WOMEN AT THE FRONTLINE OF CLIMATE CHANGE
GENDER RISKS AND HOPES
A RAPID RESPONSE ASSESSMENT
Women are often in the frontline in respect to the impacts of a changing climate. Globally the world is seeing increasingly frequent droughts and floods which are having economic but also profound social consequences. The women and people of Asia are currently at greatest risk with over 100 million people affected in this region annually.

Patterns of development and settlements put the poor and the vulnerable at increased risk with many forced to settle on the only land available at the time-land that all too often is prone to flooding and mud slides. This report underlines that women are disproportionately likely to lose their lives in such events.

During disasters, such as drought or floods, women are also more vulnerable to organised criminal traffickers as a result of communities being scattered and protective patterns in families and society become disrupted: a point underlined by INTERPOL and Non Governmental Organizations in this report and a pattern of exploitation known from armed conflicts and other disasters.

More than 1.3 billion people live in the watersheds of Asia’s mountain ranges. With more than half of South Asia’s cereal production taking place downstream from the Hindu Kush Himalaya, the impacts on food security will become ever more important with increasing climate change. Here, adaptation will become crucial.

Women represent a primary resource for adaptation through their experience, responsibilities, and strength. This report provides ample information to show that women play a much stronger role than men in the management of ecosystem services and food security. Hence, sustainable adaptation must focus on gender and the role of women if it is to become successful.

Women’s voices, responsibilities and knowledge on the environment and the challenges they face will need to be a central part of the adaptive response to a rapidly changing climate. UNEP welcomes the collaboration and contributions of the countries and regional institutions, such as ICIMOD in strengthening the research, understanding and outreach on the important role that women play in the climate change challenge and will increasingly play in this century.

Governments have a responsibility to make gender considerations part of the response and UNEP hopes this report will play a part in providing a focus for relevant agencies operating across the spectrum of development and climate assistance to put women at the centre of their strategies.
SUMMARY

Adaptation, vulnerability and resilience of people to climate change depend upon a range of conditions. These vary from their degree of exposure and dependency upon weather patterns for livelihoods and food security, to varying capacities in adaptation, which are influenced by gender, social status, economic poverty, power, access, and control and ownership over resources in the household, community and society. Mountain peoples are especially vulnerable since climate impacts and changes are predominantly acute in mountainous regions. This is particularly true in the Andes, Africa and Asia.

A key challenge in responding to climate change is the increasing number of events of too much and too little water. From 1999–2008, floods affected almost one billion people in Asia. The corresponding figures were about four million in Europe, 28 million in the Americas and 22 million in Africa. For instance, the 2010 flood in Pakistan affected more individuals than the combined impacts of the Indian Ocean Tsunami (2004), the Kashmir Earthquake (2005) and the Haiti Earthquake (2010). Flash floods in the Himalayas are estimated to cause the loss of at least 5,000 lives every year.

Women in the South are particularly vulnerable to the impacts of disasters due to skewed power relations and inequitable cultural and social norms. At the same time, women are essential for developing sustainable adaptation options due to their knowledge, multiple and simultaneous responsibilities and as well as roles in productive areas. These include all sectors from agriculture, rangelands, biodiversity and forests, to households, income-generation, livelihoods and other socio-cultural and political-economic institutions and relations. Worldwide, women are an estimated 43% of the work force in agriculture. In Asia and Africa, this proportion is higher, often above 50%, especially in mountain regions. Hence, women play a key role in adaptation efforts, environmental sustainability and food security as the climate changes.

However, several dynamics make adaptation more difficult for some women due to a lack of access to formal education, economic poverty, discrimination in food distribution, food insecurity, limited access to resources, exclusion from policy and decision-making institutions and processes and other forms of social marginalisation. These dynamics put women at a distinct disadvantage, and few programmes include or focus on them for adaptation.

Women generally have far less access to and control over the resources they depend upon. Nor do they have opportunities for direct governance and effective influence in politics from the household to community, national, regional and international levels. In some contexts, women are often subject to gender-based violence, harassment and psychological violence within the household. Some studies suggest that 95% of women and girls surveyed reported first-hand knowledge of violence with 77% by family members. Such situations affect women in negative ways, and further impede women’s ability to adapt to extreme events and changes in their environment.

During extreme events such as drought, floods and other climate-related disasters, women face additional risks, due in large part to gender inequities that result in women bearing the disproportional brunt of disaster impacts. Moreover, women are often discouraged from learning coping strategies and lifesaving skills, such as how to climb trees or swim. Both factors put them at a disadvantage when floods hit. Often women are not permitted to evacuate their homes without consent from their husbands or elder men in their families or communities. Gendered cultural codes of dress may inhibit their mobility during crises, resulting in higher disproportionate mortality during many disasters. During such events, women and girls are frequently subjected to intimidation, gender-based violence,
sexual harassment and rape. Women and girls also face an even more serious risk with the onslaught of climate-induced disasters: organised trafficking.

Organised trafficking of women is emerging as a potentially serious risk associated with environmental problems. Climate-related disasters such as flood, drought or famine may disrupt local security safety nets, leaving women and children unaccompanied, separated or orphaned due to the erosion and breakdown of normal social controls and protections. This makes them especially vulnerable to the exploitation of human trafficking.

After a natural disaster, economic and security challenges may lead women who are in charge of households and livelihoods to seek temporary relief, shelter and amenable living conditions in acutely insecure contexts, making them potential targets for exploitation and human trafficking. Disasters that lead to increased physical, social and economic insecurity, and affect women and children, are among some of the push factors that give rise to trafficking. Therefore, insecure disaster regions must be considered as potential areas for such harmful activities.

In Nepal, an estimated 12,000–20,000 women and children – including some boys – are abducted or deceived into forced labour (ca. 30%) and brothel-based sex work (ca. 70%) every year. Economically impoverished mountain families are particularly vulnerable to being deceived with false offers of remunerated work and education for girls, ensnaring them into a well-established system of abuse, forced labour and sex work. Some of this trafficking occurs within national and regional spheres, but foreign destinations also include India, China and the Middle East. The negative impacts from disasters may be exacerbated by the probability of contracting HIV/AIDS. For instance, approximately 12–54% of women, boys and children trafficked under normal circumstances contract HIV/AIDS. They are aged typically from 7 years of age to 22 years and averaging 16 years. Trafficked children are at particular high risk and some surveys suggest that at least 15% of them experience other forms of violence on a weekly basis in addition to sexual abuse.

Great uncertainty exists regarding the possible elevated levels of exploitation during political conflicts or climate-related disasters. Estimates based on emerging data from anti-trafficking organisations such as Maiti Nepal suggest that trafficking may have increased from an estimated 3,000-5,000 in the 1990’s to current levels of 12,000–20,000 per year. The data also suggests that trafficking may have increased by 20-30% during disasters. Indeed, INTERPOL has also warned that disasters or conflict may increase the exposure of women to trafficking as families are disrupted and livelihoods are lost. Hence, targeted efforts to reduce exposure of women and children to exploitation and abuse must be supported and implemented due to increasingly extreme climatic events and rising populations and intensifying land use change, pressures and grabbing.

Women experience acute and differential impacts given the accelerated pace of climate change. These impacts exacerbate existing inequities in socially-constructed gender roles, responsibilities, perceptions and skewed power relations that tend to disadvantage women. However, women also provide vital hope for successful adaptation through their critical knowledge, experience, agency and unique role in agriculture, food security, livelihoods, income generation, management of households and natural resources in diverse eco-systems, and participation in a variety of socio-cultural, political-economic and environmental institutions.

Strategically placed for both dealing with impacts and adaptation, mountain women are at the front line in sustaining their environments. Learning from them and investing in them will provide a crucial stepping stone and catalyst for future adaptation efforts far beyond mountain regions. Imagine what is possible in terms of adaptation to climate change if women are given due recognition and are included in international development efforts and policy processes as strategically important development actors in their own right. Although women are among the frontline managers of the environment, often lacking equitable access to resources and disproportionately bear the risk of climate change, they simultaneously offer the greatest hope for the future.
**RECOMMENDATIONS**

1. Design adaptation programmes in food security, agriculture, rangelands and managing natural resources in ways that are sensitive and responsive to the different and multiple roles women and men play in various spheres of natural resource management, as well as their households, communities, livelihoods, and customary and statutory institutions and relations (local, national, regional and international). The programmes should have a strong focus on women and gender equity to ensure successful implementation and that adequate resources are allocated to translate this vision into tangible action.

2. Improve women’s livelihoods and strengthen adaptation by ensuring women’s access, control and ownership of resources (such as land, livestock, property and income opportunities), and access to development resources such as credit, information, training and outreach, and culturally appropriate and labour-saving technology.

3. Invest in gender sensitive and culturally appropriate labour-saving green technologies, water harvesting, storage, irrigation systems, and substitutes for fuel wood and use (including mechanisms for maintenance). Design and implement these investments in collaboration with women to reflect their needs and concerns. Ensure that physical, cultural, social, economic and practical elements are compatible with their livelihood practices within diverse ecosystems supporting agriculture, pastures, forests, watersheds, households and communities.

4. Conduct a systematic analysis of climate change from environmental, development and gender equity perspectives to fill urgent gaps in research, knowledge and data. Disaggregate data by gender and other domains of difference, such as class, age, marital status, lifecycle positioning, ethnicity, caste, profession, and ensure they are understood within the context of power relations emanating from these differences. Research should focus on the differentiated experiences of women and men in terms of adaptation, impacts, responses, vulnerabilities and opportunities provided by climate and other simultaneous drivers of change. However, there should be a distinct focus on women’s needs, priorities, constraints, impacts, local strategies, knowledge and meaningful participation that defines their local responses in the context of often unequal gender relations.

5. Ensure an enabling environment for the increased participation and substantive inputs of women in decision and policy-making in local, community, national, regional and international institutions, processes, negotiations and policies related to climate change issues. Adaptation programmes should have long-term goals of increasing gender and social security needs, safety nets and active participation of women in governance at every level through participatory policies and targets, and capacity strengthening, development of leadership and technical skills, and clear recognition and support of their rights, agency and knowledge.

6. Ensure that education, training, awareness raising and information programs address the vulnerability and risk of gender-based violence, sexual abuse and trafficking in the context of mountain regions, but especially in high-risk flood, drought and disaster prone areas.

7. Collaborate among and between national police authorities, customs authorities, anti-trafficking NGO’s, research institutions and INTERPOL to detect, intercept and combat national and trans-boundary trafficking of women and children.