

## Lessons from the field

Lessons learned from natural disasters in the region over the past decade and a half illustrate how the **physiological vulnerabilities, sociocultural and economic marginalisation, and gender stereotypes** which inform policy and relief work make all the difference in whether an individual is killed or manages to survive and, having survived, the extent of access he or she has to aid and rehabilitation afterwards. Drawing largely on Chew and Ramdas (2005), this section outlines some of the main ways in which women can be disproportionately affected during and after disasters.

### Women are more at risk of dying than men

The lack of consistent, gender-disaggregated disaster data makes it difficult to generalise about gender mortality rates in natural disasters: evidence from the destruction wrought by Hurricane Mitch in Central America in 1998 points to higher death rates amongst men (Bradshaw 2004b). There is, however, evidence from various South Asian disasters of women suffering higher mortality rates than men.

- During the Bangladesh cyclone of 1991, mortality levels amongst females over the age of ten were three times higher than those of males (Twigg 2004).
- In the Latur, Maharashtra (India) earthquake of 1993, women accounted for 48% of the affected population, but accounted for 55% of those who died (Twigg 2004).
- In the Asian tsunamis, five times as many women as men are believed to have died (Chew and Ramdas 2005).
- Disproportionate numbers of women were killed in the earthquake that devastated large areas of northern Pakistan in 2005 (Chew and Ramdas 2005).

What accounts for these gender-differentiated mortality rates? In part, they can be explained by physiological and biological factors. Women's physical size, strength, and endurance in relation to men; states of pregnancy and lactation; their primary responsibility for infants, small children, and the elderly; and, often, clothing may all serve to slow them down in crises when timing is crucial to survival.

#### Voices from the field #1

*"When the wave came, I grabbed both my children in my arms and tried to run, but the wave caught me, and I was forced to choose between my six-year old and my baby or else we would have all perished. I can still see the look in his eyes when I let go of him."*

*- Sri Lankan mother and tsunami survivor (Chew and Ramdas 2005)*

But less obvious issues also affect women's ability to protect themselves. Differential death and injury rates can be attributed to how, throughout much of the sub-continent, males and females have very different kinds of 'cultural permission' to use and access physical spaces. One example comes from the earthquake in Pakistan during which disproportionately high numbers of women and children lost their lives because of the collapse of houses and schools which they were in at the time. There is anecdotal

evidence to suggest that, in areas where female seclusion practices are not so pronounced, fewer women died, presumably because they were more mobile and felt more able to flee crumbling dwellings (Farid Ahmad, personal communication).

This relationship between gendered use of space and mortality rates has also been noted in other natural disasters in South Asia. In the Afghan earthquake of 1998 more women and children were killed as they prepared the evening meal (a time during which men were working in the fields) (ALNAP 2005); during the Latur earthquake in Maharashtra in 1993, fewer men than women died because they happened to be sleeping outdoors because of the warm weather. Moreover, because the gender division of labour keeps women in or close to homesteads, it is generally they who suffer disproportionately from the collapse of poorly-constructed dwellings (Bryne and Baden 1995).

Structures of decision-making and women's weak bargaining power within the household also account for high female mortality rates. One well-documented example comes from the Bangladesh cyclone of 1991 when many women waited for their husbands to return home to take the decision to evacuate, thereby losing precious time that might have saved their lives and those of their children (D'Cunha1997). A similar situation was played out in a very different cultural context halfway across the globe when Hurricane Mitch devastated several Central American countries in 1998. For instance, excessive female and child mortality rates and prevalence of disease in Nicaragua were attributed to many women failing to heed government evacuation warnings because they felt they should not leave their homes without the permission of their partners.



Harder to ‘see’ socialisation processes that inculcate in girls and women what has been termed a ‘learned powerlessness’ can also be at fault. In certain areas affected by the Asian tsunamis, the disproportionately high numbers of females who lost their lives through drowning are attributed to their having been less likely to know how to swim than men and boys; and possibly having limited their own choices by thinking they couldn’t climb trees or on to the roofs. In some areas clothing too was a hindrance, e.g., waterlogged saris constrained women’s ability to move (Chew and Ramdas 2005). Context, however, is everything: saris were an important ‘tool’ in rescue and relief efforts during the devastating Bhuj earthquake in 2001 and were used to pull people out of buildings and served as stretchers to convey the injured to medical attention (Anmol Jain, personal communication).

In some instances, high female mortality rates may be because early warning systems were not effective in reaching women. The following box demonstrates how the intersection of gender inequalities, sociocultural mores constraining women’s autonomy, and faulty assumptions about information-sharing at the household level can have literally deadly consequences for many rural women.

### Box 3: What went wrong?

In the aftermath of the Bangladesh cyclone of 1991 it was found that early warning signals had not reached large numbers of women. The information had been disseminated primarily in market places to which, in this highly sex-segregated society, many women do not have easy access. Moreover, it had also been erroneously assumed that men would convey the warning information to their family members. This did not occur to the extent that it should have, partly because many people discounted the severity of the warnings (cyclones since 1970 hadn’t caused much damage), but also because many men failed to share the relevant information with their wives. In the absence of timely and relevant information, women were unable to minimise the risks to themselves, their children, and whatever productive assets they could otherwise have saved. Sex-segregation norms also contributed to preventing women from protecting themselves and their families by taking the initiative to go to relief distributors and to shelters. Women who did get to shelters found them ill-suited to meet gender- and culture-specific needs: in a social context where seclusion is practised, large numbers of men and women were crowded in together with no prospect of privacy for pregnant, lactating, and menstruating women; and shelters lacked separate toilets and adequate water supplies.

(UNEP 1997)

## Women’s sanitary and health needs may be overlooked

Disaster relief efforts often fail to pay adequate attention to *specifically* female health and sanitation needs. These include attention to pre- and post-natal issues and complications such as early pregnancy loss, premature delivery, stillbirths, and delivery-related complications – all of which have been noted to increase in the aftermath of disasters. According to a non-governmental organisation working in the earthquake-affected area of Kashmir (Pakistan), the lack of gender-appropriate health facilities and personnel made it difficult for medical teams to gain access to injured women, and

left unaddressed the needs of the fifty per cent of married women who were pregnant at the time (IUCN 2006).

The absence of gender- and culturally-appropriate facilities, coupled with restrictive cultural mores and women's low social status, can create difficult situations for pregnant women, as narrated in the box below.

### **Voices from the field #2**

"I delivered a baby in this tent...I couldn't even go to the dispensary within our camp due to the shame my husband felt about me delivering his baby. He said I mustn't raise my voice while delivering so that no one around our tent would hear my cries due to the labour pains. I had to bear all the pains quietly without any help, no lady doctor and no medicine. My baby is still at high risk of a fatal sickness while living in this tent in the severe cold."

- *Earthquake victim and new mother in Pakistan (IUCN with Khwendo Kor 2006)*

In the chaotic conditions that prevail in the aftermath of a disaster it is common for the sanitary needs of women and girls to be overlooked or to not be adequately addressed, or if addressed often inappropriately: a fact-finding mission in the aftermath of the Asian tsunami noted that there was a lack of contraceptives and that the distribution of sanitary supplies and underwear was under the control of men (Chew and Ramdas 2005).

Other health-related dimensions affecting girls and women in disaster situations are given below (Bradshaw 2004b; Byrne and Baden 1995; WHO 2002).

- The extra needs of pregnant and breast-feeding women for food and water are rarely reflected in relief aid.
- Social taboos around menstruation coupled with norms of modesty can create considerable stress and health complications for women and girls, especially if lack of privacy and/or lack of latrines and clean water prevent them from attending to their needs properly.
- Girl children may be given less food in preference to male children and adults, thereby making them susceptible to poor health conditions.
- The breakdown of social support systems can contribute to female vulnerability to sexually transmitted diseases and HIV/AIDS.
- The fact that women and girls are responsible for child care, water supplies, and sanitation renders them more likely to come into contact with polluted water sources and exposes them to potential health hazards.

### **Women's workloads increase**

The disruption of normal life in the aftermath of a disaster in no way alters the nature of women's domestic work: water and fuelwood must be found; meals need to be prepared; and infants, small children, and the elderly require care. In fact, women's

work in post-disaster contexts may actually become *more* labour intensive because natural catastrophes all too commonly disrupt access to the very natural resources upon which daily household subsistence needs depend, thereby resulting in longer walks to sources of water, fodder, and fuel (United Nations 2004). Because so much of women's work is within or around homesteads, the destruction of houses also makes women's working conditions more difficult – a case in point being the difficulties of cooking on precariously reconstructed hearths or inside temporary shelters (IUCN 2006; SEEDS 2005).

Post-disaster circumstances can also aggravate the conditions of women's work by opening up new arenas of insecurity. An example of this is given by an NGO involved in post-earthquake rehabilitation in Pakistan. It recounts how daily life became highly stressful because: (i) women felt insecure living in tents that couldn't be locked; (ii) they had to walk considerable distances across the camps to use latrines (and, in some instances, there were no separate facilities for women and men); and (iii) they felt their mobility was constricted by the presence of male relief workers. In this atmosphere of a perceived sense of heightened insecurity, children, and especially younger girls, began

### **Voices from the field #3**

"We are worrying day and night. We can't go to our fields. We don't know what will happen. We have a lot of needs that we cannot fulfil due to the loss of employment of the male members of the family...Our men now remain here the whole day because there is no income opportunity for them."

- Earthquake survivor (IUCN with Khwendo Kor 2006)



to share in the daily domestic work, often taking over tasks from mothers and older sisters who were no longer comfortable moving around on their own (IUCN 2006).

An additional pressure placed on women during disasters is the social obligation to deal with stress experienced by other family members. Typically this is not even acknowledged by disaster relief/rehabilitation agencies. There is an unspoken expectation that women (along with their daughters) are available to cope with the *social and emotional upheavals* that are the inevitable outcome of death, disease, injury, destruction of homes, and the loss of all that is familiar (Enarson 2001c; Hussein and Husain 2006).

The following box highlights how the combination of women's productive and reproductive roles can result in their carrying enormous work burdens in post-disaster situations.

#### **Box 4: Who's doing the work?**

A field report to a shelter in the aftermath Hurricane Mitch in Honduras noted that women and teenaged girls were in evidence everywhere washing clothes, cooking, and looking after small children. Women had organised themselves into groups of several families, each having elected a manager to coordinate cooking, cleaning, use of latrines and water, and security. This was in addition to women's responsibilities within their own families. Over 50% of women were, in addition, trying to generate income through various activities such as taking in laundry and preparing tortillas. Conspicuous by their absence were the men, with the few present playing dice in a shelter. The women reported that their menfolk were absent – working elsewhere or 'disappeared.'

(Delaney and Shrader 2000)

### **Women are more economically vulnerable**

Women experience a harder time recovering from disasters, are more vulnerable to destitution, and susceptible to labour exploitation, forced marriages, and trafficking. This is primarily because of their economic vulnerability: compared to men, they have lower literacy and educational levels, have considerably less access to productive resources (notably land) and to income-generating opportunities, and are more likely to be over-represented in the agricultural and informal sectors which tend to be badly-hit by natural disasters. As a result, women account for a disproportionately higher number of the unemployed or those employed in marginally paid work than men. Their economic vulnerability is intensified because they lack meaningful access to decision-making pertaining to divisions of labour, control of household resources, or issues pertaining to their well-being. Finally, the combination of women's domestic and caregiving responsibilities together with the sociocultural constraints on their mobility make it less likely that women will have the opportunity to migrate in search of income-generating work (Twigg 2004; Chew and Ramdas 2005; PAHO n.d.).

The collapse of social support systems, lack of assets, and other expressions of socio-cultural powerlessness can have particularly devastating consequences for certain categories of women, such as the elderly, widows, and female children and orphans. In one riverine community in Pakistan, for instance, the washing away of lands and houses forced families to sell jewellery to make ends meet, with the result that the marriages of many young girls – for whom the jewellery would have provided dowries – had to be delayed. The sale of jewellery also led to a growing sense of vulnerability on the part of women for whom it had represented an important source of economic and psychological security. Fieldworkers noted that the delay (or in some instances lack of marriage opportunities) had serious implications for the social status, psychological state, and even survival of young women (Ariyabandhu 2000).

Women who have lost their husbands can face a particularly difficult time. It is not uncommon for widows to have to face efforts on the part of the dead husband's kin to dispossess them of land and other property. In Bangladesh, for instance, there have been cases of the Shariah law being exercised in this respect, leaving widows and children even poorer than before. The challenges women face in such cases are enormous. Even in South Asian countries that do provide formal recognition of women's property rights, there is a wide gap between *de jure* and *de facto* situations and customary laws, traditions, and cultural factors often hold sway, especially in rural areas. Illiteracy, and lack of education and empowerment also result in women being unaware of the statutory laws that theoretically could grant them security of tenure after the deaths of their husbands. It is, moreover, usually hard for semi- or completely illiterate rural women to muster up the resources required to seek legal protection.

### Women may be denied adequate relief or compensation

The combination of 'cultural permission' shaping women's mobility or lack thereof, and gender biases in relief and rehabilitation work, often affects their ability to benefit from relief efforts. After the earthquake in northern Pakistan in 2005, widows, single women, and women-headed households found it difficult to gain access to the relief and tent camps that had been set up outside their local areas because of their concern about having to deal with men who were not related to them. NGOs involved in relief and reconstruction work reported that it was not uncommon for women, even in areas where no formal constraints on women's physical mobility exist, to feel intimidated by having to deal with male relief workers who were not their kin and, hence, they did not receive the relief supplies available. While compensation was provided by the government to designated heads of families who had proof of identity, this was not always easy for women: women who had lost their male family members found it difficult to sign up because they were neither able to go to the issuing office on their own, nor did they want to have their photographs taken by men they did not know (IUCN 2006).

Gender biases that permeate thinking at the policy and field levels are even more to blame for accentuating women's sociocultural and economic vulnerabilities in the aftermath of disasters. Key amongst these is the 'male head of household' bias which assumes that men are the primary income earners, whereas women's inputs

are regarded as supplementary, thereby justifying the channelling of economic assistance, direct compensation, assistance, jobs, and training to men only. Lessons learned highlight how failing to explicitly acknowledge women's routinely central inputs into family sustenance and welfare and their need for economic support, relief, and rehabilitation work often aggravates women's situations. For instance, consider the following.

- Women who lack resources in their own right may risk losing indirect access to resources if they are abandoned or if the husband dies.
- Female heads of household, who are often amongst the most vulnerable segments of the disaster-affected population, and their dependents, often fail to receive adequate supplies.
- Food and other resources distributed to men on the assumption that what benefits them will also benefit their families may fail to reach household members and be sold on the market instead.

#### **Voices from the field #4**

*"We have skills but lack resources. It is most important that we are given some productive resources such as sewing machines and material for embroidery so that we can work and earn to restore our damaged and weak family economy."*

*- Young female earthquake survivor (IUCN with Khwendo Kor 2006)*

There are many instances of how common this gender bias is. In one area in Sri Lanka women whose husbands had died during the tsunami were unable to claim money. There have also been cases in which relief distribution has been based on the needs of single adults, so that even if women do receive aid it is insufficient to share with their children (Chew and Ramdas 2005). In the aftermath of the '91 cyclone, Bangladeshi women heads of household were overlooked in the allotment of land and housing because it was based on the previous patterns of ownership; allotment ownership had been in men's names, with the result that new allotments were given to even very young sons or the brothers of deceased husbands but not to widows (Asian Disaster Management News, 1997). Women often found themselves doubly marginalised, dealing with the discomfort of interacting with male distributors for relief supplies, often sidelined because virtually all immediate and long-term recovery support was directed toward men, and because male kin often used relief items to meet their own needs, spending money on pān and cigarettes, thus directing crucial resources away from household needs (Enarson 2004).

### **Women face the risk of increased gender-based violence**

Field studies from socially and culturally dissimilar regions, such as the areas affected by the Asian tsunami, Hurricane Katrina, and the Kashmir earthquake, suggest that women and girls face increased vulnerability to domestic and sexual violence in the aftermath of disasters (IUCN 2006; Enarson 2006). An increase in domestic violence and sexual assault was noted after the 2004 Indian Ocean tsunami, with instances of women being battered for resisting their husbands' sale of jewellery or disputing the use

of relief funds (Chew and Ramdas 2005). It has also been observed that women who are socially isolated to begin with face greater risks of domestic violence than others in disaster situations, with access to fewer resources and options at such times.

## Gender stereotyping – it hurts everyone

Gender stereotypes – the casting of people into rigidly fixed ‘boxes’ based on *assumptions and expectations* about their abilities and their temperaments (which are often far removed from reality) – often play a large part in configuring how people are affected by and how they respond to disasters. In the aftermath of Hurricane Mitch some work programmes in housing construction prevented women from participating in construction work in order that they could devote their time to their perceived ‘natural roles’ of domestic work and child care (Delaney and Shrader 2000). In other instances, relief and rehabilitation agencies have unwittingly reinforced women’s work burdens by taking for granted their labour and care-giving inputs.

Field studies indicate that men, too, are by no means immune to the negative effects of gender stereotyping. Cross-culturally, ideologies of manhood stress men’s roles as breadwinners and protectors of families, a problematic image to live up to in ‘normal’ times (especially when the overwhelming reality is that most rural and poor urban households are equally dependent on the inputs and earnings of their female members). It can become especially onerous in post-disaster situations when families’ livelihoods and assets are destroyed. Evidence from North America and Cambodia indicates that men may have a difficult time seeking assistance from relief centres because of a perceived sense that this is an admission of their inability to live up to their roles as providers (Enarson 2004). In another example, young Sudanese men in refugee camps were unable to prepare the food provided for them, since cooking was usually done only by women, and it was something they had never learned to do (WHO 2002).



Gender stereotyping can also cause damage by failing to give due weight to the mental trauma and psycho-social problems that emerge in disaster contexts and which can seriously affect people's coping strategies. There is evidence that females may suffer more emotional disorder and distress in the aftermath of disaster than men because of the expectation of society that they will provide the support needed to family members, placing family well-being before themselves within a context of limited social support for their own needs (ALNAP 2005; Bradshaw 2004b; WHO 2002). On the other hand, the expectation that men (and boys) are physically and emotionally strong has done little to ensure that they are provided with much-needed counselling and emotional support in times of trauma.

#### **Box 5: Gender stereotyping can have negative consequences**

- **Seeing women as victims** overlooks their capacities: their lives force them to be resourceful!
- **Taking for granted women's time and labour** (including for unpaid care-giving) places huge burdens on them, prevents them from engaging in hazard prevention work, and is a major cause of their poor emotional well-being.
- **Having a male 'household head' bias in food/supply distribution** is marginalising women and rendering them and children susceptible to abandonment if men take off or if relief supplies are directed away from household needs.
- **Assuming that men are physically and emotionally strong** prevents the channelling of post-disaster counselling to them.
- **Viewing men as family providers** reinforces a commonly-held view amongst men that seeking assistance is an admission of weakness (and, thereby, places added burdens on women).
- **Uncritical acceptance of 'the household' as a system of support** overlooks the fact that members' (including the elderly) needs may not be met in times of crisis.
- **Sociocultural norms of female modesty** can severely hamper women's ability to protect their lives and gain access to relief and reconstruction initiatives.