

# 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”<sup>1</sup>. 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.<sup>2</sup> 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.<sup>3</sup>*
- *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).<sup>3</sup> 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.<sup>4</sup>

## ***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.<sup>5</sup>

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.<sup>6</sup>

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.<sup>7</sup> 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.<sup>8</sup>

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.<sup>9</sup> 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.<sup>10</sup> 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.<sup>11</sup>

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.<sup>12</sup> 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;<sup>a</sup>*
- *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](http://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.<sup>13</sup>
- **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.**<sup>14</sup> 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.

## Gender and adaptation

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



**REFERENCES:** 1. Parry, M.L., O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds.), *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Intergovernmental Panel for Climate Change, Cambridge University Press, Cambridge, United Kingdom, and New York, USA, 2007. 2. Women's Environment and Development Organization, 'Changing the Climate: Why Women's Perspectives Matter', 2007, available at: <http://www.wedo.org/library/changing-the-climate-why-womens-perspectives-matter>. 3. Rajivan, A., and H. Cheema, *Enforcing Rights and Correcting Wrongs: Overcoming Gender Barriers in Legal Systems*, United Nations Development Programme, Asia-Pacific Regional Centre, Bangkok, 2011; World Bank, *Social Dimensions of Climate Change*, Washington, DC, 2010; World Health Organization, *Gender, Climate Change and Health*, 2011; World Resources Institute (WRI), *World Resources 2010–2011: Decision Making in a Changing Climate – Adaptation Challenges and Choices*, Washington, DC, 2011; WomenWatch, 'Women, Gender Equality and Climate Change', 2009. 4. Aguilar, L. et al., 'Training Manual on Gender and Climate Change', published by the International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP) and Global Gender and Climate Alliance (GGCA), San Jose, Costa Rica, 2009. 5. Castañeda, I., and S. Gammage, 'Gender, Global Crises, and Climate Change' in Jain, D., and D. Elson (eds.), *Harvesting Feminist Knowledge for Public Policy*, International Development Research Centre, SAGE Publications India, New Delhi, India, 2011. 6. United Nations Conference on Trade and Development (UNCTAD), *Applying a Gender Lens to Science, Technology and Innovation*, Geneva, 2011. 7. Anderson, C., 'Gender Matters: Implications for Climate Variability and Climate Change and for Disaster Management in the Pacific Islands', *InterCoast Newsletter*, 2002. 8. WRI 2011, note 3. 9. Dankelman, I., *Gender and Climate Change: An Introduction*, Earthscan, 2010; Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture*, 2011; Rajivan and Cheema 2011, note 4; World Bank 2010, note 4; 10. Anderson 2002, note 7; Carvajal-Escobar, Y., M. Quintero-Angel and M. Garcia-Vargas, 'Women's Role in Adapting to Climate Change and Variability' *Advances in Geo Sciences*, Issue 14, 277–280, 2008; UNDP, *Human Development Report 2010 – The Real Wealth of Nations: Pathways to Human Development*, 2010; UNDP, *Human Development Report 2007/2008 – Fighting Climate Change: Human Solidarity in a Divided World*, New York, 2007. 11. UNCTAD 2011, note 7. 12. WRI 2011, note 3. 13. A product of three years of negotiations on adaptation, the Cancún Adaptation Framework was adopted as part of the Cancún Agreements at the 2010 Climate Change Conference in Cancún at the 16th Conference of Parties and the 6th Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. As part of the Cancún Agreements, Parties agreed that adaptation must be addressed with the same level of priority as mitigation. 14. Alboher, S. 'Clean Development Mechanism: Exploring the Gender Dimensions of Climate Finance Mechanisms', UNDP, November 2010; Alboher, S. and E. Vogt, 'Climate Investment Fund: Exploring the Gender Dimensions of Climate Finance Mechanisms', UNDP, November 2010; UNDP, 'Ensuring Gender Equity in Climate Change Financing', 2011.



Empowered lives.  
Resilient nations.



United Nations Development Programme  
304 East 45th Street, New York, NY 10017, USA  
[www.undp.org/gender](http://www.undp.org/gender)

© 2013 United Nations Development Programme  
All rights reserved

The views expressed in this publication are those of the author(s) and do not necessarily represent the official position of the United Nations, including United Nations Member States and the United Nations Development Programme.

**AUTHOR:** Senay Habtezion

**CONTRIBUTORS:** Elizabeth Eggerts, Sophia Huyer, Hannah Strohmeier and Lucy Wanjiru

**EDITOR:** Jeffrey Stern (Suazion, Inc.)

**DESIGN:** Suazion, Inc. ([suazion.com](http://suazion.com))

**PHOTOGRAPHY:** Pradeep Kurukulasuriya, Senior Technical Advisor, UNDP-GEF (front cover) and World Bank/Curt Carnemark (this page)



# Gender and disaster risk reduction

*Women bring unique experiences and valuable skills that would benefit disaster risk mitigation and preparedness. By recognizing and promoting the unique capacities of women, one can simultaneously further community resilience and advance gender equality.*

## Background

The recent upsurge in the intensity and recurrence of hydro-meteorological disasters underscores the need for an increased understanding of the nexuses among disasters, climate change and the human impacts of these often intertwined phenomena. Climate change will affect disaster risks in two ways: by increasing the frequency and severity of weather and climate hazards and by increasing communities' overall vulnerability to these hazards (through factors such as ecosystem degradation, reductions in water and food availability and changes to livelihoods).

Disasters tend to hit the poorest and most marginalized demographics the hardest. Women and girls are particularly exposed to climate-related disaster risk—they are likely to suffer higher rates of mortality, morbidity and economic damage to their livelihoods. Women bring unique experiences and skills to disaster risk reduction and management, although these skills are often not acknowledged or tapped into sufficiently. Increased awareness of the drivers, pressures, stressors and opportunities associated with climate-related disasters is key to finding smart pathways to reduce and manage disasters. It is therefore

imperative that disaster risk reduction and management strategies are gender-aware, taking into account both gender-based vulnerabilities as well as women's unique contributions.<sup>1</sup>

## **Disasters pose huge developmental challenges**

On average, disasters killed more than 70,000 people and affected more than 200 million people per year during the last decade in the Asia-Pacific region.<sup>2</sup> Climate-related disasters (e.g. storms, heavy rainfalls, floods, droughts, landslides, water stress and heatwaves), unplanned urban development, vulnerable livelihoods and ecosystem degradation could overturn years of progress made towards achieving sustainable development objectives and the Millennium Development Goals.<sup>3</sup> Almost 90 percent of deaths in disasters occur in hydro-meteorological events.<sup>4</sup>

There is a mutually reinforcing relationship between climate change and disasters. Climate change increases the intensity and frequency of extreme weather and climate events such as tropical cyclones, floods and heatwaves.<sup>5</sup> Further, the adverse impacts of climate change on livelihoods and ecosystems diminish communities' adaptive capacities and increase their vulnerability to disasters.<sup>6</sup>

## **Gender-based vulnerability and exposure to disaster risk is clearly established**

Although all countries grapple with real and/or potential extreme hazards (e.g. earthquakes, tropical cyclones, floods), some are more vulnerable than others. The Asia-Pacific region, for example, accounted for 90 percent of countries affected by disasters, 65 percent of disaster related deaths and 38 percent of economic damage<sup>7</sup>—and climate change will likely intensify existing risk patterns in the region.<sup>8</sup> While disasters pose threats to lives and livelihoods of everyone in their path, they tend to have disparate impacts on particular demographics. This is

### ***The differential gender impacts of hazards***

*Following the 1991 cyclone and flood in Bangladesh, women's death rate was almost five times higher than men's. Warning information was transmitted by men to men in public spaces, but was rarely communicated to the rest of the family. As many women are not allowed to leave the house without a male relative, they perished waiting for their relatives to return home and take them to a safe place.*

*Moreover, as in many other Asian countries, most Bengali women have never learned to swim, which significantly reduced their survival chances during the flood.*

Source: Röhr, U., 2006 'Gender and Climate Change', *Tiempo*, Issue 59. Available at <http://www.tiempocyberclimate.org/portal/archive/pdf/tiempo59high.pdf>.



due to the fact that disaster risk is a function of ‘adaptive capacity’—the ability of communities and people to cope with the hazard at hand.<sup>9</sup> In other words, the poor are likely to live under circumstances that make them less likely to survive and recover from a disaster event.<sup>10</sup> Studies have shown that disaster fatality rates are much higher for women than for men due, in large part, to gendered differences in capacity to cope with such events and insufficient access to information and early warnings.<sup>11</sup> For example, women accounted for 61 percent of fatalities caused by Cyclone Nargis in Myanmar in 2008, 70–80 percent in the 2004 Indian Ocean tsunami, and 91 percent in the 1991 cyclone in Bangladesh.<sup>12</sup>

## *Climate change and disasters: Fast Facts*

- ↗ *Women and children are 14 times more likely than men to die during a disaster.*
- ↗ *There is a direct relationship between women's risk of being killed during disasters and their socio-economic status (defined as access to information, economic resources and ability to exercise personal freedom of choice).*
- ↗ *In the 2004 Asian tsunami, women in many villages in Aceh, Indonesia, and in parts of India accounted for over 70 percent of the dead.*
- ↗ *More women than men died during the 2003 European heatwave. In France, most deaths were among elderly women.*
- ↗ *During Hurricane Katrina, most of the people trapped in New Orleans were African-American women and children, the poorest demographic group in the US.*
- ↗ *Extreme weather events often create conditions conducive to outbreaks of infectious diseases (e.g. heavy rains can produce insect breeding grounds and contaminate clean water sources; drought can cause fungal spores and spark fires).*
- ↗ *In refugee camps, women and girls are exposed to higher risks than men, including through conflict over scarce resources. Compounding this, social strains in such situations aggravate stress levels in the family, which may result in increased incidences of domestic violence.*
- ↗ *In some situations, men are disproportionately vulnerable: there were more immediate deaths among men when hurricane Mitch struck Central America, not only because they were engaged in open-air activities, but because they took fewer precautions when facing risks.*

Sources: Gault, B., H. Hartmann, A. Jones-DeWeever, M. Werschkul and E. Williams, 'The Women of New Orleans and the Gulf Coast: Multiple Disadvantages and Key Assets for Recovery. Part I. Poverty, Race, Gender, and class', Institute for Women's Policy, Research Briefing Paper, 2005; Neumayer, E., and T. Plumper, 'The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002', *Annals of the Association of American Geographers*, issue 97, 1997; see also International Union for Conservation of Nature, available at: [http://cmsdata.iucn.org/downloads/disaster\\_and\\_ender\\_statistics.pdf](http://cmsdata.iucn.org/downloads/disaster_and_ender_statistics.pdf); Oxfam, 'The Tsunami's Impact on Women', Briefing Note, March 2005; Peterson, K., 'Reaching Out to Women when Disaster Strikes', White Paper, Soroptimist, 2007; Pirard, P., S. Vandentoren, M. Pascal, K. Laaidi, A. Le Tertre, S. Cassadou and M. Ledrans, 'Summary of the Mortality Impact Assessment of the 2003 Heat Wave in France', *Eurosurveillance* 10 (7), 2005; United Nations Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific*, Thailand, 2011.

This gendered asymmetry in vulnerability to disaster risk is rooted primarily in geographic, economic, social, educational/informational and political power imbalances across all levels: women tend to live and work closely with the natural resources and geographical features that are most effected by disasters and shocks; socio-cultural norms may cause restrictions in movement to escape disasters (particularly water-related hazards); they have lower levels of access to economic resources in general, and in particular, lower levels of education and information to access, read and act upon disaster warnings.<sup>13</sup>

The greatest effects of disasters on livelihoods tend to be in agriculture, because that makes up the largest proportion of many developing country economies. Houses and productive assets, including agricultural land, livestock, and rural enterprises, can all be affected. Since women are still largely marginalized in these sectors due to factors such as lack of literacy, land ownership and access to resources, they tend to face the greatest obstacles in recovery.<sup>14</sup>

## **Disaster risk management benefits from women's unique contributions**

Gender-based vulnerability and exposure to disaster risk—a painful reality—should not eclipse women's immense contributions in all phases of the disaster risk management cycle. Studies consistently show that gender equality and women's empowerment are vital for environmental sustainability as well as necessary elements of investments towards achieving the Millennium Development Goals and successfully adapting to climate change impacts.<sup>15</sup> Women bring unique experiences and valuable skills that would benefit disaster risk mitigation and preparedness.<sup>16</sup> By recognizing and promoting the unique capacities of women, one can simultaneously further community resilience and advance gender equality.<sup>17</sup> For example, after the 1993 earthquake in Latur, India, a network of women's self-help groups was created in order to address risk reduction and practical needs, such as credit, livelihoods, water and sanitation, and health and education. This network included 3,500 women's groups in over 1,064 villages. Through this initiative, women have acquired knowledge of earthquake-safe building, 'dos and don'ts' of relief, recovery and rehabilitation, information on assets and properties, and knowledge of access to emergency credit.<sup>18</sup>

## **Recommendations**

➤ **Disaster risk reduction and management efforts need to be gender-aware. Mainstreaming gender in disaster risk reduction and management would add value to such initiatives.** Incorporating gender perspectives into disaster risk reduction and management policy and projects will increase disaster management efforts equitability, effectiveness and sustainability.

➤ **Despite gender-based vulnerabilities, especially in disaster-prone regions such as Asia and the Pacific, women are also key agents of positive change in disaster risk reduction and management efforts.** Both factors need to be properly considered when developing disaster risk reduction and management policy and actions across scales.

➤ **All climate efforts, including financing initiatives that target climate-related disasters, should leverage gender equality and women's empowerment.**

Investing in women is an effective means for advancing sustainable development and fighting climate change. The needs, interests and contributions of all members of the society, especially women and other vulnerable groups, should therefore be taken into account in the design and operationalization of financing of disaster risk reduction and management.<sup>19</sup>

➤ **The climate effort across scales and sectors is an opportunity to improve the well-being of humans and ecosystems.**

Disaster risk management at the programmatic and planning levels should aim to boost women's participation and empowerment. Vigorous, pro-poor and gender-sensitive planning and implementation is a winning pathway for nurturing sustainable and resilient livelihoods.

## Mainstreaming gender in disaster risk reduction

- *Include gender perspectives in disaster reduction efforts at the national, regional and international levels—including in policies, strategies, action plans, and programmes;*
- *Analyse climate change data (e.g. desertification, floods, drought, deforestation) with a gender-sensitive perspective and collect sex-disaggregated data;*
- *Take gender-aware steps to reduce the negative impacts of disasters on women, particularly in relation to their critical roles in rural areas in provision of water, food and energy (i.e. provide support, health services, information and technology);*
- *Increase women's participation and representation in all levels of decision-making processes;*
- *Include women's traditional knowledge and perceptions in the analysis and evaluation of disaster risks, coping strategies and solutions;*
- *Ensure that women are being visibly engaged as agents of change at all levels of disaster preparedness, including early warning systems, education, communication, information and networking opportunities;*
- *Build national and local women's groups' capacities and provide them with a platform to be heard and to lead;*
- *Consider the level of a woman's access to technology and finances, health care, support services, shelter and security in times of disaster; and*
- *Include gender-specific indicators to monitor and track progress on gender equality targets.*

## Gender and disaster risk reduction

*Studies consistently show that gender equality and women's empowerment are vital for environmental sustainability as well as necessary elements of investments towards achieving the Millennium Development Goals and successfully adapting to climate change impacts.*



- REFERENCES:** 1. United Nations International Strategy for Disaster Reduction (UNISDR), 'Climate Change and Disaster Risk Reduction', Briefing Note 1, September 2008. 2. United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), *Statistical Yearbook for Asia and the Pacific*, Thailand, 2011. 3. UNISDR, 'Adaptation to Climate Change by Reducing Disaster Risks: Country Practices and Lessons', Briefing Note 02, November 2009. 4. Carvajal-Escobar, Y., M. Quintero-Angel and M. García-Vargas, 'Women's Role in Adapting to Climate Change and Variability', *Advances in Geo Sciences*, issue 14, 277–280, 2008. 5. Parry, M.L., O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds.), *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Intergovernmental Panel for Climate Change, Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA, 2007. 6. UNISDR, 'Strengthening Climate Change Adaptation Through Effective Disaster Risk Reduction', Briefing Note 3, 2011; UNISDR 2009, note 3. 7. Climate Action Network Australia, 'Climate Change Impacts Globally', 2010, available at: <http://cana.net.au/general-info/climate-change-impacts-globally>; UNESCAP 2011, note 1. 8. Parry et al. 2007, note 5. 9. Ibid.; Women's Environment and Development Organization, 'Changing the Climate: Why Women's Perspectives Matter', 2007. 10. Parry et al. 2007, note 5. 11. Ikeda, K., 'Gender Differences in Human Loss and Vulnerability in Natural Disasters: A Case Study from Bangladesh', *Indian Journal of Gender Studies*, 2:2: 171–93, 1995; Neumayer, E., and T. Plumper, 'The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002', *Annals of the Association of American Geographers*, issue 97, 1997; Oxfam, 'The Tsunami's Impact on Women', Briefing Note, March 2005. 12. Castañeda, I., and S. Gammage, 'Gender, Global Crises, and Climate Change', in Jain, D., and D. Elson (eds.), *Harvesting Feminist Knowledge for Public Policy*, SAGE Publications India, New Delhi, India, 2011. 13. Aguilar, L. et al, 'Training Manual on Gender and Climate Change', published by the International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP) and Global Gender and Climate Alliance (GGCA), San Jose, Costa Rica, 2009. 14. UNESCAP and UNISDR, *Protecting Development Gains: Reducing Disaster Vulnerability and Building Resilience in Asia and the Pacific*, Bangkok, 2010. 15. Dankelman, I., *Gender and Climate Change: An Introduction*, Earthscan, London, 2010; Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture*, 2011; United Nations Development Programme (UNDP), *Human Development Report 2011: Sustainability and Equity: A Better Future for All*, 2011; *World Bank, World Development Report 2012 – Gender Equality and Development*, 2011. 16. Anderson C., 'Gender Matters: Implications for Climate Variability and Climate Change and for Disaster Management in the Pacific Islands', *InterCoast Newsletter*, 2012; Carvajal-Escobar et al. 2008, note 4. 17. World Resources Institute, United Nations Environment Programme, UNDP and World Bank, *World Resources 2010–2011: Decision Making in a Changing Climate—Adaptation Challenges and Choices*, Washington, DC, 2011. 18. UNISDR, 'Gender Perspective: Working Together for Disaster Risk Reduction – Good Practices and Lessons Learned', 2007. 19. Alboher, S., 'Clean Development Mechanism: Exploring the Gender Dimensions of Climate Finance Mechanisms', UNDP, November 2010; Alboher, S., and E. Vogt, 'Climate Investment Fund: Exploring the Gender Dimensions of Climate Finance Mechanisms', UNDP, November 2010; UNDP, 'Ensuring Gender Equity in Climate Change Financing', 2011.



Empowered lives.  
Resilient nations.



United Nations Development Programme  
304 East 45th Street, New York, NY 10017, USA  
[www.undp.org/gender](http://www.undp.org/gender)

© 2013 United Nations Development Programme  
All rights reserved

The views expressed in this publication are those of the author(s) and do not necessarily represent the official position of the United Nations, including United Nations Member States and the United Nations Development Programme.

**AUTHOR:** Senay Habtezion

**CONTRIBUTORS:** Elizabeth Eggerts, Sophia Huyer, Hannah Strohmeier and Lucy Wanjiru

**EDITOR:** Jeffrey Stern (Suazion, Inc.)

**DESIGN:** Suazion, Inc. ([suazion.com](http://suazion.com))

**PHOTOGRAPHY:** UNDP (front cover) and UN Photo/WFP/Amjad Jamal (this page)



# Gender and energy

## Background

*“Although access to more modern energy alternatives will not necessarily lead to greater equality in gender roles, it can at least relieve some of the most burdensome and unhealthy aspects of their daily lives and expand the development options available to women, their families and their communities.”*

Source: ENERGIA, ‘Fact Sheet on Energy, Gender and Sustainable Development’, 2011.

Approximately 2.7 billion people (almost 2 billion in the Asia-Pacific region)—40 percent of the world’s population—depend on wood, charcoal or animal waste for basic energy needs such as cooking and heating.<sup>1</sup> Because poor and marginalized people tend to rely on locally sourced biomass for their daily energy needs, any stress on their surrounding ecosystems, climatic or otherwise, is likely to render them increasingly vulnerable to biomass—and hence energy—scarcities.<sup>2</sup> Such scarcities take a significant toll on poor women, especially rural women. Rural women and girls are the primary energy producers for the household. Further, they tend to depend on small-scale agriculture and locally available resources to support their livelihoods and to fulfil their household obligations. Energy poverty leads to drudgery, greater health risks and a lack of time to focus on income-generating, educational or other self-nurturing (e.g. leisure) activities.

The United Nations General Assembly designated 2012 as the International Year of Sustainable Energy for All. Such designation is fitting; the lack of meaningful access to sustainable energy services hampers progress towards economic and social development, achieving the Millennium Development Goals and climate change adaptation and mitigation objectives.

## **Better energy access is a catalyst for achievement of the Millennium Development Goals**

Energy is essential to life in the 21st century. Modern energy services play a key role in facilitating access to fundamental necessities such as clean water, sanitation and health care and advance development through the provision of reliable and efficient lighting, heating, cooking, mechanical power, transport and telecommunication services.<sup>3</sup> Because women and girls are primarily responsible for the bulk of household work, access to clean and affordable energy directly benefits their health and well-being. Though access to modern energy alternatives is not sufficient to guarantee gender equality, it is necessary in order to relieve women of drudgery and to provide them more time to care for themselves and engage in activities that are more productive to them, thereby leading to empowerment and greater gender equality.<sup>4</sup> On a broader scale, incorporating poverty alleviation measures, gender equality principles and climate change impacts into energy policies can catalyse national development and play a vital role in realizing the Millennium Development Goals.<sup>5</sup>

### **Energy poverty has gender dimensions**

Energy poverty—a malaise that afflicts over a billion people—is one aspect of broader economic poverty and has similar, marked gender characteristics. Women and girls are often primarily responsible for collecting fuel and water for their families. In India, for example, women gathering firewood, crop waste and cattle dung fulfil 92 percent of rural domestic energy needs. They gather 85 percent of their cooking fuel from forests, village commons and fields.<sup>6</sup> Rural women tend to participate in the informal and biomass-dependent economic sectors, which tend to be neglected in national energy policies. Women also face energy related hurdles in the formal sectors—for example, women-headed businesses generally have lower access to finance and energy-related services (such as grid electricity) than men.<sup>7</sup>

Relatedly, indoor pollution from the use of cooking stoves is also a serious health problem for women, girls and boys under the age of 5.<sup>8</sup> By 2030, indoor air pollution from biomass use is likely to cause more than 1.5 million deaths per year.<sup>9</sup> Factors such as workload and poor nutrition also increase women's susceptibility to health risks, including anaemia and perinatal mortality.<sup>10</sup> Moreover, drudgery from energy-collection (e.g. fetching and carrying fuel wood) takes a significant toll on women's and girls' health and well-being, affects prenatal mortality and increases post-delivery complications.

Energy poverty also affects women and girls by virtue of the toll it takes on their time, resulting in 'time poverty' (a lack of time for rest and leisure after taking into account the time spent working, whether in the labour market or at home). Women spend an inordinate amount of time gathering biomass for basic energy needs, resulting in severe opportunity costs that prevent them from participating in other beneficial ventures (e.g. education).<sup>11</sup> Because women undertake these activities largely on foot, climate-induced scarcity of natural resources will exacerbate women's time poverty as women and girls will be forced to travel spend more time collecting these resources. Technology can help alleviate some of these challenges. For example, in Nepal, mechanized mills were found to reduce the time needed to process one kilo of rice from 19 minutes to 0.8 minutes.<sup>12</sup>

Finally, women are often excluded from discussions about energy plans and policies. Excluding women from decision-making is likely to result in gender-blind planning, financing, execution and implementation.<sup>13</sup>

## **Energy services and programmes can promote women's skills development and employment**

Supporting women to develop and manage greener technologies and green and renewable energy sources contributes to national mitigation strategies, provides new employment opportunities, contributes to poverty reduction and promotes women's economic empowerment. For example, the *Grameen Shakti* project in Bangladesh has trained over 30,000 local women to install and maintain solar systems and provides micro-loans to purchase domestic solar systems. The solar systems' reduced emissions create 'certified emission reduction' units under the Kyoto Protocol's Clean Development Mechanism. Grameen Shakti purchases the units to sell on emissions trading markets, thus generating income to subsidize the cost of the system.

## **Energy policies and programmes need to be gender sensitive**

Although women and girls are disparately energy-poor and likely to bear the brunt of inequitable energy policies across various levels, they nonetheless play a key role in energy

### **Gender and energy: Fast facts**

- 1.4 billion people (almost 800 million in the Asia-Pacific region), do not have access to electricity.
- Energy poverty has distinct gender characteristics, disproportionately affecting women and girls.
- 2 million people (mainly women and children) die because of the burning of biomass indoors.
- About 10 million people, mostly rural poor, have gained access to modern energy services through UNDP-supported projects over the past decade.
- The practice of cooking over open wood fires or primitive stoves accounts for almost 20 percent of global greenhouse gas emissions.
- The number of premature deaths from household air pollution is greater than the number of premature deaths from malaria or tuberculosis.
- Improved watermill technology, which involves the improvement of traditional watermills for agro-processing and electricity generation, has helped spare women of the drudgery of grinding and milling and saves them significant time for other activities

Sources: UNDP, *Human Development Report 2011 — Sustainability and Equity: A Better Future for All*, 2011; International Energy Agency (IEA), 'World Energy Outlook 2011: Energy for All – Financing Access for the Poor; Special Early Excerpt of the World Energy Outlook 2011'; 2011; IEA, *World Energy Outlook, 2010*; World Health Organization, *Gender, Climate Change and Health*, 2011.

production, utilization and conservation. Smart energy policies should offer due consideration to their needs, concerns and unique contributions. Women's central role in sustainable socio-economic development (through their role as food producers, health care providers, educators and natural resource managers) means that gender equality and women's empowerment are key to development, environmental sustainability and to ensuring efficiency and sustainability of climate change responses.<sup>15</sup> In particular, incorporating both women's and men's contributions and concerns can increase access to and benefits from grid and off-grid electricity/energy sources.<sup>16</sup> In fact, failure to consider gendered interests, different levels of access to resources and the different needs of men and women can limit the effectiveness and sustainability of energy programmes and policies and other energy use-related development activities.

## Promoting gender equality through improved access to energy: Northern India

*Access to energy services significantly impacts women's lives by reducing time spent on household tasks, improving their health and increasing access to information services such as television, radio and the Internet. Access to energy services can also unleash a process of women's empowerment, bringing in changes in gender relations.*

*Jagriti is a non-governmental organization working in the remote hills of northern India. In 2001–2002, Jagriti began organizing poor women into women's savings and credit groups to improve their status and give them a collective voice. However, it quickly became apparent that if these women were to benefit from Jagriti's programmes, their work burden—some 10 hours per day devoted to cooking and collecting fuelwood and water—would have to be reduced so that they would have time to participate in economic activities. Consequently, Jagriti, through the women's savings and credit groups, introduced improved energy technologies such as liquefied petroleum gas, pressure cookers and energy-efficient water heaters.*

- *Given improved fuel efficiency, trips to the forest were reduced from once daily to between one and four times per week;*
- *Using liquefied petroleum gas and pressure cookers saved 1 to 1.5 hours of cooking time each day, enabling women to engage in income-generating activities such as weaving; and*
- *More efficient fuels reduced indoor air pollution, which improved health, productivity and general quality of life.*

*The improved energy-efficient devices thus catalysed the process of women's empowerment and changes in gender relations in ways completely unforeseen by the project. Visible indicators included the following:*

- *Women opening bank accounts;*
- *Increased participation in training activities and interactions with banks and government offices;*
- *Increased intra-group loans to meet women's emergency needs for cash;*
- *Increased participation in village-level meetings and stronger articulation of their needs in such forums; and*
- *Increased support from family members to engage in economic activities outside the home and to participate in community activities.*

Source: United Nations Development Programme (UNDP), 'Towards An "Energy Plus" Approach For The Poor – A review of good practices and lessons learned from Asia and the Pacific', 2011., pp. 31-32.

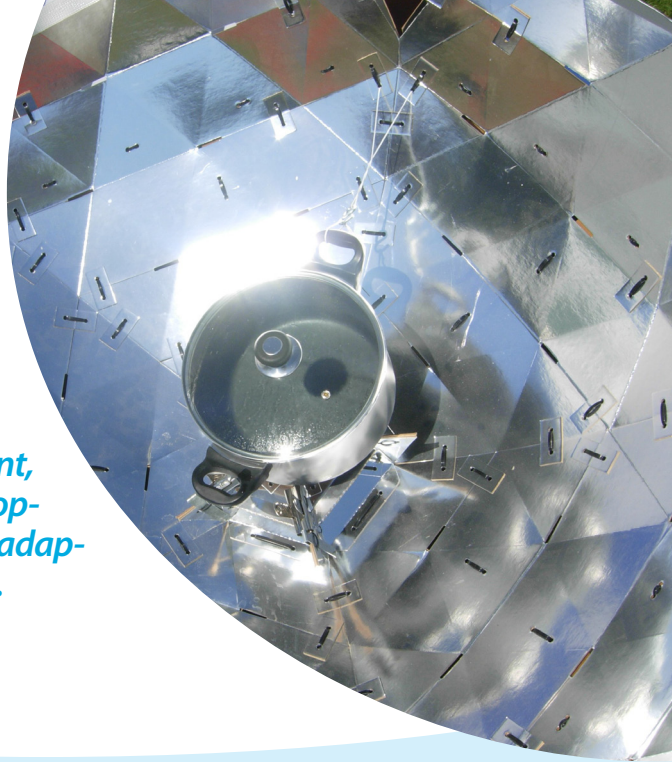


## Recommendations for action

- **Concerted efforts in low-emission technologies investment is needed across levels and sectors.** Lack of modern energy services remains a significant challenge to lifting millions of poor women, children and men out of poverty and achieving Millennium Development Goals targets. As such, low-emission technologies that benefit women and poor communities are needed to further improve their living situation and increase their resilience to climate change impacts. Investments in modern and sustainable energy services would alleviate women's drudgery, help improve the quality of their lives and health and afford them time to engage in other activities such as income generation, education, time with children and leisure. It would also help lead to the betterment of livelihoods of local populations at large through training in selling, setting up and maintaining low-emission energy technologies.
- **Gender-based constraints related to access to energy, finance, training, employment and entrepreneurship need to be better studied and addressed.** Policies that include both women and men during development stages will support equitable benefits from the setting up, maintenance, sale of and access to energy services. Infrastructure projects designed to promote cleaner, more efficient forms of fossil fuels and renewable energy can offer new skills training and increased employment for women. Therefore, more efforts are needed to involve women in the design, maintenance and dissemination of locally appropriate energy technologies and services.<sup>17</sup>
- **Climate change financing focusing on the energy sector should complement broader developmental goals including gender equality, poverty eradication and sustainable development.**<sup>18</sup> Existing public and private mitigation financing schemes need to focus on projects that benefit and support women's community-level forestry, food production, cooking and other energy-related activities. At the very least, gender and social impact assessments need to be undertaken during programme and project design. Where feasible, carbon financing options should ensure more equitable benefits for men and women by helping expand women's access to and control over energy and supporting their existing energy-related activities. This includes efforts to qualify small-scale projects (e.g. improved stoves and forestry management) for financing by simplifying application processes and targeting rural women.
- **Mainstreaming gender in energy policies and programming is good social policy and would enhance the efficiency of energy policies.** Incorporating gender perspectives into energy projects, policy and planning is critical to ensure the effectiveness and sustainability of not only energy programmes and policies, but also all development activities that involve energy use. The use of gender budgeting and gender audits is one critical tool for ensuring an ongoing integration of gender perspectives into energy policy and programmes.

## Gender and energy

*The lack of meaningful access to sustainable energy services hampers progress towards economic and social development, achieving the Millennium Development Goals and climate change adaptation and mitigation objectives.*



**REFERENCES:** 1. United Nations Development Programme (UNDP), 'Towards An "Energy Plus" Approach For The Poor – A review of good practices and lessons learned from Asia and the Pacific', 2011. 2. UNDP, *Human Development Report – Sustainability and Equity: A Better Future for All*, 2011; International Energy Agency (IEA), 'World Energy Outlook 2011: Energy for All – Financing Access for the Poor; Special Early Excerpt of the World Energy Outlook 2011', 2011; World Bank, 'Modernizing Energy Services for the Poor: A World Bank Investment Review – Fiscal 2000–08', 2010. 3. UNDP 2011, note 1. 4. ENERGIA, 'Fact Sheet on Energy, Gender and Sustainable Development', 2011. 5. IEA 2011, note 2. 6. World Bank, 'Gender and Climate Change: Three Things You Should Know', fact sheet, 2011a, available at: <http://go.worldbank.org/TN0KYRX8Q0> (accessed 22 October 2012). 7. Alstone, P., C. Niethammer, B. Mendonça and A. Eftimie, 'Expanding Women's Role in Africa's Modern Off-Grid Lighting Market', Lighting Africa Project, International Finance Corporation, 2011. 8. World Bank, *Gender Equality and the Millennium Development Goals*, Washington, DC, 2003. 9. UNDP 2011a, note 1. 10. World Health Organization, 'Gender, Climate Change and Health', 2011. It should also be noted that women tend to carry greater loads compared to men, but have a lower intake of calories, because customs usually dictate that men receive more food and water. See *Id.* See also Dankelman, I., *Gender and Climate Change: An Introduction*, Earthscan, 2010. 11. World Bank, 'Gender, Time Use, and Poverty in Sub-Saharan Africa', working paper, 2006; World Bank, *Gender in Agriculture Sourcebook*, 2009. 12. Carr, M. with M. Hartl, *Lightening the Load: Labour Saving Technologies and Practices for Rural Women*, IFAD and Practical Action Publishing, 2010. It is important that technology works for women. For example, women were walking for 10 to 180 minutes in Nepal to reach the mills and waiting an average of 30 minutes for their turn. See *Id.* 13. UNDP, *Gender & Energy: A Toolkit for Sustainable Development and Resource Guide*, 2004. 14. Schalatek, L., 'Gender and Climate Finance: Double Mainstreaming for Sustainable Development', Heinrich Böll Foundation, 2009, available at: [http://www.boell.org/downloads/DoubleMainstreaming\\_Final.pdf](http://www.boell.org/downloads/DoubleMainstreaming_Final.pdf); United Nations Conference on Trade and Development, 'Applying a Gender Lens to Science, Technology and Innovation', Current Studies on Science, Technology and Innovation, 5th ed., Geneva, 2011. 15. UNDP, 2011b, note 2; World Bank, *World Development Report 2011, Gender Equality and Development*, 2011; Carvajal-Escobar, Y., M. Quintero-Angel and M. Garcia-Vargas, 'Women's Role in Adapting to Climate Change and Variability', *Advances in Geo Sciences*, issue 14, 277–280, 2008; Alstone et al. 2011, note 7. 16. Alstone et al. 2011, note 7. 17. ENERGIA, 'Where Energy is Women's Business: National and Regional Reports from Africa, Asia, Latin America and the Pacific', 2007. 18. UNDP, 'Ensuring Gender Equity in Climate Change Financing', 2011; Schalatek 2009, note 14.



Empowered lives.  
Resilient nations.



United Nations Development Programme  
304 East 45th Street, New York, NY 10017, USA  
[www.undp.org/gender](http://www.undp.org/gender)

© 2013 United Nations Development Programme  
All rights reserved

The views expressed in this publication are those of the author(s) and do not necessarily represent the official position of the United Nations, including United Nations Member States and the United Nations Development Programme.

**AUTHOR:** Senay Habtezion

**CONTRIBUTORS:** Soma Dutta, Elizabeth Eggerts, Sophia Huyer, Hannah Strohmeier and Lucy Wanjiru

**EDITOR:** Jeffrey Stern (Suazion, Inc.)

**DESIGN:** Suazion, Inc. ([suazion.com](http://suazion.com))

**PHOTOGRAPHY:** UN Women/Gaganjit Singh (front cover) and Marie-Claire Angwa (this page)



# Gender and climate finance

## Background

*Properly designed and executed climate finance vehicles can be leveraged to help address socio-political imbalances that weaken communities' resilience to climate change impacts and can help redress gender imbalances.*

The economic, social and environmental costs of climate change are prohibitively high. Due to limited resources and capacities, developing countries (many in the Asia-Pacific region) are most vulnerable to the impacts of climate change, and accordingly the costs that these countries will face are the highest. Further, climate change affects women and men differently. While women's participation in the global labour force has increased to 40 percent, gender gaps in earnings and productivity persist across all forms of economic activity—in agriculture, wage employment and entrepreneurship.<sup>1</sup> Gender differences in time use, access to assets and credit and in treatment by markets and formal institutions (including legal and regulatory frameworks) all play a role in constraining women's opportunities.<sup>2</sup> The greater reliance that women place on natural resources for their livelihoods and household responsibilities causes women and girls to be disproportionately affected by changes, shocks and shifts in their local environment.

Adequate and sustainable climate finance is imperative to addressing the climate challenge. In addition, properly designed and executed climate finance vehicles can be leveraged to help address socio-political imbalances that weaken communities' resilience to climate change impacts and can help redress

gender imbalances. These imbalances are greater for marginalized groups, such as poor women and men, who often face higher barriers to accessing and benefiting from such financial resources. Therefore, it is crucial that climate finance mechanisms explicitly target such groups during project planning, implementation, monitoring and evaluation.

Existing climate finance mechanisms have varying degrees of gender sensitivity, and much work remains to be done in engendering the larger global climate finance regime.

## ***Climate change impacts have a huge price tag***

According to the World Bank, the annual costs of adaptation for all sectors from 2010 to 2050 will be \$22.25 billion for East Asia and the Pacific and \$14.05 billion for South Asia.<sup>3</sup> Similarly, modelling work done by the Asian Development Bank covering four countries in Southeast Asia (Indonesia, Philippines, Thailand and Viet Nam) shows that the costs of the changing climate to these countries each year could equal a loss of 6.7 percent of their combined gross domestic product by 2100, more than twice the world's average.<sup>4</sup>

On the global scale, although cost estimates for adaptation and mitigation efforts vary widely, by 2030, the budget needed to respond to climate change will range from \$249 to \$1,371 billion annually.<sup>5</sup> These hefty figures demonstrate the need for sustainable and significant resources to address the climate challenge.

Limited financial resources, inadequate awareness and capacity constraints have hindered many countries' efforts to access relevant climate funds, private-sector finance and carbon markets. With over 50 international public funds, 45 carbon markets and 6,000 private equity funds providing climate change finance, the current climate finance architecture is remarkably complex and wrought with huge challenges.<sup>6</sup> Significant questions include: How to raise funds at a scale that is commensurate with the challenge? Where to find new funding sources? How to efficiently and effectively transfer resources to where they are most needed? How to ensure equity and transparency in fund disbursement and utilization?

Many poor countries' lack of awareness of opportunities and processes and their limited capacities continue to constrain them from accessing existing funds and mechanisms. For example, although 84 percent of all registered Clean Development Mechanism (established under the Kyoto Protocol of the United Nations Convention on Climate Change) projects are implemented in Asia and the Pacific, only a few countries are actually efficiently using it.<sup>7</sup> Further, while China and India are the largest recipients of climate finance globally, the most vulnerable countries in the region, particularly Pacific Island states, receive very little funding.<sup>8</sup>

## ***What is the gender-climate finance nexus?***

Levels of vulnerability and exposure to climatic risk vary across regions, countries and demographics. Political and socio-economic imbalances often render women disproportionately vulnerable to climate change impacts. For example, women are less likely to get credit to buy drought-resistant crops; in land allotments, they are more likely to be allocated marginal lands that are at heightened risk of climate impacts (e.g. flooding or downpours). Further, because women's livelihoods and traditional roles and responsibilities tend to be more reliant on natural resources, climate change will greatly affect their lives.<sup>10</sup>

Climate finance approaches should, therefore, be sensitive to the gendered aspects of climate change impacts. Although existing finance mechanisms have varying degrees of gender sensitivity, much work remains to be done to engender the larger global climate finance regime.<sup>11</sup>

Properly designed and executed climate financing mechanisms—those that leverage empowerment and gender equality—have the potential to enhance the climate response effort while simultaneously improving women’s lives. For example, funding projects that also reduce the walking distance to access energy sources, water and sanitation or promote reforestation and sustainable forest management will promote sustainable environmental practices and decrease the negative effects on women and girls of environmental change and deterioration. Similarly, funding that supports settlements for women-headed households that have lost their homes to disaster events will support adaptation and recovery efforts and will minimize stresses on the environment caused by refugee populations.

## ***Gender-sensitive climate finance regimes are likely to be more effective***

Despite steady progress being made to improve the gender sensitivity of the current climate finance regime (especially within multilateral funds), many existing funds and mechanisms have yet to methodically incorporate gender considerations. Research shows that

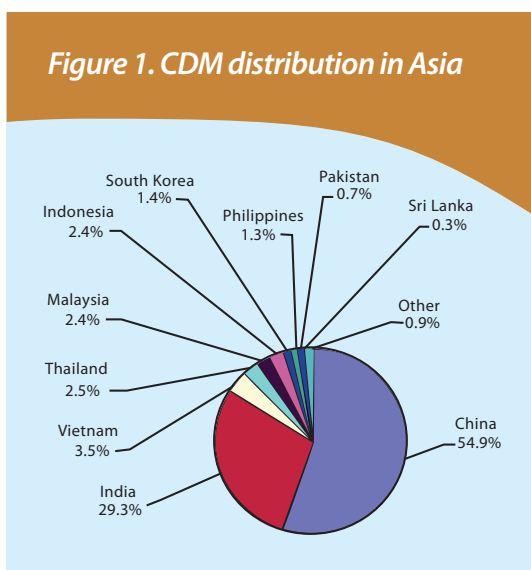
### ***Gender and climate finance***

- *Gender disparities constrain women’s abilities to engage in climate finance or to start or scale up initiatives aimed to respond to climate change. Examples include women’s disproportionately high illiteracy rates (e.g. 65 percent of the illiterate adults in the Asia-Pacific region are women), and their low representation and participation in political decision-making (e.g. in 2010, Nepal and New Zealand were the only Asia-Pacific countries in which women occupied at least 30 percent of national parliamentary seats).*
- *Out of 141 countries, 103 have legal difference between men and women that may hinder women’s economic opportunities, including access to credit.*
- *In most countries, the share of women smallholders who can access credit is 5 to 10 percentage points lower than that of men smallholders.*
- *Most Clean Development Mechanism projects tend to overlook small-scale projects that involve and benefit women.*
- *Investing in women would enhance returns on climate finance as well as the environment, progress towards achieving the Millennium Development Goals, poverty alleviation and social policy.*

Sources: IFC 2006, World Bank 2011, FAO 2011; Schalatek 2009 UNESCAP 2011, UNFCCC 2012, UNDP HDR 2011, UNDP 2011; World Bank 2011; 2012.<sup>9</sup>

gender equality and women's empowerment lead to increased productivity, socio-economic development and environmental sustainability, including increased results in climate change adaptation and mitigation efforts.<sup>12</sup> For example, the Clean Development Mechanism has been criticized for having too much focus on large-scale projects, with too little emphasis on the type of low-tech, small-scale and community-based activities that women typically engage in (e.g. tree planting, an important carbon sequestration and reforestation mitigation activity). Marginalizing those who lack the resources or capacities to engage in large-scale projects limits the poor's and women's participation in Clean Development Mechanism projects.<sup>13</sup>

Conversely, incorporating gender considerations into climate funds and mechanisms will yield more effective and efficient outcomes. For example, women are principal practitioners of agroforestry systems in much of the world, devising innovations to integrate livestock, agriculture, horticultural and forest technologies and practices. Supporting their agricultural and forestry activities through climate finance (e.g. reducing emissions from deforestation and forest degradation (REDD) programmes) will improve forest management projects and preserve biodiversity.<sup>14</sup>



Source: United Nations Framework Convention on Climate Change, 'Clean Development Mechanism: Registered Projects by Region', available at: <http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByRegionPieChart.html> (accessed 23 July 2012).

## Recommendations

The recommendations presented below are some key entry points and ways forwards towards improving the gender-responsiveness of climate finance mechanisms. Taking such actions can help ensure that they will have maximum reach for both women and men on the ground as well as promote sustainable development.

### ➤ **All types, scales and aspects of climate finance need to be gender-responsive.**

All areas of climate finance need to be gender responsive in order to ensure that climate finance is effective and equitable. Gender perspectives, principles and tools should be mainstreamed in all levels of climate finance mechanisms' governance structures, procedures, processes and operations.

### ➤ **Ensure that climate finance complements the goals of sustainable development and efforts to achieve the Millennium Development Goals.**

Synergies between mitigation, adaptation, poverty eradication, economic development, gender equality and women's empowerment should be maximized. In this effort, climate funding needs to be

channelled to support rural- and community-level groups and activities, particularly those specific to women.

- **Better data is needed in order to support and legitimize a wider, more comprehensive range of development investments targeting gender equality and women's empowerment in the non-social sectors (including infrastructure, environment and macroeconomic policy).** The international development community should provide funding, technical assistance and capacity building to strengthen developing countries' statistical systems to collect and analyse gender and sex-disaggregated data. Finance mechanisms should also collect and utilize this information.
- **Engage with climate finance frameworks, networks and instruments in order to ensure that their evolving and reforming processes integrate gender perspectives.** Women and women's groups need to be engaged as key stakeholders in climate finance-related decision-making at all levels. This includes active engagement with private sector and non-market finance mechanisms (e.g. multilateral climate funds, such as the Climate Investment Funds) and market-based mechanisms (e.g. the Clean Development Mechanism). It is critical that ongoing investment and financial support for climate change responses break the cycle of gender-blind decision-making processes within the larger global financial structure. Socially excluded groups' capacities need to be developed in order to enable them to engage effectively in climate financing decision-making processes.
- **Utilize national-level finance tools, such as national climate funds and climate finance readiness strategies in order to help countries manage, coordinate, implement and account for international and domestic climate finance.** There is a wide range of tools that would strengthen national capacities to use climate finance effectively as well as integrate financial resources appropriately within their national development planning and sustainable development goals. In this process, it is critical that these national-level finance tools channel funds in a gender-responsive manner that catalyses low-emission, climate-resilient development for both women and men.<sup>15</sup>
- **Non-governmental and civil society organizations, including women's organizations, should be ensured of direct access to funding mechanisms.** Climate finance mechanisms should target women's and small-scale initiatives in adaptation and mitigation activities. For example, within climate financing mechanisms a designated small grants facility or special funding programme should also be established for women, local communities and indigenous peoples. In this process, it is crucial to streamline often complex and lengthy application processes.
- **Ensure that climate finance is adequate, efficient, accountable and transparent.** Issues of accountability, efficiency and good governance need to be addressed so that adaptation and mitigation financing is utilized in a fair and transparent manner. Gender-responsive budgeting can help ensure greater accountability over public resources while promoting gender equality goals.<sup>16</sup> Such strategies can also help address budgetary gender gaps and emphasize the re-prioritizing of financial resources within activities rather than just increasing overall expenditures.<sup>17</sup> There is also a need for an independent evaluation and recourse mechanism that would allow vulnerable groups, including the poor and women, the accessibility and opportunity to submit grievances for review.

## Gender and climate finance

*Existing climate finance mechanisms have varying degrees of gender sensitivity, and much work remains to be done in engendering the larger global climate finance regime.*



**REFERENCES:** 1. World Bank, *World Development Report 2012: Gender Equality and Development*, Washington, DC, 2012. 2. Ibid. 3. World Bank, *The Costs to Developing Countries of Adapting to Climate Change: The Global Report of the Economics of Adaptation to Climate Change Study*, Washington, DC, 2009. The figures are based on averages of two scenarios (wettest and driest). 4. Asian Development Bank, *The Economics of Climate Change in Southeast Asia: A Regional Review*, Manila, Philippines, 2009. 5. United Nations Development Programme (UNDP), 'Ensuring Gender Equity in Climate Change Financing', 2011. 6. UNDP, 'Human Development in a Changing Climate: A Framework for Climate Finance', 14 July 2010. 7. The Clean Development Mechanism is a market-based mechanism which provides a vehicle for industrialized countries to meet their emission reduction commitments by allowing them to earn certified emission reduction (CER) credits from investing in emissions-reduction projects in developing countries. CERs are in turn bought and sold on the carbon market to help Annex I countries (i.e. industrialized and developed countries) meet their commitments under the Protocol. See <http://cdm.unfccc.int/index.html> and <http://cdm.unfccc.int/Statistics/index.html>. 8. UNDP 2011, note 6. 9. Food and Agriculture Organization of the United Nations (FAO), *The State of Food and Agriculture*, 2011; Schalatek, L., 'Gender and Climate Finance: Double Mainstreaming for Sustainable Development', Heinrich Böll Foundation, Washington DC, 2009; UNDP, note 5; UNDP, *Human Development Report 2011: Sustainability and Equity: A Better Future for All*, 2011; United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), *Statistical Yearbook for Asia and the Pacific*, Thailand, 2011; United Nations Framework Convention on Climate Change, 'Clean Development Mechanism: Registered Projects by Region', available at: <http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByRegionPieChart.html> (accessed 23 July 2012); World Bank, *World Development Report 2012: Gender Equality and Development*, Washington, DC, 2012; World Bank, *Removing Barriers to economic inclusion*, Washington, DC, 2011. 10. FAO, note 9; Dankelman, I., *Gender and Climate Change: An Introduction*, Earthscan, 2010; WomenWatch, 'Fact Sheet: Women, Gender Equality & Climate Change', 2009; World Bank, *Social Dimensions of Climate Change*, Washington, DC, 2010. 11. UNDP 2011, note 5. 12. UNDP, *Human Development Report 2011: Sustainability and Equity: A Better Future for All*, 2011; Carvajal-Escobar, Y., M. Quintero-Angel, and M. Garcia-Vargas, 'Women's Role in Adapting to Climate Change and Variability', *Advances in Geo Sciences*, issue 14, 277–280, 2010; FAO 2011, note 9. 13. Alboher, S., 'Clean Development Mechanism: Exploring the Gender Dimensions of Climate Finance Mechanisms', UNDP, November 2010. 14. Schalatek, L., 'Gender and Climate Finance: Double Mainstreaming for Sustainable Development', Heinrich Böll Foundation, Washington DC, 2009; Gurung, J., 'Gender and REDD+', Brown Bag Seminar presentation, 19 August, 2002, Bangkok, available at: [http://www.recocf.com/site/uploads/content/pdf/REDDNet04\\_1\\_15\\_Flynn\\_C\\_](http://www.recocf.com/site/uploads/content/pdf/REDDNet04_1_15_Flynn_C_) *Blending Climate Finance through National Climate Funds: A guidebook for the design and establishment of national funds to achieve climate change priorities*, UNDP, New York, NY, USA, 2011; Vandeweerd, V., Y. Glemarec and S. Billett, 'Readiness for Climate Finance: A framework for understanding what it means to be ready to use climate finance', United Nations Development Programme, New York, NY, USA, 2012. 16. Elson, D., 'Gender Responsive Budget Initiatives: Some Key Dimensions and Practical Examples', paper presented at the conference on Gender Budgets, Financial Markets, Financing for Development, 19–20 February 2002, Heinrich-Boell Foundation, Berlin, available at: [http://www.glow-boell.de/media/en/btx\\_rubrik\\_3/Elson.pdf](http://www.glow-boell.de/media/en/btx_rubrik_3/Elson.pdf). 17. UN Women, *Gender-Responsive Budgeting website*, available at: [http://www.gender-budgets.org/index.php?option=com\\_content&view=article&id=13&Itemid=214](http://www.gender-budgets.org/index.php?option=com_content&view=article&id=13&Itemid=214).



Empowered lives.  
Resilient nations.



United Nations Development Programme  
304 East 45th Street, New York, NY 10017, USA  
[www.undp.org/gender](http://www.undp.org/gender)

© 2013 United Nations Development Programme  
All rights reserved

The views expressed in this publication are those of the author(s) and do not necessarily represent the official position of the United Nations, including United Nations Member States and the United Nations Development Programme.

**AUTHOR:** Senay Habtezion

**CONTRIBUTORS:** Elizabeth Eggerts, Sophia Huyer, Hannah Strohmeier and Lucy Wanjiru

**EDITOR:** Jeffrey Stern (Suazion, Inc.)

**DESIGN:** Suazion, Inc. ([suazion.com](http://suazion.com))

**PHOTOGRAPHY:** World Bank/ Shehzad Noorani (front cover) and UN Photo/L. Groseclose (this page)