Gender Dimensions of Climate Change and Disaster Risk Reduction and Resilience Building

GENDER-BASED VULNERABILITY AND DIFFERENTIATED IMPACT OF CLIMATE CHANGE AND DISASTERS

Climate change and disasters affect people with different gender and social identities differently, often making women and LGBTIQ people more vulnerable (Figure 1-6). Much of this is not due to any biological difference but due to the gender-differentiated roles and responsibilities at the household and community level (Neumayer and Plümper 2007). The gender-based vulnerability is further exacerbated due to existing gender disparities especially access to land and other resources, participation in governance and decision-making structures, and, more importantly, access to education, health, extension and financial services. The critical gender-based vulnerabilities of climate change and disasters have been discussed here:

A. Increase in Domestic Work and Time Poverty

Within our complex societal systems, women's care giving is essential in providing a backbone of support. This is even more true in Asia, where women do four times the unpaid care and domestic work than men do (ILO 2018), as compared to global figures of 2.6 times (UN Women 2018). Measuring minimum wages, Oxfam reports that the monetary value of unpaid care work globally could be around US\$10.8 trillion (Coffey, et al. 2020). Women's caregiving role and unpaid work will increase manyfold due to climate change especially in disaster situations. Poor women and those in rural areas more involved in informal caregiving will be most affected (ILO 2018). Some of the critical gender caregiving roles that will impact women more include:

 Managing food security: As traditional food sources become increasingly unpredictable and scarce, along with raising food prices, women will be strained for managing food security within their homes. Poor women with limited access to land, resources, and extension services will be most affected.

- 2. Fetching drinking and domestic water: The gendered dimension of water management is well known. In most societies, women and girls are largely responsible for domestic and drinking water collection. Already in many parts of South Asia, scarcity of water and lack of proper supply infrastructure results in women walking miles or waiting for hours in queues to fetch water. With more than two billion people around the world expected to face water shortage by 2025 (Hameeteman 2013), this will especially have a harsher effect on women and girls. In drought-prone areas, the time spent by women and girls to fetch water will increase manyfold, as they have to travel longer distances for the same. In flood-prone areas, damage to existing water supply infrastructure will further decrease the access to water for many communities especially those living in urban slums, which will again hurt women more.
- 3. Arranging fodder: As pressure on land for production of more crops, bio-fuels and renewable energy increases, availability of grazing land will decrease. With women having the main responsibility for arranging fodder for the cattle, especially the small livestock that they often have control of, decline in fodder availability will affect both time poverty (for arranging fodder) and income poverty (loss of livestock) of women.
- 4. Fuelwood for cooking: Stringent measures for forest protection and emission reduction policies will further affect fuel availability for cooking especially for poor women who cannot afford clean energy sources. FAO estimates that many countries in the developing world draw on fuelwood to meet as much as 90 per cent of energy requirements. Further, gender roles and discrimination will hinder women from participating in decisions related to local forest management processes, which will hamper availability and result in women having to travel further to reach unprotected forest areas.
- 5. Domestic Waste Management: Governments all over are trying to address improper waste management in open landfills and water-ways. As women have the prime responsibility of waste management within the household, they will be most affected by the additional roles of waste segregation and recycling.

FIGURE 1-6: POSTER ON GENDER DIMENSIONS OF CCDRR



Women and LGBTIQ People are Affected More by Climate Change and Disasters



INCREASE IN DOMESTIC WORK AND TIME POVERTY

- · Asian women's unpaid care and domestic work, already four times that of men, will increase.
- With reduced food crop production and increased food prices, poor women will be strained to maintain food security.
- With more than 2 billion people expected to face water shortage by 2025, women and girls will have to travel longer distances and spend more time to fetch water.
- Damage to water supply infrastructure in floods and cyclones will also hurt women in urban areas.
- As pressure on land for food and fuel grows, grazing land will reduce, increasing the workload of women for arranging fodder.
- Forest protection and clean energy policies will affect fuel and wood availability a source of 90% energy for poor women.



EXACERBATED HEALTH BURDEN AND CARING RESPONSIBILITIES

- Skewed intra-household food distribution will result in women and girls being deprived of basic food intake and nutrition.
- Women being more exposed to standing water due to water fetching responsibilities will be at higher risk of water-borne diseases.
- Physiological characteristics also make women, especially pregnant women, more susceptible to vector-borne diseases like Malaria.
- Drinking saltier water (a direct result of sea water ingress) will also have severe impacts, especially on pregnant women, as rates of hypertension and pre-eclampsia will escalate.
- After disasters, women' sexual and reproductive health needs are further marginalized.



GREATER RISK OF DEATH, INJURY, AND VIOLENCE

- Women and children are 14 times more likely to die or be injured in a disaster than men due to gender inequalities.
- Forced to sleep in insecure homes and emergency shelters without privacy and hygiene facilities, women and LGBTIQ people are particularly vulnerable to physical and sexual assault.
- Women and girls also often face elevated levels of violence if they have to travel long distances to fetch water, firewood or fuelwood after a disaster.
- Adolescent girls especially report higher levels of sexual violence in the aftermath of disasters. The risk and likelihood of early marriage increases.
- Post-traumatic Stress Disorder among men often leads to hegemonic masculinity crisis increasing pre-existing levels of violence.
- Women and children also face greater risk of trafficking and being pushed into sex trade.



HIGHER LIKELIHOOD OF LOSS OF LIVELIHOODS AND ASSETS

- Women are more dependent on natural resource-based livelihood and hence will face more loss due to droughts, flooding, etc.
- Women are often more involved in subsistence farming and provision of agriculture labour and their livelihoods will be more impacted by loss of crop yield coupled with water scarcity.
- Women also own only smaller livestock such as chickens, ducks, goats, which are not
 only less likely to be rescued but also more prone to be sold for immediate cash after
 disasters, thereby resulting loss of limited assets.
- With more women being employed in informal sector, with low paid jobs and lack of social security, their loss of livelihoods will hurt more.
- Already deprived of access to land and resources, their profound vulnerability will be further exacerbated.

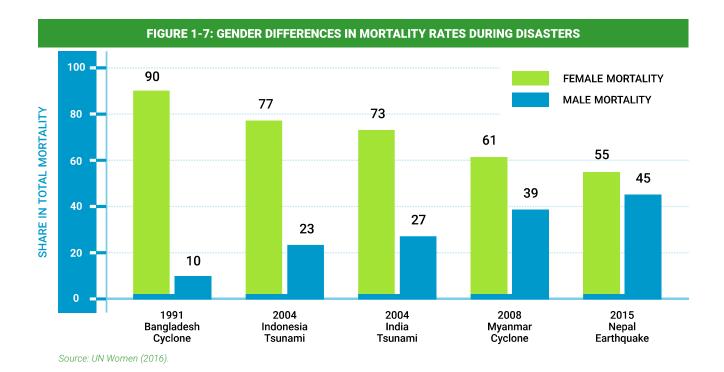
Floods, cyclones and other disasters destroy both natural resources and supply infrastructure for basic services like water, fuelwood, and others. Women and girls, having the key responsibility of managing these, have to travel longer distances for arranging these. Working hours further escalate with caregiving to the injured and sick and reconstruction work after disasters. All these have a profound impact on women's time poverty.

As noted by UN Women and BCAS (Bangladesh) in 2014 "....climate [change] is wreaking havoc with the livelihood of vulnerable women. From floods, to droughts, cyclones, increased salinity, erosion and water logging, women's days are dictated by their access to natural resources, and they rely on these to care for their families and communities. Almost all climatic changes lead to women's increased labour, especially as it relates to the access to clean and safe water, fuel and food." (UN Women 2016).

B. Exacerbated Health Burden and Caring Responsibilities

1. Increased health burden: Intra-household gender discriminations especially in food and nutrition provision, access to safe water, and others also increase women's health risks. Skewed intra-household food distribution will result in women and girls even being deprived on basic food intake and nutrition. Standing water can pose a significant health threat to people via water-borne diseases such as typhoid fever and cholera, or vector-borne diseases including malaria, dengue, yellow fever and chikungunya. Women are generally exposed to areas of standing water significantly more than men due to their assigned roles to collect drinking water, prepare food, or take care of family members and livestock. In addition, women may sometimes be more susceptible than men to vector-borne diseases due to physiological characteristics. For example, pregnant women are twice as likely to attract mosquitoes, which kill over one million people per year. Similarly, drinking saltier water (a direct impact of sea-level rise) can have severe health impacts especially for pregnant women, whose rates of hypertension and preeclampsia in some regions have begun to escalate. In coastal Bangladesh for example, a 2011 study emphasized that climate change-induced sea level rise was having serious health impacts for local populations, especially pregnant women (Khan, et al. 2011).

- 2. Caring for children, sick and elderly: As primary caregivers, women and girls will also find their health care responsibilities increased as family members will be more exposed to vector- and water borne diseases such as malaria, dengue, cholera, diarrhoea and heat stress morbidity.
- 3. Women's sexual and reproductive health (SRH) concerns: After disasters, the sexual and reproductive health rights of women are often observed to be marginalized. Studies from South and South-East Asia have shown that disaster relief processes are not inclusive of the sexual and reproductive health needs of women. Women from fishing communities in the Philippines reported increased birth rate after disasters and as a mechanism to cope with reduced income from fishing which is being impacted by climate change (Castro and Hernandez 2015). A study from Nepal revealed narratives from women reporting that after disaster, many pregnant women did not receive proper nutritious food, resulting in deficiencies and child birth issues (Singh 2015). In Maldives, women reported that relief kits did not include gender-specific essential supplies. Family planning and SRH services become constrained and practically inaccessible in the islands of Maldives after disasters (Shazly and Mohamed 2015). A study of rural and remote women from Laos revealed that the access to even basic sexual and reproductive health services becomes impossible due to inaccessible roads and bridges during rainy season or after flood-induced damage. During summers, women have to walk from 12 to 20 km by foot under heat to access these services at health centres (Thikeo and Sychareun 2015). Increased domestic and unpaid work load after disasters and deteriorated sanitation facilities impact the health of women (Bisan and I 2015). In Bangladesh, many cyclone shelters are not inclusive of gender-specific needs, like a path to the shelters, access to toilets, or separate space for women and lactating mothers. Women from Pakistan reported safety and privacy issues in moving to such shelters (Hussain 2015). Instances of unwanted pregnancy and unsafe abortions increase after disasters.



C. Greater Risk of Death, Injury and Violence

- 1. Women are more likely to die during disasters than men: Women are more likely to lose their lives during disasters than men are. Mortality rates associated with disasters as shown in Figure 1-7 clearly highlight this discrepancy (UN Women 2016). Another study by Neumayer and Plümper (2007) also states that women and children are 14 times more likely to die or be injured in a disaster than men. The study also reveals that this is not due to natural or physical weakness but largely due to gender inequalities. Based on a review of gender and disasters in 141 countries, this 2007 study showed that when economic and social rights are equally distributed, the death rates are similar. The key gender discriminations, which play major roles are highlighted here:
 - After the Asian tsunami in 2004, more women and children died because they were trapped inside their homes (due to gender norms) while men were out in the open. UN Women (2016) also highlighted how this mortality can be higher for poor women as the homes they stay in are often poorly constructed and lack protection against disasters.
 - Women have limited access to information and are also less likely to receive early warning information on time (Oxfam 2005). Illiterate women would be further constrained in reading and acting upon disaster warnings (Aguilar, Granat and Owren 2015).

- Even when they receive evacuation notice, cultural limitations like responsibility of elderly and children, failure to make snap decisions, not being able to relocate without male relative, among other situations, can result in delayed response. For example, it was documented that women in Bangladesh did not leave their houses during floods due to cultural constraints on female mobility; those who did were unable to swim in the flood waters (Demetriades and Esplen 2008).
- In several societies, practices of purdah (seclusion) dictate the extent that women and girls can leave the house to seek shelter (Sultana 2018). Many parents consider cyclone shelters to be unsafe for girls and prefer to leave them at home rather than exposing them to potential harm from shared sleeping quarters and lack of adequate and private sanitary facilities (Swarup, et al. 2011).
- Women and girls often receive little or no disaster response trainings (for example, swimming and climbing trees), and clothing restrictions (like wearing of sarees) can further hamper the free movement of women and girls during disasters. A 2009 study in Gujarat (India) revealed how most women could not swim although 40 per cent of men could (Ahmed and Fajber 2009).
- Furthermore, women, lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ) also face negative consequences in the aftermath of disasters, especially on relief and recovery efforts (UN Women 2016).

2. Increased Sexual and Gender-Based Violence: Often forced to sleep in unsecure homes and emergency shelters with lack of privacy and separate hygiene facilities, women and LGBTIQ persons are particularly vulnerable to physical and sexual assault. Adolescent girls report especially higher levels of sexual harassment and abuse in the aftermath of disasters (Bartlett 2008). Women and girls also face elevated levels of violence if they must travel long distances to fetch water, firewood or food after a disaster.

Further, increased stress and feelings of powerlessness – due to bereavement, loss of property and loss of livelihood, mental health problems such as post-traumatic stress disorder, scarcity of basic provisions, and other factors leading to hegemonic masculinity crises – contribute to pre-existing levels of violence among men. This is often compounded by loss of protection from family members who have died or migrated and a breakdown in the rule of law (UN Women 2016).

Increase in poverty and living in margins also leads to rise in early and forced marriage among underage girls. Women and children are also at greatest risk of being trafficked in times of disasters, and they face the greatest risk of becoming targets for exploitation, resulting in slavery and sex labour (Nelleman, et al. 2011). There is also evidence that employment in sex work increases during climate crisis (IFRC 2015).

D. Higher Likelihood of Loss of Livelihoods and Assets

There are some critical differences in the livelihood patterns of men and women in most societies. Although these are contextual, the underlying elements are:

1. Women are more dependent on natural resource-based livelihoods than men: Women also tend to possess fewer assets and depend more on natural resources for their livelihoods. Loss of livelihoods, particularly of small-scale farmers and those in agricultural-based livelihoods, also produce differentiated impacts for women and men. Women who are often involved in subsistence farming of food crops and provision of agriculture labour are more likely to be impacted by loss in crop yields coupled with water scarcity. And while they have a major labour contribution in allied activities like livestock rearing, women often own and control only smaller livestock such as chickens, ducks and goats. During disasters, these are less likely to be rescued due to operational constraints. Fisheries, another sector which employs women in large numbers in Asia, will be impacted by the degradation of marine ecosystems due to climate change.

DISCUSSION POINT

Ask the participants if they know of any instances wherein they have observed increase in sexual and gender-based violence after disasters.

Facilitator Clues

- > After the 1991 Bangladesh cyclone, many young women were reportedly abducted and abused especially where there were no separate safe places for sleeping, changing, showers and toilets.
- > Child marriage has always been a problem in Bangladesh; but recently there were links between disaster and child marriage. This is because families in poverty often see a girl as one mouth less to feed, while the groom's family looks at her as one more working hand. Furthermore, social evils like dowry and bride price often result in young girls being sold to future husbands.
- Field studies in Bangladesh and Indonesia by ARROW (Mian and Namasivayam 2017) have reported that women and girls have a greater risk of sexual violence due to climate change, having to walk longer distances to fetch water, firewood, food, and others.
- Increases in violence against women after disasters and during hot weather have also been documented in Vietnam (Oxfam 2009).
- In a study by Action Aid (Chanthy and Samchan 2014), the number of instances of domestic violence reportedly almost doubled in Banteay Meanchey and Svay Rieng provinces (Vietnam), after floods as compared to before the floods.
- After the 2015 Nepal earthquake, many femaleheaded households reported feeling unsafe in makeshift tents, especially with increased alcohol consumption among men.
- > Nepal also witnessed an increase in trafficking from an estimated 3,000-5,000 annually in 1990 to 12,000-20,000 per year after the earthquake.
- > In West Bengal (India), there is an observed pattern between trafficking of women and girls and annual flooding. Similar reports appeared after the cyclone Phailin in 2013.
- > There is also some evidence that trafficking was a major concern after the typhoon Haiyan in Philippines in 2013.
- > After the tsunami in 2005, Sri Lanka also reported cases of harassment and abuses.
- > The Covid-19 lockdown in 2020 showed a surge in cases of domestic violence all over the world.

- 2. Sectoral implications: Other than agriculture and allied activities, women, especially poor women in Asia, are often concentrated in manufacturing jobs in the garment industry and hospitality/tourism sector. The garment industry will particularly be impacted by climate change, first due to decline in cotton production in Asia and second due to the impact of heat waves on productivity. In Cambodia for example, studies show that downward trend of productivity for hotter days was statistically significant in the garment industry (Kjellstrom and Phan 2017). Home-based workers will also be majorly impacted by heat waves. Focused group discussions by Mahila Housing SEWA Trust with women home-based workers in 50 urban slums in India, Bangladesh and Nepal, had women reporting up to 30 per cent decline in productivity during summer months due to heat waves (Mahila Housing SEWA Trust 2015). Further, home-based workers are additionally vulnerable due to loss of raw-materials and work place, when homes are inundated during floods and/or destroyed during other major disasters.
- 3. Loss of assets: Women are also bound to lose their limited assets during and after a disaster. For example, in Nepal, women control smaller livestock, which is given to them by their parents to start a new family. It was noted that in the aftermath of the 2015 earthquake, stress-selling of assets to cope with the disaster tended to concentrate on smaller livestock, such as goats and chickens, which were owned and controlled by women. Similarly, in the 2015 Myanmar floods, women lost 80 per cent of all animals killed in the floods, while men lost 20 per cent in terms of buffaloes, cattle and pigs (UN Women 2016). In India, there are many reports which highlight that sale of smaller livestock is the first drought-coping strategy adopted by poorer families. Destruction of domestic buildings during floods also signify not just a loss of home but an end to a home-based livelihood for women. Such practices inevitably erode their livelihoods and ability to cope with future stresses. Many women in South Asia do not use banks but keep hidden cash/jewellery within homes, which could be lost in case of emergency evacuation and/or used to meet the immediate expenses, thereby leading women to further lose their meagre savings. An added limitation is that women also have no insurance or coverage to meet these disaster-related losses, nor are these accounted for in economic loss assessments after a disaster.
- 4. Women are more likely to be in informal sector, with low paid jobs and lack of social security: In most countries, women's access to formal jobs is restricted due to legal, education and social constraints. Even now, only eight of the 190 countries have equal legal rights for women in employment. The rest have laws impeding women's economic opportunities - no factory jobs, working nights, taking permission from husband for work, and others (World Bank 2020a). Women's less access to education and the added burden of domestic responsibilities, child bearing and child care role, coupled with existing gender discrimination further limit their access to higher paid jobs and positions. Globally, there is a 50 per cent gender wage gap (the ratio of the total wage and nonwage income of women to that of men) and only 36 percent of senior private sector's managers and public sector's officials are women (about 2 per cent higher than the figure reported last year) (WEF 2020).
- 5. Existing discrimination in resource rights and access to services further exacerbates gender-based vulnerability: Customary and traditional practices in the patriarchal societies in Asia are a major barrier to women's access to land and resources (water and forest products). Women lack access to land (and other resources available on the land) because they are often sidelined when it comes to inheritance rights to land ownership compared to their male family members. Without land (including farmland), household food security, particularly for women-headed household, will be affected as most rural population in Asia are agrarian. These existing gender discrimination in ownership, control and management of resources especially land, livestock, water and forests, will further exacerbate the impact on the way climate change affects women's and men's livelihoods patterns. To cite a few examples:
 - As there is a competition for scarce land resources, the fact that women lack land titles could mean that they would lose the control of the even small surplus lands that they currently farm.
 - Women generally own small livestock like goats that depend on common grazing lands, which will also become scarce with climate impacts. Poultry is also more likely to be impacted by heat-related mortalities and morbidities.
 - As water becomes scarce, it is more likely to be diverted for industrial use and/or for cash-based agriculture products like cotton, horticulture, and similar crops that contribute more to the country's

gross domestic product (GDP). Women who are engaged in subsistence farming will more likely lose their crops due to lack of water. Women's lack of land titles means that they will also have no say in the irrigation committees that are often linked to titles, especially in South Asia.

- FAO (2015) reports that 25 per cent of the world population 1.6 billion people, mainly indigenous communities, landless and women rely on forests and forest products for their livelihoods.
 Conservation programs that aim at protecting forest areas from deforestation may make it difficult for indigenous women to access the conservation zones to collect the non-timber forest products they are dependent on to provide food security for their families.
- Women often take up home-based work, and hence loss of homes to disasters or displacement due to sea level rise will mean that they not only lose their place of shelter but also their place of work. Further, the raw material and other equipment stored at home are not accounted for in economic losses of a disaster, which mean they will have to bear the burden of these losses.
- Increasing heat will also have a major impact on women's home-based livelihoods. Poor women generally live in small homes, often made of heatconducting materials like asbestos sheets with less or no ventilation especially in slums of India and Bangladesh. As the day temperatures rise, indoor temperatures within these rises manyfold reducing women's productivity by up to 30 per cent (Mahila Housing SEWA Trust 2015).

Lack of access to credit, extension services, and limited mobility due to domestic responsibilities will further mean that poor women will be more vulnerable to droughts, flooding and loss of natural resources due to climate change. Furthermore, women's productive value is more often invisible in national statistics and related policy planning processes. As climate change involves changes in production patterns and livelihood options, women with less control and participation in policy planning will be more affected. Also, women earn lower wages than men, leaving them more vulnerable to changes in working environment due to external factors. The same would also apply to climate change.

Adding to the woes is that decision-making at the household level is often controlled by men. Women are many a times excluded from key decisions like sale of land, house and other assets which have a critical impact on their overall asset ownership. The issues of key immovable resources, especially land and housing rights,

must be brought into the climate debate (Sultana 2018) as it has a profound impact on the vulnerability of women. Furthermore, a lack of understanding of the gender dimensions can impede equitable distribution of recovery assistance. For example, entitlement programs have traditionally favoured men over women, tenants of record, bank-account holders, and perceived heads of households.

GENDER-INTERSECTIONALITIES AND CCDRR

Disaster and the Male Gender - It is not only women who are disproportionately impacted due to gender roles. Cultural expectations in male risk-taking behaviour often put men and boys at greater risk of death and injury during a climate-related disaster. In Vietnam, anecdotal evidence suggests that men are more likely to be killed due to occupational segregation - for example being a fisherman. Men are also more likely to ignore evacuation calls than women. A decline in food security and livelihood opportunities can also cause considerable stress for men and boys, given the socially ascribed expectation that they will provide economically for the household. Added to this is the fact that men are less likely to seek help for stress and mental health issues than women and girls (Masika 2002) which can have severe consequences for them. This can be illustrated by the way in which men are distressed to the point of suicide in India due to agricultural losses leading to an inability to repay loans (Keneddy and King 2014). Men also have specific needs, such as stress, alcohol counselling, or developing the skills to cope with becoming a single parent after disaster. All these point to the contextual nature of gender and the need for gender analysis in CCDRR.

LGBTIQ and Health Concerns – The recent COVID-19 crisis affected the health of millions of people across the globe. These impacts are however likely to be heightened for some of the most vulnerable populations especially lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ) people (Gelder 2020). Their preexisting inequalities are likely to be exacerbated by the pandemic, making it more difficult for these populations to access critical services - including healthcare and social protection. While global or Asia level data, which could have been particularly useful in better understanding the potential negative impacts of the COVID-19 pandemic on sexual and gender minorities, is not available, data from Western Balkans, reported by World Bank, show that only 12 per cent of LGBTIQ people surveyed had forgone necessary medical treatment because of the fear of discrimination by medical providers. In Serbia, earlier research by World Bank (2019a) had also found that only one-third of LGBTIQ respondents rated their health as "very good," compared to 55 per cent of the

general population. Again, transgender people fare much worse, with only 18 per cent rating their health as "very good." The self-assessment of one's health as bad or very bad progressively increases among LGBTIQ people who are materially deprived (11 per cent), severely materially deprived (20 per cent), compared to 5 per cent of the overall LGBTIQ sample. It is important to analyze similar trends in local context as the health risks with climate change are expected to increase over the next decade. Unless action is taken to remove gender discrimination and improve health seeking behaviour of LGBTIQ communities, the health impacts of climate change on these communities would be disproportionately higher.

Climate Change and Elderly – Elderly people are often mentioned as a group at particular risk during heat waves as shown in the 2003 heat wave in Europe as well as other climate-related disasters (Kuzuya 2012). However, they are often absent in climate change adaptation plans as a specific target group. Elderly women are likely to be particularly vulnerable, especially in developing countries where resources are scant and social safety nets are limited or non-existent. Elderly women may also have heavy family and caring responsibilities which cause stress and fatigue while also preventing wider social and economic participation; and their incomes may be low because they can no longer take on paid work. They may also not understand their rights to access community and private sector services, such as local clinics. Even when they are aware of these services, even nominal amounts for clinic visits and drugs may not be affordable. Access is further restricted for older women living in rural areas. who are often unable to travel the long distances to the nearest health facility (WHO 2014b). Older men are also particularly disadvantaged by their tendency to be less tied into social networks than women and therefore unable to seek assistance from within the community when they need it (WHO 2014b).

GENDER INEQUALITIES AMPLIFIED BY CLIMATE CHANGE

Gender Equality is a human right and a very important development objective in itself. Over the last many decades, various actors including the UN and other international bodies, national and local governments as well as civil society organizations have been pursuing the agenda of gender equality. Although there is still a long way to go especially towards full realization of the SDG 5 by 2030, the world is much ahead on gender parity, than where it stood a few decades earlier.

Various studies (GGCA 2016; UNDP 2019; UNDESA 2020) state that climate change will actually push back the progress made towards achieving gender equality over the years. This can happen due to the following reasons:

- 1. Overall, people will be worse off in general; and women with less resources and fall-back options will feel the impact more.
- 2. The impact would be particularly on natural resources land, water, food, energy, health, affecting women and girls' time-use and livelihood patterns. For example, women and girls could end up spending more time fetching water, taking care of the sick and injured and/or undertaking construction tasks after a disaster.
- 3. Increased workloads would mean women have less time available for income-generating activities especially full-time jobs, which provide greater social security (Bradshaw and Linnekar 2014).
- 4. Increased workload for girls could also force them to drop out of schools to help with housework, thereby eliminating the gender parity gains in education made over decades (Davis, et al. 2005; UNDP 2009). This will further increase the gap in employment opportunities for girls as compared to boys.
- 5. Livelihoods are expected to be upset in a way that social norms and networks will be recast expectations of traditional gender roles will resurface. For example, after the 2015 Myanmar floods, rural women who relied on agriculture labour for income were left without alternative livelihoods while men moved out to find work elsewhere (UN Women 2016).
- Reduced education and economic power, coupled with increased economic stress among men as breadwinners, heightened after disasters are likely to increase domestic violence (Masson, et al. 2016).
- 7. Prevalence of other forms of gender-based violence like trafficking and child marriage, elimination of which are so critical to achieve SDG 5, can also escalate. In Bangladesh for example, Human Rights Watch found that disasters are one of eight factors that contribute to child/early marriage (IFRC 2015; Mian and Namasivayam 2017).
- Studies have also pointed at the increased risk of sexual violence for young girls, women and those with other gender identities especially in the aftermath of disasters (Swarup, et al. 2011; Mian and Namasivayam 2017).
- There is also the risk that action for climate change adaptation and disaster management would lead to diversion of government budgetary resources from health, education and other social services which can increase gender discrimination within the country (UNFPA and WEDO 2009a).

More importantly, these actions will not work in isolation but would have a cascading effect and can actually lead to a vicious cycle of gender inequality.

GENDER INEQUALITIES IN CAPACITIES FOR CCDRR AND RB

Not only does climate change impact men and women differently, but their gender-differentiated relative powers, roles and responsibilities also affect their adaptation and resilience capacities. Women and men exhibit different ways of responding to climate change. For instance, women are known to have a higher perception of risk from disasters as compared to men; thus, they tend to heed evacuation warnings more and also spread the information (UNDP and UN Women 2018).

Women are also clear about their needs and priorities; and with traditional knowledge base, have already begun taking action on climate change adaptation. Mitchell, et al. (2007) reports how women from rural communities in the Ganga river basin in Bangladesh, India and Nepal have

shifted cultivation to flood- and drought-resistant crops, or to crops that can be harvested before the flood season, or varieties of rice that will grow high enough to remain above the water when the floods come. In flood-prone areas in Bangladesh, women prepare elevated platforms for family members with disabilities using the chouki (traditional bed) and bamboo. They also preserve fuels, matches, dry food (such as rice, peas, puffed rice, flattened rice and molasses), ropes and medicine at home and prepare portable mud stoves for future use. Women often collect firewood to store in dry places for later use.

The fact does remain though that pre-existing gender inequality and women's lower social positions in many situations does limit their capacity to respond to climate change. The inadequate access of women, especially poor women, to education and information; limited ownership and control over natural resources, land and finances; and restrictions to participation in the governance and decision-making processes hinder their capacities to adapt to climate change.

DISCUSSION POINT



Ask the participants to list examples of how the social position of women and existing gender inequality in their regions hinder women's adaptive capacities.

Facilitator Clues

- > Women and girls are often restricted from participating in local committees for disaster management or climate change adaptation. Even when there is no restriction, they often cannot participate due to time constraints.
- > Women's lack of land ownership often results in them not being able to make decisions related to cropping patterns even though they may want to. FAO, in its brief on Gender-Responsive Approach to Climate Smart Agriculture (Nelson and Huyer 2016), reported that in Kenya, the most rapid adoption of drought-resistant crops was among women whose husbands were away and not making the day-to-day decisions.
- > Women have less access to decision-making spaces and influence than men in shaping policies and prioritizing how climate finance is used. As the need for climate change mitigation and adaptation actions grow, the distribution of related financing will increase as will the potential gap in access to and control over resources between men and women under the prevailing systems and mechanisms. This will further hinder women's adaptive capacities.

Gender Integration in CCDRR and RB

NEED FOR INTEGRATION OF GENDER IN CLIMATE CHANGE AND DRR POLICIES

All policies and measures affect women and men differently, which is why undertaking gender analysis and inclusion of gender dimensions into policy planning is important. Gender integration helps find ways to mitigate possible risks that may exacerbate gender inequality, and highlight opportunities to enhance positive outcomes. In the context of CCDRR, this has multiple implications.

Gender Equality is a human rights issue and a development goal in itself. Climate change will not only heighten gender inequality but also increase violence against women, child marriage and trafficking, all of which are serious offences against human rights (UN Women 2016). A Human Rights-Based Approach (HRBA) demands that protection of these human rights be central to all development, adaptation, risk reduction and resilience building programmes.

Moreover, not taking women and LGBTIQ people along with men into account in CCDRR policies would mean neglecting a large part of the people whose well-being we seek to improve. This would be in direct contravention of the Leave No One Behind (LNOB) approach that most countries have agreed upon as part of the 2030 sustainable development agenda. Women and girls who are still among the most marginalized groups of the society and particularly vulnerable to current and future climate change and disaster risks need to be the key target of the LNOB approach when applied to CCDRR. Application of a gender lens to CCDRR can achieve the desirable results in these contexts.

For example, when Cyclone Sidr hit Bangladesh in 2007, not only had the absolute numbers of people killed fallen to around 3,000 but the gender gap in mortality rates had also shrunk to 5:1. This was possible as between 1991 (when Cyclone Gorky killed thousands) and 2007, Bangladesh had made great strides in hazard monitoring, community preparedness and integrated response efforts as also focused on 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.

Applying the gender lens is not charity for women but, as the World Development Report states, is "smart economics" (World Bank 2012). If all countries were to match the progress toward gender parity of the country in their region with the most rapid improvement on gender inequality, as much as US\$12 trillion could be added to annual global GDP growth in 2025. The World Development Report 2012 framework also encourages a more nuanced and forward-looking inclusive approach to gender and climate change.

In this context, it is also important to understand that gender inequalities and gender roles play a key role in determining the choice of adaptation strategies men and women have in terms of their different needs, strategies and opportunities for adaptation and recovery. Unless women are actively included in CCDRR planning and gender made an integral part of the action, there is bound to be a male bias in the programmes, which could lead to inefficient allocations of scarce resources. Actions that disregard linkages between gender and climate change and fail to identify women as a target group for specific measures may allocate resources inefficiently. For example, the assumption that men are farmers can lead to most agriculture technology trainings being focused on them. Women who actually perform more than half of the agriculture operations will not have access to that information, which can lead to technology mal-adaption (GGCA and UNDP 2016). Similarly, diverting water for cash crops based on men's preference will further increase food insecurity, and affect not only women but the society as a whole. This will also further increase women's reproductive work (time for fetching water), reducing her availability for productive activities, again hampering overall development and poverty eradication goals.

Thus, CCDRR action can reinforce or exacerbate inequalities if it misses the differential needs of the beneficiaries. However, it can also intentionally aim to overcome and transform them while building resilience of all people. Climate change adaptation and DRR policies, plans and projects that do not take women's issues and needs into account may unintentionally exacerbate existing gender inequities. On the other hand, climate action can also be an opportunity to make use of previously underused (and under-recognized) abilities, knowledge and talents. By examining the existing constraints in socio-cultural structures while designing climate change response, long standing gender inequalities can be identified and addressed.

For example:

- Low carbon energy policies, for example, can inflict
 additional costs on women while also reducing
 forest-based livelihood opportunities. However, if
 implemented with pro-poor and gender-responsive
 approach, they also have a high potential to provide
 livelihood and entrepreneur opportunities for women.
- Bio-fuel promotion and similar agriculture technology policies can increase or decrease food production by diversion of land from its current usage.
- Public transport policies can reduce women's time poverty or inflict additional costs on them.
- Prioritization of budget allocation within the health sector for communicable diseases as against reproductive and child health care.
- Forest conservation programmes that restrict indigenous women's access to non-timber forest products that they are dependent on to provide food security and supplementary income for their families.

(mitigation, preparedness, response and recovery) have not been well (Bradshaw and Fordham 2013). 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 (O'Neil, et al., 2014).

Second, it is important that women are also as much informed, prepared and equipped as men, if the adaptation and DRR strategies have to be effectively implemented. Finally, integration of gender in CCDRR action leads in more efficient result. 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 labour force participation (World Bank 2011).

Women and Mitigation Policies

Women and men have different influences on the carbon emission pathways. Women also have a major role to play in mitigation actions. Women being 'homemakers' can be seen as a choice, thereby minimizing their unpaid domestic and care work. They also influence major choices and consumption patterns like usage of cooking fuels, electricity and water, purchase of food products, packaging material, clothing, and others, which will need to be addressed for low-emission development pathways. Similarly, it is mostly women who decide which food products to buy and how to dispose of household waste. The waste management cycle can be made more efficient if men, women, and their children are all informed on how to separate their waste and dispose them at the household and community level.

The argument above makes a case for gender analysis that can be considered for policy context and situational analysis, which should be coupled with the national commitments on Human Rights and Gender Equality, and subsequently integrated into policies and action plans. However, while gender equality matters in its own right, it also matters for effective climate action (World Bank 2011).

Gender is an important dynamic in climate and disaster risk reduction efforts. First, the knowledge, skills and inputs of women are very important for development of context-appropriate adaptation and DRR policies and strategies. While women's vulnerability is almost always assumed, their unique capacities and contributions to adaptation and across the disaster management cycle

DISCUSSION POINT



Ask the participants if they can identify examples to support any of the above aspects.

Facilitator Clues

- Climate change adaptation requires a re-evaluation of regional agricultural practices. Women, having more than 50 pe cent role in agriculture production, hold vast amount of important knowledge that will inform these needed re-evaluations of agricultural practices. Furthermore, representing 43 per cent of the world's agricultural labour force, women will also have a major part to implement the solutions.
- > Women have an important role in disaster response by virtue of their household responsibilities. They foresee risks and take cautionary measures in advance by making portable stoves, stockpiling firewood, storing dry food, conserving water, purchasing essential goods, saving money and building social networks within their communities.
- In La Masica (Honduras), there were no reported fatalities after Hurricane Mitch because a disaster agency had provided gender-sensitive training and involved women and men equally in hazard management activities, and women took over control of the early warning system. This led to a quick evacuation when the hurricane struck (Newman and Stephenson 2010).

The Asian Development Bank, in its training manual on gender and climate change (ADB 2015), sums up the importance of gender-inclusive climate action on four parameters making it more:

- **Effective** because it identifies all relevant target groups and stakeholders.
- **Efficient** because it achieves greater outputs with the allocated resources.
- **Equitable** because it identifies and reduces inequalities.
- Sustainable because it leads to long-term social and economic development.

EXISTING STRATEGIES, GAPS AND CHALLENGES TO GENDER MAINSTREAMING

Recognizing the gender dimensions of CCDR, women's rights agencies like UN Women, the Global Gender and Climate Alliance (GGCA), WEDO, and the like, along with international agencies like UNDP, World Bank, Asian Development Bank, have been making efforts for engendering of climate and disaster action.

This has led the global climate change policy architecture, the UNFCCC, to include gender as an important objective within its agenda as part of various Conference of Parties (COP), and specifically adopting the Lima Work Programme on gender in COP 20 (2014) and the enhanced Gender Action Plan in COP 25 (2019). The Sendai Framework for Disaster Risk Reduction also has a strong gender commitment. Various national governments have also been taking various steps towards engendering domestic CCDRR policies and plans. (These have been discussed in further detail in Module 2 Session A.)

However, a lot still remains to be done. Some of the key gender mainstreaming strategies currently in practice and the gaps and challenges in execution are given below.

1. Policy Measures: There is a growing awareness among national governments and development agencies on the need for gender mainstreaming in climate change and DRR policies and plans. UN Women (2016) reports that there is substantive mention of the word 'gender' in CCDRR laws, policies and strategies. However, the same report also points that 'gender' is largely understood as women and presented as victims of climate change in need of protection measures. Further, despite all this progress, many national governments often do not have gender as a key priority in climate action having to manage multiple cross-cutting issues. Often faced with making difficult choices on allocating scarce resources, these policies remain on paper and are not backed with programmes and budgetary allocations.

Gender Mainstreaming Startegy: CSOs can take a strong lead for promoting gender-inclusive and transformative policy dialogues using the CEDAW commitment in national climate change planning processes. CSOs can also advocate for GRB or Gender-Responsive Budgeting to be adopted in the CCDRR sectors for translation of these policy commitments into budgetary allocation.

2. Institutional Mechanisms: There is a lack of coherence between their national strategies, national CCDDR planning, and international agreements on gender like CEDAW that they have ratified (Otzelberger 2011). One of the major constraints towards this is that national strategies are led by planning and finance ministries, CCDRR plans are with technical ministries like agriculture, water, forest and environment, while gender policies are by social and women's ministries. In most countries, planning, finance and technical ministries have little or no gender understanding; while the social and women's ministries with gender mandates lack knowledge on CCDRR. Unless there are institutional mechanisms in place to bring these ministries together throughout CCDRR policy formulation and implementation, the gender policy prescriptions will not translate into practice. An even more vital gap in institutional mechanisms is the lack of spaces for civil society organizations (CSOs), especially women's groups, to participate in national planning and development processes.

Gender Mainstreaming Startegy: CSOs can support technical ministries in undertaking sectoral gender analysis for CCDRR to enable evidence-based planning. CSOs can also partner with the technical Ministries for capacity building on gender mainstreaming.

3. Gender Analysis and Knowledge Management: A gender-sensitive response requires a much deeper understanding of existing inequalities between women and men, and a contextual analysis of the ways in which climate change can exacerbate these inequalities. For example, while women may die more during floods and storms in Bangladesh due to cultural reasons, men may die more in Vietnam due to occupational reasons. Getting this level of gender analysis requires a high level of gender-disaggregated data collection as well as community participation in risk and vulnerability assessments. Unfortunately, there is lack of both at the community, national and regional

levels, which limits evidence-based gender analysis and planning (UN Women 2016).

The good news is that there is a body of work on gender and climate change that is constantly expanding on the 'directly' climate-sensitive sectors like food security and agriculture, forestry, water, disasters, as well as on social sectors such as health and education. However, the areas where gender dimensions appear less obvious - such as transport and infrastructure, energy access, housing, and formal or informal employment – are far less well explored. Even lesser research is done on emerging complexities brought about by the uncertainties of climate change to gender equality, recasting of gender roles, sexual and gender-based violence, child marriage, among others. It is not surprising thus that UN Women (2016) reports that knowledge generation and management remain key barriers to the meaningful inclusion of gender equality in CCDRR.

Gender Mainstreaming Startegy: A key activity in this regard would be undertaking research especially in sectors where the gender impacts are not directly visible – transport, informal employment, migration, among others. CSOs can publish statistics and knowledge products highlighting gender dimensions within the sector, for raising awareness on need for gender integration and to be a handy document which can be directly used by the Technical Ministries.

4. Gender-responsive governance with women's participation and leadership: The most important element in gender-responsive climate action is the participation and leadership role by the communities themselves, especially women and girls. There is a need for governments to adopt participative processes, especially at local level, so that CCDRR strategies and interventions can truly identify and meet the needs of those they aim to assist. In this way, processes can be forged that respond to local realities while feeding into a broader vision of climate change deceleration. Gender sensitivity and women's participation is also required in all these participatory processes, consultation and decision-making processes related to climate change adaptation. This needs to move beyond just creating spaces for women to be present but to recognize their capacities and the knowledge that they can contribute to such processes. Women specifically need to be involved in identifying and monitoring climate risks, including developing risk and

hazard maps and data, identifying gender-specific aspects of risk and vulnerability and crafting the responses to risk. Women must be fully involved in community level climate action groups/committees, disaster response drills and related activities.

Gender Mainstreaming Startegy: CSOs can strengthen local knowledge base and enable direct participation to capture the ideas and knowledge of men, women and those with other gender identities. Formation and strengthening of women local groups and federations on CCDRR concerns both in rural and urban areas could be vital CSO activities.

Additionally, it is important to empower communities, especially women, to voice their issues and concerns in national CCDRR policies and plans. An easy entry point for this could be increasing the engagement and political influence of CSOs advancing women's rights in national CCDRR platforms and policy making processes. While such CSOs do have a say at regional level, their participation in national decision-making is limited. There is a lack of any institutional mechanisms which could enable effective participation of these CSOs or even the women themselves in the decision-making processes.

Furthermore, there is also a severe under-representation of women in political participation in Asia and around the world. Women still hold only 25 per cent of the global seats of national parliaments (WEF 2020). Promoting gender-responsive governance, and having more women-leaders in electoral and executive positions in government, are necessary if women's voices are to be heard and they are to be included in the planning and implementation of CCDRR initiatives and strategies. This can also be done at the local level to begin with. For example, in India, there is a constitutional provision for ensuring that at least one-third of the elected representatives and leaders in rural and urban local bodies are women.

Gender Mainstreaming Startegy: CSOs can also support women-leaders' participation, especially of those from poor and marginalized sections, in gender-responsive international and national climate negotiations. Identification and training of women-leaders from vulnerable communities to present their issues and concerns directly should be an important CSO activity.

DISCUSSION POINT

Ask the participants what they think would be the key considerations that need to be kept in mind when undertaking gender analysis or enabling women leadership and participation in climate decision-making.

Facilitator Clues

- > It is very important to ensure that gender concerns are not limited to men and women, and that all gender identities are analyzed in the local context while undertaking gender analysis. collecting gender data or enabling gender representation in decision-making. For example, while analyzing sexual violence in the aftermath of a disaster, it should be analyzed across all genders and not limited to women and girls. Gender needs assessment should include assessment of needs of LGBTIQ persons for privacy and separate hygiene facilities. Similarly, the cultural pressures on men to earn or take risk which can increase their stress should also be understood in order to design interventions like alcohol de-addiction counselling after disasters.
- Similarly, other intersectionalities related to age, ethnicity, caste, class or social identities also need to be considered. For example, data on mortality during disasters must include agespecific information to understand if there are any additional concerns of the girl-child, adolescent girls or elderly women. When enabling representation of women in decisionmaking platforms it should not be limited to one group of educated women but include indigenous women, (dis)abled women, women from different occupational categories, rural and urban background.

5. Gender mainstreaming and gender transformative approaches: Mainstreaming gender into policy processes, programmes and projects can help ensure that such processes equitably benefit everyone as envisaged in the human rights-based approach and leave no one behind principles so critical to achieving the SDGs. However, while these measures can advance social policy (including gender equality), they may not always enable a transformative structural change in gender relations. For this, it is important that while gender is integrated in plans and response measures, the focus is not only on addressing vulnerability but exploiting potential opportunities to further advance the goals of gender equality. At the same time, this also calls for the need to move beyond focus only on women but on men and other genders as well while planning and implementing CCDRR programmes.

Gender Mainstreaming Startegy: Advocating for gender mainstreaming in national policies and programmes, CSOs can concentrate on designing and piloting gender transformative projects. Implemented in project mode with strong evaluation components inbuilt, these will have the potential to be adopted by the government for scaling up.

6. Inclusion in plans and response measures: There is an increased recognition that CCDRR plans and response measures should take into account gender-differentiated risks, vulnerabilities and capacities. Unfortunately, in practice, the actual plans and programmes are still pre-dominated by technology and economic solutions, which are considered gender-neutral – even though they are often based on the 'male norm.' For example, when early warnings are provided via mobile phones, it benefits men more than women, not only due to differences in mobile technology access but also the cultural limitations of taking snap decisions. There is still a major need to focus on all response measures to be evaluated on gender outreach and to focus on inclusion of these in CCDRR plans and response measures. Policies and measures that focus solely on gender-specific vulnerability, however, run the risk of victimizing women. Thus, it is important that men, women and people from other gender identities must all be involved directly in planning and implementation processes. Community-based women-led CCDRR programmes should be the key gender mainstreaming approach. Unfortunately, not only are these not yet fully recognized in national policies and programmes but

there is also very limited donor funding available for implementing and scaling up such programmes, which are so important for achieving gender mainstreaming.

Gender Mainstreaming Startegy: CSOs should focus on developing and implementing community-based CCDRR projects which are either women-led, and/or focus on specific vulnerable populations – elderly, (dis)abled, LGBTIQ, indigenous communities, ethnic minorities, migrants/refugees, among others.

7. Addressing Vulnerability versus Exploiting **Opportunities:** Current gender mainstreaming approaches also have a strong focus on women's specific vulnerabilities and favoured intervention that put women at the receiving end of adaptation responses. They have, for a large part, not addressed the gender inequalities underlying these differences in vulnerability, and have lacked consideration of the roles, preferences, needs, knowledge and capacities of men and women, boys and girls at all levels, particularly at the national and regional levels. It is important for countries, CSOs and communities to take a closer look at their structural dimensions of gender inequalities and use climate adaptation programmes as a means to address these. Such 'gender opportunities' refer to the potential of a response to climate change that takes into account the roles, views, ideas, needs and capabilities of men and women to i) promote gender equality; ii) reduce poverty; and iii) contribute to successful climate change adaptation and mitigation strategies (Otzelberger 2011). A critical strategy towards this is to promote diverse livelihoods options for women in order to increase their resilience to hazards and to ensure that risks faced by women are not exacerbated by inappropriate development policies and practices (World Bank 2011).

Gender Mainstreaming Startegy: CSOs can improve the understanding of gendered impacts of climate change within the national and local context and appropriate response strategies through training programmes and workshops on gender and CCDRR. Long-term engagement with existing government training institutes focusing on CCDRR would be even more effective.

- 8. Availability of Climate Finance: Another critical element of gender-responsive climate action is the provision of financial resources. Some strides have been made in creating climate finance mechanisms that are gender-responsive, especially with gender being a component in donor driven investments. However, due to existing economic structures, financial resources to aid in the mitigation and adaptation of climate change are not as likely available to women as to men (World Bank 2011). Budget allocation for CCDRR implementation across scales and sectors should be prioritized for action that addresses gender needs. Furthermore, ensuring participation of women and other genders in decision-making on all aspects of climate-related financing so vital to the efficacy and efficiency, as well as equity, of resources, is still a long way ahead.
- 9. Addressing Sex, Age, Disability Disaggregated Data (SADDD): A cross-cutting area of concern across all the above is the limited availability of SADDD across all sectors related to climate change and especially during disasters. The risk from disasters is often exacerbated due to differences in male and female vulnerability, sexual orientation, age, (dis)ability, race, ethnicity, and others (GFDRR n.d.). Unfortunately, most disaster assessments do not focus on undertaking disaggregated assessments, with more than 90 per cent of the countries reporting to the Hyogo Framework Agreement not collecting SADDD (UNDRR 2015). Unless data are available to assess the differential vulnerabilities across these social dimensions, enabling gender and intersectionality responsive policies and programmes would always remain a challenge.

Gender Mainstreaming Startegy: Creating gender and climate change tools covering entire programme cycle with specific focus on monitoring and reporting.

10. Focus on men and other gender identities: Finally, it is important to note that a gendered approach to climate change should not simply be about women. Men and boys and those with other gender identities are also vulnerable to the impacts of climate change but often in different ways, and these need to be identified and communicated. Unfortunately, as reported in UN Women (2016), current climate policies still tend to equate 'gender' with 'women.'

CAPACITIES FOR GENDER MAINSTREAMING

Efforts of various agencies over the years have seen an increased level of awareness, policy commitments and implementation of pilot projects for addressing gender concerns. There have even been some very innovative women-led programmes being undertaken with support from multi-lateral agencies and donors. However, most of these, while having plans for scale, are not scaled up mainly due to lack of capacities at the national level. As mentioned earlier, most technical ministries have little or no gender understanding, and therefore lack the capacities for systematic integration of gender in CCDRR work. Thus, even when a gender mandate exists, it is often not connected to actual practice. There is often a gender disconnect in project and programme cycles between relatively strong gender analysis in the conceptual basis and planning of projects on the one hand, and the much weaker integration of gender perspectives into implementation, monitoring and evaluation of CCDRR initiatives on the other. One of the biggest challenges for gender mainstreaming is building capacities of technical ministries for gender integration and mainstreaming in policies and programmes related to CCDRR.

WOMEN AS EQUAL PARTNERS AND ACTORS IN CLIMATE ACTION

Women can be powerful agents of change for climate action. Unfortunately, this potential remains untapped due to lack of gender integration in climate change action planning and more importantly due to lack of spaces for women to participate in planning and decision-making or take lead in implementation of climate actions. Women can be important agents of change; all climate actions, especially at national and local levels, involve women as equal partners and actors. They just need to be empowered to benefit from the resilience efforts.

There are countless examples where empowering women to exercise leadership within their communities contributes to climate resilience. It is important to know and learn from these stories of women change agents. Women can play a critical role in disaster preparedness. For example, when the water level rises, some women move to the nearest high locations and make temporary shelters to ensure their safety and that of their families. Others find refuge in the houses of relatives or friends on higher ground. Those who have the necessary resources increase the plinth level of their houses or their homestead. To protect their assets

and livelihoods, women try to store seeds in high places before floods come, which allows them to replant quickly after the floods have receded. Livestock is sometimes taken to higher ground, but safe places for cattle are often hard to find. Women also adapt their agricultural patterns, including intensifying efforts in homestead production and seeking non-farm production options. Some female farmers have switched to cultivating crops that can be harvested before the flood season, or to varieties of rice that grow high enough to remain above water when the floods arrive.

Most discussions on gender in the context of climate change has focused on exploring and highlighting the particular vulnerabilities of women to climate change impacts due to their gender roles and responsibilities. However, because of these very roles and their ensuing dependence on natural resources, women often have a unique understanding of their natural environment. Studies reveal that women express greater concern about climaticinduced calamities than men do about environmental problems. Therefore, women can play a very constructive role in environmental conservation, something that was often overlooked. In many South and South-East Asian countries - India, Nepal, Philippines - indigenous women play significant roles in sustaining and managing forests, which are critical for climate change mitigation, adaptation and disaster mitigation.

Women are also at the forefront of fighting climate change and helping their communities adapt to environmental changes. There is also enough evidence showing increase in community resilience where women are empowered to create institutional platforms that expand their own, their families' and their communities' endowments, agency and opportunities. Such empowerment opportunities can serve as a powerful springboard for building climate resilience.

In Vietnam, women – through the Vietnam Women's Union – plan and organize information sessions for other women at the commune level. They perform plays on DRR and disease prevention, and organize awareness-raising activities in their community. Women also play a critical role in fortifying their homes against storms. In Cambodia, women reported that in time of droughts, they borrow money from women's savings groups, which they give to their sons so that they can find work in the capital, Phnom Penh, or on farm plantations. However, what is also important is to explore how these collectives can become platforms for livelihood promotion of women.