GENDER ASPECTS OF CLIMATE CHANGE

Climate change is an environmental problem with a strong political and development component. The impacts of global climate change are not only physical and economic, (for instance, in the form of natural disasters), but also social and cultural, jeopardising environmentally based livelihoods in many areas of the world.

As predicted by the Intergovernmental Panel on Climate Change (IPCC), “climate change impacts will be differently distributed among different regions, generations, age classes, income group, occupations and genders” (IPCC, 2001). The IPCC also notes: “the impacts of climate change will fall disproportionately upon developing countries and the poor persons within all countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources.” People living in poverty are more vulnerable to environmental changes. The gender-poverty links show that 70 percent of the poor in the world are women and their vulnerability is accentuated by race, ethnicity, and age. When natural disasters and environmental change happen, women and men are affected differently because of traditional, socially based roles and responsibilities.

Most climate change issues, policies and programs are not gender neutral. In light of this, several areas deserve attention, specifically: gender specific resource-use patterns; gender-specific effects of climate change; gender aspects of mitigation and adaptation; gender and decision-making on climate change; women’s capacity to cope with climate change; and gender related patterns of vulnerability.

It is widely recognised that industrial countries bear the main responsibility for greenhouse gas emissions but the impacts are felt most severely in developing countries. It is therefore relevant to analyse the gender aspects of climate change in developed countries from the angle of emissions and to also consider mitigation strategies from a gender perspective. But so far, the critical issues of who is responsible for CO\textsubscript{2} emissions and through what activities, of how social, political and planning conditions affect emission reduction, and of the role played by gender in increasing or curbing emissions, have scarcely been identified, much less debated.

The Issues At Stake

Climate change has many gender-specific characteristics: (i) women are affected differently, and more severely, by climate change and natural disasters because of social roles, discrimination and poverty, (ii) women are still underrepresented in decision-making about climate change, greenhouse gas emissions and adaptation/mitigation, and (iii) there are gender biases in carbon emissions. They should be included not only because they are most vulnerable but also because they have different perspectives and expertise to contribute. Gender is a significant dimension to take into account when understanding environmental change. Perspectives, responses and impacts related to disaster events are different for men and women, as men and women have different social responsibilities, vulnerabilities, capabilities and opportunities for adjustment and unequal assets and power relations; they experience environmental change and disasters differently.
Women are affected differently and more severely

The effects of climate change manifested in the increase of extreme weather conditions such as hot summers, droughts, storms or floods, impact women more severely than men, both in developing and in developed countries. For example, the 20,000 people who died in France during the extreme heat wave in Europe in 2003 included significantly more elderly women than men.

In natural disasters that have occurred in recent years, both in developing and in developed countries, it is primarily the poor who have suffered—and all over the world, the majority of the poor are women, who at all levels earn less than men. In developing countries, women living in poverty bear a disproportionate burden of climate change consequences. Because of women’s marginalized status and dependence on local natural resources, their domestic burdens are increased, including additional work to fetch water, or to collect fuel and fodder. In some areas, climate change generates resource shortages and unreliable job markets, which lead to increased male-out migration and more women left behind with additional agricultural and households duties. Poor women’s lack of access to and control over natural resources, technologies and credit mean that they have fewer resources to cope with seasonal and episodic weather and natural disasters. Consequently traditional roles are reinforced, girls’ education suffers, and women’s ability to diversify their livelihoods (and therefore their capacity to access income-generating jobs) is diminished.

An Oxfam Report (March 2005) on the impact of the 2005 Asia Tsunami on women raised alarms about gender imbalances since the majority of those killed and among those least able to recover were women. In Aceh, for example, more than 75 percent of those who died were women, resulting in a male-female ratio of 3:1 among the survivors. As so many mothers died, there have been major consequences with respect to infant mortality, early marriage of girls, neglect of girls’ education, sexual assault, trafficking in women and prostitution. These woes, however, are largely neglected in the media coverage. (Deepa Kandaswany, 2005)

Climate change, which reduces crop yields and food production particularly in developing countries, affects women’s livelihood strategies and food security, and therefore their right to food. Women are responsible for 70-80 percent of household food production in Sub Saharan Africa, 65 percent in Asia, and 45 percent in Latin America and the Caribbean. Traditional food sources may become more unpredictable and scarce as the climate changes. Droughts and flooding can be detrimental to women who keep livestock as a source of income and for security. Women’s knowledge and experience of maintaining bio-diversity through the conservation and domestication of wild edible plant seeds and food crop breeding is key to adapting to climate change more effectively.

Both in developing and in developed countries women are primary caregivers, combining the care for children and the elderly with their domestic and income-earning activities. These additional responsibilities place additional burdens on women impacting their ability to work outside the home and to deal with the effects generated by environmental changes caused by global warming.
In a study executed on behalf of ACTIONAID in 1993-1994 in the Himalayan region of Nepal, it became clear that environmental degradation has compounded stress within households and pressure on scarce resources. This meant that the pressure on children, particularly girl children, to do more work and at an earlier age was increasing. Girls do the hardiest work, have the least say and the fewest education options. Programmes that concentrate only on sending more girls to school were failing as the environmental and social conditions of the families deteriorated. (Johnson et al, 1995)

In traditional societies women are even more vulnerable to the impacts of climate change because they are often not allowed to participate in the public sphere, and are therefore less likely to receive critical information for emergency preparedness. They are also less mobile due to strict and gendered codes of social behaviour, and have less chances to escape from affected areas.

Climate protection instruments may, affect women and men differently because of their differing economic status (see example of eco-taxes under Energy). Financial support of technical measures to protect the climate likewise tends to be more in favour of men’s interests. Measures necessary to produce changes in behaviour do not receive a similar level of recognition and support.

As reported by the gender disaster workshop in Ankara (2001)¹, “Women’s human rights are not comprehensively enjoyed throughout the disaster process. Economic and social rights are violated in disaster processes if mitigation, relief, and reconstruction policies do not benefit women and men equally. The right to adequate health care is violated when relief efforts do not meet the needs of specific physical and mental health needs throughout their life cycle, in particular when trauma has occurred. The right to security of persons is violated when women and girls are victims of sexual and other forms of violence while in relief camps or temporary housing. Civil and political rights are denied if women cannot act autonomously and participate fully at all decision-making levels in matters regarding mitigation and recovery.”

Women are under-represented in decision-making
Women’s role in communities is not formally recognized or accounted for in mitigation, adaptation and relief efforts. Women’s knowledge about ecosystems and their strategies, experiences and skills for coping with natural disasters and water shortages, are often ignored. Strategies and policies to cope with climate change are neglecting the gender dimensions of climate change and the current gender-climate change agenda. Women are poorly represented in planning and decision-making processes in climate change policies, limiting their capacity to engage in political decisions that can impact their specific needs and vulnerabilities. Vulnerability and mitigation are part of the 1988 UN International Panel on Climate Change agenda but gender perspectives have still not been incorporated in its work.

The level of women’s participation in planning and decision-making on climate protection is very low even in industrialised countries, and this is linked above all to the heavily technical nature and male dominance in key areas of work; energy, transport, town planning (Climate Alliance 2005). Consequently, it is generally men who profit more from the newly emerging jobs in these areas, be it renewable energies or emissions trading.

At both international and national levels, it remains difficult for women to gain recognition in the field of climate protection. While there is now a small and growing group of committed women and men in policy forums advocating for gender to be taken into account, response to the issues remains limited. At the national level, the picture is not much better. The integration of gender appears most likely to succeed at the regional and local levels but even here it is the exception rather than the rule.

**Gender biases in carbon emissions**

In some instances, responsibility for emissions appears related to the gender-specific division of labour, economic power and the different consumption and leisure habits of men and women. For example, emissions connected with mobility have a clear gender component. In Europe, in both the work and leisure contexts, women travel by car less frequently and over shorter distances, use smaller, energy-saving cars and fly considerably less frequently than men.

Women are over represented as heads of low-income households and under represented in high-income groups. In this respect, income levels play a role in CO$_2$ emissions: the higher the income, the higher the emissions from larger houses with more electrical equipment, bigger cars and so on; the lower the income, the less the household’s ability to use energy efficient appliances, build energy-saving houses or purchase electricity and heat produced from renewables. These differences must be addressed in climate change mitigation policies. Lack of technical education also has an effect since behavioural changes, including consumption patterns cannot be made without knowledge of the challenges and options for reducing CO$_2$ emissions.

[36 (b)] Women and men perceive the cause of climate change (including CO$_2$ emissions) differently. In Germany, more than 50 percent of women compared to only 40 percent of men, rate climate change brought about by global warming as extremely or very dangerous. Women also believed very firmly that each individual can contribute toward protecting the climate through his/her individual actions. However, policy planning does not reflect in anyway these perceptions.

**Lessons Learned**

Women at the international level have organized to influence climate change negotiations and national policies, and important international networks promoting the role of women in energy and climate change have been established, including the Gender and Climate Change Network established by LIFE, WECF, SAGEN, and ENERGIA during COP-9 (www.gencc.interconnection.org).
A concept for integrating the gender perspective in UN climate protection negotiations has been drawn up by women’s networks in Germany supported by women’s groups worldwide. Entry points for incorporating a gender perspective as well as strategies and possible alliances are identified. Initial steps toward implementation are planned for COP 11 at the end of 2005, including a strategy workshop, a women’s caucus and a “Climate Talk” to present the issues to high-level representatives. A workshop, to be organised jointly with the IPCC will aim to close, in the medium term, the considerable gaps in research.

At the local level, women provide particular kinds of social capital for mitigation, adaptation and coping with environmental change, actively organising during and after disasters to help their households and community.

In those situations where climate change programs and policies have recognized gender differences within the same community, household or stakeholder groups, there have been several benefits. For instance, unlike many other communities in Honduras, La Masica reported no deaths after Hurricane Mitch in 1998; six months earlier, a disaster agency had provided gender-sensitive community education on early warning systems and hazard management. The community decided to involve women and men equally in all hazard management activities and women took over from men the abandoned task of continuously monitoring the early warning system. As a result, the municipality was able to evacuate the areas promptly when Hurricane Mitch struck.

**Climate Programme 2004-2008, Lower Austria—Gender Mainstreaming**

The government of the Austrian federal state of Lower Austria has applied gender mainstreaming to its newly established climate protection programme. Five gender-mainstreaming measures have been drafted and assigned to the over 200 climate protection measures, to be taken into consideration during implementation. Resistance was substantial which is why at the end of the agreement process only five GM measures remained, although there had originally been double that number. These are as follows:

- Representation of women in decision-making positions
- Equality of opportunity in planning, organisation and promotions
- Promotion of women in technical occupations
- Inclusion of gender aspects in training
- Inclusion of gender aspects in PR work.

An initial review of implementation of the climate programme will be carried out in 2006, when implementation of the gender mainstreaming components will also be reviewed. Source: [www.noe.gv.at/service/RU/RU3/Klimabuendnis/klimaprogramm.htm](http://www.noe.gv.at/service/RU/RU3/Klimabuendnis/klimaprogramm.htm)
Women are able to map their risks and vulnerabilities from their own standpoint and to play an important role in early warning. Women’s knowledge in adaptation (traditional and community-specific) could be used as an important resource.

Inuit women in Northern Canada have always had a deep understanding of weather conditions, as they were responsible for assessing hunting conditions and preparing the hunters accordingly. [www.iisd.org/pdf/unuitpropreport4.pdf] During a drought in the small islands of the Federal States of Micronesia, it was local women, knowledgeable about island hydrology as a result of land-based work, who were able to find potable water by digging a new well that reached the freshwater lens. (Cheryl L. Anderson, InterCoast, winter 2002/REF)

Tapping women’s interest in disaster mitigation and preparedness has led to improved community welfare during and after disasters. Ensuing strategies, including gender-sensitive target group analysis, identification and preparation of safe areas for villagers to escape floods, establishing local early cyclone warning monitoring and communication systems, research on indigenous resilience practices and the creation of women-accessible emergency loan funds, help the poor reduce their risks in natural disasters.

Through improved access to resources, technologies and finance, women have been more likely to increase efficiency in their use of renewable energy and mitigate climate change. More secure access to resources from forests and protected areas has resulted in less deforestation and maintenance of carbon sinks and improved access to safe water for humans and animals has enabled dry-land women to have more time for livelihood and subsistence activities.

Since 1996, Costa Rica has been implementing the Program to Pay for Environmental Services (Programa de Pago por Servicios Ambientales) to promote and encourage conservation, reforestation, carbon emission mitigation and its greenhouse effect and the sustainable management of Costa Rica’s natural resources. The programme is a mechanism that offers economic rewards to landowners who don’t cutback the forests on their land. The problem also encompasses ownership issues since most landowners are men and women have little access. To help resolve this problem, FONAFIFO (Fondo Nacional de Financiamiento Forestal), the national institution in charge of implementing the program as well as promotion of gender equity, imposes a fee to ensure that a certain amount of the gains goes to supporting women to become landowners. Source: http://www.fonafifo.com/index.htm

Improvements in family income have reduced the need for males to migrate to urban and other areas, thereby increasing rural labour availability for anti-desertification and reclamation practices (for example, soil and water conservation, cut-and-carry fodder
systems, intensive agro-forestry systems) and enabling traditional ecosystem management practices to be passed on by both women and men.

Gender-sensitive methods of problem analysis, situation description and impact assessment will have to be developed for climate change contexts. Instruments such as gender impact assessment can already be applied and can be developed further during the process of application. For all instruments and measures relevant to climate protection, in local areas and regions as well as at the national and international level, an impact analysis should be conducted regarding the situation of women and men and how gender justice and climate protection can be mutually reinforcing. Questions include: What is the socio-economic situation forming the backdrop to these measures? Is care work and its requirements recognised and taken into account? How is this reflected in the general situation (for example, financial aid, information, supportive measures)?

**Toolkit: “Climate for Change—Gender Equality and Climate Change Policy”**

The Climate Alliance of European Cities conducted its first gender project between 2003 and 2005. In cooperation with 10 cities in four European countries, the situation of women in municipal climate protection bodies was examined and instruments were discussed with a view to increasing the proportion of women in decision-making positions. Discussions also touched on ways that increasing the proportion of women would contribute to climate protection, and whether a more gender-sensitive climate protection policy could automatically be expected as a result. Even though the questions were left unanswered, there was interest to continue working on them in the future.

Source: [http://www.climateforchange.net](http://www.climateforchange.net)

**Six Principles for Engendered Relief and Reconstruction: “Nothing in Disaster Work is Gender-Neutral”:**

- Think big: gender equality and risk reduction principles must guide all aspects of disaster mitigation, response and reconstruction. The window of opportunity closes quickly.
- Get the facts: gender analysis is not optional or divisive but imperative to direct aid and plan for full and equitable recovery.
- Work with grassroots women: women’s community organizations have insights, information, experiences, networks, and resources vital to increasing disaster resilience.
- Work with and develop the capacities of existing women’s groups.
- Resist stereotypes: base all initiatives on knowledge of difference and specific cultural, economic, political and sexual contexts, not on false generalities.
- Take a human rights approach: democratic and participatory initiatives serve women and girls best. Women and men alike must be assured of the conditions needed to enjoy their fundamental human rights, as well as simply survive.
- Respect and develop the capacities of women: avoid overburdening women with already heavy workloads and family responsibilities.
CONCLUSION

There is a need to refocus the thinking and the debate on energy and climate change to include a human rights perspective. Integrating a rights-based approach to access to sustainable and affordable energy is an approach that will recognise and take into account women’s specific needs and women’s human rights. Current economic models based primarily on privatisation strategies do not include accountability in terms of meeting people’s basic needs.

Women must be recognised as agents of change who have a significant role to play in creating sustainable models for energy consumption and production, and in responsible climate change mitigation and adaptation efforts. There is an urgent need to include gender equality and involvement of women at all environmental planning and decision-making levels. Empowerment through capacity building and technical training will increase women’s capacity to effectively participate in energy policy-making and decision-making bodies.

Finally, addressing the absence of the gender dimension in the UNFCCC, and the scarcity of research focusing on the gender aspects of climate change will also help to build a more consistent and solid approach regarding climate change policies.

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