



## GENDER AND CLIMATE CHANGE

# Gender, adaptation and disaster risk reduction

Global climate efforts have been gradually shifting towards a more balanced approach on adaptation and mitigation. Thus the Paris Agreement on Climate Change seeks to limit the global temperature rise to 2°C (and strives towards a rise of 1.5°C), but it also puts adaptation on par with mitigation, among other issues, by establishing a global goal on, and cycles for, improvement on adaptation.<sup>1</sup> Similarly, the Sendai Framework has adopted a disaster risk management approach that aims to broadly strengthen resilience and adaptive capacity to climate-related hazards and natural disasters, emphasizing the need for dovetailing climate change adaptation and disaster risk reduction (DRR) efforts. In both domains (adaptation and DRR), there is increasing recognition of the need for gender-responsive action in response to climatic and disaster risk. Gender equality and women's empowerment are key to the success of all post-2015 multilateral agendas, including 2030 Agenda, the Paris Agreement, the Sendai Framework, and all future actions on reducing climatic and disaster risk.

## *Gender gaps increase women's vulnerability to climatic and disaster risk*

Vulnerability is a function of socio-economic, geographic, demographic, cultural, political and environmental factors. Different groups are thus differentially vulnerable based, in part or in whole, on their gender, age, social status, health and wealth/poverty; on whether they have a disability; and on other sociocultural characteristics.<sup>2</sup> Climate change is disproportionately harsh on vulnerable groups, a large majority among them members of rural communities, particularly women. The reasons therefore are manifold but fall broadly within the stated vulnerability characteristics. Women are often poorer, receive less education, and are excluded from political, community and household decision-making processes that affect their lives.<sup>3</sup> Such economic and social inequities translate into women possessing fewer assets and meagre means to cope with the negative effects of the changing climate. The tendency of women and girls to depend more on natural resources for their livelihoods also lends itself to increased vulnerability. For instance, climatic stress on water and forest resources often leads to women having to travel longer distances for a longer time to fetch water or wood, exposing them to health risks<sup>4</sup> and limiting their prospects for engaging in high-return ventures such as education, politics and business.<sup>5</sup>

Similarly, while disasters pose threats to everyone in their paths, they often have disparately harsher impacts on women. Studies have shown that disaster fatality rates are much higher for women than for men. This is due, in large part, to gendered differences in the capacity to cope with such events and insufficient access for women to information and early warnings.<sup>6</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>7</sup> This gendered asymmetry in vulnerability to disaster risk is rooted primarily in geographic, economic, social, educational/informational and political power imbalances in societies. These factors translate into women having lower levels of access to economic resources in general, and in particular, lower levels of access to education and information that would allow them to read and act upon disaster warnings.<sup>8</sup> Women also tend to live by and work closely with the natural resources and geographical features that are most effected by disasters and shocks (e.g., marginal lands and informal settlements) – men also live in these areas but women are less likely to be able to cope with the shocks. Further, cultural norms on gender roles sometimes limit women's ability to make snap decisions in disaster situations and, in some cases, the clothes they wear and/or their unpaid care work (of children, the sick and/or the elderly) and household responsibilities may restrict their range of movement to escape disasters (particularly water-related hazards) (see Box 1: Gender differentiated vulnerability to climate and disaster risk).

## Box 1 *Gender differentiated vulnerability to climate and disaster risk*

- *Women and children are 14 times more likely than men to die during a disaster.*
- *The Human Development Index (HDI)\* value is lower for women than for men.*
- *Globally, women earn 24 percent less than men. In Latin America, in Mexico, women earn an average of 20 percent less than men; in Argentina, 12 percent less; and in Brazil, 25 percent less.*
- *If all countries were to match the progress towards gender parity of the country in their region with the most rapid improvement on gender inequality, as much as \$12 trillion could be added to annual global GDP growth in 2025.*
- *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 United States.*
- *A study by the World Bank indicates that 155 of the 173 economies it covered (one in nine) have at least one law impeding women's economic opportunities.*

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\* HDI is a summary measurement of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living.

Sources: UNDP (2015a); UNDP (2015b); UNFPA and WEDO (2009); World Bank Group (2015); MGI (2015)<sup>9</sup>

## *Adaptation and disaster risk reduction response could unintentionally worsen socio-economic inequities*

While there is almost unanimous consensus on climate change and its damaging impacts, the specific methods and ingredients required to implement 'good' adaptation on the ground is far from clear.<sup>10</sup> Thus it is not enough that we make a concerted response to climate change – *how* we respond is just as important. Adaptation (and disaster risk reduction) policies, plans and projects that do not take women's issues and needs into account may unintentionally exacerbate existing gender inequities. The UNFCCC Technology Executive Committee, for example, notes that a lack of careful planning in adopting technologies in support of agricultural adaptation (e.g., agricultural machinery that may not be gender-friendly) increases the risk of social/economic *maladaptation*.<sup>11/12</sup> Similarly, diverting fresh water to areas where there is a water shortage (through dikes, water transfers or irrigation canals) may have the unintended consequence of lengthening and intensifying women's productive and reproductive

working day by placing water sources in distant places.<sup>13</sup> These examples underscore the need for proper consideration of the interests and contributions of all members of society, especially women and other vulnerable groups, in the design, planning, financing and implementation of adaptation actions.

There is a growing interest in developing tools and guidelines on how to consider the environmental, sociocultural and economic dimensions of adaptation actions and thereby lower the risk of maladaptation.<sup>14</sup> More effort should be made on developing new (and honing existing) standards that ensure thorough consideration for gender in the implementation of adaptation and disaster risk reduction actions.

Building resilience to risks and addressing underlying vulnerability is increasingly being accepted as a unifying goal for climate change adaptation/mitigation, disaster risk management and poverty reduction. The Sendai Framework for Disaster Risk Reduction 2015–2030, adopted on 18 March 2015 at the Third UN World Conference in Sendai, Japan, is one of the highest profile endorsements of the need for an integrated approach to disaster and climatic risk. There is a lot of merit in ensuring that adaptation and disaster risk management efforts are mainstreamed at the national level to increase policy cohesiveness. It is also important that such mainstreaming efforts integrate gender-based vulnerabilities and needs and concerns across scales. Box 2 provides critical elements of gender mainstreaming in adaptation and disaster risk reduction.



## Box 2 *Critical elements of gender mainstreaming in adaptation and disaster risk reduction*

### **Common elements**

- *Include gender perspectives in adaptation and disaster reduction efforts at the national, regional and international levels – including in policies, strategies, action plans, and programmes;*
- *Build the capacities of national and local women's groups' and provide them with a platform to be heard and to lead;*
- *Include gender-specific indicators and data disaggregated by sex and age to monitor and track progress on gender equality targets;*
- *Ensure that climate finance is responsive to climate change and disaster risk; vulnerability dynamics, especially within marginalized groups of society, including poor women and men. To this end, undertake a gender analysis of applicable budget lines and financial instruments to determine the differentiated impacts on women and men. More broadly, engage with existing climate finance frameworks, networks and instruments at all levels to ensure more meaningful integration of gender perspectives in disaster risk reduction and adaptation efforts;*
- *Consider the reallocation of resources, if relevant, to achieve gender equality outcomes from the actions planned;*
- *Include women's traditional knowledge and perceptions in the analysis and evaluation of adaptation and disaster risks, coping strategies and solutions; analyse climate change data (e.g., on desertification, floods, drought, deforestation) with a gender-sensitive perspective and collect sex-disaggregated data;*
- *Increase women's participation and representation in all levels of decision-making processes.*

### **Elements specific to disaster risk reduction**

- *Take gender-aware steps to reduce the negative impacts of disasters on women, particularly in relation to their critical roles in rural areas in the provision of water, food and energy (i.e., provide support, health services, information and technology);*
- *Ensure that women are being visibly engaged as agents of change at all levels of disaster preparedness, including in early warning systems, education, communication, information and networking opportunities;*
- *Consider the level of women's access to technology and finances, health care, support services, shelter and security in times of disaster.*

### **Elements specific to adaptation**

- *Address gender differences in capabilities to cope with climate change adaptation. Specifically, make women's equal access to information, credit and other productive and reproductive resources a priority;*
- *Develop and apply gender-sensitive criteria and indicators for monitoring and evaluation of the results of ongoing adaptation actions.*

## Women's empowerment improves adaptation to climate and disaster risk

While women's vulnerability is almost always assumed, their unique capacities and contributions to adaptation and across the disaster management cycle (mitigation, preparedness, response and recovery) have not been well documented.<sup>15</sup> In fact, women's individual and collective knowledge and experience in natural resource management and other societal activities at the household and community levels equip them with unique skills that benefit adaptation and disaster efforts across scales and sectors.<sup>16</sup> For example, during a drought in the small islands of the Federated States of Micronesia, the knowledge of island hydrology that the women had as a result of their land-based work enabled them to find potable water by digging a new well.<sup>17</sup> Similarly, in Honduras, post-Hurricane Mitch (1998), women helped save lives and assets as the water rose,<sup>18</sup> and, as part of the recovery efforts, they led and organized community-based work to rebuild homes and other properties.<sup>19</sup>

With the new 2030 roadmap and Sustainable Development Goals (SDGs) adopted by the global community, not only is gender equality reaffirmed as a matter of human rights and dignity (SDG 5), it is also recognized as central to all of the SDGs. Appreciating, engaging and promoting women's unique capacities in adaptation and DRR would allow decision makers to pursue policies that build resilience in communities while also remedying gender injustice.

### Key Messages

- **Climate effort challenges also provide opportunities to improve human development.** Vigorous, pro-poor and gender-responsive planning and implementation is a winning pathway for nurturing sustainable and resilient livelihoods. Climate change adaptation and disaster risk reduction plans and programmes should aim to build up the asset base of women, promote their participation in the planning and execution of these activities and enhance their empowerment in society.
- **Climate change adaptation and disaster risk reduction actions could lead to maladaptation, unintentionally worsening socio-economic imbalances.** Adaptation and DRR efforts on the ground should be keenly attuned to the varied needs and interests of poor and marginalized communities, especially women, to ensure that these efforts do not inadvertently worsen the status quo. Promoting diversification of economic and/or livelihood opportunities of the poor and adopting gender-sensitive technology are examples of gender-aware DRR and adaptation planning. Existing systems of climate finance (such as the Green Climate Fund) could be helpful in promoting integrated adaptation and disaster risk reduction solutions that also advance social development.
- **Mainstreaming gender considerations into adaptation and through all phases of disaster reduction would add much value to these efforts.** Women bring unique capabilities and knowledge to the adaptation and disaster risk reduction efforts that could lead to greater returns

for environmental sustainability across SDGs. Incorporating gender perspectives into adaptation and disaster risk reduction and management policy and projects through improved collaboration among all members of society, including men and women, would lead to the greater equitability, effectiveness and sustainability of adaptation and disaster risk reduction efforts (see Box 2: Gender mainstreaming in adaptation; and Box 3: Gender mainstreaming in disaster risk reduction).

- **Adaptation and disaster risk reduction is a process – there is a need for continuous assessment and realignment of goals and priorities.** The empowerment of women and poor and marginalized groups should be seen as one crucial goal in the monitoring and evaluation of projects designed to reduce climatic and disaster risk. Current adaptation and DRR efforts at all levels (such as National Adaptation Plans, Intended Nationally Determined Contributions, Disaster Risk Management National Plans, etc.) should be subjected to persistent reviews with an eye towards improving our understanding of climate and disaster risk reduction pathways that both empower women and lead to climate-resilient development.

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