



Gender and adaptation

Background

Channelling women's skills and wisdom will improve adaptation efforts. Just as important, measures taken to address gender based vulnerability can strengthen adaptive capacity of the society at large.

The adverse impacts of climate change will particularly affect the poor and disadvantaged groups of society. As the Intergovernmental Panel on Climate Change notes, “poor communities can be especially vulnerable, in particular those concentrated in high-risk areas. They tend to have more limited adaptive capacities, and are more dependent on climate sensitive resources such as local water and food supplies”¹. The projected impacts are such that climate change adaptation efforts need to address the nexus between climate change and the wide-ranging socioeconomic sources of vulnerability, including poverty and gender inequality. In addition, women’s unique knowledge and skill set concerning development and environmental management could greatly benefit adaptive efforts. Thus, as the need for adapting to the unavoidable changes in climate continues to become more and more urgent in national policy processes, it is crucial that adaptation responses are pro-poor and gender-aware, informed both by gender-based vulnerabilities as well as the unique contributions of women.

Adaptive strategies need to address gender-based vulnerabilities

Along with other socio-economic and environmental factors, gender is a key determinant of vulnerability to climate change. Women often face social constraints, receive less education and are excluded from political and household decision-making processes that affect their lives.² In addition, they tend to possess fewer assets than men and depend more on natural resources for their livelihoods. For example, climatic stress on water and forest resources often leads to women having to spend a longer amount of time to fetch water or wood, with associated opportunity costs such as foregone productive use of time for education and income generation. In time of a disaster, women are more likely to suffer due to their limited access to financial, natural, institutional or social resources and often due to social norms and ethos (e.g. dress

Gender-based vulnerability to climate change: Fast facts

- *Gender differences in time use, access to assets and credit and treatment by markets and formal institutions (including legal and regulatory frameworks) play a role in constraining women's economic opportunities. Women, as subsistence farmers in the developing countries, are responsible for 70 to 80 percent of household food production.*
- *In most countries, the share of female smallholders who can access credit is 5 to 10 percentage points lower than that of male smallholders.*
- *Out of 141 countries reviewed in a World Bank study, 103 have legal differences between men and women that may hinder women's economic opportunities, including access to credit.^a*
- *In 2010, women occupied 30 percent or more national parliamentary seats in only two countries in the Asia-Pacific region (Nepal and New Zealand).*
- *A 2010 study of seven low-human development index countries undertaken by Koolwal and Van de Walle found that 56 to 86 percent of rural women fetched water, compared to 8 to 40 percent of rural men.*
- *Collecting firewood and water was found to cause spinal damage, complications during pregnancy and maternal mortality.*

Note: a) Koolwal, G., and D. van de Walle, 'Access to Water, Women's Work and Child Outcomes' Policy Research Working Paper 5302, World Bank, Washington, DC, 2010.

Sources: Food and Agriculture Organisation of the United Nations, *The State of Food and Agriculture*, 2011. Oxfam, 'The Tsunami's Impact on Women', Briefing Note, March 2005; United Nations Development Programme (UNDP), *Human Development Report 2011: Sustainability and Equity: A Better Future for All*, 2011; UNDP, *Gender and Climate Change: Impact and Adaptation*, November 2009; United Nations Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific 2011*, Thailand, 2011; World Bank, *Women, Business and the Law 2012: Removing Barriers to Economic Inclusion*, Washington, DC, 2011.

codes that inhibit mobility).³ Women's productive and reproductive activities make them disproportionately vulnerable to changes in biodiversity, cropping patterns and insect and disease vectors.

It is imperative that scientific factors and an understanding of the socio-economic drivers and pressures of vulnerability (including gender imbalances) inform adaptation approaches. Conversely, adaptation initiatives that are not gender conscious may themselves unintentionally exacerbate gender inequalities.⁴

Adaptation to disaster warrants special attention since disasters have harsh impacts on women

Women and children are disproportionately victimized by disasters. To illustrate, women accounted for 61 percent of deaths caused by Cyclone Nargis in Myanmar in May 2008, 70 to 80 percent of deaths in the 2004 Indian Ocean tsunami and 91 percent of deaths in the 1991 cyclone in Bangladesh.⁵

In a changing climate where hydro-meteorological disasters are intensifying in severity and/or frequency, it becomes more important to take into account women's and vulnerable groups' needs, interests and contributions in the design, planning, financing and implementation of disaster risk mitigation and management.

Adaptation needs to build on women

Women's potential as agents of change for climate mitigation and adaptation remains largely unrecognized. Women's local knowledge, generally part of an oral tradition, should be factored into climate data to reach a more precise understanding of adaptation measures. Such knowledge includes sowing seasons, multi-cropping, local crops, trees, herb varieties that thrive in local climates, wild edible varieties, crops suitable to climatic conditions, seed selection, seed storage, preparation of bio-fertilizers and bio-pesticides, manure application, pest management, post-harvest processing and value addition.⁶

A simple yet important example: women's communal knowledge of island hydrology was employed in finding potable water by digging a new well that reached the freshwater lens.⁷ Harnessing such wisdom and skill supports adaptation efforts. Perhaps more importantly, women's contributions can strengthen adaptive capacity of the society at large—by promoting the unique capacities of women in adaptation, it is possible to pursue the simultaneous objectives of building resilience in communities and promoting gender equality.⁸

Gender equality could help bring about gains in sustainability and agricultural productivity and can help ensure greater returns on investments in Millennium Development Goal achievement.⁹ By virtue of their family and communal responsibilities and their greater involvement in natural resources management, women have unique skills and wisdom that could be brought to bear in the design of adaptation solutions.¹⁰ Likewise, when mitigation technology projects are designed from a gender equality perspective, they can serve various purposes, such as

contributing to climate change mitigation, lightening women's workload and becoming a source of income generation.¹¹

Channelling women's skills and wisdom will improve adaptation efforts. Just as important, measures taken to address gender-based vulnerability can strengthen adaptive capacity of the society at large. In this way, it is possible simultaneously build communities' resilience and gender equality.¹² Partnering with women's organizations and community groups should be a priority in developing and expanding climate change adaptation efforts.

Not enough is known about the connection between gender roles and climate change adaptation, despite efforts to understand and reduce vulnerability of the poor to the effects of long-term climate change. More research is needed to understand what men and women know about climatic shifts and how they cope to ensure the food security of their households. Tools are needed to incorporate the knowledge and needs of both women and men into strategies and policies for coping with long-term change.

Mainstreaming gender in adaptation efforts

- *Analyse the effects of climate change on both women and men and examine their perspectives on adaptation priorities and strategies;*
- *Ensure the collection of sex-disaggregated qualitative and quantitative data in all assessments, stocktaking, monitoring and evaluation;*
- *Incorporate a female perspective when designing and implementing projects;*
- *Capitalize on the talents and contributions of both women and men;*
- *Set targets for female participation in all activities;*
- *Ensure that women are adequately represented in all levels of decision-making processes;*
- *Consult with regional and national-level gender specialists to ensure gender considerations are integrated throughout project planning, implementation, monitoring and evaluation processes;*
- *Make women's equal access to information, technology, economic resources and education a priority;*
- *Address gender differences in capabilities to cope with climate change adaptation and mitigation;*
- *Develop and apply gender-sensitive criteria and indicators for progress monitoring and evaluation of results;*
- *Undertake a gender analysis of budget lines and financial instruments to determine a budget's differentiated impacts on women and men;^a*
- *Consider reallocating resources (when relevant) in order to achieve gender equality outcomes from the actions planned; and*
- *Develop and apply gender-sensitive criteria and indicators.*

Note: a) For more information see www.gender-budgets.org.

Recommendations

- **Gender perspectives should be integrated into the design, implementation, monitoring and evaluation of adaptation strategies.** Mainstreaming gender into adaptation initiatives will enhance the success and sustainability of climate projects and policies. Women have unique capabilities to bring to climate change adaptation efforts which, if employed properly, would render the efforts more equitable, more effective and more sustainable and lead to greater returns on investments in environmental sustainability, the Millennium Development Goals and broader development objectives.
- **Gender-based vulnerabilities and the associated factors and differences in disaster situations need to be especially emphasized while addressing disaster adaptation.** Gender-based vulnerabilities to disasters are acutely disproportionate. However, women have communal skills, survival and coping strategies that could be very useful in disaster management efforts. Both their vulnerabilities and their skills need to be meticulously factored into adaptation planning. There is a great need for women's effective participation and the integration of gender analysis into addressing the issues of vulnerability and risk management from a holistic and sustainable development perspective.
- **Adaptation initiatives at the global, national and local levels need to be gender-responsive.** Men and women have varied needs and concerns. It is essential to integrate gender perspectives into the planning and implementation processes of adaptation policies and initiatives at all levels. National adaptation programmes of action and the recently launched Cancún Adaptation Framework process should be used as opportunities to do so.¹³
- **Adaptation activities that reduce disaster risks and increase communities' resilience to climate change impacts (e.g. technology transfer and climate insurance) need to target women.** Women generally have low levels of access to technologies, information and financing to adjust and deal with the impacts of climate change, as well as to ease their productive and reproductive burdens.
- **Adaptation efforts should be seized as opportunities to improve the well-being of humans and ecosystems.** Adaptation initiatives at programmatic and planning levels need to bolster women's participation and empowerment. Aiming for vigorous, pro-poor and gender-sensitive planning should enable poor and marginalized communities to develop sustainable and resilient livelihoods.
- **Research is needed to gather and retain women's knowledge on food production, seeds and natural resources.** This knowledge needs to be factored into climate data to reach a more precise understanding of adaptation measures and to ensure that this knowledge is used for sustainable development approaches.
- **Adaptation finance should leverage gender equality and women's empowerment.**¹⁴ Investing in women is an effective avenue for advancing sustainable development and fighting climate change. More work needs to be done in order to ensure that gender considerations are duly factored into the design and operationalization of adaptation finance.

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It is imperative that scientific factors and an understanding of the socio-economic drivers and pressures of vulnerability (including gender imbalances) inform adaptation approaches.



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