economic insecurity tends to increase more than men's (given that women often start with fewer resources than men do);
- women often face gender-specific barriers when dealing with relief and reconstruction work;
- women's workloads tend to increase more than men's; and
- women tend to recover more slowly from economic losses than do men, because their socio-economic status is often more vulnerable at the time of disasters.

The importance of understanding the different impacts of natural disasters on women, men, boys and girls is slowly trickling into mainstream disaster preparedness and response systems, as well as international relief efforts. Awareness also needs to be strengthened on the need to involve local communities in flood mitigation efforts.²⁶

4. Strategies to accelerate implementation

Progress on environmental issues is crucial for the health of the planet. Although the linkages between poverty, environmental degradation and gender inequalities have been pointed out at the policy level, much remains to be done to develop integrated and effective solutions to these challenges.

At a general level, various strategies have been identified as important.²⁷

- Improve and support women's capacity to participate in discussions and shape environmental policy and action at all levels – from grass roots to national governments to international organisations.

- Adjust government priorities so that awareness and promotion of gender equality are integrated into financial planning
- Improve institutional capacities to incorporate gender-related environmental analysis. UNEP points out that “much of modern environmental analysis is framed by the technical/scientific paradigm and relies mostly on quantitative biophysical data. Much of the work on gender and environment, on the other hand, is framed by a social science approach relying more on qualitative, case study narratives, and anecdotal evidence. Merging these two paradigms will be a challenge.”²⁸
- Support the explicit commitment to bring issues of gender equality into the environmental arena.

This section looks at how these general strategies can be applied in specific environmental areas. It is meant to inspire and illustrate, rather than provide an exhaustive list of possible actions and entry points.

Expanding women’s participation in restoring drylands²⁹

In many of the world’s drylands, women’s traditional roles and knowledge in natural resource management and food security are crucial. Yet, women often face specific constraints as they care for their families and attempt to ensure sustainable use of the land, including limited access to productive assets, inability to participate in decision-making and exclusion from agricultural extension services. One review of experiences highlights the importance of understanding women’s workloads and responsibilities, their knowledge, their access to productive assets (land, water, livestock), their access to extension and support services, the availability of financial services and access to markets and women’s participation in decision-making.

In particular the review highlights three important strategies in combating desertification.

- *Strengthen rural poor women’s organisations:* In addition to addressing the practical needs of women, it is also important to strengthen women’s organisations so that women’s role in decision-making and planning can be strengthened.
- *Capacity building to create enabling environments:* Capacity gaps exist both within women’s organisations and within local and national authorities working on environmental issues. Although there is an increase in the use of participatory methods, specific attention is required to ensure that these techniques facilitate women’s participation as well.
- *Apply a gender approach, while promoting the role of women:* One analysis of field experiences in drylands found that there were a number of initiatives targeting women, but little integration of gender perspectives into such initiatives.³⁰ This would require an analysis of the various roles and responsibilities of women and men in their use and management of natural resources, organisational issues, and distribution of power within households and communities.

Niger: Reducing Drought Vulnerability

A joint initiative of the Government of Niger and the International Fund for Agricultural Development (IFAD), the Project for the Promotion of Local Initiative for Development, in Aguié included a gender equality component. The area around Aguié is characterised by drought, chronic malnutrition and low incomes. Vulnerability affects more women than men because of the increasing economic responsibilities, lower education levels and heavier workloads of women.

The project introduced innovative strategies proposed by the local communities.

- Support for small and medium livestock breeding. Women's groups received inputs to start goat breeding and participated in testing specific initiatives, such as the use of goat manure as a fertiliser. This approach resulted in income generation and increased yields.
- Support for seed multiplication. Given low rainfalls, short-cycle, high production seeds were required.
- Development of income-generating initiatives among women.

In this case the diversification of crop biodiversity and the active participation of women contributed to improved food security.

Source: IFAD (2006) *Gender and Desertification*.³¹

Ensuring gender equality perspectives in water supply and sanitation

Experience has shown that women's empowerment and the improvement of water supply, sanitation facilities and hygiene practice are inextricably linked.³² Access to safe drinking water is a human right and essential for achieving gender equality. Numerous tools and resources exist which explore the gender dimensions of water supply and sanitation (and integrated water resources more generally).³³ International meetings and experts have developed a lengthy list of strategies and recommendations, including:

- strengthen legislation and mobilize resources for increasing access to safe water and adequate sanitation (including enacting and reinforcing water legislation that promotes small-scale water development, gives priority to water allocation for basic domestic and productive waters needs; introducing affirmative action plans to ensure that a minimum percentage (such as 30 per cent) of women participate in decision making from cabinet down to village levels);
- facilitate access to land and water for productive purposes (including recognizing women's key roles in agriculture, as well as their responsibilities in livestock, fisheries and watersheds; according women equal rights to inherit land...);
- promote improved access to sanitation (including ensuring that sanitation policies are gender sensitive and earmark funds for school sanitation facilities that benefit boys and girls);
- develop capacity and encourage participation (including providing training and awareness-raising on the linkages between gender, water and poverty; enlist role models to encourage girls to study science...);
- ensure public discussion and equitable tendering procedures in any move to privatize water services (including measuring the differential impact on women and men of increased private sector involvement).

A set of recommendations were also directed at local governments:

- encourage gender mainstreaming at the local level (including encouraging gender-sensitive budgets, removing gender biases within public sector organisations, and recognising the important roles played by women in provision and conservation of water);

- promote sanitation (including addressing the needs of men and women for sanitation and hygiene); and
- develop capacity (of women to participate and of men and women to understand differential needs and aspiration of all groups).

Women and Water Users Committees in Brazil

In the Rio Gaviao region of Brazil, a community development project, supported by the International Fund for Agricultural Development (IFAD), required that new and existing water user committees take in women as members. The project included a strong training component (with over 40 per cent women) and the formation of separate water users committees for women.

As a result, water security in dryland area was improved and led to significant increase in water available for use in the home and for livestock, and reduced workloads of women and young people.

Source: IFAD (2006). *Gender and Desertification*.³⁴

Linking reductions in women's workloads with environmentally sound practices

The synergies between gender equality, environmental sustainability and the energy sector were first recognized in relation to biomass energy. Women were recognized as users and collectors of fuel wood, and as victims of environmental deterioration that caused energy scarcity. Time use surveys have shown that women spend long hours in fuel collection.³⁵

One of the seven priorities identified by the Millennium Project to make progress on MDG3 is to invest in infrastructure to reduce women's and girls time burdens. The examples below show that there are ways that this can be done that also support environmentally sound practices.

- Upesi Rural Stoves in Kenya: This project aimed to improve the living and working conditions of women in rural households through the use of fuel-saving wood-burning stoves. The benefits also included improved health and time savings for users of the stoves as well as relief from the pressures caused by wood fuel shortages.³⁶
- In Malawi, the Ndirande Nkhuni Biomass Briquette Programming trained women's groups to produce briquettes from waste materials as an alternative fuel source.³⁷
- In the Sudan, a project has given priority to community and extension activities that have eased the duties of firewood collection among women through the provision of energy-saving gas cylinders and stoves.³⁸

Strengthening women's participation in biodiversity and conservation management

Studies have shown that women and men often have different knowledge of plants, seeds and natural resource use, and that women's knowledge is often overlooked by planners and policy makers. Various initiatives have tried to overcome this bias and recognize and building on women's work with natural resources. For example, in Colombia, an initiative involving the promotion and adoption of bean varieties discovered the critical importance of involving women in the process. Women were responsible for the preparation of food for the farmhands working on their husbands' land. Given labour force shortages, providing good food made it easier to secure labour. Women had definite criteria regarding preferred bean varieties (different than those of men). When women were consulted on the varieties to be tested, their selections proved to be highly popular.³⁹

Organic Cosmetics Made From Medicinal Plants

In the late 1990s, the community of San Miguel de Guatuso in Costa Rica was faced with serious environment problems: soil exhaustion and agrochemical contamination, deforestation, water contamination and an exhaustion of headwaters.

A group of women, encouraged by initial success in promoting the construction of an aqueduct, decided to create the Women's Association of San Miguel of Guatuso and produce cosmetics made from organically-grown medicinal plants.

Their project was chosen by the Office of the Director of Gender and Environment of the Ministry of the Environment and Energy (MINAE) to participate in a programme to promote production projects for poor women. The programme was designed to provide women's groups with training and technical assistance to ensure successful initiatives.

Starting in 2000, the Women's Association received training in different agricultural aspects such as handling and production of crops and organic fertilizer, construction and use of solar dryers, project execution techniques, accounting and product marketing.

Several years later, the women involved emphasized a greater degree of awareness regarding conservation and the acquisition of clean techniques for planting and fertilizing, and reforestation efforts had increased. They highlighted that improvements had also been made with respect to their self-esteem, solidarity among women, teamwork and involvement in community matters. The members are now working with other community members on conservation of a virgin forest located near their community.

Source: Araujo & Corrales (2004) *Organic Cosmetics made from Medicinal Plants*⁴⁰

Gender, Biodiversity and Local Knowledge for Food Security

The Food and Agriculture Organisation (FAO) regional project, "Gender, Biodiversity and Local Knowledge for Food Security" (also known as LinKS) evolved with the growing interest and recognition that rural men and women have in-depth knowledge and understanding of local ecosystems and environmental processes. The aim of the project was to improve rural people's food security and promote sustainable management of agrobiodiversity by strengthening the capacity of institutions to use participatory approaches that recognize the knowledge of male and female farmers.

The project (1997-2005) focused on capacity building; research and documentation; and communication and policy debate in Mozambique, Swaziland, Tanzania and Zimbabwe,. Research findings were used to strengthen the capacity of national institutions to better understand the knowledge of women and men and use gender-sensitive participatory methodologies.

Source: Lambrou and Laub (2006) "Gender, Local Knowledge, and Lessons Learned in Documenting and Conserving Agrobiodiversity."⁴¹

Supporting land titling for women

Secure access to land is an important prerequisite for both poverty reduction and sustainable land-use practices. Without title to land people generally, and women in particular, lack access to related resources such as credit, agricultural extension services, new technologies, and water rights. Throughout the developing world, women control land and other productive resources less frequently than men do, although significant gaps in data exist.⁴²

According to the United Nations' Millennium Project, "Men and women acquire land in many ways, through inheritance, purchase or transfers from the state (land reform programmes, resettlement schemes for people displaced by large dams and other projects, antipoverty

programmes). Research shows that each channel of land ownership has a gender bias: male preference in inheritance, male privilege in marriage, gender inequality in the land market and male bias in state programmes of land administration.”⁴³

Although noting that strategies for increasing women’s access to land must be context specific, the Millennium Project suggests four areas to explore.⁴⁴

- *Reforming laws and supporting women’s claims to property.* Legal reform, including in constitutional provisions, family law and property law, to ensure consistency with the *Convention on the Elimination of All Forms of Discrimination Against Women* (CEDAW), and measures to ensure enforcement of these legal provisions.
- *Joint titling.* Formal registration of property in both the husband’s and wife’s names.
- *Collective approaches to support women’s access to land.* Various types of collective ownership and production as alternatives to strengthening women’s access to land.
- *International action.* International organisations and networks have provided momentum to national movements aimed at strengthening women’s property and inheritance rights.

Joint titling to land in Viet Nam

In 2001, Viet Nam revised its marriage and family law so that both spouses’ signatures are required on any documents registering family assets and land use rights. With joint title, women are protected in case of widowhood, separation or divorce.

The Vietnamese government, in cooperation with the World Bank, selected two communes for a pilot project to reissue land title certificates with joint signatures. The project organized village meetings and distributed leaflets about the new law. As a result of the pilot, some 2,600 households had joint title. A 2002 evaluation by the World Bank concluded that the project also:

- Enabled the establishment of a gender-responsive land administration system
- Improved the ability of local governments to implement land reform
- Enabled local practices to comply with national law
- Disseminated knowledge on national law in remote communities.

Other reports, however, indicate that although changing the law was an important first step, it alone was insufficient to guarantee massive joint titling. Older attitudes and practices worked against widespread adoption of the joint titling scheme.

Sources: UN Millennium Project (2005). *Taking Action* and Vietnam Investment Review (2004). *Fight for Your Rights.*⁴⁵

Ensuring attention to gender equality perspectives in disaster mitigation planning

In the aftermath of the Asian Tsunami there is increase global attention on early warning systems and mitigation plans to respond to natural disasters. As was pointed out above, these processes are not always accompanied by a concern for gender inequalities nor do they generally include a gender analysis. Yet, the evidence of why gender matters in natural disasters continues to mount.⁴⁶

Although the focus is often on women’s vulnerability in disasters, it has been pointed out that the critical links between gender equality, sustainable development and disaster reduction are “women’s roles long before and even longer after such occurrences.”⁴⁷

There are several critical themes to be considered:

- understanding and supporting women's roles in resource conservation;
- supporting women's environmental activism;
- drawing on women's knowledge regarding vulnerabilities and coping strategies of specific groups within the community;
- ensuring women's participation – both as community members and as 'experts' in risk assessments and other emergency preparedness efforts;
- making women's work in disasters visible (this includes women's domestic/survival work to ensure family wellbeing and work through informal women's organisations);
- supporting longer-term efforts towards greater equality (including women's access to land, economic independence, reducing violence against women, increasing political participation)

Translating these general areas into a specific sector, entry points for improving work in flood mitigation have been identified:⁴⁸

- the identification of flood prone areas;
- the examination of the livelihood systems in the flood prone areas, especially gender roles and responsibilities;
- an assessment of the extent and type of damage that floods are likely to cause;
- the identification of the differential impact of floods on men and women based on their specific roles and responsibilities;
- the development of mitigation strategies that will be targeted based on a gender perspective that goes beyond current community participation approaches.

Women's participation in risk mapping

In the Dominican Republic and St. Lucia, four women's community-based organisations were involved in mapping the risks faced by their communities. The women were trained in basic research methods and then conducted interviews, recorded life histories, developed photo essays and drew risk maps to assess their own strengths and the dangers they faced. This information was compiled into Community Vulnerability Profiles to be used by community leaders and local emergency managers.

A set of practical *Guidelines for Working with Women to Assess Disaster Vulnerability* were produced.

DAW (2004). *Making Risky Environments Safer*.⁴⁹

Incorporating gender equality issues in climate change programmes

Only recently has the spotlight been shone on the gender dimensions of climate change. As discussed earlier, there are still many questions regarding both how women and men will be affected differently by changing environmental patterns and how gender differences, roles and inequalities will influence both advocacy and consumption patterns determining the future on this issue.

Although the discussions are still in early stages, several possible interventions or strategies have already been identified:⁵⁰

- promote cleaner-burning fuel for household use (which will help to reduce air pollution and harmful emissions);

- incorporate both women and men into the decision-making framework on climate change mitigation and adaptation initiatives;
- support vulnerability reduction measures which target women's needs;
- facilitate extension studies, particularly for women, to improve the accessibility and use of new, environmentally sustainable technologies; and
- support the development and use of tools, including vulnerability assessments, that build on local and indigenous knowledge, held by women and men, of measures to adapt to or mitigate the impacts of climate change.

Climate Change and Gender Equality in China

One goal of the Canada-China Cooperation in Climate Change initiative is to increase the contribution of women by empowering them to participate equally in the development and implementation of climate change related policies and programmes.

Specific objectives include:

- Increase awareness of gender inequalities and support for women's full participation in decision-making and technical activities associated with climate change;
- Increase the capacity to analyse gender equality issues relevant to the project and incorporate the results of the analysis into project activities;
- Develop and implement appropriate targets for male/female participation in project activities, based on sex-disaggregated baseline research (the minimum expectation is 30 per cent participation by women; and
- Increase the awareness, abilities, self-confidence and motivation of women working to address the issue of climate change.

Source: CIDA (nd). *Gender Equality and Climate Change*⁵¹

Building women's participation into *National Action Programmes* to implement environmental conventions⁵²

The United Nations Convention on Desertification and Drought (UNCDD) is one environmental convention which explicitly recognizes the important role played by women. There are lessons in the way this Convention has moved forward that could be applied in the implementation of other environmental conventions.

Under the UNCDD, a major responsibility of states parties is the establishment of a National Action Programme (NAP) in partnership with civil society. The full participation of women and men is an explicit, important principle for the NAPs. By 2003, more than 56 countries had presented NAPs. A review of these NAPs found that the vast majority of countries in Africa, Asia, Latin America and the Caribbean had made progress on this dimension of the Convention. For example, more than seven countries outlined detailed programme areas specifically for women's empowerment or gender mainstreaming. Other NAPs included the participation of women as one of the overall objectives of the NAPs.

Some NAPs (such as Uganda and Zambia) drew on national commitments to women's participation or gender mainstreaming. Some countries (such as Senegal and Mongolia) made significant efforts to involve women's organisations. Capacity building was an important

element for several countries (such as Benin and Mali). The NAP from Ethiopia outlined how male extension agents would be trained on gender aspects in dryland development programmes.

Although as of 2004, there were still weaknesses in the NAPs (often relating to specific indicators and benchmarks), this process is still considered an important advance. According to one review:

“Still considering the enormous challenges in establishing an innovative model for international environmental governance based on principles such as participatory approaches, socio-economic development and gender mainstreaming, it is remarkable that only six years after the UNCCD became legally binding, it seems to be the norm that national strategies to combat desertification inevitably have to integrate gender considerations.”⁵³

5. Resources

Websites

- The IUCN’s (World Conservation Union) gender and environment web page contains news, links to publications and fact sheets. There is considerable documentation available in Spanish. www.genderandenvironment.org/index.php (accessed 9 July 2007).
- The Gender and Water Alliance site includes guides, news, case studies and information on activities related to gender equality issues in the water sector (water and sanitation, irrigation, www.genderandwater.org/page/121 (accessed 9 July 2007).
- The Gender and Disaster Network site provides a useful starting point to look at the gender dimensions of natural disasters and response. www.gdnonline.org/ (accessed 9 July 2007).
- The virtual organisation, Global Development Research Centre, has a specific page on gender equality and the environment, with links to resources and publications. www.gdrc.org/gender/gender-envi.html (accessed 9 July 2007).
- IGNARM’s (Network on Indigenous People, Gender and Natural Resource Management) site includes *Guidelines for Practitioners on Integrating Indigenous and Gender Aspects in Natural Resource Management*. www.ignarm.dk/resources/guidelines_introduction.htm (accessed 9 July 2007).
- UNEP’s Gender and the Environment website provides examples of women’s activism on environmental issues and background on gender equality issues in climate change, energy, poverty and water. www.unep.org/gender_env/ (accessed 9 July 2007).
- Women’s Environment and Development Organisation’s (WEDO) web site includes a online guide on gender equality and climate change as well as information on WEDO’s advocacy and research across a range of issues. www.wedo.org/ (accessed 9 July 2007).
- The web page of the International Network on Gender and Sustainable Energy (ENERGIA) includes background on the network and its activities as well as an extensive data base on women and energy. www.energia.org (accessed 9 July 2007).

Reports and tools

- ▶ Division for the Advancement of Women (DAW) (2005). *Women and Water. Women 2000 and Beyond*. This publication provides a useful overview of gender equality issues throughout the water sector. www.un.org/womenwatch/daw/public/Feb05.pdf (accessed 9 July 2007).
- ▶ Division for the Advancement of Women (DAW) (2004). *Making Risky Environments Safer*. This publication explores gender equality issues in the context of disaster reduction. www.un.org/womenwatch/daw/public/w2000-natdisasters-e.pdf (accessed 9 July 2007).
- ▶ IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. This publication looks at the impact of desertification on women and their role in the management of natural resources and drylands. It looks at lessons learned and provides recommendations for expanding women's roles in order to restore dryland areas. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 9 July 2007).
- ▶ INSTRAW (2005) *Women and the Environment: New Challenges. Beijing at 10: Putting Policy into Practice*. This document provides a review of progress and gaps on this critical area since 1995. www.un-instraw.org/en/index.php?option=content&task=blogcategory&id=148&Itemid=175 (accessed 9 July 2007).
- ▶ UNEP/WEDO (2004). *Women and the Environment*. This overview document explores the gender dimensions of biodiversity, desertification, water management and environmental policies. It provides examples of women's activism on environmental issues from around the world. www.unep.org/Documents.Multilingual/Default.asp?DocumentID=397&ArticleID=4489&Lang=en (accessed 9 July 2007).

Notes

¹ See for example, paragraphs 246 to 252.

² For analysis of references to women in Agenda 21 see, UNIFEM & UNEP (1995). *Agenda 21: An Easy Reference to Specific Recommendations on Women*. www.gdrc.org/gender/a21/agenda1.html (accessed 9 July 2007).

³ See Principle 20, www.un.org/documents/ga/conf151/aconf15126-1annex1.htm (accessed 9 July 2007).

⁴ Johannesburg Declaration on Sustainable Development paragraph 20. www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm (accessed 9 July 2007), and Johannesburg Plan of Implementation www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm (accessed 9 July 2007).

⁵ CSW agreed conclusions (2002) Environmental Management and the Mitigation of Natural Disasters: www.un.org/womenwatch/daw/csw/ (select 46th session, then agreed conclusions) (accessed 9 July 2007).

⁶ United Nations (2005). *Review of the implementation of the Beijing Platform for Action and the outcome documents of the special session of the General Assembly entitled “Women 2000: gender equality, development and peace for the twenty-first century.” Report of the Secretary-General*. E/CN.6/2005/2, para. 430. For an interesting review of how women and gender equality concerns were incorporated into the UN Convention to Combat Desertification, see Friederike Knabe and Lene Poulsen (2004). *How the UN Convention to Combat Desertification and Drought Promoted the Role of Women in Decision-Making*. Prepared for IUCN. www.generoyambiente.org/admin/admin_biblioteca/documentos/unccdgender.pdf (accessed 9 July 2007).

-
- ⁷ Report of the first Global Women's Assembly on the Environment: Women as the Voice for the Environment, held at the headquarters of the United Nations Environment Programme (UNEP), Nairobi, from 11 to 13 October 2004. UNEP/DPDL/WAVE/1, www.un-ngls.org/cso/cso5/final_report.doc (accessed 9 July 2007).
- ⁸ See, for example, UNEP (2004) *Women and the Environment*. Nairobi: UNEP, WEDO and the United Nations Foundation. www.unep.org/Documents.Multilingual/Default.asp?DocumentID=397&ArticleID=4489&l=en (accessed 9 July 2007).
- ⁹ United Nations (2004). *Review of the implementation of the Beijing Platform for Action and the outcome documents of the special session of the General Assembly entitled "Women 2000: gender equality, development and peace for the twenty-first century."* Report of the Secretary-General. E/CN.6/2005/2, para.437.
- ¹⁰ UNEP (2004) *Women and the Environment*. Nairobi: UNEP, WEDO and the United Nations Foundation. www.unep.org/Documents.Multilingual/Default.asp?DocumentID=397&ArticleID=4489&l=en (accessed 9 July 2007).
- ¹¹ IUCN (2002). *The Unavoidable Current: Gender Policies for the Environmental Sector in Mesoamerica*. San Jose, Costa Rica. www.genderandenvironment.org/admin/admin_biblioteca/documentos/GENDER%20POLICIES.pdf (accessed 9 July 2007).
- ¹² See Network of Women Ministers of the Environment, International Assembly of Women Ministers www.ourplanet.com/imgversn/152/liswood.html (accessed 5 July 2007).
- ¹³ UNEP (2004). *Gender, poverty and environment* in *Global Environment Outlook Year Book 2004/5*. www.unep.org/geo/yearbook/yb2004/ (accessed 9 July 2007).
- ¹⁴ These examples are from Interagency Task Force on Gender and Water (2005). *A Gender Perspective on Water Resources and Sanitation*. Background Paper No. 2. Commission on Sustainable Development. DESA/DSD/2005/2. www.un.org/esa/sustdev/csd/csd13/documents/bground_2.pdf (accessed 10 July 2007).
- ¹⁵ United Nations (2004). *Review of the implementation of the Beijing Platform for Action and the outcome documents of the special session of the General Assembly entitled "Women 2000: gender equality, development and peace for the twenty-first century."* Report of the Secretary-General. E/CN.6/2005/2, para. 431.
- ¹⁶ INSTRAW (2005) *Women and the Environment: New Challenges. Beijing at 10: Putting Policy into Practice*. www.un-instraw.org/en/index.php?option=content&task=blogcategory&id=148&Itemid=175 (accessed 10 July 2007).
- ¹⁷ United Nations (2004). *Review of the implementation of the Beijing Platform for Action and the outcome documents of the special session of the General Assembly entitled "Women 2000: gender equality, development and peace for the twenty-first century."* Report of the Secretary-General. E/CN.6/2005/2, para. 455-457.
- ¹⁸ See Lambrou, Yianna and Regina Laub (2006). *Gender, Local Knowledge, and Lessons Learnt in Documenting and Conserving Agrobiodiversity*. Research Paper No. 2006/69. United Nations University, UNU-WIDER. www.wider.unu.edu/publications/rps/rps2006/rp2006-69.pdf (accessed 10 July 2007) and IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 10 July 2007).
- ¹⁹ See Intergovernmental Panel on Climate Change (2007) *4th Assessment Report* www.ipcc.ch/ and www.ipcc.ch/activity/ar.htm (accessed 5 July 2007).
- ²⁰ See, for example, Lambrou, Yianna and Brazia Piana (2006). *Gender: The Missing Component of the Response to Climate Change*. Gender and Population Division, FAO. www.fao.org/sd/dim_pe1/docs/pe1_051001d1_en.pdf (accessed 10 July 2007).
- ²¹ See, for example, Lambrou, Yianna and Brazia Piana (2006). *Gender: The Missing Component of the Response to Climate Change*. Gender and Population Division, FAO. www.fao.org/sd/dim_pe1/docs/pe1_051001d1_en.pdf (accessed 10 July 2007).
- ²² According to one study, women are more strongly convinced than men that global warming is unavoidable, more women than men favour a leadership role for Germany in climate policy and women are more willing to alter environmentally harmful behaviour. See Ulrike Rohr (2006). *Gender and Climate Change*. In *Tiempo: A Bulletin on Climate and Development*. Issue 59 (April). www.cru.uea.ac.uk/tiempo/newswatch/comment050711.htm (accessed 10 July 2007).
- ²³ See IISD/UNEP (2000) *Capacity Building for Integrated Environmental Assessment and Reporting: Training Manual*. Winnipeg. www.iisd.org/pdf/geo_manual_2.pdf (accessed 10 July 2007).

-
- ²⁴ See Archibald, Linda and Mary Crnkovich (1999) *If Gender Mattered: A Case Study of Inuit Women, Land Claims and the Voisey's Bay Nickel Project*. Research Paper, Status of Women Canada. www.swc-cfc.gc.ca/pubs/pubspr/0662280024/199911_0662280024_e.pdf (accessed 10 July 2007).
- ²⁵ See for example Enarson, Elaine (2000). *Gender and Natural Disasters*. Working Paper No. 1, Geneva: ILO. www.ilo.org/public/english/employment/recon/crisis/download/criswp1.pdf (accessed 10 July 2007).
- ²⁶ Hussein , Maliha H. and Tariq Husain (2006) *Considering Gender Issues in Flood Mitigation*. www.genderandwater.org/page/741 (accessed 10 July 2007).
- ²⁷ UNEP (2004). *Gender, poverty and environment in Global Environment Outlook Year Book 2004/5*. www.unep.org/geo/yearbook/yb2004/ (accessed 9 July 2007).
- ²⁸ UNEP (2004). *Gender, poverty and environment in Global Environment Outlook Year Book 2004/5*. www.unep.org/geo/yearbook/yb2004/ (accessed 9 July 2007)
- ²⁹ This section is based on IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 10 July 2007).
- ³⁰ FAO (2003) *Gender and Sustainable Development in Drylands: An Analysis of Field Experiences*. Rome: Food and Agriculture Organisation. www.fao.org/docrep/005/j0086e/j0086e00.htm (accessed 10 July 2007)
- ³¹ This section is based on IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 10 July 2007).
- ³² Water Supply and Sanitation Collaborative Council (2006). *For Her: It's the Big Issues – Putting women at the centre of water supply, sanitation and hygiene*. Water, Sanitation and Hygiene, Evidence Report. Geneva. www.genderandwater.org/page/5124 (accessed 4 July 2007).
- ³³ See for example UNDP (2003). *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability – A Resource Guide*. New York: UNDP. www.undp.org/water/docs/resource_guide.pdf (accessed 10 July 2007).
- ³⁴ IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 10 July 2007).
- ³⁵ UNEP (2004). *Gender, poverty and environment in Global Environment Outlook Year Book 2004/5*. www.unep.org/geo/yearbook/yb2004/ (accessed 9 July 2007).
- ³⁶ Njenga, Beatrice Khamati (2001) *Upesi Rural Stoves Project in Kenya in Generating Opportunities: Case Studies on Energy and Women*. New York: UNDP. www.undp.org/energy/publications/2001/2001a.htm (accessed 10 July 2007).
- ³⁷ Mabona, Malla (2001). *Ndirande Nkhuni biomass briquette programme in Generating Opportunities: Case Studies on Energy and Women*. New York: UNDP. www.undp.org/energy/publications/2001/2001a.htm (accessed 10 July 2007).
- ³⁸ IFAD (International Fund for Agricultural Development) (2006). *Gender and Desertification: Expanding Roles for Women to Restore Drylands*. www.ifad.org/pub/gender/desert/gender_desert.pdf (accessed 10 July 2007).
- ³⁹ IUCN (2004) *Diversity Makes the Difference*. San Jose, Costa Rica. www.genderandenvironment.org/admin/admin_biblioteca/documentos/BIODIVERSITY.pdf (accessed 10 July 2007).
- ⁴⁰ Araujo , Ariana and Pilar Corrales (2004). *Organic Cosmetics made from Medicinal Plants, Women's Association of San Miguel de Guatuso*. In IUCN (2004). *Everything Counts! Valuing Environmental Initiatives with a Gender Equality Perspective in Latin America*. San Jose, Costa Rica: IUCN and IDRC. www.generoyambiente.org/admin/admin_biblioteca/documentos/EVERYTHING%20COUNTS.pdf (accessed 10 July 2007)
- ⁴¹ Yianna Lambrou and Regina Laub (2006). *Gender, Local Knowledge, and Lessons Learnt in Documenting and Conserving Agrobiodiversity*. Research Paper No. 2006/69. United Nations University, UNU-WIDER. www.wider.unu.edu/publications/rps/rps2006/rp2006-69.pdf (accessed 10 July 2007). The Training Manual from the project is available at: www.fao.org/sd-links/documents_download/Manual.pdf (accessed 10 July 2007).

-
- ⁴² UN Millennium Project (2005). *Taking Action: Achieving Gender Equality and Empowerment Women*. Task Force on Education and Gender Equality. London: Earthscan & UNDP.
www.unmillenniumproject.org/reports/tf_gender.htm (accessed 26 June 2007).
- ⁴³ UN Millennium Project (2005). *Taking Action: Achieving Gender Equality and Empowerment Women*. Task Force on Education and Gender Equality. London: Earthscan & UNDP.
www.unmillenniumproject.org/reports/tf_gender.htm (accessed 26 June 2007).
- ⁴⁴ UN Millennium Project (2005). *Taking Action: Achieving Gender Equality and Empowerment Women*. Task Force on Education and Gender Equality. London: Earthscan & UNDP.
www.unmillenniumproject.org/reports/tf_gender.htm (accessed 26 June 2007).
- ⁴⁵ UN Millennium Project (2005). *Taking Action: Achieving Gender Equality and Empowerment Women*. Task Force on Education and Gender Equality. London: Earthscan & UNDP.
www.unmillenniumproject.org/reports/tf_gender.htm (accessed 26 June 2007) and Vietnam Investment Review.
"Fight for your Rights: Women's Ongoing Struggle for Equality". June 7, 2004. goliath.ecnext.com/coms2/gi_0199-165880/Fight-for-your-rights-women.html (accessed 10 July 2007)
- ⁴⁶ See for just one example, OXFAM (2005) *The Tsunami's Impact on Women*. OXFAM Briefing Note.
www.oxfam.org.uk/what_we_do/issues/conflict_disasters/downloads/bn_tsunami_women.pdf (accessed 10 July 2007).
- ⁴⁷ DAW (2004). *Making Risky Environments Safe. Women 2000 and Beyond*. New York: Division for the Advancement of Women, United Nations. www.un.org/womenwatch/daw/public/w2000-natdisasters-e.pdf (accessed 3 July 2007).
- ⁴⁸ Hussein, Malika H. and Tariq Husain (2006). *Considering Gender Issues in Flood Mitigation*.
www.genderandwater.org/page/741 (accessed 10 July 2007).
- ⁴⁹ DAW (2004). *Making Risky Environments Safe. Women 2000 and Beyond*. New York: Division for the Advancement of Women, United Nations. www.un.org/womenwatch/daw/public/w2000-natdisasters-e.pdf (accessed 3 July 2007). The guidelines are available at: www.ihrc.fiu.edu/lssr/workingwithwomen.pdf (accessed 10 July 2007).
- ⁵⁰ CIDA (nd). *Gender Equality and Climate Change: Why consider gender equality when taking action on climate change?* [www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Climate%20change3/\\$file/Gender-2.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Climate%20change3/$file/Gender-2.pdf) (accessed 9 July 2007).
- ⁵¹ CIDA (nd). *Gender Equality and Climate Change: Why consider gender equality when taking action on climate change?* [www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Climate%20change3/\\$file/Gender-2.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Climate%20change3/$file/Gender-2.pdf) (accessed 9 July 2007).
- ⁵² This section is based on Friederike Knabe and Lene Poulsen (2004). Promoting Equality between Men and Women through Multilateral Environmental Agreements, *How the UN Convention to Combat Desertification and Drought Promoted the Role of Women in Decision-Making*. Prepared for IUCN.
www.generoyambiente.org/admin/admin_biblioteca/documentos/unccdgender.pdf (accessed 10 July 2007).
- ⁵³ Knabe, Friederike and Lene Poulsen (2004). *How the UN Convention to Combat Desertification and Drought Promoted the Role of Women in Decision-Making*. Prepared for IUCN. P. 38
www.generoyambiente.org/admin/admin_biblioteca/documentos/unccdgender.pdf (accessed 10 July 2007).