

# Gender Equality and Adaptation

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The 2007 report of the Intergovernmental Panel on Climate Change (IPCC) 2007 predicts that greenhouse gases and aerosols will alter the energy balance of the climate system and over the next two decades it is projected that there will be a warming of 0.2°C (IPCC, 2007). Climate changes are expected to have unprecedented effects on people



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worldwide, particularly through the increase in natural disasters (Giles, 2007). Social, economic and geographical characteristics will determine the vulnerability of people to climate change. Many studies have determined that poor women are more vulnerable to natural disasters given socially constructed gender roles and behaviours.

A study of disasters in 141 countries provided decisive evidence that gender differences in deaths from natural disasters are directly linked to women's economic and social rights. In inequitable societies, women are more vulnerable to disasters; for example, boys are likely to receive preferential treatment in rescue efforts and both women and girls suffer more from shortages of food and economic resources in the aftermath of disasters (Neumayer and Pluemper, 2007).

- Women and children are 14 times more likely to die than men during a disaster. In the 1991 cyclone disasters which killed 140,000 in Bangladesh, 90% of victims were women (Aguilar, 2004). Similarly, in industrialized countries, more women than men died during the 2003 European heat wave. During Hurricane Katrina in the USA, African-American women who were the poorest population in that part of the country faced the greatest obstacles to survival. During the 2006 tsunami, more women died than men – for example in Indonesia and Sri Lanka, male survivors outnumber female survivors by 3 or 4 to 1 (Davis *et al.*, 2005).

- In Sri Lanka, swimming and tree climbing are taught mainly to boys, which helped them survive and cope better than women when the waves of the tsunami hit. Social prejudice keeps girls and women from learning to swim, which severely reduces their chances of survival in flooding disasters (Oxfam, 2005).
- Women become less mobile because they are the primary care-givers in times of disaster and environmental stress.
- After a natural disaster, women are more likely to become victims of domestic and sexual violence therefore women often avoid using shelters from fear (Davis *et al.*, 2005).
- The household workload increases substantially after a disaster, which forces many girls to drop out of school to help with chores (Davis *et al.*, 2005).
- Nutritional status determines the ability to cope with the effect of natural disasters (Cannon, 2002). Women are more prone to nutritional deficiencies because of their unique nutritional needs, especially when they are pregnant or breastfeeding, and some cultures have household food hierarchies. For example, in South and Southeast Asia 45–60% of women of reproductive age are underweight and 80% of pregnant women have iron deficiencies. In sub-Saharan Africa, women carry greater loads than men, but have a lower intake of calories because the cultural norm is for men to receive more food (FAO, 2000).
- Droughts could increase due to climate change, which will affect women's crop and livestock production (increasing the work of collecting, storing, protecting and distributing water) and impact their own and their families' health. There has been an increase in the frequency and intensity of drought in many African regions. Between 1984 and 2000, Morocco had ten years of drought and northern Kenya experienced four severe periods of drought between 1983 and 2001.
- More women than men work in the informal sector and in small enterprises. These sectors are often the worst hit and least able to recover from the effects of disasters, due to lack of capital, and limited access to credit and information, among other obstacles (Nelson *et al.*, 2002).
- In areas subject to periodic drought or flooding, men and women have different knowledge, management practices and exchange relationships. Women's knowledge of their surroundings and of natural resources can prove essential when recovering from a natural disaster and this knowledge is usually underused (Hannan, 2002). For example, in the small islands of Micronesia, working the land has given women a unique knowledge of the island's hydrology, enabling them to find water and build wells during a drought period (Anderson, 2002).

As predicted by the IPCC, “climate change impacts will be differently distributed among different regions, generations, age classes, income groups, 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.”

Adaptation and vulnerability to disasters are social issues (Skutsch *et al.*, 2004). Risk is a function



of exposure to a given hazard, and of the factors that perpetuate conditions of vulnerability. Variability in magnitude of vulnerability and the capacity to adapt depends on the political and social factors that determine the group of people or the individual (Cannon, 2002). Adaptive capacity hinges on the options available to individuals or households for modifying dangerous conditions, for moving away from hazardous situations or protecting their assets from potential damage and loss. Political and social factors include initial conditions of a person, the resilience of their livelihood, the opportunities for self-protection, and their access to social protection and social organization. However, vulnerabilities are socially constructed and distinct for different groups of people. Women can be more vulnerable to the negative impacts of natural hazards due to their socio-economic position within societies (Neumayer and Pluempner, 2007).

Women are more vulnerable due to: physical and biological differences that can disadvantage their initial response to natural hazards; social norms and given roles (related to the expected behaviour of women) that affect the way they react to a disaster; and an inequitable distribution of aid and resources caused by social hierarchies.

Disasters occur only when changes in natural conditions negatively affect vulnerable people. How severe a disaster is depends on where natural hazards occur, their intensity and the number and characteristics of the people that are potential targets (Cannon, 2002).

Although women are disproportionately impacted by disasters and swift environmental changes, women have also contributed to curbing the impacts of climate change. Women’s knowledge and responsibilities related to natural resource management have proven to be critical to community survival. For example, after Hurricane Mitch in 1998, La Masica, Honduras surprisingly reported no deaths. A disaster agency had provided gender-sensitive community education on early warning systems and hazard management six months earlier. 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 area promptly when Hurricane Mitch struck (Aguilar, 2004).



## **Recommendations:**

- The international Adaptation Fund that the UNFCCC is in the process of developing must include gender considerations.
- National and international adaptation plans, strategies, and budgets should mainstream gender.
- Global and national studies should produce gender-differentiated data on the impacts of climate change and emphasise the capacities of men and women to adapt and mitigate climate changes. Studies should also determine the advantages of implementing gender-sensitive adaptation projects.
- Governments should understand and use the knowledge and specialized skills of women in natural disaster survival and management strategies.
- Recognise that **women are powerful agents of change** and that their leadership is critical. Women can help or hinder in dealing with issues such as energy consumption, deforestation, burning of vegetation, population growth and economic growth, development of scientific research and technologies, policy making, and should be included in all levels of strategies to adapt to climate change.
- Improvement of women's access to, and control over, natural resources in order to reduce poverty and vulnerability, to manage and conserve natural resources and to ensure that women have resources to adapt properly.
- Development of training and educational programmes for women and girls (especially in vulnerable communities) that provide general information about disasters, and strategies to cope with them.

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