

# **Mainstreaming gender perspectives in environmental management and mitigation of natural disasters**

**Presented by  
Carolyn Hannan  
Director, Division for the Advancement of Women  
United Nations**

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Madame Chairperson  
Distinguished Experts  
Participants

I am honoured to make a presentation on this panel along with such committed and knowledgeable experts. I look forward to hearing the dynamic grassroots experiences that will be shared by my fellow panelists.

The Beijing Platform for Action, adopted at the Fourth World Conference on Women (1995), and the ECOSOC agreed conclusions (1997/2), call on Member States, the United Nations system, international organizations and non-governmental organizations to systematically incorporate gender perspectives into all policy areas, including in environmental management and natural disasters. This is the important strategy of *gender mainstreaming* which aims to ensure that all policies, strategies and implementation of projects and programmes are based on a full understanding of the contributions, potentials, priorities and needs of women and men and girls and boys.

The Platform for Action recognized the impact of environmental disasters on women and called for greater investigation of the relevant gender perspectives. The outcome document of the twenty-third special session of the General Assembly (June 2000), in following-up the implementation of the Platform for Action, noted that the social and economic impact of natural disasters and epidemics - and particularly the impact on women, gender relations and the achievement of gender equality - remained relatively

invisible as a policy issue.<sup>1</sup> Women's roles as subsistence producers and users and managers of the environment were highlighted. The special session recommended that Governments should be assisted to develop gender-sensitive responses to humanitarian crises arising from armed conflict and natural disasters.<sup>2</sup>

In my presentation I will focus on the gender mainstreaming strategy in relation to environmental management and mitigation of natural disasters and touch on some of the changes that need to take place at the level of policies and strategies. I strongly believe that the momentum for effective change should come through a "bottom-up" rather than a "top-down" approach. Policy and strategy development at global and national levels – must be based on lessons from the ground if it is to achieve people-centred sustainable environmental management and disaster mitigation.<sup>3</sup>

### **Background: Gender equality and environmental management and natural disasters**

Large natural disasters receive considerable international press coverage and external emergency support. Less visible disasters which are on a smaller scale or slower to develop receive little media attention and thus less preventive and remedial inputs. These natural disasters, should, however, be of equal concern. They include the smaller-impact disasters caused by recurrent floods or minor landslides as well as slow-onset disasters, such as land degradation and drought and desertification caused by over-exploitation of natural resources and other unsustainable development practices and natural hazards. The losses and costs associated with these events are considerable and a succession of such smaller disasters may increase vulnerability and eventually culminate in major disasters. As a result, risk management (including risk assessment) is as critical a strategy in natural disasters as emergency management or response. Risk management involves measures to avoid disasters (prevention) as well as measures to limit the impact of disasters (preparedness and mitigation).

Although Agenda 21, adopted in 1992, did not focus strongly on natural disasters, natural disaster management is considered an increasingly important issue for sustainable development, and as such is getting greater attention in the preparation of the World Summit on Sustainable Development (Johannesburg, 2002). The linkages between sustainable development and natural disasters which are more clearly recognized today include the fact that development practices which ignore natural hazards can contribute to

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<sup>1</sup> Report of the Fourth World Conference on Women, Beijing, 4-15 September, chapter 1, resolution 1, Annex II.

<sup>2</sup> General Assembly resolution S-23/3, 10 June 2000, annex, paras. 46, 56 and 86a.

<sup>3</sup> In preparing this presentation I have benefitted greatly from the findings and recommendations of the Expert Group Meeting on "Environmental Management and the Mitigation of Natural Disasters: A Gender Perspective", organized in Ankara, Turkey from 6-9 November 2001, by the Division for the Advancement of Women and the Inter-Agency Secretariat of the International Strategy for Disaster Reduction (UN/ISDR).<sup>3</sup> In addition, the outcome of an on-line discussion conducted by the Division for the Advancement of Women prior to the Expert Group Meeting also provided important information.

environmental vulnerability and hinder the achievement of sustainable development, and that disaster responses and humanitarian assistance absorb significant amounts of resources which would otherwise be allocated to development efforts.

While initial approaches to natural disasters focused on technological and engineering solutions, following the International Decade for Natural Disaster Reduction (1990s), there has been increased recognition that many of the worst effects of natural disasters are directly linked to human behaviours, including settlement patterns and land use. Adequate responses must be multidisciplinary and intersectoral. Natural disasters cause social and economic disruption as well as environmental destruction, including loss of life, injuries and loss of livelihoods through destruction of resources and property. As the linkages between disaster reduction and sustainable development have been increasingly highlighted, the role of social sciences in the development of effective, people-centred and sustainable natural disaster strategies has received greater emphasis.

While this recognition of social dimensions has resulted in increased attention to the importance of community involvement and ownership, gender perspectives have not yet been given adequate attention in policies and strategies to prevent and respond to natural disasters. The Yokohama Plan of Action<sup>4</sup> (1994) did call on Member States to stimulate community involvement and the empowerment of women, as well as other socially disadvantaged groups, and to incorporate women as well as men in all stages of disaster management programmes and capacity building. Much of the attention to women and gender perspectives to date has, however, been solely in the context of discussions of vulnerability. Research has tended to focus on emergency response and management, in particular on the differential impacts of emergencies on women and men. There has been much less attention to gender perspectives in the critical element of risk assessment and management, including in relation to environmental vulnerability. The role of women in preventive strategies and coping strategies in the aftermath of disasters has often also been overlooked. As a result, many of the important capacity-building initiatives in disaster prevention and management bypass women and the effectiveness of the initiatives are thus significantly weakened.

Incorporating gender perspectives in work on natural disasters requires a sound understanding of the gender perspectives in relation to environmental management in addition to the identification of the relevant gender perspectives in disaster risk management, in the impact of disasters and in emergency management/responses. On the basis of this knowledge, ways and means of addressing these gender perspectives in the development of policies, strategies and action plans need to be identified.

### **Gender perspectives on risk assessment and management**

Adequate attention to gender perspectives in risk management (including risk assessment) requires a broad focus on gender in relation to natural resource management. To understand the impact of natural disasters on women respective men – the losses and costs to both women and men - and their potential for recovery after disasters, it is

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<sup>4</sup> Adopted at the Yokohama World Conference on Natural Disaster Reduction held in 1994.

necessary to understand the interactions of women and men with the environment. Both women and men are actively involved in the use and management of natural resources in developing countries. There are, however, important differences and inequalities between women and men in access to and control over resources, as well as in relation to knowledge of the resource base. Women and men may use completely different resources in the same environmental context, or use the same resources in different ways. It has been documented from some areas, for example, that women's and men's knowledge of forest resources differs considerably because they use different resources. This has implications for maintaining biodiversity as all knowledge needs to be documented and utilized. In forests, women and men may depend on the same trees and shrubs for their livelihoods but may use them in different ways and for different purposes. Women may, for example, collect leaves, twigs and small branches for fuel for domestic use or collect fruits and berries while men may cut down the trees for poles for building, for making tools or for firewood to sell in towns. In the area of fishing, women and men often perform completely different activities. Men may be involved in fishing from boats while women are often responsible for the treatment of the catch - smoking, drying - and for marketing. Women may, however, also fish from the shore. Women are also often heavily involved in shrimp production in many areas.

Women's roles in natural resource management have generally been less well understood compared with men's, except for a few areas such as water supply, fuelwood supply and food crop production. Women's roles in cash-crop production (often as a critical source of labour) have usually been underestimated particularly where men "own" the products of the labour. Wetlands development policies and strategies also most often totally ignore the fact that women as well as men utilize, and are dependent on, the wetland resources. This can affect women's livelihood strategies negatively but can also have a negative impact on the sustainability of wetlands.

Natural disasters - particularly erosion and other forms of soil degradation, pollution of freshwaters, shore-line erosion, flooding, loss of wetlands, drought and desertification - impact directly on women in their roles as providers of food, water and fuel. Climate change can also impact on women's productive roles since the physical impacts of global warming - rising sea levels, flooding in low-lying delta areas and increased salt-water intrusion - can jeopardize sustainable livelihood strategies. Food security and family well-being are threatened when the resource base on which women rely to carry out their critical roles and obtain supplementary incomes is undermined.

In rural areas in many parts of the world, women's insecure land tenure can cause unsustainable practices and be a critical factor in constraining their potential for recovery in the aftermath of disasters. Greater attention should be given to land tenure in research on gender and sustainable development, and in relation to its impact on natural disasters.

Effective risk assessment and management require the active involvement of local communities and civil society groups to ensure decreased occurrence of disasters and reduced losses and costs when they do occur. The knowledge, contributions and potentials of both women and men need to be identified and utilized. Because gender

perspectives are not always taken adequately into account in environmental management women may not be consulted and involved to the same extent as men in natural disaster management programmes. Women's considerable knowledge of natural resources and their contributions to environmental management are often under-utilized. When women do not receive adequate information on hazards and risks and the links to natural resource use and environmental sustainability to the same extent as men, there is a risk that they can contribute directly and indirectly to environmental vulnerability.

Although there are clear indications of a positive shift from a purely technological response in early warning and information systems, there is still much to be done before the responses adequate incorporate relevant social issues, including gender perspectives. The social context needs much more attention if adequate early warning and prevention systems are to be developed and losses and costs to individuals, household and communities are to be reduced. The particular roles, responsibilities and needs of women as well as men need to be considered as this may provide valuable information for developing early warning and information systems.

Both women and men need to have access to timely information and warnings on risks or impending disasters. In some contexts access to information will not, however, be sufficient for women to be able to respond adequately. Because of gender-specific constraints - lack of decision-making capacity, lack of capital of different forms (financial, physical, human, social) and socio-cultural norms on mobility, etc - women may need additional support in order to be able to effectively act upon such information/warnings.

### **Differential impacts of natural disasters on women and men**

The level of risk in relation to natural disasters is determined by both physical and social factors. Physical factors determine the probability of occurrence of floods, drought, landslides, earthquakes, volcanic eruptions, storms or cyclones, as well as the intensity of such hazards. Social vulnerability to disasters - particularly the level of impact - is increasingly the focus of attention as the importance of the human action and social status in natural disasters has become more evident. Social vulnerability is determined by a number of factors including hazard awareness at individual and community levels; condition of infrastructure - including housing standards; legal systems regulating important issues such as housing and transport systems; community organization; and effectiveness of public policy and administration - particularly related to recognition of susceptibility to natural disasters, development of preventive strategies, and organization of responses to disasters.

Losses and costs of natural disasters are not distributed evenly across populations. Poverty plays a key role, as poorer segments of the population can face greater exposure to negative impact due to risk factors such as poor housing, vulnerable location of farms and settlements, and limited access to information, as well as constraints to the development of effective preventive or coping strategies. Certain groups of the poor may

be more vulnerable because of specific constraints, such as female headed-households, the disabled, the elderly and street children.

Disaster responses of individuals and groups tend to mirror the status, roles and situation of these individuals and groups in society. Because of their continuing subordinate position in many societies, women in general may be subjected to specific vulnerabilities - of which one of the most important may be limited access to information, training and capacity building initiatives, as well as to opportunities to make their voices heard and bring their perceptions, priorities and needs "to the table" at household and community levels. The fact that women have limited access to decision-making and leadership positions hinders their involvement in the "public" sphere and restricts their contribution to disaster prevention and emergency response and management.

Existing gender inequalities regarding enjoyment of human rights, socio-economic and political status, access to and control over resources, access to education, health, safe shelter and other services, access to safety nets and exposure to violence can place women in even more vulnerable situations in the context of natural disasters. Gender-specific vulnerabilities which have been documented include, over and above limited access to information, socio-cultural norms which restrict mobility or impose impractical dress codes; confinement to the home for large parts of the day (either because of the division of labour or the practice of seclusion) and poor physical condition due to poor health, malnutrition, overwork and even lack of physical exercise in some parts of the world. Women with special situations – older women, women with disabilities, pregnant or nursing women and women with small children - face particular constraints in disaster situations.

The gender-specific impacts of natural disasters and other emergencies have been relatively well documented in some contexts. Natural disasters increase women's economic insecurity through loss of essential productive resources, such as land, gardens, equipment and animals. The loss of jewellery, utensils and other traditional forms of capital can be a severe economic set back for women in many areas. Women in informal sector work, such as street vending, child care and domestic work, or owners of small home-based businesses, may lose their jobs and have no means of securing compensation where such recovery programmes exist. These women usually also have fewer chances to find other sources of work than men. Credit programmes established may also overlook the needs of these women.

In addition, women's workloads often increase dramatically because of increased family and community work and care-giving responsibilities. Collection of water, fuel and food may become significantly more difficult. Queueing for essential supplies or medical services may take long periods of time and reduce the time available for other important tasks. Girls may be forced to drop out of school in order to take over some of women's tasks. If local schools are closed, girls may have more problems than boys in attending distant schools, particularly if there are transport problems or insecure routes to school.

Migration of men and youths may increase as a result of natural disasters and loss of jobs locally. This may lead to an increase in de facto female-headed households with limited supply of adult labour and insecure sources of income. Displacement and resettlement of communities as a result of natural disasters also involves particular problems and constraints for women, related to the division of labour and their responsibilities for family welfare. Access to shelter, supplies of energy and water, sanitation facilities, schooling and community services can become more difficult and increased risks to personal security may occur.

Gender-based biases and stereotypes, as well as heavy work burdens and sole responsibility for many household tasks, may result in women not being able to seek medical treatment for physical or psychological problems to the same extent as men. In situations where men cannot gain access to adequate counselling and other forms of stress support, the insecurity and anxiety that results from natural disasters may result in increased violence against women and children, including sexual violence.

### **Emergency response and management**

Overlooking the contributions, priorities, needs of women as well as men can hinder an effective emergency response and a full recovery process. Since the contributions of women are often not recognized at household level, or in the informal sector, the losses women experience in natural disasters are not always identified and taken into account in recovery programmes. Even in terms of economic recovery, women's contributions in the informal sector and at household level can be critical. Efforts to move beyond humanitarian assistance and relief programmes to more long-term development programmes must be informed by a gender perspective to be effective in securing sustainable, people-centred development.

As mentioned earlier, poverty plays a key role in relation to potential for developing adequate coping strategies. Those individuals and households with capital (financial, physical, human and social) are in far better positions to recover quickly. Poor female-headed households - including those households where women are left alone because of post-disaster migration of men and youths - have reduced potential to develop effective strategies for recovery and development of more sustainable livelihoods.

A rights-based approach is critical in disaster relief and reconstruction processes to ensure that women and men benefit equally. This does not mean that women and men should receive exactly the same support, but rather that the specific needs and priorities of both women and men are taken into consideration in planning processes and allocation of resources. Economic and social rights can be violated, for example, if the health needs of both women and men are not met; civil and political rights can be denied if women are not consulted and are denied the right to equitable participation, particularly at decision-making levels.

Some of the issues which need to be addressed in emergency and recovery programmes have already been briefly mentioned. Programmes must be developed on the basis of a

greater understanding of the gender-specific needs in emergency situations - because of differential impacts of disasters - in relation to health, education, shelter, food supplies, water and sanitation, energy and other basic supplies, as well as employment and income-generating opportunities. A number of critical aspects can be highlighted:

- The specific health needs of women and girls, particularly reproductive health and access to sanitation, should be given particular consideration;
- Counselling should be provided to both women and men which is based on recognition of their particular vulnerabilities in emergency situations;
- The increased risks for violence against women and children, including sexual violence, must be taken into account, particularly in situations where communities are forced to live in camps and where security can be a serious issue for women and girls;
- Adequate assessment of the roles, responsibilities and access to resources of women and men must be undertaken in order to understand the extent of losses and costs to women and men and their potential for recovery, and recovery programmes and allocation of resources (including credit and alternative employment programmes) must be based on this assessment;
- The needs and priorities at household level for shelter, water, energy, food supply and care of the sick and injured - particularly those tasks which are the responsibility of women and girls - should be given adequate focus and resources;
- Consultation processes and efforts to increase community participation and ownership of recovery processes must make explicit efforts to find ways and means of ensuring the full involvement of women as well as men;
- Women's particular needs for dialogue and exchange with other women on their situations, priorities and constraints, and for specific support mechanisms, should be recognized since the gender mainstreaming approach does not preclude the need for initiatives targeted at women;
- Capacity development initiatives should explicitly target women as well as men.

Aid organizations, including NGOs, must develop the awareness, commitment and capacity to incorporate gender perspectives into all dimensions of their work. Particular care must be taken not to marginalize women by focusing all attention on men as actors and failing to recognize women's contributions and potential. The inputs of external actors can unintentionally perpetuate or even exacerbate the difference and inequalities between women and men in disaster situations. Failure to recognize women's economically productive work in the informal sector may reduce their access to critical economic assistance.

Development opportunities can arise in the wake of natural disasters, as in post-conflict situations. This can offer unique possibilities for empowering women and advancing their situation and position within their households and communities, but only if women are perceived as full contributors to the recovery process. Gender stereotypes can be challenged as women take on new roles and learn new skills, both in the household and community. Men's roles may also change as they are required to take on more responsibility for securing basic needs for water, energy and food and participate in child care and care of the sick and injured. This can lead to significant changes in attitudes. Aid

organizations can facilitate this change process by explicitly recognizing the importance of the more mundane, less visible recovery efforts at the "private" or household level which are usually the responsibility of women, as well as the more dramatic efforts at the "public" community level, most often undertaken by men. Conscious efforts to support the political mobilization of women in the wake of natural disasters - in community mobilization programmes - can have a significant impact on women's empowerment. Programmes which provide training and credit and are focused on development of new skills – such as in the area of ICTs, new areas of employment and greater understanding of sustainable development must be explicitly targeted to women as well as men to ensure the development of women's capabilities and greater recognition of their potential. Changes of this nature need, however, to be consciously supported by aid organizations to attain their full potential.

It is difficult to begin a process of considering gender perspectives in the midst of a natural disaster or other humanitarian crisis. The emergency nature of the situation makes this difficult or impossible. It is therefore important that organizations working in this area develop clear policies, strategies and generic action plans and guidelines on incorporating gender perspectives in advance of emergency situations. Generic guidelines should highlight the possible gender perspectives which could arise and ways and means of addressing these in different phases of emergency operations. While the response has always to be context-specific (and this is particularly important in relation to gender and other social criteria), it is possible to identify the generic kinds of issues which might arise and questions which should always be asked, relating to the roles, contributions, knowledge, priorities and needs of women as well as men and then to adapt these to the specific contexts in which natural disasters occur. This is essential to be able to both meet the needs of women and men and fully utilize the potential of women as well as men.

### **Conclusions and recommendations**

In conclusion, gender is a significant factor in the construction of social vulnerability in relation to risk of natural disasters, the differential impact of disasters and potential for developing adequate responses to hazards and disasters. Gender-based differences and inequalities interact with social class, race and ethnicity and age to put some women and girls in particularly vulnerable situations. On the other hand, women should not only be seen as victims. Women are agents of change, actors and contributors at all levels. Full understanding of the roles, contributions, knowledge of women and men in relation to the natural resource base is an essential starting point in working with natural disasters, particularly in terms of risk assessment and management. Emergency response and management must explicitly target women as well as men in all areas of support, based on the recognition that women's involvement is essential to adequate recovery and potential for sustainable development and reduction of natural disasters.

A number of recommendations can be made which could lead to significant impacts:

- *Policies, strategies and methodologies* for disaster reduction should be people-centred and be based on consultative and participatory processes which include all

stakeholders, both women and men. The particular constraints to consultation and participation in areas of great poverty should be identified and addressed, including the gender-specific constraints.

- The *constraints to introducing multi-dimensional and intersectoral approaches* in risk assessment and management and emergency response and management need to be identified and addressed to ensure that critical social perspectives can be incorporated in policies, strategies and action plans, with an adequate focus on gender equality. A particular challenge is bringing together disparate areas of academic interest, policy concern and institutional responsibility.
- The *value-added of including social dimensions*, including gender perspectives, in work on natural disasters needs to be made explicit. This requires moving beyond a focus on women as victims to an approach which recognizes the contributions and potential of women as well as men.
- The research which does exist on gender and environmental management, risk assessment and management and emergency management and response should be more systematically *compiled in a form which is useful to policy makers and administrators*.
- Key areas where more *research is needed* should be identified and resources made available for initiating research projects, based on participatory processes where both local women and men can be involved in identifying vulnerabilities and suggesting remedies.
- One critical area of research should be developing a better understanding of the *linkages* between gender, environmental management and disaster reduction and the *policy implications* of this knowledge.
- *Generic guidelines* need to be developed on the types of gender-specific questions which should be raised in relation to environmental management, risk assessment and management and emergency response and management. These guidelines should then be adapted in each specific disaster context to ensure that adequate attention is given to the needs and priorities of both women and men and that women as well as men are consulted and given opportunities for participation.
- Collection of *sex-disaggregated data* should be obligatory in all areas of work on natural disasters. Where such statistics are not available, this should be clearly pointed out as an important gap to be rectified.