Loss & Damage

LOSS AND DAMAGE IN A WARMER WORLD: WHITHER GENDER MATTERS?

Gender perspectives on the Loss and Damage debate

SHARMIND NEELORMI and AHSAN UDDIN AHMED

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CDKN
ICCCAD International Centre for Climate Change and Development
GERMANWATCH
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UNITED NATIONS UNIVERSITY
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Summary

- While greenhouse gas emission has been continuing unabated, a deliberate delay in taking firm mitigation action till 2020 ensures that the vulnerable Least Developed Countries, Small Island Developing States and African Countries will have to deal with unavoidable residual impacts of climate change that will result in loss and damage to men and women. Since impacts of climate change give rise to differential implications for women – owing to societal norms, practices as well as gender-based different roles and responsibilities – they will be subject to loss and damage burden which are somewhat different than those likely to be faced by males. The cost of loss and damage due to climate variability and change is generally estimated in terms of lost GDP. Market-centric approaches grossly fail to integrate gender concerns. Going beyond market centric assessment and approaches, the continuum of L&D discourse must acknowledge the sphere of non-market activities and find ways to address those giving due emphasis on differential needs and priorities of women and men in a given society. In L&D discourse, therefore, gender issues matter.

- An analysis of gender-differentiated vulnerability of women in vulnerable countries and the plight of women in the current social, economic and political contexts under loss and damage deserves special care and profound understanding. The negotiators on Loss and Damage must pay immediate attention to fill in the gap in understanding. In elaborating further work on L&D, through both a continuation of the work programme and further steps towards a concerted global response on L&D, the following important aspects should be considered by COP: (a) recognize gender-differentiated L&D and prioritize specific needs of women, (b) provide clear understanding on shifting timelines for 'peaking' and 'emission targets' and consequent L&D needs focusing on women, (c) provide clear understanding on 'deficits' in adaptation (for delayed actions) and adaptation financing and consequent L&D needs focusing on women, (d) include mechanisms towards carrying out assessments of gender-differentiated vulnerability and adaptation needs in LDCs, SIDS, and Vulnerable African Countries, and (e) create immediate and urgent actions involving communities and in particular, vulnerable women. It is recommended that there should be ensured participation from women and gender constituency in emerging international institutional architecture on L&D.

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1. Introduction

Climate change is increasingly becoming a reality, especially in vulnerable Least Developed Countries (LDC), Small Island Developing States (SIDS), and African Countries (AFC). Early manifestations are experienced by communities in many places, again their major impacts are adversely affecting lives and livelihoods of women and men, and their relationship within the household, community and society in those countries.

Despite weak economic ability and competing requirements for investing in essential socio-economic sectors such as poverty eradication, health, education, etc., LDCs, SIDS and vulnerable AFCs are showing utmost eagerness to take measures to promote adaptation, even by diverting finance away from development towards building resilience through adaptation. Having predominant focus on trivial post-hazard management of humanitarian call, many of these countries have also taken pro-active measures to integrate adaptation in development processes.

However, the decision at COP17 (1/CP.17) essentially confirmed a delay for 'early actions' for arresting emissions of greenhouse gases – the latter being the root cause of climate change and associated impacts. Any treaty-driven early action is pushed till 2020, committing to a 4 to 6˚C warmer world by 2100 and to much higher levels of adaptation requirement across the globe. Meanwhile, the weakening of the Kyoto Protocol (KP) through the cessation of Annex-1 Parties such as Canada, non-willingness to continue in the second commitment period (such as Japan) and continued avoidance of historical responsibility by USA has essentially crippled the KP in its second commitment period, thereby further exacerbating the associated risks and needs for adaptation. It is understood that, even if planned adaptation is conceived early and began to implement with the assistance of Green Climate Fund (GCF) and other windows of funding opportunities between now and 2020, many LDCs, SIDS and AFCs will have to deal with residual impacts of climate change. The residual impacts despite early adaptations will give rise to unavoidable 'Loss and Damage (L&D)' – the inevitable that the said vulnerable countries along with their affected population including women will have to suffer from.

Though the UNFCCC process mentioned L&D in a number of occasions, its initial understanding came along a COP decision (1/CP16), which emphasized towards establishing a "… work programme in order to consider approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change." Following the Cancun decision, the concept gained a momentum through another COP decision which asked the Subsidiary Body on Implementation (SBI) in COP17 to provide an outline of the organization of the work programme (i.e., L&DWP) into three thematic areas as follows:

1. "Assessing the risk of loss and damage associated with the adverse effects of climate change and the current knowledge on the same

2. A range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow-onset events, taking into consideration experience at all levels

3. The role of the Convention in enhancing the implementation of approaches to address loss and damage associated with the adverse effects of climate change."

Recommendations on L&D from the SBI are due at COP18 in Doha, Qatar. As part of the global effort to bring clarity in common understanding on the important issue, there have been four regional expert consultations that took place over the past few months. Experts have been trying to shed lights on the important issue and a few publications have emerged for promoting the discourse on L&D. However, the current discourse on L&D does not give adequate considerations to gender concerns that are deemed extremely important towards understanding residual climate impacts beyond adaptation and resulting differential L&D needs for vulnerable women, communities and countries.

In absence of any noteworthy literature on Gender and Loss and Damage, this brief article attempts to highlight the rationale for having a

complementary discourse, provide a few case studies and put forward a few recommendations for the global community to consider while they elaborate on L&D through the UNFCCC regime.

2. Whither Gender Matters in the Discourse of Loss and Damage?

Gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed (UN Women, 2012). This means that they are constructed or produced by society and as such can be modified or changed.

By definition, Loss and Damage (L&D) is dependent upon residual impact caused by climate change, which is a function of the exposure that causes climate change to occur (i.e., the GHG forcing), the sensitivity of affected community or country to the consequences of the exposure, and adaptive capacity of the community or country to withstand consequence of the exposure despite adaptation. Since L&D is all about residual impacts, putting human beings at the centre of attention, a discourse on L&D must revolve around both men and women and their relationship – as these central elements of human system interplay with initial impacts of climate change, adaptation to climate change as well as 'residual impacts of climate change' beyond adaptation. Gender therefore constitutes a primary element in the discourse of L&D.

The cost of loss and damage due to climate variability and change is generally estimated in terms of lost GDP. Market-centric approaches and solutions of climate change value only market goods and services that could "be brought directly or indirectly into relation with the measuring-rod of money" (Pigou, 1920). There are of course some objections to this neoclassical market-centrism and Keynesian school of economics. The feminist challenge to the measure of the economy springs originally from the fact that the production boundary excludes, and thus renders invisible, much of the work and production done in the households and subsistence production – the latter cases are often the realities in LDCs, SIDS and vulnerable African Countries. Because the goods and services produced there do not find their way into the market they are not included in contemporary national accounts, a fact of particular concern for feminists because the majority of work in those spheres is done by women.

Gendered divisions of labour often result in the over-representation of women in agriculture and informal sector, which is vulnerable to climate change /variability. Lack of access to clean water, safe sanitation, health and energy sources often put extra burdens on women's shoulders, adding to their reproductive and care giving tasks (Enarson, 2000). Therefore when a slow or sudden onset disaster strikes, this adds to the double burden of productive and reproductive labour (Patt et al, 2007). Going beyond market centric assessment and approaches, the continuum of L&D discourse must acknowledge the sphere of non-market activities and find ways to address those giving due emphasis on differential needs and priorities of women and men in a given society. In L&D discourse, therefore, gender issues matter.

Although there have been attempts to establish the fact that hazard & disaster responses are generally gender blind, which often disregard special needs and abilities of women in various stages of disaster, impacts of disasters are not so gender blind. In many societies, vulnerability to climate change and extreme weather events differs for women and men. In many cases, but not always, women are more vulnerable than men to climate change/ variability and especially in time of disasters through their socially constructed roles and responsibilities (Dankelman, 2010), and because they lack adequate power and assets (Mitchell et al, 2007). With climate induced disasters unfolding, the interplay of traditional gender relations often exacerbate existing inequalities, leaving women even more vulnerable to subsequent disasters (Hoffman, 1998) and hardships.

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It is the socially constructed gender-specific vulnerability of women and men that leads to the relatively higher female disaster mortality rates compared to those of men (Neumayer and Plumper, 2007). Since the overall impact of a climate driven hazard is a function of availability of and access to various capitals (human, natural, financial, physical and social) to deal with the hazard, women's relatively lesser control over such capitals often tend to increase their vulnerability compared to men from the same exposure of hazard.

The gendered analysis of various capitals which allow human beings to withstand a hazard is summarized below:

- Women have lesser access to financial capital, which constrain their ability to invest in measures that might have reduced their sensitivity to hazard impacts; lack of financial ability might severely reduce women's ability to consider preparedness in a bid to avoid higher levels of damage and losses during a climate induced disaster;

- Women often have lesser human capital due to poor access to enhance skills, poor prior knowledge about an impending hazard due to reduced access to early warning messages and restrictions imposed by cultural and religious practices; lack of skills restricts their opportunity to maintain income streams if their main economic activities somehow are devastated by adverse impacts of climate driven hazards;

- Women's physical capital on an individual level is severely constrained by causes compounded by social norms and cultural practices, which in turn reduce their opportunity to fight back during an exposure to hazard; lack of physical capital even can constrain their ability to take advantage of support such as relief provided by the society around them, which often lingers periods of sufferings and extends loss burden;
- Women's access to natural capital is again severely constrained by societal norms, religious impositions, cultural practices – especially in any patriarchal society, leaving little room for them to take equal advantage compared to their male partners sharing the same ecological endowment and to meet their during-disaster survival as well as post-disaster livelihoods needs; and

- Women have little or, in most cases, no participation in constructing formal social capital, including decision making processes, policies, and institutions, which deprive them when they require active support from social capital. In contrast, women have much larger influence in building informal social capital, which immensely help the entire society, males included, towards addressing the aftermath of any climate-induced disaster.

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Under the prevailing social, economic, political and cultural circumstances in the vulnerable countries in a warmer world, women's and men's responses to these crisis situations, as well as their abilities to cope with them to a very large extent reflect their status, roles and positions in the society. The fewer the control over the above capitals, the lesser the chance to succeed in overcoming climate induced adverse effects on livelihoods or towards maintaining a healthy social life. Because of gender based inequalities, girls and women are typically at higher risk than boys and men (UN, 2004; Enarson, 2002; Chew and Ramadas, 2004).

Women's food insecurity in many impoverished communities offers a classical case, which is inherently different than that for males and children due to disparity in intra-household food distribution (i.e., allocation) and intake, often exhibited as a consequence of climate induced loss of production and resultant food shortage. The direct loss of nutrition is not necessarily the only 'loss', such losses have far reaching implications, even influencing inter-generational health concerns if the females suffer such food insecurity during their pregnancies. The minimum is the immediate damage to health of the food unsecured females, which might lead to higher health costs or social costs due to their inability to perform in household chores.

Direct health effects are also prominent for women, especially when they are socially dictated to uphold certain specific responsibilities even during a devastating climate driven hazard. For example, where salinity intrusion is a reality as a consequence of sea level rise and/or low river flow, women are forced to undertake drudgery to collect non-saline drinking water (Ahmed, 2008b) and they consume lesser quantity of water per day just to avoid repeated drudgery more than once a day – which adversely affect their health including reproductive health. Similarly, being engaged in household chores in saline water logging condition and exposed to high salinity, a large proportion of women are subject to skin ailments and infections in their reproductive organs, while their respective husbands might be working away from water logging conditions for months (Ahmed et al., 2007a). Those of whom avoid drudgery and continue to drink saline water from nearby sources, they suffer from high blood pressure, while mothers to be suffer from higher than normal miscarriages.

Food insecurity and damage to health affect human capital for the women, which in turn affect their overall productivity. In addition, climate induced high intensity hazards often diminishes their sense of security, especially if the dwelling unit is somehow demolished (in case of cyclone) or devastated (in case of flood and high rainfall induced landslide). Forced relocation to places under open air often adds to their agony, affect their psyche as they become easy victims of social vices (such as sexual harassment, even rape). Destruction of home often is considered as a sign of ill-fate that brings socially derogatory treatments by fellow lucky women, even though the sufferer has not been particularly affected by social vices. In such cases, the sense of dignity is also severely 'damaged'.

A Gender approach is therefore important to identify men's and women's differing vulnerability to crisis as well as different capacities and coping strategies in order to design effective disaster management program.

Photo: Golam Rabbani 1

Since L&D, by the decision s of COP (1\CP.16 and 1\CP.17), is a concern for vulnerable developing countries including the Least Developed Countries (LDCs), the Small Island Developing Countries (SIDS) and African Countries (VACs), and women are likely to be the worst victims, due to their lesser access to all the impact-modifying capitals they surely deserve the greatest space in the discourse of L&D. There is no denying the fact that women's plight under climate change would be the most striking and the residual adverse impacts would be both immediate and far reaching for affected women across these vulnerable countries.

Each of the above mechanisms to cause damage and incur loss, sometimes irreparable, is observed through real life experiences in LDCs, SIDS and Vulnerable African Countries. In a bid to illustrate a few examples, three case studies are presented below, which depict L&D issues as experienced by women in their locally relevant vulnerability contexts.

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3. Case Study: Loss and Damage faced by Indigenous People in Columbia

Columbia is a mountainous country in the Central America, which also shares part of the Amazon rainforests. Its diverse ecosystems largely depend on altitudinal variation of climate system, marked distinctly by ice peaks in the Andes, springs in the high mountain regions, freshwater rivers, lush green valleys, coasts, deserts, and dense rainforest vegetation. Out of a total of 41.4 million population, 1.4 million (about 3.5%) are indigenous (DANE, 2009). There are reportedly 87 different indigenous cultures/people and 64 different languages. The majority of the indigenous people in Columbia live in rural areas.

The indigenous populations have subsistence-based economies which are generally self-sustaining. Agriculture, fishery, pasturage, hunting, gathering and horticulture are among the major economic activities providing livelihoods. Women in most cases are involved in domestic wellbeing and reproductive activities, which also requires them to grow food in small plots (*chagras*), preparation and distribution of food, and food conservation. In addition, a large number of indigenous women depend on mobility and access to urban areas for exchanging, selling and purchasing commodities to maintain their livelihoods. Not only the women contribute to management (including conservation) of environment and ecosystem around them, they are the repository as well as disseminators of indigenous knowledge regarding well-being of human as well as environmental systems (Tovar-Restrepo, 2010).

These women are destined to face the brunt of adverse impacts of climate change. While rising temperature itself is considered to be an issue of concern, there are projections of lesser rainfall in some parts and floods in the other parts, prolonged droughts, landslides in hilly terrains, and desertification under climate change (Tovar-Restrepo, 2010).

The early projections reveal that, with an increase of temperature between 2 to 4C, traditional agricultural systems involving rotational agriculture, hunting practices and high mountain livestock rearing (in the Andean and Caribbean region) would be adversely affected, contributing to lesser family income and food insecurity (UNDP, 2009).

Women in various indigenous groups will have to suffer from malnutrition related health problems. In Amazon region, the rise in temperature would modify forest flora and fauna, could even destroy a few, resulting into loss of livelihoods of indigenous women. There would be higher disease burden involving malaria and dengue fever. As provider of household well-being including health care of family members, women will have to face such challenges in the affected areas.

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In the Andes, up to 30% reduction of rainfall is projected which would reduce flow from natural water springs (UNDP, 2009). A dam has already been taken away critically important resource from the indigenous groups, which will be compounded further by the drying up of springs in a mountainous terrain. This will severely affect natural irrigation potential and thereby affect crop production. Women of Arhuaco, Kogi and Kankuamo people in the Andean Columbia will face hardship.

In the high altitude ecosystems prolonged drought is likely to occur. It is projected that about 75% of upland plateaus and 95% snow peaks are under risk of extinction (UNDP, 2009). The environment which has been known to support livelihoods of the indigenous people in those areas will no longer be as productive. Rivers, forests and water bodies (lagoons) located in high altitudes will be severely affected, which in turn will have negative impacts on crops, plants and species upon which the indigenous people base their livelihoods. For example, Pastos women from Nariño (in southwestern Columbia) will face negative implications in potato production at altitudes above 2,950 meters (Tovar-Restrepo, 2010).

Columbian indigenous people will also face more frequent and severe natural hazards such as

floods, landslides, and desertification. Women will face the brunt of such changes owing to physical isolation, lack of alternatives and resources to face the hazards, lack of early warning system, reduced opportunities to diversify economic activities, inadequate disaster preparedness, lack of health services, etc. (UNDP, 2009; De Chavez and Tauli-Corpuz, 2009).

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On top, indigenous women in Columbia have been facing armed conflicts, which often push them beyond tipping point to accept otherwise unacceptable living and livelihood conditions. Climate change will add an extra layer of difficulties. In a multiple hazard environment and given the diversified terrain involving extreme altitudinal variabilities, an early adaptation could have reduced the plight of the indigenous Women of Columbia. However, the slowdown in the progress in international climate regime has guaranteed that there will be significant loss and damage in the form of inevitable resultant impacts beyond adaptation.

4. Case Study: Gender Related Issues of L&D in Mozambique

Mozambique has been affected by droughts and strong winds that are believed to be climate induced, in addition to continued environmental degradation. As a consequence of such increased incidence of hazards, men and women representing Magondzwene and Mapai-Ngale communities are required to spend more time in agricultural activities to ensure same or even lower level of production than they used to obtain.

Men are migrating and a new trend of migration has emerged due to such climate induced phenomena (Pendleton et al., 2006). As a consequence of migration of household-heads (i.e., men), in one hand the members of the household including women are able to rely less on natural resources that offer them livelihoods and on the other the migrating men contribute little to family welfare. The latter in turn increase workload of the women and other household members including children. The results of such changes are manifested in 60 and 27% households becoming de facto women headed households in Mapai-Ngale and Magondzwene communities, respectively. Not only the women are supposed to assume traditional productive and reproductive roles, they are now forced to render services that have been the traditional roles of men in their communities.
Such shifting roles of women, triggered by climate induced phenomena and subsequent out-migration of males in the households, forced them to find employment in brewery and selling alcoholic beverage for the Mapai-Ngale community and engaging in fisheries in Magondzwene community. Women from both the communities explained how such shifting roles have took away their time that would have been dedicated to maintain usual household chores and ensure well-being of the family members.

Due to both environmental degradation and drought, availability of water has become limited that requires drudgery. With increasing drudgery to longer distances, women of both the communities need extra time, taking away quality time to be spent with their offspring – let alone having an opportunity to lay back and rest (Rebeiro and Chauque, 2010).

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Forest production has declined in both the communities due to drought. In the past, mango and cashew were the common fruits in Mangondzwene community, supplying important nutrition for the inhabitants. Now fruit productivity has gone down due to lack of soil moisture. In the forest, it used to be a women's role to collect fruits and roots as well as firewood. With declined productivity of forest products, women's burden and work load has increased substantially. With declining forest productivity, women are required to venture longer distances for collecting good charcoal making wood.
The alternative employment opportunities in the form of brewing alcoholic beverages and selling it do not come without a hassle either. Women engaged in such activities are also subject to drinking-related problems such as violence, diseases and promiscuity (Rebeiro and Chauque, 2010).

5. Case Study: Gender Dimensions of Loss and Damage in Bangladesh

Bangladesh is a low lying deltaic country located in South Asia. Its landmass occupy only about 7% of the combined catchment areas of Ganges-Brahmaputra-Meghna (GBM) river system, while the rivers generally drain over 92% of flow generated from a catchment area of over 1.75 million km^2 – that too in four months (June to September). As a result, the landmass often faces flooding (Ahmad et al., 1994). In sharp contrast to monsoon season, there is hardly any rainfall during the prolonged dry season (November to April) which gives rise to moisture stress and phonological drought (Karim et al., 1990). The lack of rainfall also induces low flow in rivers, which in turn gives rise to salinity ingress along the coastal river systems (Ahmed, 2006). The coastal areas are prone to cyclonic activities (Ali, 1999). Since a significantly large part of the deltaic land is within 10 meters from the mean sea level, cyclone driven surges inundate such low lying lands and cause deaths of human beings and destruction of dwelling, infrastructure and livelihoods of coastal population (Agrawala et al., 2003). A large population confined within a small landmass and proneness to natural hazards such as flood, drought, river erosion, salinity ingress and cyclonic storm surge make Bangladesh one of the worst affected countries under climate variability and change (World Bank, 2000).

Photo: Golam Rabbani 2

The constitution of Bangladesh grants equal rights to women and men in all spheres of public life and has been supplemented by a number of Acts and Ordinances to safeguard women's equal rights. In practice, patriarchy controls women's spheres in Bangladesh, however, gender relations have been undergoing a process of considerable transformation over the last three decades as part of broader process of economic transition and social change (Halim 2001, World Bank, 2008). Available statistics on health, nutrition, education, employment and political participation bear witnesses of continuing struggle to achieve equality (Asaduzzaman et al., 2007, Neelormi, 2010).

Women's experience and interests in Bangladesh is strongly differentiated by their class position, poor women being more marginalized (Neelormi, 2010). Whilst poverty rates in Bangladesh have decreased in recent years, vulnerability to poverty continues to have concrete gender dimensions. Women are not necessarily excluded from public spaces, or from the exercise of public power. But they can only operate in these spheres by remaining within cultural norms of femininity. The movement of women into male space (e.g. through increasing participation in agricultural labour) may therefore not be experienced as a liberation; women themselves may be reluctant, but are pushed into these spaces by sheer necessity, often encouraged by men around them. Women producers are disadvantaged economically by their brokered access to markets through males (Hamid, 1989), and their inability to participate in local political, social and legal institutions (Kabeer, 1991). Significant disparities in employment and wage rates persist which, combined with considerable gaps in asset ownership, seriously limit women's economic opportunities (Mahmud, 2003). They are also more subject to physical insecurity and violence.

Bangladeshi women are lagging far behind their male counterparts under the prevailing social and economic circumstances. Women's responses to known hazards and crisis situations, as well as their abilities to cope with them vary widely, and to a very large extent it depends on status, roles and positions of individual woman in the society. Neither impacts nor responses are homogenous across a given society. Because of gender based inequalities, girls and women in Bangladesh are typically at higher risk than boys and men (Ahmed et al., 2007b).

Bangladesh has been keen to address climate change related vulnerability, which is manifested in the pronouncement of Bangladesh Climate Change Strategy and Action Plan (BCCSAP) and allocating own finances in the order of US$100 million per year in all fiscal years starting from 2009-2010 and investing on an average about 18% of its social safety net allocation of about US$4 Billion per annum. The government of Bangladesh has initiated a process to integrate adaptation concerns towards designing every development project under its annual development programme so that adaptation concerns are mainstreamed into development activities (PC, 2011). NGOs have been keen on designing and implementing adaptation responses targeting at the grassroots to enhance resilience of communities (Ahmed, 2010).

Despite such on-going adaptation activities, there are apprehensions that the country would not be able to avoid large scale loss and damage (L&D) due to high susceptibility to extreme weather events induced by climate change. As explained above, a significant proportion of 'L&D cost' will have to be borne by women because of very high gender differentiated vulnerability and limited scope of integration of gender-specific adaptation in mainstream adaptation activities.

The current L&D issues for women that manifest through their relations with males and social constructs (norms, cultural and religious practices and institutional approaches, etc.) in Bangladesh are experienced in the following modalities.

Despite such on-going adaptation activities, there are apprehensions that Bangladesh would not be able to avoid large scale loss and damage (L&D) due to high susceptibility to extreme weather events induced by climate change. A significant proportion of 'L&D cost' will have to be borne by women because of very high gender differentiated vulnerability and limited scope of integration of gender-specific adaptation in mainstream adaptation activities.

Women possess little financial capital, while their access to financial capital has been negligible to low (Rahman and Sen, 1993; World Bank, 2012), which is why their ability to take necessary hazard-reducing as well as stress avoiding measures are much lower than those for men. Lack of access to financial capital diminishes their ability to consider important pre-hazard preparatory measures which might have reduced their particular sensitivity to imminent hazards (especially those which are well known and follow certain periodicity such as flood, drought, etc.).

Women's access to productive natural capital in Bangladesh is low and severely restricted, especially for those of whom who are poor and marginalized (Action Aid, 2010). In a male dominated society, while it is difficult for a poor man to have access to fishing grounds or use *khas* land to produce food, women generally find it impossible to gain access to such resources that are vital for their livelihoods and food security (Unnayan Onneshan, 2007; Inter-Corporation, 2008). In addition, when family owned productive resources lose productivity due to climate induced hazards or extreme weather events, those further restrict women's ability to adapt, resulting in increasing cost of L&D.

Owing to inequity in intra-household food distribution and subsequent poor nutrition, women in Bangladesh possess physical ability (i.e., human capital) lower than that for males, which restricts their access to post-hazard support that are vital towards stimulating post-hazard rehabilitation processes. Moreover, women's lower level of skills does not provide for opportunities to diversify economic activities (Hamid, 1989; Mahmud, 2003), restricting access to income and investment for adaptation. This in turn increase damage burden.

Photo: Golam Rabbani 3

Poor human capital of women again interplays with lesser exposure to and understanding of early warning system, due to limited education and restricted access to information sources as a consequence of patriarchal norms and practices,

which eventually reduces women's ability to take necessary safety measures and increases vulnerability to extreme events (Ahmed et al., 2007b).

Poor human capital of women again interplays with lesser exposure to and understanding of early warning system, due to limited education and restricted access to information sources as a consequence of patriarchal norms and practices, which eventually reduces women's ability to take necessary safety measures and increases vulnerability to extreme events.

While it is argued that social capital often comes to rescue people from disastrous situations, weaknesses in social capital in specific cases involving women put them in greater vulnerability. For example, early warning system often does not reach women in time. Moreover, they are overburdened to ensure safety of children and elderly members of the respective households and they are required to safeguard other household assets including livestock and poultry, which make them more vulnerable than men (Ahmed et al., 2007b). Such incidences in turn result into increased death toll for women compared to that for men.

Inadequacies in physical capital in some specific cases affect women more than men. For example, the design of the cyclone shelters was found to be insensitive to women's particular needs, which acted as barriers for women not to relocate there even after receiving early warnings (Ahmed et al., 2007). Such issues have been resulted into higher death related losses and injuries involving women along the coastal areas of Bangladesh.

During an embankment failure if the area is inundated with saline water, prolonged exposure to saline water develops skin ailments, while lack of freshwater for drinking in salinity affected areas develops increased blood pressure among women in pregnancy. Cases of miscarriages and abortion are also reportedly common in severely saline affected areas.

Women in rural Bangladesh do have a few burdens on top of household chores: collection of safe drinking water and fuel for cooking. During prolonged event such as flood, women's plight increases, as they are required to go far distances to collect non-contaminated water and to collect dry biomass (if adequate amount is not stored within the household) (Ninno et al., 2001). During an embankment failure if the area is inundated with saline water, prolonged exposure to saline water develops skin ailments (Ahmed et al., 2007a), while lack of freshwater for drinking in salinity affected areas develops increased blood pressure (Ahmed, 2008; Huq, 2010) among women in pregnancy. Cases of miscarriages and abortion are also reportedly common in severely saline affected areas (Ahmed, 2008).

During hazards when dwelling units are severely damaged or destructed (in cases of flash flood, huge waves - *afal*, river erosion and cyclone), women become much more vulnerable compared to affected males. In such cases, women's sense of security also gets shattered. They are often forced to live under open sky, where they become subject to social vices (Ahmed et al., 2007, Ahmed et al., 2012). Such incidences leave profound scars to the psyche of affected women and also damage their sense of dignity in their respective social setting.

Photo: Golam Rabbani 4

The most distinct damage faced by the women in Bangladesh is perhaps nutritional erosion due to food insecurity. Occasional food insecurity occurs when food production is affected by hazards such as flood and flash flood, drought, salinity ingress, saline water surge following a cyclone and water logging (Karim, 1996; Habibullah et al., 1998; Ahmed, 2006). In case of food insecurity, women tend to take extraordinary measures such as eating less, resorting to poor quality food items or cheaper food and quitting meals (Ahmed et al., 2007b; Ahmed et al., 2012). This in turn adversely affects their nourishment and overall health

condition. The latter is a long-term damage caused by climate variability and change related hazards in subsistence based poor agricultural households.

The most distinct damage faced by the women in Bangladesh is perhaps nutritional erosion due to food insecurity. Occasional food insecurity occurs when food production is affected by hazards such as flood and flash flood, drought, salinity ingress, saline water surge following a cyclone and water logging.

It is inferred that there are a number of issues which relate gender differentiated loss and damage costs in relation to climate change in Bangladesh. Intriguingly, some of the issues may not be suitable towards estimating tangible costs. Nonetheless, gender specific L&D issues do exist and those need to be highlighted towards developing programmes related to L&D.

6. RECOMMENDATIONS

Almost half the global population is women and more than half the poor in LDCs, SIDS, and the Vulnerable African countries are represented by women. Therefore, an analysis of gender-differentiated vulnerability of women in those countries and the plight of women in the current social, economic and political contexts under loss and damage deserves special care and profound understanding. In the current state of understanding, unfortunately, gender-oriented views and compassionate approaches seems largely overlooked. The negotiators on Loss and Damage must pay immediate attention to fill in the gap in understanding.

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It should be kept in mind that reckless consumption of fossil fuels, particularly in the Annex-1 countries, is the root cause of climate change and the primary modality to address the issue should begin with reduction of emissions of greenhouse gases in Annex-1 countries. A greater effort to reduce GHG emissions would drastically reduce costs of both adaptation as well as L&D globally. Therefore, developed Country Parties (Annex-1) should pay respect to UNFCCC objectives, commit to the Second Commitment Period of the Kyoto Protocol and the ambitious emission reduction targets to arrest warming within 2℃. By respecting the call of Durban Platform, the rapidly industrialized and high emitting developing countries should also commit to emission reduction targets to achieve the shared goal. All the Parties should recognize that any delay in committing to the precautionary principle of the

UNFCCC and to the 2℃ goal would increase the L&D burden on the poor and the women in LDCs, SIDS, and Vulnerable African Countries.

The current and future limits to adaptation must be acknowledged, especially in the backdrop of delaying the process to achieve the shared vision under the Bali Action Plan. It is necessary to commit to immediate and urgent actions in both mitigation and adaptation, simultaneously, in view of upholding the precautionary principle under the UNFCCC.

Since the COP decisions regarding L&D calls for actions concerning rapid as well as slow onset events, and extreme events which have both immediate adverse effects and long term slow adverse effects on vulnerable men, women and children, it would be necessary to ensure a synergy of global actions under the Hyogo Framework of Action (HFA) and Durban Platform, supported adequately by the provisions created under the UNFCCC, including that of Cancun agreement and the Copenhagen Accord.

In elaborating further work on L&D, through both a continuation of the work programme and further steps towards a concerted global response on L&D, the following important aspects should be considered.

The L&DWP should

- Prioritize specific needs of, and the risks for, those countries and people which are particularly poor and vulnerable, including women,

- Provide clear understanding on shifting timelines for ‘peaking’ and ‘emission targets’ and consequent L&D needs in

LDCs, SIDS, and Vulnerable African Countries, with particular focus on Women,

- Provide clear understanding on 'deficits' in adaptation (for delayed actions) and adaptation financing and consequent L&D needs in LDCs, SIDS, and Vulnerable African Countries, with particular focus on Women,

- Include mechanisms towards carrying out assessments of gender-differentiated vulnerability and adaptation needs in LDCs, SIDS, and Vulnerable African Countries so that the knowledge base bring clarity towards addressing L&D under the Convention,

- Create immediate and urgent actions involving communities and in particular, vulnerable women.

It is recognized that countries most vulnerable to climate induced loss and damage – mostly the LDCs, SIDS, and the African Countries – are not responsible for climate change. Their populace, particularly the women, is the mere victim of incidences of loss and damage. The objective of the UNFCCC and the principle 3.1 of the Convention in its uncurtailed essence involving equity should be clearly reflected in the expansion of ideas, understanding and work of the L&D Work Programme, with developed countries taking committed steps to proactively prevent and redress L&D and support approaches to address L&D, including an approach which is based on needs of the vulnerable, including women.

The L&DWP is envisaged as an on-going global effort, with the blessings of the COP decisions, and it should by no means be limited to a specific end-point. To this end, the L&DWP should encompass immediate and urgent L&D actions as well as a long-term rehabilitation mechanism to deal with gradually unfolding contexts of vulnerability faced by the vulnerable, especially women.

The objective of the UNFCCC and the principle 3.1 of the Convention in its uncurtailed essence involving equity should be clearly reflected in the expansion of ideas, understanding and work of the L&D Work Programme

The COP should attach high importance on women's participation in defining their contexts of vulnerabilities, at all levels, and in all the vulnerable countries across the globe. There should be greater opportunities to promote constructive debates towards integrating women's particular vulnerability in the L&D accounting processes and greater gender participation in the evolving architecture on the L&D. An advisory assistance to the UNFCCC and related bodies towards integrating gender-differentiated concerns into the on-going discourse on L&D may be sought from the members of women and gender constituency, who can provide guidance to SBI towards implementing its L&D programme in an equitable manner.

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The Loss and Damage in Vulnerable Countries Initiative

Accepting the reality of unmitigated climate change, the UNFCCC negotiations have raised the profile of the issue of loss & damage to adverse climate impacts. At COP-16, Parties created a Work Programme on Loss and Damage under the Subsidiary Body on Implementation (SBI). The goal of this work programme is to increase awareness among delegates, assess the exposure of countries to loss and damage, explore a range of activities that may be appropriate to address loss and damage in vulnerable countries, and identify ways that the UNFCCC process might play in helping countries avoid and reduce loss and damage associated with climate change. COP-18, in December 2012, will mark the next milestone in furthering the international response to this issue.

The “Loss and Damage in Vulnerable Countries Initiative” supports the Government of Bangladesh and the Least Developed Countries to call for action of the international community.

The Initiative is supplied by a consortium of organisations including:

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For further information, please contact one of our offices:

Germanwatch – Berlin Office
Schiffbauerdamm 15, 10117 Berlin, Germany
Ph.: +49 (0) 30 - 28 88 356-0, Fax: -1
E-mail: info@germanwatch.org

Germanwatch – Bonn Office
Kaiserstraße 201, 53113 Bonn, Germany
Ph.: +49 (0) 228 - 60492-0, Fax: -19
E-mail: info@germanwatch.org

For further information: **www.germanwatch.org**