PANEL II

Environmental management and mitigation of natural disasters: a gender perspective

Written statement submitted by

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Madame Chairperson, friends and colleagues:

My thanks for this opportunity to share some of the conclusions of the Expert Group Meeting on environmental management and the mitigation of natural disasters. I hasten to add that all the “experts” were humbled by how much there is yet to learn and do.

Our focus in Turkey and today in New York is on environmental disasters, but the task before us is even more complex. For most of the world’s people, disasters precipitated by naturally occurring environmental events are tightly interwoven with “the daily disaster” of lives constrained by poverty and inequality, and often by armed conflict and fiscal crisis as well. Technological disasters such as those that occurred at Chernobyl and Bhopal, and disasters triggered by epidemics such as HIV/AIDS also demand our attention.

Let me preempt my conclusion and urge you to consider that our real task must be the prevention of disaster. I use the word prevention advisedly. Certainly, we will never escape the untimely volcanic eruptions, earthquakes, and extreme weather events that are part of the human experience. But just as certainly we have a moral obligation to minimize preventable harm by changing the taken-for-granted world which transforms extreme but natural events into human tragedies. The tide now sweeps the other way. Increasing numbers of disasters—large and small, sudden-onset and slow-onset—take a rising toll on increasing numbers of people. Our work must focus on a platform of action which can turn the tide and lead us to safer, more just, and more sustainable ways of living on this planet.

The gendered terrain of disaster: through women’s eyes

Natural disasters trigged by cyclones or earthquake are social processes deeply rooted in global political-economic and social forces, but also inescapably local events. We feel the wild winds and the jolting of the earth beneath us as individuals, one moment at a time, in particular places and times. Disasters unfold in worlds shaped by culture and class, race and ethnicity, age, physical abilities and other power relations—including those based on gender. A growing body of evidence now documents relevant differences and inequalities among women and men throughout the disaster process. Gender shapes men’s as much as women’s lives and deaths in disasters. But the gendered division of labor, maternal health, women’s longevity, household and economic structures, and the gender inequalities embodied in everyday life put girls and women at special risk. Women’s inability to enjoy their full human rights; their poverty, economic insecurity and lack of land rights; limitations on personal autonomy and political expression;
barriers to literacy, education, and training; constraints on health and time and leisure—the list goes on—all these combine to undermine women’s ability to anticipate, prepare for, survive, respond to, and recover from disasters. This is what gendered vulnerability means for women.

But living life as a woman also empowers women at critical junctures, from risk assessment and hazard mitigation to emergency preparedness, disaster response, and post-disaster reconstruction. The Expert Group Meeting documented the wide range of activities undertaken by women as environmental resource uses and managers (not always for the better), household managers and caregivers to dependents, community leaders, and local historians of people, place, and hazard. Accounts were shared of women’s efforts to reduce social vulnerabilities and identify and mitigate environmental hazards in the communities they know best. Again and again, we learned that women build communities, promote safety, and reweave the fabric of everyday life after disasters.

Developing and strengthening women’s capacity to reduce and manage risk is not a secondary or divisive concern but an essential first step in the hard work ahead of building more disaster-resilient communities. Therefore, we called at the Expert Group Meeting for support of both scientific expertise and women’s local knowledge, and for approaches to risk reduction that support rather than undermine women’s traditional coping strategies in risky environments. We called for a more holistic, integrated, cross-sectional and multidimensional approach integrally linking gender equality, sustainable development and disaster reduction. Recognizing that there is no single ‘community,’ just as there is no unitary ‘household,’ we called for a gender perspective in community-based approaches to risk. And we called to account all the institutional actors which continue to marginalize women in development and disaster work, challenging them to end exclusionary practices which put girls and women at increased risk.

**Keys to prevention: learning from local women**

If the question is learning from local women about disaster prevention, an important part of the answer is about barriers to learning. We have at present no full documentation of best practices or standards which foster gender-fair disaster planning and practices, and a very full roster of unanswered research questions. We utilize an approach which separates rather than integrates disasters, global development and gender equality. It is an approach more reliant on the outside expert and sophisticated technologies than on the painfully won knowledge of people who live day in and day out in risky environments, managing risk and coping with disasters when they must. Our well-intentioned focus on humanitarian relief deflects attention from root causes, specifically unsustainable and unjust economic development priorities which privilege few and rob many thousands of people every year of life and livelihood.

Documenting women’s local efforts to reduce and manage risk is one step forward. Lacking the empirical, longitudinal and comparative research needed to ask and answer important questions about women and men as risk managers, we swapped stories—just a few of which I have time to share with you today. Most were not about women in emergency management (though this is an important topic) but spoke to local women’s proactive efforts at every phase of the disaster process.
**Risk assessment**

*Mapping Risk through Women’s Eyes: Action Research in the Caribbean*

Four women’s CBOs in the Dominican Republic and St. Lucia are winding up the first of a two-year project to map risk in their communities, including the daily disasters that shape low-income women’s lives and the hurricanes, landslides, and fires to which they are exposed. With training in basic research methods, the community women used interviewing, photo essays, risk mapping and other techniques to assess vulnerabilities and capacities. This information will be compiled in community vulnerability profiles, written guidelines for conducting vulnerability research with women’s CBOs, and a bilingual, practice-oriented guidebook for working with women to reduce risk in the Caribbean. The community researchers will also be trained to work with other groups, agencies, and governments as informal community vulnerability educators. [Adapted from E. Enarson, proposal to the Center for Disaster Management and Humanitarian Relief, University of South Florida, 2001.]

**Environmental hazard mitigation**

*Technological Innovation in Bangladesh: Women Farmers Reducing Risk*

In Bangladesh, women char-dwellers increase food security through homestead gardening and food processing and storage, and preserve the seeds of a great variety of food crops and vegetables. Composting kitchen waste provides soil-enriching fertilizer. Women here also preserve rainwater by coating the pits they dig with cow dung, and select fast-growing seedlings to make char soils more stable. They prepare for floods by securing fodder for their livestock and planting trees around the low houses they build with local materials and cross-bars for wind protection. [Adapted from M. Chowdhury, “Women’s technological innovations and adaptations for disaster mitigation: a case study of charlands in Bangladesh.” Prepared for the EGM in Ankara, 2001.]

*India’s Self-Employed Women’s Association and the Disaster Mitigation Institute*

When the January 2001 earthquake struck Gujarat, water conservation was all the more important as fresh waters turned salty in some places and wells and storage tanks were damaged. SEWA’s and DMI’s work with local women before the quake, sharing new techniques for harvesting rainwater with household containers and community wells and ponds, was invaluable. After the quake, SEWA helped direct emergency supplies and provided craft kits to women in shelters. With DMI, they went to poor rural women to assess the economic impacts of the drought and earthquake, and trained women in seismic-resistant building techniques. The Disaster Mitigation Institute also promotes women’s collectives to produce, preserve, and sell livestock fodder to reduce losses during droughts and other disasters. [For more information, see websites for SEWA (www.sewa.org) and DMI (www.southasiadisasters.net).]
Developing Young Women as Environmental Promoters: Pilot Project in Urban Egypt

In the fringes of great cities, poor women have little authority but much responsibility for meeting urgent family needs. WHO collaborated with the local tenants’ committee to identify young women for training from environmental scientists in sound environmental practices, including waste water management. Known as “environmental promoters,” these young women earn new respect from local, male-dominated municipal authorities, using their new environmental knowledge to lobby local government for paving roads subject to flooding and other needed changes. [Adapted from Mirvat Shabanah, Women Health and Development office of the WHO, Cairo. Personal communication, Ankara EGM, 2001.]

Emergency planning and preparedness

Hawaiian Women on an El Niño Task Force

Women on El Niño task forces in Hawaii (1997-98) developed public education and awareness programs which carried information from village to village, resulting in conservation programs and public health measures that mitigated damage from the El Niño drought. By campaigning to treat suspect groundwater before drinking, they helped reduce the incidence of reported diarrheal disease significantly. By targeting women with forecasts and warning information, the effects of hazards were significantly reduced and community knowledge increased. [See posting by Cheryl Anderson (p. 12) in E. Enarson, report from the On-Line Conference conducted by the DAW in preparation for the EGM, 2001.]

Australian Women Preventing Bushfire

In the aftermath of a destructive bushfire in Australia, mainly women responded when a local woman put out a call for fire prevention volunteers. The women then made regular personal visits at the start of fire season to families in the area, helping people reduce fire hazards around their homes. Local authorities opposed the program, which ran successfully for a number of years, and eventually appointed a male bushfire education and prevention officer. “Since his appointment, no pamphlets have been distributed, no one calls to remind or help people clear their land, and no one calls on the frail or elderly to work out evacuation plans.” [Adapted from H. Cox, “Women in bushfire territory,” in Enarson and Morrow (eds.), The Gendered Terrain of Disaster.]

Women’s Good Practices in La Masica, Honduras

La Masica reported no deaths after Hurricane Mitch, an outcome some attribute to an active community education program undertaken by the Central American disaster prevention agency six months earlier. “Gender lectures were given and, consequently, the community decided that men and women should participate equally in all hazard management activities. When Mitch struck, the municipality was prepared and vacated the area promptly, thus avoiding deaths. . . [Women] also took over from men who had abandoned the task of continuous monitoring of the early warning system.” Some 20 years earlier, a similar pattern developed in Honduras after Hurricane Fifi when women stepped in to carry on soil conservation measures abandoned by
Women for Development: Preparing for Earthquakes in Armenia

Nine years after Armenia’s destructive 1988 Spitak earthquake, a small group of women scientists organized Women for Development to help reduce women’s social vulnerabilities to earthquakes. One important project was the training of primary and middle-school teachers and pupils in seismic protection skills (“don’t be scared, be prepared!”). The group also helped local and regional governments plan for coordinated quake response, and designed mass media campaigns highlighting women. This conveyed “a new positive type of woman, who is not only silently carrying the heavy results of the disasters but is also ready to provide her knowledge and ability for disaster mitigation.” [Adapted from A. Mikayelyan, “Earthquake mitigation from a gender perspective in Armenia.” Paper prepared for the EGM in Ankara, 2001.]

Emergency relief

Women Using the Internet to Respond to Hurricane Mitch

Communication between disaster relief agencies and stricken communities was impossible after Hurricane Mitch. In Tegucigalpa, Honduras, the coordinator of a sustainable development network mobilized international resources using internet listserves and email. In this way, she networked outside agencies with medical supplies and other resources with local community groups. Eventually, a core group of 100 volunteers formed to analyze and circulate information. Recognizing the lack of internet access in poor areas, the group then obtained outside funding providing computers and training to nearly 800 people, “convinced these skills will reduce the vulnerability of Hondurans to future disasters.” [Adapted from US AID’s Gender Matters Information Bullet No. 8, Unsung heroines: women and natural disasters, January 2000.]

Women on the Move in Montserrat

As the eruptions continued and women lost income and housing, women in Montserrat started a new group called Women on the Move. It offers skills training in traditional and nontraditional fields to women “thrown together in shelter,” opening up work for women on male-dominated construction sites. Their consensual decision-making process not only brings traumatized women together in a positive way but unites women who come from very different parts of the island. By encouraging women to believe in themselves and “enter into new relationships with their men and the society in which they live,” Women on the Move helps disaster-struck women have “faith in their own ability to shape and direct their lives.” [Adapted from J. Soares and A. Mullings, ‘A we run tings’: women rebuilding Montserrat.’ Unpublished manuscript.]
“The Oxfam Women” in Zambia

During the drought of the early 1990s, Oxfam turned to its long-standing local development partners to devise strategies for increasing food security. Beginning with mass workshops, they moved to elected committees, ensuring that at least 50% of the slots were filled by women. Soon known as “the Oxfam women,” they worked very effectively in small groups distributing relief food and sharing labor, land and tools to increase food supplies. “That’s when we found out our development work with these women’s groups had not just given them an opportunity to grow more food, but an opportunity to gain insight into their problems, to gain self-confidence, and to articulate that in public and really take on anybody. So these women were, if you like, the vanguard leaders of the moment.” [Interview with K. Pushpanath, Oxfam Regional Representative for Malawi and Zambia, 1988-1993, in Focus on Gender 12 (1), 1994.]

Postdisaster recovery and long-term reconstruction

Puntos de Encuentro: Working with Men to Mitigate Violence in Disasters

“In response to increased levels of gender-based violence in Nicaragua following Hurricane Mitch, the NGO Puntos de Encuentro organized an information campaign that used various different media to transmit one simple message—“Violence against women is one disaster that men can prevent.” The campaign proved very effective at changing men’s attitudes towards violence against women.” It is a model for women collaborating with men at the community level to decrease community vulnerability. One observer recalled, “It is clear from the looks on participants’ faces that this workshop is not only enabling them to work through the emotional difficulty of post-traumatic stress but also to consider the need for transforming gender roles in their community.” [See P. Delaney and E. Shrader, “Gender and post-disaster reconstruction: the case of Hurricane Mitch in Honduras and Nicaragua,” The World Bank LAC Gender Team, January 2000 (www.anglia.ac.uk/geography/gdn). Also see the Gender and Natural Disasters. Fact sheet developed by the Pan-American Health Organization (www.paho.org).]

Women Will Rebuild Miami

Over 40 ethnic, cultural, social, religious, and economic women’s organizations in Greater Miami met regularly throughout the relief and recovery period following Hurricane Andrew, working against gender bias in the recovery processes. Local media were utilized to highlight women’s and children’s needs and lobby for redistributing donated and government relief funds to meet these needs. While their goal of redirecting just 10% of available funds to women and children was not met, Women Will Rebuild did influence the use of relief funds and brought more women into decision-making positions in the male-dominated relief group (We Will Rebuild). Working in coalition after a crisis makes cooperative work among women’s CBOs in the next hurricane much more likely and the neglect of women and children much less likely. [See E. Enarson and B. Morrow, ‘Women will rebuild Miami’ in Enarson and Morrow (eds.), The Gendered Terrain.]
From Disaster to Development: Building on Women’s Experience in India

Following the 1993 earthquake in Latur, a network of women’s groups and rural organisations organized by Swayam Shikshan Prayog (SSP) became “community consultants” interfacing between impacted communities and government to promote the kinds of disaster relief that advanced long-term community development. Grassroots women also trained in safe housing construction techniques, monitored the long housing reconstruction process, and helped redesign new homes to better suit women. This work led SSP to Turkey after the 1999 Marmara earthquake, where they shared their experiences with women’s groups there. Back home, over 100 women leaders traveled to Gujarat following the 2001 quake to demonstrate the technical and political skills gained in the Latur earthquake. SSP also helped construct housing and community centers in Gujarat. [Adapted from Redesigning Reconstruction (April 2001), publication of the Swayam Shikshan Prayog, and from P. Gopalan, “Responding to earthquakes: people’s participation in reconstruction and rehabilitation.” Paper prepared for the EGM in Ankara, 2001.]

Foundation for the Support of Women’s Work After a Turkish Earthquake

The FSWW’s Women and Children Centers house savings groups, child care, income-generation projects, and other community services. The centers proved invaluable after the 1999 earthquake. Women involved in these centers mobilized in groups to conduct housing surveys about shortages and tenant needs, in addition to undertaking emergency relief. They visited local officials personally to share this information and make women’s needs known. Among their achievements were more public financing for child care, more construction work for women, and regular meetings between affected women and other ‘stakeholders’ in the recovery process. They also inspired tenant women to organize housing coops. Working with women’s CBOs from India and elsewhere, FSWW was a catalyst for shifting post-disaster activities from relief to development and for grassroots women’s participatation in public decision-making. [See S. Akcar, “Grassroots women’s collectives’ role in post-disaster efforts: potential for sustainable partnership and good governance.” Paper prepared for the EGM in Ankara, 2001.]

From knowledge to action

This is not a picture of hapless women awaiting rescue by strong-armed men [think of the media images you see] but of women showing the way, looking ahead, taking responsibility. Their skills, networks, local knowledge, and informal leadership made a real difference at the local level—which is where effective risk reduction and disaster prevention is possible. These stories show women at work during the “window of opportunity” for social change following disasters. Propping this window open a bit longer is part of women’s work, too.

How do we build on their knowledge and continue to link women’s empowerment, community development, and risk reduction? How do we ensure that no disaster mitigation, preparedness, relief, or recovery plan is adopted (or funded) without a gender perspective, or drafted without input from grassroots women’s groups knowledgeable about local vulnerabilities and capacities.
The EWG recommended, as you see in the document in hand, a number of very specific action steps for governments, policy makers, the media, educators, researchers, and civil society. But making this happen is political work—and it can’t be done without women. The best GIS maps, most sophisticated emergency management plans, most highly trained scientists, and most proactive governments cannot make people safe. Safer ways of living in hazardous environments must be won, achieved through hard work at the local level by women and men.

The point is not to overburden local women or glamorize their role as environmental actors but to empower them as decision-makers and support their efforts to protect life and livelihoods. This is the spirit of Women’s Action Agenda 2002, and Beijing Plus Five, and women’s movements around the world. Disaster prevention needs to be taken up by women locally but also by women’s movements and other activists for social justice and sustainable development. We will want to look closely for gaps and blinders in the development work undertaken by UN family of organizations and its member governments. Are disaster prevention and gender equality integral concerns? We need to think strategically about how existing treaties, conventions, and protocols can be used to bring these issues forward. For example, we need to ensure grassroots women’s full and equal participation in the proposed new global treaty on disaster prevention, and in training programs within development and humanitarian relief agencies, and in governmental initiatives like FEMA’s Project Impact here in the US, which currently takes a gender-blind approach to vulnerability.

Perhaps the proposed GROOTS Working Commission on Disasters and Development could take the lead, spearheading organizing along these lines—and in the other directions you will suggest:

- The ISDR promotes risk reduction around the globe, working through partnerships with governments, business and corporate leaders, scientific and technical experts, and local communities. We will want to work very closely with them on the need for a sustained analysis of gender relations as a factor in every aspect of risk reduction and risk management. More gender-specific early warning systems are a case in point. I welcome your thoughts today about what the next steps might be.

- We need to enable women in CBOs and other organizations to take part in developing international agreements. Each year there are missed opportunities for integrating these issues into international work on globalization and environmental change. We must be there, as we are now in advance of the Johannesburg conference, to help shape dialogue and action around sustainable development.

- Women’s human rights are clearly violated in natural disasters. Increased risk of sexual and domestic violence in disaster contexts is just one example. How can CEDAW monitoring systems be utilized to make disaster planning and response more responsive to these concerns? What connections need to be made?

- Environmental disasters, slow degradation of land and water, and armed conflict force millions of women from their homes into “temporary” encampments where they may be forced to use resources unwisely to meet immediate survival needs. They are also extraordinarily vulnerable to the effects of natural disasters. How can we help put these
issues on the agenda of the Office of the United Nations High Commissioner for Refugees? How can they help?

• Women’s livelihoods are at risk in every disaster though their need for income is rarely addressed in pre-disaster preparedness projects or in post-disaster relief programs. The International Labour Organization is now employing a gender perspective in its programming around work and employment issues in disasters of all kinds. Can this be a model for women working with trade unions and other worker associations on disaster mitigation plans? Can Habitat address safe housing as a work issue for women in disasters, as well as a life safety issue?

• Like other sustainable development initiatives, the UN’s work on Healthy Cities cannot succeed without recognizing that women are key players in the social organization of fringe urban communities, so terribly vulnerable to floods and other natural disasters. Poor urban women’s inability to prepare for and mitigate hazards must be on the agenda for healthy cities. With respect to public health, we need to capitalize on women’s roles as informal health providers before, during, and after disasters. It is also imperative that violence against women in disasters be addressed as a public health issue. Women’s groups working on health and violence have expertise needed by disaster planners. How can they work together?

• Here in the US, the National Congress of Neighborhood Women can promote women as leaders in building disaster-resilient communities, bringing this issue to mainstream women’s organizations and governmental women’s bureaus. Advocacy groups knowledgeable about the resources as well as the needs of women living with disabilities, new migrants and refugees, senior women and women who work from home, immigrant rights groups, sex workers and street children, and women in violent relationships are natural allies. In the US and elsewhere, we need new coalitions with these groups around vulnerability reduction and emergency preparedness.

• Last but not least, we must think more carefully about how best to work with our male colleagues on gender and disaster issues. More research on gender and disaster in men’s lives would help, and more and better training on the pitfalls of gender-blind disaster work in the field. How can we contest the notion that gender is a divisive and secondary topic in risk management, best left to the coffee break, without bringing men fully to this work? We need to identify our allies here and initiate specific projects with them on gender equality and risk reduction.

With that, I invite your own ideas about moving from knowledge to action. My thanks for your kind attention.
Selected English-language Resources


Enarson, Elaine and Maureen Fordham. 2001. From women’s needs to women’s rights in disasters. Forthcoming in Environmental Hazards.


**Special journal issues**


**Website**

The Gender and Disaster Network (www.anglia.ac.uk/geography/gdn) includes downloadable papers, contact information for members, bibliographies, reports, and other resources. It also includes proceedings and action recommendations from women and disaster conferences held in British Columbia (1999) and in Miami (2000).

**Videos**
