



## The Scrutiny Relationship between Women's and Climate Change in Developing Countries

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**Abstract.** In many of contexts, women are more vulnerable to the effects of climate change than men—primarily as they constitute the majority of the world's poor and are more dependent for their livelihood on natural resources that are threatened by climate change. Women and men in the poorest and developing countries are especially vulnerable when they are highly dependent on natural resources particularly at the local level for their livelihood. Women charged with the responsibility to secure water, food and fuel for cooking and heating face the greatest challenges. It is important to remember, however, that women are not only vulnerable to climate change but they are also effective actors or agents of change in relation to both mitigation and adaptation. Thus the present paper intends to examine relationship between women and climate change in Developing countries by using descriptive- analytic method. Our findings indicate that Women often have a strong body of knowledge and expertise that can be used in climate change mitigation, disaster reduction and adaptation strategies. However, gender inequalities, political, economic and poverty prevents women from activities to deal with climate change Vulnerabilities.

**Keywords:** Women, Gender, Women Participation, Climate Change, Developing Countries

### 1. INTRODUCTION

The last decade has been marked by growing public concerns and widespread media coverage surrounding the possibility of global climate change due to an increased green house effect and another factors (Gore 1991).The degree to which people are affected by climate change impacts is partly a function of their social status, gender, poverty, power and access to and control over resources. Despite the international community's increasing acknowledgement of the differential experiences and skills women and men bring to development and environmental sustainability efforts, women still have lesser economic, political and legal clout and are hence less able to cope with—and are more exposed to—the adverse effects of the changing climate(Bostrom, Morgan, Fischhoff, and Read 1994:959). Drawing on women's experiences, knowledge and skills and supporting their empowerment will make climate change responses more effective. However, the impacts of gender inequalities and women's recurrent socio-economic disadvantages continue to be ignored and remain a critical challenge to adaptation efforts (Dake1992:40).

As the world continues to grapple with what a post-Kyoto climate regime should look like, it is crucial that mitigation and adaptation efforts integrate gender issues at all levels. This will minimize risks to women and children and ensure greater success of efforts to address climate change. In the other words, Women's participation in climate change decision-making is an important prerequisite for more gender-responsive and efficient climate change policies that

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best serve the needs of society. In most Member States, women continue to be underrepresented in decision-making processes and positions (Alber and Roehr 2006:7) . According to the document, “Recent studies reveal that not only is women’s participation important but also how they participate—and how much. And because women often show more concern for the environment, support pro-environmental policies and vote for pro-environmental leaders, their greater involvement in politics and in nongovernmental organizations could result in environmental gains, with multiplier effects across all the Millennium Development Goals (Douglas ,Gasper ,Ney, and Thompson 1998:196). As well as, the 2012 World Development Report makes the case that gender equality is intrinsically important to development, as well as being smart economics (world bank 2011). Thus, based on above information this paper seeks to draw and analysed the dimension of relationships between women and climate change whit particular emphasis on developing and poorest countries. The first highlights the impact of climate change on poor and vulnerable regions and needs for effective adaption and mitigation measures. The second looks at how climate change would impact on women instead of males. The third provides an overview of key climate sensitive sectors (Food Security), and the gender dimension of its impacts. Next, we underscore the women attempts and role of their powers in decision-making phase and need for use of their capacities in address to climate change vulnerabilities. The final section makes concluding remarks on the basis of the findings of the preceding sections.

### **Climate Change effects in the Poorest Zones**

Changing climate is one of the most daunting global challenges of our time. The scientific evidence that climate change is a serious and urgent issue is now compelling. This observation is supported by the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which asserts that studies conducted have allowed for a broader and more confident assessment of the relationship between observed warming and impacts, than was made in the Third Assessment. The report states that most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in

Anthropogenic greenhouse gas concentrations. Furthermore, more specific information is now available across a wide range of systems, sectors and across the regions of the world concerning the nature of future impacts, including for some fields and places not covered in previous assessments (IPCC 2007). The warmest recorded 13 years of average global temperatures have all occurred between 1997 and 2011. The World Meteorological Organization has indicated that the extent of Arctic sea ice in the year 2011 was the second lowest on record, and its volume was the lowest (WMO,2011). This and other climate and global warming effects, including thawing permafrost, sea level rise, increased flooding and shifting seasons, can in turn have negative implications for biodiversity, coastal systems, freshwater resources and livelihoods. It is also widely recognized that although climate change impacts will affect all countries, the poor, will be disproportionately affected. Their reliance on local ecological resources, coupled with existing stresses on health and well-being and limited financial, institutional and human resources leave the poor most vulnerable and least able to adapt to the impacts of climate change. Most ironically, the vast majority of those most vulnerable to the impacts of climate change are also the least responsible for contributing to it in the form of GHG emissions (IPCC 2007). In the other words, Over the next decades, billions of people, particularly those in developing countries, are expected to face shortages of water and food and risks to health and

life as a result of climate change (UNFCCC 2007). Key climate change impacts in the Developing Countries regions include increases in the intensity and or frequency of disasters and extreme events such as heat waves, tropical cyclones, prolonged dry spells, intense rainfall, tornadoes, snow avalanches, thunderstorms, severe dust storms and sea level rise.

Climate change can exacerbate poverty and frustrate gains made towards achieving the Millennium Development Goals. The 2011 Human Development Report observed that climate change continues to threaten livelihoods in low human development index<sup>5</sup> nations and that climate change may also worsen the most lingering environmental threats such as deforestation, water scarcity and land degradation, which often hit the poorest the most (Leiserowitz 2003). Moreover, these changes could have a direct human toll, for example due to an increase in natural disasters. Poverty and climate change are closely related. The poorest and most disadvantaged groups tend to depend on climate-sensitive livelihoods ( agriculture), which makes them disproportionately vulnerable to climate change. These groups also lack the resources needed to weather harsh climatic impacts (For example; better houses, drought resistant crops). This diminished adaptive capacity makes them even more vulnerable, forcing them to engage in unsustainable environmental practices such as deforestation in order to sustain their well-being (Neumayer and Plümper 2002:66).

### **Climate Change and Gender**

Women in developing countries are particularly vulnerable to climate change because they are highly dependent on local natural resources for their livelihood. However, women can be powerful agents of change. There are countless examples where empowering women to exercise leadership within their communities contributes to climate resilience, ranging from disaster preparedness efforts in Bangladesh, Indonesia and Nicaragua, to better forest governance in India and Nepal, to coping with drought in the Horn of Africa (Dulal and others 2011). Women charged with securing water, food and fuel for cooking and heating face the greatest challenges. Women experience unequal access to resources and decision-making processes, with limited mobility in rural areas. It is thus important to identify gender-sensitive strategies that respond to

These crises for women. A number of factors account for the discrepancy between women's and men's differentiated exposure and vulnerability to climate change risks. First, gender-based differences in time use, access to assets and credit and treatment by markets and formal institutions (including the legal and regulatory framework) constrain women's opportunities. As a result, there is a global gender gap in earnings and productivity—women make between 30 and 80 percent of what men earn annually. In the other word, developing countries %70 of totally 1.3 billion populations constituted by women working under wage of one dollar. Since women are responsible to their families by providing food, fuel and water without basic modern substructure conditions, they also experience the energy poverty very intensively (Armstrong 2004). A World Bank survey in 141 countries showed that 103 countries continue to impose legal differences on the basis of gender that may hinder women's economic opportunities (UNFPA 2009). In addition, two thirds of the world's 743 million illiterate adults are women. Although women make up 43 percent of the overall agricultural labour force, percentages vary by region and country. Overall, women make up half of the agricultural labour force in the least developing countries, while in developing countries (where data is available), they own between 10 and 20 percent of the land. The cumulative effects of poverty and social,

economic and political barriers is that women will often be disadvantaged in coping with the adverse impacts of the changing climate (Cliff and Karen 2010:120).

Second, compared to men, women face huge challenges in accessing all levels of policy and decision-making processes. This renders them less able to influence policies, programmes and decisions that impact their lives. Third, socio-cultural norms can limit women from acquiring the information and skills necessary to escape or avoid hazards (swimming and climbing trees to escape rising water levels). Similarly, dress codes imposed on women can restrict their mobility in times of disaster, as can their responsibility for small children who cannot swim or run. Such social influences render women disproportionately vulnerable to disasters and related negative effects of climate change. Fourth, a lack of sex disaggregated data in all sectors (e.g. livelihoods, disasters' preparedness, protection of environment, health and well-being) often leads to an underestimation of women's roles and contributions (Care International 2010). Overall, based on the documentation of international organizations vulnerability to climate change can be induced by a number of factors to be considered are as follows.

- In spite of high ability of women, they do not participate in the decision process.
- Globally, only 17 and 19 percent of women in developing countries make up members of the Cabinet. In addition, a series According to studies from 11 developing countries, only 5 countries are deprived of the presence of women in Parliament.
- An study by the Organisation for Economic Co-operation and Development (OECD) classified women's access to land as "very limited" in a number of countries within the Asia-Pacific region.
- Burning biomass fuel indoors leads to 2 million deaths per year (mainly women and children)(OCED 2012).

### **Women's and Food Security(Climate Change)**

Climate change has serious ramifications in four dimensions of food security: food availability, food accessibility, food utilization and food systems stability. Women farmers currently account for 45-80 per cent of all food production in developing countries depending on the region. About two-thirds of the female labour force is engaged in agricultural work. In the context of climate change, traditional food sources become more unpredictable and scarce (Alboher and Vogt 2010).

Women face loss of income as well as harvests—often their sole sources of food and income. in developing countries, and more than 90 percent in many African countries Related increases in food prices make food more inaccessible to poor people, in particular to women and girls whose health has been found to decline more than male health in times of food shortages. Furthermore, women are often excluded from decision-making on access to and the use of land and resources critical to their livelihoods. For these reasons, it is important that the rights of rural women are ensured in regards to food security, non-discriminatory access to resources, and equitable participation in decision-making processes(WRI 2008).

### **Women's and Climate Effort**

Women play a pivotal role in natural resources management and in other productive and reproductive activities at the household and community levels. This puts them in a position to contribute to livelihood strategies adapted to changing environmental realities. Their extensive knowledge and expertise—that can also be used in climate change mitigation, disaster reduction and adaptation strategies—make them effective actors and agents of change (Röhr 2010). Numerous examples demonstrate that communities fare better during natural disasters when women play a leadership role in early warning systems and reconstruction. Women tend to share information related to community well-being, choose less polluting energy sources and adapt more easily to environmental changes when their family's survival is at stake. A 2000 study found that women in South Asia displayed enormous strength and capacity throughout the entire disaster cycle: preparing for hazards, managing after a disaster and rebuilding damaged livelihoods. Activities included ensuring food and water for the family, securing seed and other productive material and taking care of the sick and elderly (IUCNR 2007).

Research has also revealed the importance of gender equality and women's empowerment to environmental sustainability and achievement of the Millennium Development Goals. Greater female participation in economic development will lead to productivity gains. It is estimated, for example, that if women's paid employment rates were raised to the same level as men's, the gross domestic products of the United States, the European Union and Japan would see increases by 9, 13 and 16 percentage points, respectively. Women's greater participation is also likely to enhance the effectiveness and sustainability of climate change projects and policies. For example, women tend to be very effective at mobilizing communities in the event of disasters and disaster risk management and reduction<sup>22</sup> and have a clear understanding of what strategies are needed at the local level (UNIFEM 2009). International recognition of the importance of supporting women and gender equality is increasing. For example, the Organization for Economic Co-operation and Development's official development assistance for the advancement of gender equality tripled from 2002 to 2006 (from \$2.5 billion to \$7.2 billion).<sup>23</sup> Nevertheless, considerable gender-based barriers continue to exist across the major pillars of international and national policy processes on climate change (Carvajal-Escobar, Quintero and Garcia-Vargas 2008).

### **Women's Participation in Climate Change decision- making**

The link between gender-sensitive climate change policies and gender equality in decision-making has not been sufficiently researched. Recent research from Sweden concludes that 'governance tends to enhance gender differences by privileging men and masculinity, challenging resources to male actors and fields and thereby maintaining current power structures' (Kronsell 2011:11). Gender equality in decision-making is a question of democracy and justice and, thus, is a goal in itself. There is also strong and mounting evidence at the country level that improving gender equality contributes to policy choices that lead to better environmental governance, whether through increased representation and voice of women within their communities, in society at large, and at the political level, or through increased labor force participation. In Nepal and India, for example, women's participation in forest committees beyond a critical minimum threshold (around a third) has been seen to have a positive impact on forest regeneration and a reduction in illegal extraction of forest

products (Agarwal 2010). Beside this, Research analyzing other policy fields supports the argument that approaches and policies tend to be better and more efficient if there is a more equal distribution of women and men in policymaking. Following and analyzing the international climate change negotiations leads to similar conclusions. While women's participation in governmental delegations— comprising ministry officials, advisors and policy consultants — is slowly but constantly increasing, the proportion of women serving as heads of delegations — as leading negotiators during the annual Conference of the Parties (COP) — has remained more or less constant. Is it more important to have women in leading positions in the UN climate change administration, such as a female executive secretary of the UNFCCC secretariat or a female COP presidency? Positive answers are based not only on the democratic principle that women and men should be equally represented and present in decision-making bodies, but also on the fact that negotiations should address various gender needs and priorities and that women can play a significant role in bringing them into the discussions (Granberg 2004:32). It was only after more women's organizations had entered the international climate arena and lobbied for women and gender issues that the gender aspects of climate change gained more attention. The history of women's participation in the negotiations provides a clear linkage to the prominence of gender in the negotiations. It was at COP13 in Bali in 2007 that gender emerged as an issue, because more women's organizations had become interested in climate change and attended the conferences; and the Bali Plan of Action provided an entry point for social and gender issues by putting the impact of climate change in developing countries on the agenda of the negotiations on future commitments (Gender CC 2010).

## 2. CONCLUSION

As we summarized in the article the climate change as one of the most threatening and interpreted some researchers is as the most important threat in the twenty-first century. In fact, by the end of the Cold War concept of security is widespread that environmental security is one of the best examples of it and climate change as the most important subject of the present generation is considered. Considering that women in developing countries (Asia) had the greatest impact of climate change in this paper attempts to provide impact of such a descriptive and analytical method. And activities carried out and examined the relationship between climate change and women. Women are the first victims of global climate change and have to pay attention to them. They can deal with climate change and take efficient measures in the field of Millennium Development Programs. However, although this group is considered to be vulnerable victims of climate change but there has not been so far has not been appropriate policy to help them. Recent studies shows that women in developing countries despite of high capacity have been left in field of management and decision-making on climate change issues. The evidences are the gender gap, international organizations research and recent policies in this field. Finally, recommendations to improve the status of women can be represented as follows:

- Increasing the role of women in decision-making on climate change.
- Involvement of women in decision-making at the local level and the micro.
- Increasing awareness and understanding on adaptation issues and concerns at the global, national, and most importantly, at the local levels, among the poor and vulnerable.
- Require further research on how climate change impacts both women and men, and on the different ways that women and men contribute to climate change.

- Integrate gender perspectives throughout climate change programming in order to effectively address both women's and men's needs and priorities, ensure the full and meaningful participation of women and achieve gender-equitable outcomes.
- Guaranteed women's rights in climate change mitigation and adaptation, including their rights to information, knowledge, skills, resources and participation in decision-making.
- The use of gender analysis to understand the different roles and responsibilities of women and men in natural resource use and management, in order to make interventions equally relevant for women and men.

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