

# ***GENDER & CLIMATE CHANGE:***

## ***3 THINGS YOU SHOULD KNOW***



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1818 H Street, NW  
Washington, DC 20433  
Telephone: 202-473-1000  
Internet: [www.worldbank.org/socialresilience](http://www.worldbank.org/socialresilience)  
E-mail: [asksocial@worldbank.org](mailto:asksocial@worldbank.org)  
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***GENDER AND CLIMATE CHANGE:  
THREE THINGS YOU SHOULD KNOW***

# ***GENDER EQUALITY MATTERS IN ITS OWN RIGHT, AND IT MATTERS FOR EFFECTIVE CLIMATE ACTION***

The 2012 World Development Report makes the case that gender equality is intrinsically important to development, as well as being smart economics.<sup>1</sup> The Bank sees gender analysis as integral to the social analyses that inform our lending. Gender analysis helps find ways to mitigate possible risks that may exacerbate gender inequality, and highlights opportunities to enhance positive outcomes. In the context of climate change, this has three key implications:

- 1. Women are disproportionately vulnerable to the effects of natural disasters and climate change where their rights and socio-economic status are not equal to those of men,*** and where they have less voice and influence than men in shaping policies and prioritizing how climate finance is used. Women's rights, socio-economic status and voice can all be strengthened through gender-sensitive and climate-smart development assistance. The WDR 2012 framework allows for a shift away from a singular focus on women's and girls' vulnerability and their role as victims towards emphasizing their agency. This encourages a more nuanced and forward-looking approach to gender and climate change.
- 2. Empowerment of women is an important ingredient in building climate resilience.*** There are countless examples where empowering women to exercise leadership within their communities contributes to climate resilience, ranging from disaster preparedness efforts in Bangladesh, Indonesia and Nicaragua, to better forest governance in India and Nepal, to coping with drought in the Horn of Africa. There is also strong and mounting evidence at the country level that improving gender equality contributes to policy choices that lead to better environmental governance, whether through increased representation and voice of women within their communities, in society at large, and at the political level, or through increased labor force participation.
- 3. Low-emissions development pathways can be more effective and more equitable where they are designed using a gender-informed approach.*** Billions of women around the world make decisions every day that influence the amount of carbon that is released into the atmosphere. This influence differs from that of men owing to women's socially ascribed roles as home-makers (where decisions influence emissions e.g. from domestic cooking), as farmers (influencing soil carbon emissions), and as consumers (purchasing decisions influencing emissions from the entire lifecycle of production, consumption, waste disposal). Women's and men's choices can be expanded in ways that reduce carbon footprints, through gender-sensitive approaches to the design and distribution of improved cook stoves, advice on low-tillage agriculture, or product labeling and recycling, among many other examples. The strengthening of women's political representation and leadership roles within wider society is likely to contribute to the kinds of institutional transformation that are required to put countries on low-emissions development paths.





Yemeni woman drawing water from a cistern.

***The mainstreaming of gender-sensitive approaches is starting to happen across the range of climate actions, but much more needs to be done.*** The World Bank is working in 130 countries to support climate change adaptation and mitigation. Both gender and climate change are priority focal areas for results under IDA16. The Bank is learning through its own work and that of others the 'whys and hows' of integrating the three key aspects related to gender and climate change mentioned above. The following pages expand on these lessons and make the case that gender mainstreaming is urgently needed both in dedicated climate finance and in approaches to climate-smart Official Development Assistance (ODA).

# 1.

## **WOMEN AND GIRLS ARE OFTEN DISPROPORTIONATELY VULNERABLE TO NATURAL DISASTERS AND CLIMATE CHANGE IMPACTS WHERE THEIR ENDOWMENTS, AGENCY AND OPPORTUNITIES ARE NOT EQUAL TO THOSE OF MEN**

*Growing empirical evidence supports the broad view that women's overall lower access to assets, services and voice makes women more vulnerable than men to the effects of natural disasters and climate change. Much of the documented evidence to date relates to the effects of natural disasters. A 2007 study of 141 natural disasters over 1981–2002 found that when economic and social rights are realized equally for both sexes, disaster-related death rates do not differ significantly for men and women. But when women's rights and socio-economic status are not equal to those of men, more women than men die in disasters.<sup>2</sup>*

In **Bangladesh**, for example, of the 140,000 people who died from the flood-related effects of Cyclone Gorky in 1991, women outnumbered men by 14:1. Contributory factors limiting women's mobility and use of cyclone shelters were social norms and ascribed roles

for women including primary responsibility for the care of children, the sick and elderly; social norms preventing women from leaving their homes or staying in cyclone shelters without a male relative; traditional dress codes such as the wearing of *sarees* that can easily become entangled; and concerns around privacy and safety in shelters. Women also represented an estimated 61% of fatalities in **Myanmar** after Cyclone Nargis in 2008, and 70% of those dying during the 2004 Indian Ocean tsunami in **Banda Aceh, Indonesia**.<sup>3</sup>

*This gender gap in vulnerability to the effects of climate extremes is not inevitable. By the time Cyclone Sidr hit Bangladesh in 2007—an event at least as severe as Gorky—the absolute numbers of people killed had fallen to around 3,000 as a result of better cyclone preparedness efforts. Between 1991 and*



Women in Colombia whose home is affected by flooding every year.

2007, Bangladesh had made great strides in hazard monitoring, community preparedness and integrated response efforts. The gender gap in mortality rates had also shrunk to 5:1 by specifically addressing the cultural reasons why women were reluctant to use cyclone shelters, including paying particular attention to engaging women in these efforts

as community mobilizers more likely to be heard by other women, and creating women-only spaces in cyclone shelters.

In **Nicaragua**, by contrast, more men than women died as a result of Hurricane Mitch in 1998. One community, La Masica, reported no hurricane-related deaths, which was attributed to gender-sensitive community ed-





**Residents of Amauta-B shantytown in Peru work to build a retaining wall in their community.**

ucation on disaster preparedness and early warning six months prior to Mitch. Both men and women contributed to hazard management activities, but women ended up continuously monitoring the early warning system that made prompt evacuation possible.<sup>4</sup>

*Just as natural disasters affect women disproportionately, response and recovery efforts can also increase or reinforce existing inequalities.*<sup>5</sup> The World Bank notes that:

"The unevenness of [disaster] impacts is often highly visible because of media attention, but the recovery process is potentially more uneven, and it tends to be less visible, at least to those on the outside, because their attention has turned elsewhere."<sup>6</sup> Violence and sexual harassment of women and children typically increase after a crisis when civil and administrative structures are weakened. Such risks are often overlooked by officials as social/cultural reluctance obstructs address-



ing these issues. For instance, after the 2001 earthquakes in El Salvador, single women insisted that the sheeting provided for temporary shelters be opaque and strong. In the past, it had been translucent, making it easy to see when they were alone. Given that it could easily be cut with a machete, many women had been raped.<sup>7</sup>

*A lack of understanding of the gender dimensions can impede equitable distribution of recovery assistance.* For example, entitlement programs have traditionally favored men over women, tenants of record, bank-account holders, and perceived heads of households. Conversely, the specific needs of men have sometimes been left out, such as stress, alcohol counseling, or developing the skills to cope with becoming a single parent; this can be a significant need given that women comprise the majority of those who die in disasters. Damage and needs assessments can help ensure equity by disaggregating mortality and morbidity by gender, and taking into account losses suffered in the informal sector.

*The recovery process offers specific opportunities to promote gender equality by including women in program design and implementation as well as promoting land rights for women.* Some World Bank projects have elevated women's status in society by providing land titles in the names of both women and men, as was done in Aceh, **Indonesia**; **Vietnam**; and Gujarat and Maharashtra, **India**. After the 1993 earthquake in Maharashtra, even widows received houses in their own names and ex-gratia payments for lost relatives.<sup>8</sup> Indeed, it has become standard practice to issue housing grants and housing and land titles in both the wife's and husband's names, and to stipulate that widows receive houses in their own names after so many cases resulted in positive social impacts. Other cases include post-tsunami reconstruction in **Sri Lanka**; and post-flooding reconstruction in **Argentina**, **El Salvador**, and **Mozambique**.

The World Bank has developed guidance for staff and country clients to integrate disaster and climate risk management into community driven development and social fund operations which includes a module to integrating gender dimensions. It identifies critical entry points for integrating gender concerns in policy development and the project cycle; approaches to gender-informed M&E; practical tools for integrating gender issues in community-based disaster risk management; and challenges in gender mainstreaming in post-disaster recovery and reconstruction planning.<sup>9</sup> The East Asia and Pacific regional department recently developed regionally adapted guidance on integrating gender issues in disaster and climate risk management programs,<sup>10</sup> which are being followed up with capacity building and country-level policy analysis initially focusing on **Vietnam, the Philippines, Laos, Indonesia and China**.

*As with natural disasters, so the effects of longer-term climate change may be felt more acutely by women where their endowments, agency and opportunities are not equal to or are more climate-sensitive than those of men.*<sup>11</sup> New empirical evidence from **Bangladesh**, for example, offers insights into gender-differentiated practices for coping with and adapting to flood, river erosion, and drought.<sup>12</sup> Strategies that are most gender-differentiated include reducing food intake, internal migration, and early marriage for girls. Early marriage reduces the family's liability and may increase protection of the bride against potential violence during and after natural disasters, but may increase her vulnerability in the long run. The burden of reduced consumption and increased workloads often falls disproportionately on women, particularly in poorer households. Migration often brings positive benefits for women in terms of diversified opportunities, rights and voice. However, for those with fewer skills to begin with, migration may increase

the likelihood of exploitation in the form of low wages, forced marriages (for security and access to housing), and risk of violence.

*To address these issues, considerable attention is now being paid to mainstreaming gender concerns into country-level Strategic Programs for Climate Resilience (SPCRs) under the **Pilot Program for Climate Resilience (PPCR)**. **Mozambique, Nepal and Samoa** are notable examples, in which gender-disaggregated field consultations were carried out and helped inform SPCR priorities. In selecting civil society organizations for*

capacity building support in Samoa, priority is being given to groups that can provide gender-sensitive inputs to national- and local-level policy and planning processes. Monitoring implementation progress using sex-disaggregated indicators and data will be essential. In Bangladesh, the Northern Areas Reduction of Poverty Initiative (or NARI, which means 'women' in Bengali) provides assistance to migrant women employed in the garment industry in overcoming the difficulties of migration and giving them a chance to successfully adapt to a new life.<sup>13</sup>



Community meeting in Aurangabad, India.

## 2.

### **EMPOWERMENT OF WOMEN IS AN IMPORTANT INGREDIENT IN BUILDING CLIMATE RESILIENCE**

*Women can be powerful agents of change.* There are countless examples where empowering women to exercise leadership within their communities contributes to climate resilience, ranging from disaster preparedness efforts in Bangladesh, Indonesia and Nicaragua, to better forest governance in India and Nepal, to coping with drought in the Horn of Africa. There is also strong and mounting evidence at the country level that improving gender equality contributes to policy choices that lead to better environmental governance, whether through increased representation and voice of women within their communities, in society at large, and at the political level, or through increased labor force participation.<sup>14</sup>

*Women's empowerment can provide a vital springboard for addressing climate resilience.* The growing body of knowledge on how to

build climate resilience emphasizes diversifying economic opportunities and empowering people by enhancing their voice and agency. In **Nepal** and **India**, for example, women's participation in forest committees beyond a critical minimum threshold (around a third) has been seen to have a positive impact on forest regeneration and a reduction in illegal extraction of forest products.<sup>15</sup> Evidence is mounting that where women are empowered to create institutional platforms that expand their own, their families' and their communities' endowments, agency and opportunities, this can serve as a powerful springboard for building climate resilience more generally. Good examples of how this can be done are seen in programs that seek to build climate resilience through gender-sensitive approaches to supporting rural livelihoods:



- In **India**, the National Rural Livelihoods Mission is scaling up a model that has proven successful in Andhra Pradesh, Rajasthan, and other drought-prone states. The approach begins with empowering poor women through their own self-help groups (SHGs) to progressively build experience with savings and micro-loans. Conscious efforts are made to build capacity and social capital through financial inclusion. Over time, federations of SHGs are supported that increase their bargaining power in gaining access to a wide variety of goods and support services on behalf of their members. The same institutional platform lends itself very well to building climate resilience by mediating access to specialized advice regarding on-farm drought adaptation measures; creating linkages with other government programs such as the National Rural Employment Guarantee Act that provides up to 100 days of paid labor for eligible households in public works including building watershed management structures; and facilitating opportunities for family members through labor migration.<sup>16</sup>
- Similar approaches have been shown to work within pastoral communities of **Kenya and Ethiopia** in building resilience to drought, with a particular emphasis on empowering women to become agents of change.<sup>17</sup> Livelihood diversification made possible through capacity building support to women's savings and loans groups helped communities better manage the risks associated with the 2005–08 drought cycle by generating income, preserving assets and enhancing food security. Women played an important leadership role, inspired in part by exchange visits across the Kenyan-Ethiopia border.
- In **Bolivia**, recent work has highlighted the differences between adaptation strategies employed by men and women, and that investing in women can improve adaptation outcomes. A study of seven rural communities found that whereas men focus on adapting by such measures as expanding agricultural production (through increased land use), large-scale community interventions (e.g. irrigation, river defenses), or migration; women tend to focus more on practical and innovative improvements such as seeking alternative water supplies, protecting assets, planting new crop varieties or supplementing traditional incomes through activities like honey production or handicrafts. These differences reflect traditional gender roles and the greater access of men to knowledge resources, such as technical trainings. Evidence also shows that women prefer adaptation strategies that employ a more efficient use of existing resources.<sup>18</sup>

Gender-sensitive approaches can contribute to climate resilience in urban settings as well, as the following examples demonstrate:

- The 'Girls in Risk Reduction Leadership' project, in Ikageng Township of Potchefstroom, **South Africa**, sought to reduce the social vulnerability of marginalized adolescent girls using practical capacity-building initiatives to increase individual and community resilience to natural disasters. Girls



Grassroots leaders from Nicaragua and Peru participate in international forum on disaster risk reduction.

were trained in personal and public health, fire safety, counseling and disaster risk reduction planning.<sup>19</sup>

- In Saint Louis, **Senegal**, local civil society organizations including women's groups, youth associations and *dahiras* (religious groups) have been brought together by the NGO Enda-Tiers Monde to raise community awareness of the adverse health and other effects of flooding, including diarrhea and malaria. They help dig and maintain drainage channels, disinfect stagnant water, and place sandbags to assist residents to safely move about the neighborhood.<sup>20</sup>
- In Manizales, **Colombia**, 112 women were trained as *Guardianas de la Ladera* ('Guardians of the Slopes') to create and maintain slope stabiliza-

tion in their neighborhoods and to report on any problems. Environmental observatories have been created in the city's 11 *comunas*, to promote public engagement in environmental monitoring using a simple set of indicators known as the *semaforos ambientales* ('environmental traffic lights').<sup>21</sup>

- In the slum settlement of Kalandar in Delhi, **India**, a commercially viable water kiosk, managed by a women's committee, provides safe and affordable water for the community. Community mobilization and awareness raising around poor water quality was undertaken by an NGO and a local research institute, and sought to engage women in the planning, management and operation of the kiosk as a community enterprise.<sup>22</sup>

# 3.

## **LOW-EMISSIONS DEVELOPMENT PATHWAYS CAN BE MORE EFFECTIVE AND MORE EQUITABLE WHERE THEY ARE DESIGNED USING A GENDER-INFORMED APPROACH**

*Billions of women make decisions every day that influence the amount of carbon that is released into the atmosphere.* Owing to socially ascribed gender roles, women do the lion's share of domestic cooking around the world. Their choices in terms of cooking fuel (where they even have a choice), cooking technology, and what foods to cook, all have an important bearing on carbon emissions. Women also make decisions as land managers that affect how much carbon is released or stored in agricultural soils and above-ground biomass. And, particularly with rising incomes, women are consumers, who influence the amount of carbon emitted in the production, distribution, use and disposal of the consumer goods they choose to purchase. Women's and men's choices can be expanded in ways that reduce carbon footprints, through gender-sensitive approaches to the design and

distribution of improved cook stoves, advice on low-tillage agriculture, or product labeling and recycling, among many other examples.

Few studies estimate greenhouse gas emissions down to the level of distinct socioeconomic groups within countries, let alone along gender lines.<sup>23</sup> Most debate has centered on average per capita emissions at country level, or perhaps urban versus rural per capita emissions. Household-level consumption or expenditure data can be used as proxies for GHG emissions up to a point, but are very difficult to attribute to individuals within households owing to blurred distinctions among energy and fuel consumption for personal consumption, for commuting to work to earn family income, or for care work for other household members. A recent study of single-person households in Germany, Norway, Greece and Sweden of-





Kenyan women participating in an afforestation project.

fers some insights into gendered per capita carbon footprints, at least in Europe.<sup>24</sup> In that study, single-male households were found to consume more energy than single-women households, on average, by 6 per cent in Norway and 39 per cent in Greece, and these gender differences held true independently of age or income.

There is mounting evidence, particularly in Europe, that women have different perceptions of the significance of climate change, and behave differently as a result.<sup>25</sup> They are more likely to undertake actions perceived to benefit the environment, for example, including consuming locally sourced foods, recycling household waste, and making pur-

chasing decisions on household appliances that take energy efficiency into account. It is not clear how far such findings can be generalized, but at the very least they point to the need to take gender into account in the design of measures to reduce carbon intensity in the energy sector, and in urban and transport development.

A recent World Bank study concluded that energy sector interventions can have significant gender co-benefits where interventions are carefully designed and targeted based on a context-specific understanding of energy scarcity and household decision-making.<sup>26</sup> Most gender benefits of providing electricity and motive power occur because women

tend to spend more time at home, and are responsible for tasks that can be carried out more productively with electricity and motive power:

- There can be very significant health gains, particularly for women and children, from effective dissemination of improved cook stoves or other modern cooking technology in rural South Asia and sub-Saharan Africa, and of less polluting cooking and heating technology in China.
- In the **Lao PDR** Rural Electrification Project, it was found that female-headed households made up 43 per cent of poor households, who could not afford the upfront fees to connect to the electricity grid. This led to a pilot project, *Power to the Poor*, which set up a revolving loan fund to enable female-headed households to finance the connection costs.
- The Kuyasa Fund in Cape Town, **South Africa**, provides microfinance lending for housing, targeting the most vulnerable groups, and women in particular. Sixteen per cent of the funds were spent on improving the thermal efficiency of housing.<sup>27</sup>
- In general, lighting and television are the first common uses of electricity, accounting for at least 80 per cent of rural electricity consumption. Electricity displaces more expensive candles and kerosene lamps, thereby reducing indoor air pollution and fire and burn risk. Lighting and television help improve access to information, the ability to study, and can extend the effective working day and improve public safety. Electrification can have greater positive impacts on

women when accompanied by effective social marketing and financing to promote the use of time-saving technology. There is also an important body of evidence demonstrating that access to television has resulted in lower acceptance of spousal abuse, lower son preference, more autonomy, and greater likelihood of sending girls to school in rural India.<sup>28</sup>

- Such gender co-benefits of electrification can be realized with much lower carbon intensity through the promotion of incentives to adopt affordable renewable energy technologies such as solar lamps, as the IFC-sponsored *Lighting Africa* program seeks to promote through access to micro-finance.

There is also growing evidence in urban redevelopment and in the development of public transport systems that gender awareness in the design of such programs can result in innovations that bring significant gender co-benefits, regardless of whether or not they also seek to lower net carbon emissions:

- In urban redevelopment in Bogota, **Colombia**, that among other things aimed to reduce the carbon footprint of the city, careful attention was to creating pedestrian spaces and well-lit public transport, and had a dramatic effect in reducing gender-based and common violence.
- Measures to improve women's safety and thereby increase the acceptance of public transport by women, while indirectly reducing greenhouse gas emissions, were also undertaken in Montreal, **Canada**, and London, **UK**.

These included on-request stops between bus stops at night, and raising awareness of using unlicensed minicabs, and led to dramatic reductions in gender-based violence.<sup>29</sup>

*A number of efforts have been undertaken to integrate gender concerns into climate action.* A Strategic Environmental, Social and Gender Assessment (SESGA) was carried out for the **Climate Investment Funds** (CIFs) overall. This included specific attention to gender analysis, for example in relation to renewable energy, transport, and land rights.<sup>30</sup> The SESGA is being used to inform the harmonization of the respective draft results frameworks for the CIFs. A concerted effort will be needed to monitor progress as CIF implementation is rolled out.

Integrating gender concerns into REDD+ readiness processes under the **Forest Carbon Partnership Facility** (FCPF) is also becoming standard practice, although more needs to be done. In **Democratic Republic of Congo**, for example, the Readiness Preparation Plan (R-PP) made a concerted effort to include gender considerations, and women's groups participated in provincial level REDD+ workshops during its preparation. A Technical Coordination Group has been charged with the task of mainstreaming gender concerns throughout the REDD+ process, including in community forest management and the distribution of carbon benefits.<sup>31</sup> The R-PP template was recently updated to make specific reference to the need for gender analysis in all FCPF contexts.



## CONCLUSION

*The World Bank is making strides in mainstreaming gender-sensitive approaches to climate action on the ground.* Ensuring that men and women have equal access to education, economic opportunities, productive inputs and equal chances to become socially and politically active can generate broad productivity gains, and lead to more inclusive and greener development path for all. For the World Bank, gender analysis is an integral aspect of the upstream social analysis that is required to inform both development policy lending (DPL) and investment lending (IL). It helps identify and suggest ways to mitigate possible risks in terms of exacerbating gender inequality, and highlight opportunities to enhance positive outcomes for gender equality. The entry points for such upstream gender analysis include Poverty and Social Impact Analysis (PSIA) in the case of DPL,

and Social Assessment in the case of IL. Both gender and climate change are priority focal areas for results under IDA16. In FY10, 88 per cent of Country Assistance/Partnership Strategies (CAS/CPS) included strategies to address climate change. It is Bank policy that all CAS/CPS are informed by gender analysis. Increasingly, the nexus between gender and climate change is specifically considered at the CAS/CPS level, as in the case of Bolivia.

*Gender mainstreaming is needed both in dedicated climate finance and in approaches to climate-smart Official Development Assistance (ODA).* In practice, the World Bank, jointly with Regional Development Banks, supports governments in blending climate finance (e.g. the Climate Investment Funds (CIFs) or carbon finance) with ODA (including IBRD/IDA) and using both to leverage the governments' own and other sources of funding.

*Climate financing mechanisms are beginning to adopt gender-sensitive approaches in program design and results frameworks, but more needs to be done.* What more can be done to better match current climate financing options with women's needs, capabilities and aspirations?

- *First, funds need to be earmarked for capacity building* of grassroots women's organizations, NGOs, and networks, to assist women in developing and implementing their own climate-related actions. In some cases it may also be appropriate to earmark funding for gender-targeted programs, both at national and community levels.
- *Second, it is important to build in-country institutional capacity* within central and local government bodies, ministries and agencies, in order to better equip them to address the gender dimensions of climate change in their own analyses and response plans, such as National Adaptation

Programs of Action (NAPAs) and Nationally Appropriate Mitigation Actions (NAMAs). The lack of sex-disaggregated data is often a constraint in monitoring and assessing results.

- *Last, but by no means least, it is essential to promote gender-balanced participation in stakeholder discussions on climate change finance.* This will help ensure that, wherever necessary, financing instruments are tailored to address men's and women's different experiences of climate change, and their different capacities to respond to it.

Much can be done to improve the effectiveness of climate finance and actions on the ground by ensuring that gender relations are taken into account in design, implementation, and measurement of results. But this can only be achieved through a concerted effort to apply a gender lens in climate finance mechanisms. It matters for development, and it matters for effective action on climate change.

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The Social Development Department  
The World Bank  
1818 H Street NW  
Washington D.C. 20433, USA

[www.worldbank.org/social resilience](http://www.worldbank.org/social%20resilience)  
[asksocial@worldbank.org](mailto:asksocial@worldbank.org)