

DISASTERS AND SOCIAL VULNERABILITIES IN ASIA AND THE PACIFIC

Structure of Social Vulnerabilities

Vulnerabilities are *'the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard'*.¹ There are various aspects of vulnerabilities, arising from physical, environmental, economic and social factors. The most complex, the least understood and the most difficult are the social vulnerabilities, as these remain mostly invisible but deeply rooted in the social systems, community structures and power relations.

Every country and community in the Asia-Pacific is uniquely placed to have its own vulnerable population, based on its demography, economy, and social and political systems; but overall, the structure of vulnerabilities in the region has underlying similarities. First, the poor economic conditions of a large share of the population, except in pockets of affluence in a few developed countries, have created the most visible layer of vulnerabilities in the region. Poor people everywhere have limited capacity and access to resources to absorb the risks of disasters. Secondly, the gender relations in every society in the region, irrespective of its status of development, discriminate against women. Disasters accentuate these discriminations and make women suffer disproportionately. The children, the elderly and the persons with disabilities are the other vulnerable groups who have specific needs and concerns for their welfare, protection and development. Existing social and institutional support systems get seriously disturbed during disasters and in the aftermath making them more vulnerable. In many countries of the sub-regions, political ideologies and power relations have created further layers of vulnerabilities among segments of population who do not have equal rights of protection, such as the religious and ethnic minorities, migrants, immigrants, internally displaced persons etc. who become more vulnerable than others in disaster situations.

These layers of vulnerabilities are not mutually exclusive and may intersect, for example, within the broad set of vulnerabilities created by poverty, gender may create its own sub-set, and within this sub-set of gender, the disabled and the elderly may have their further sub-sets of vulnerabilities. In this complex matrix of vulnerabilities in the Asia-Pacific, there are sections of vulnerable population who are subjected to multiple layers of vulnerabilities. For example, a woman who is elderly and disabled and is also poor would face multiple vulnerabilities. This poses challenges in designing specific social protection systems that would integrate the services provided by multiple agencies according to the needs of the target beneficiaries.

¹ UNISDR Terminology 2009

Impact of disasters on the specifically vulnerable groups

Disaggregated data by vulnerable groups are not widely available, however the following data is indicative on the impact on specific vulnerable groups.

In 2011 Thailand floods out of the reported 380 deaths 62 were children (16%). Most of them were drowned and 40 of them were boys.

Children constituted 9 million out of 20 million people affected by the Pakistan floods of 2010 (45%)

Empirical case studies show that in Aceh province of Indonesia 21.1% of the victims in Asia Tsunami 2004 were children below 10 years and 32.6% were elders above 70 years (Tsunami Mortality in Aceh Province, Disasters, Vol. 30 No.3, 2006).

In Aceh in Indonesia higher mortality rate was observed amongst young children (0-9 years) as well as the elderly (70 and above). This holds true also for Sri Lanka with high mortality amongst children (31.8% for 0-5 years, 23.7% for 5-9 years) and the elderly (15.3% for 50+ years), compared to young adults (20 to 29 years) who had a mortality rate of 7.4% (Nishikitori in Sawai 2011)

In Aceh in Indonesia, the tsunami mortality survey of 1,653 households found higher mortality among youngest children (aged 0-9 years) and the elderly (70+). Women were found to have consistently higher mortality than male population in any age group, with nearly two-thirds of dead or missing.

According to a study carried out by OXFAM, for every 1 male killed in Asia tsunami in India and Sri Lanka 4 were females (Oxfam, Tsunami Impact on Women, Briefing Note 30 March 2005).

Pakistan earthquake of October 2005 killed more than 15000 school children due to collapse of school buildings in which they were trapped. Similarly more than 3000 school buildings collapsed during the earthquake of Sichuan which reportedly killed 90,000 people, nearly half of them children (SAARC 2011)

In the Great East Japan earthquake 2011 more than 65% of the victims (killed or missing) were 60 years of age and above (<http://www.unescap.org/idd/working%20papers/IDD-DRS-who-is-vulnerable-during-tsunamis.pdf>)

More than 2% of persons with disabilities (PWD) were killed or missing in the three prefectures (Miyagi, Iwate, Fukushima) compared to 1% of non-disabled persons. Approx 15,000 PWD live in the 3 prefectures, and the figure is based on survey by the Cabinet Office to 27 organisations: amongst 9000 people, 230 people (or 2.5%) died or missing. (Source: Katsunori Fujii, Japan Disability Forum.

Poverty and disasters

Despite visible signs of prosperity due to rapid economic growth in many countries, extreme poverty still affects more than 800 million people in the rural and urban areas of the Asia-Pacific. The problem is particularly severe in South Asia, where more than a quarter of population still lives below absolute poverty line.

Poor people in the region are routinely more exposed to the risks of disasters. Their livelihoods are threatened by droughts, floods and storm surges, while their habitats get damaged by earthquakes, landslides, cyclones and floods; they further lack the capacity to recover from the shocks of disasters. In the recent years many countries have made significant gains in reducing the incidence of poverty. It has been the experience that reduction in the levels of poverty have created better opportunities for livelihood and improved housing and living conditions of people, but there has not been any quid pro quo in this relationship. There are examples of countries and communities that have been able to reduce vulnerabilities despite the prevalence of high incidence of poverty, such as in Bangladesh, Indonesia, Vietnam and Philippines; conversely there are examples where vulnerabilities have prevailed despite relative affluence among people, such as in some of the countries in Central and East Asia. Community based disaster preparedness initiatives in many countries have significantly enhanced the capacity of the poor to assess their own risks and adopt various innovative measures and coping mechanisms, such as alternate agricultural practices, microcredit and insurance, that have reduced the risks of disasters.

Gender issues in disasters

Although gender disaggregated data on disaster mortalities and damages are generally not available, there are empirical evidences to demonstrate that women suffered more in disasters and their specific needs were mostly ignored in post disaster relief and rehabilitation measures. More women than men died in the Indian Ocean tsunami in 2004 (estimated 60 % of deaths are women and children on average and in certain pockets rising upto 70 %); the 2010 floods in Pakistan demonstrated that women were either overlooked in the distribution of relief or, they were unable to reach places of relief distribution due to social norms that restricted their mobility.

Work of women arising out of the socially assigned role, particularly the caring functions for the sick and the disabled increased sharply after every disaster; number of women headed household went up in Gujarat after the earthquake of 2001; girl dropout rates in schools increased; violence against women also spiraled post disasters in many countries. In Myanmar, Philippines, Nepal and Bangladesh, it has been reported that affected women and girls in various disaster situation and girls being trafficked.

The emergency response systems throughout the region are still dominated overwhelmingly by males. The standard operating protocols for early warning, evacuation, search and rescue have bias for men and do not consider the special physical, health, psycho-social and other needs, as well as the capacities of women and girls.

Patriarchal gender ideologies still represent women, even in the developed countries, as passive victims of disasters while failing to recognize their role and capacities in building resilience in communities or to change the underlying structures that undermine their coping mechanisms. Women's representation in national parliaments and in national platforms on disaster reduction, wherever these have been constituted, is abysmally low, while women's

involvement in disaster preparedness planning and in post-disaster recovery and reconstruction programmes is not widely reported.

Many grassroots level initiatives of women, on the contrary, have demonstrated the value addition that women make in reducing the risks of disasters through preparedness measures, and in rebuilding communities affected by disasters. There are significant lessons to be learnt from these initiatives to mainstream gender issues in national and local levels plans of action on disaster risk reduction.

Issues of children in disasters

Children compose nearly 30 percent of the population of the Asia-Pacific. Their numbers as well as their status vary widely in different sub-regions, but overall, the conditions of large number of children in terms of their health, nutrition, education and protection continue to be causes of considerable concern. The region as a whole would be missing several of child related targets of the millennium development goals.

In the absence of child segregated data it is difficult to quantify the extent of losses suffered by children in disasters; however empirical evidences suggest that child mortality would account for nearly 40 percent of the total casualties. In Asia floods 2011, the Department of Disaster Preparedness and Mitigation (DDPM) in Thailand indicated floods affected more than 2.4 million people, including 800,000 children (UNICEF). In Vietnam floods caused the deaths of 43 persons out of which 38 were children, while in Cambodia the death toll rose to 257 and at least half of them were children. The number of children perished in Thailand is 58 (Agency data sources and newspaper reports November 2011). In the Kashmir earthquake, in Pakistan alone more than 15,000 school children perished.

What makes children more vulnerable is that unlike the adults they depend on external support systems for their survival and protection, which crumble during disasters. There are wide gaps in developing support structures that can take care of the physical, psychological, legal and educational needs of children affected by disasters.

Two major initiatives taken in the recent years throughout the region are (a) school safety to ensure that lives of children are safe in schools and (b) school curriculum to include education and awareness about disaster risk reduction to develop a culture of safety among the younger generation.

Another initiative in some of the countries is directed to empower the children and use the capacities of elder children for better preparedness of the communities before disasters and better response and recovery after disasters.

Issues of disability in disasters

Conservative estimates indicate that about 10 percent people of the Asia-Pacific live with disabilities, even though official report would peg it much lower, limiting to the actual numbers that receive assistance from the government agencies. About 20 per cent of the poorest people have some kind of disability; women with disabilities experience exclusion both on account of their gender and disability; 90 per cent of children with disabilities do not attend schools; persons with disabilities are subjected to various types of violence and suffer more in natural and manmade disasters.

There are very few studies on issues of disability relating to disasters in the region, but significant guidelines have been developed such as the UN Convention on the Rights of the Persons with Disabilities 2006 and the Bonn Declaration on Disasters and Disabilities 2007 that can be incorporated into the policies and practices of the national and local level institutions that deal with the issues of the persons with disabilities. Many countries in the region are in the process of developing new legislations and policies for the implementation of CRPD. In 2012 China announced its policy for equal access of persons with disabilities to fully participate in social and economic life and reap the benefits of national development.

Ageing and disasters

Overall 7 percent people of the Asia-Pacific are in the age group of 65 plus, which is projected to more than double by the year 2025. Many countries are ageing faster, Japan, for example, has nearly 23 per cent of its people as senior citizens, which would swell to almost 30 percent in next decade and half. Given the higher life expectancy of women ageing would be feminized with sex ratios heavily tilted towards the females. The *ageing index* (number of 60+ persons per hundred persons -15) would jump from 29 at present to 64 in 2025 and 115 in 2050, reversing the population pyramid. The *dependency ratio* (number of children -15 and elders 65+ per 100 persons in age group 15-64) would be reaching almost 50 in most of the countries thereby signalling that half of the population would be dependent on other half. The *parent support ratio* (number of 85+ per 100 persons in age group 50-64 years) and *potential support ratio* (number of persons in age group 15-64 per every person above 65) would be reinforcing a trend that would require families, society and economy to support an increasing number of elderly and elder elderly.

These demographic changes pose challenges for redefining the risks for growing number of elders and elderly females and taking appropriate measures for reducing the risks of such vulnerable population. The fact that more than 60 percent of the people killed by the tsunami of East Japan in 2011 were senior citizens demonstrate the challenges that even advanced countries face in mitigating the risks of of disasters for the elderly population.

The *Madrid International Plan of Action on Ageing* recommended equal access by older persons to food, shelter and medical care and other services during and after natural disasters and other humanitarian emergencies. It further called for enhanced contributions of older persons to the reestablishment and reconstruction of communities and the rebuilding of the social fabric following emergencies. None of the countries of the Asia-Pacific is known to have developed any systematic Plan of Action which incorporates these concerns for the elderly in emergency situations. Massive casualties among the elder people in Japan during the tsunami last year demonstrated the need and he urgency for developing specific social protection measures that can mitigate the impact of disasters on the elderly persons.

Mainstreaming DRR for social protection

The countries of the Asia-Pacific have adopted various global and regional conventions for the welfare, development and empowerment of women, children, elderly and persons with disabilities and developed significant policies, legislations, institutions and plan of actions for the social protection of vulnerable groups. However, there are wide gaps between the professed policies and practices, due mainly to the constraints of resources and capacities at

all levels and lack of sustained commitments to bring about complex social and economic changes to make this happen.

Various civil society initiatives have supplemented the efforts of the governments in carrying out experiments and innovations to add value to the initiatives, but the process of learning from successful initiatives have been rather slow.

So far the approach of mainstreaming disaster risk reduction in sectoral policies and programmes has been very slow and ad hoc. Specialized institutions working for the vulnerable groups with their own cadres, norms and budget are compartmentalized and do not lend themselves to be easily influenced by the philosophies and practices of disaster reduction, unless disasters have wrecked havoc and taken tolls of the vulnerable population.

There are significant lessons to be learnt from each disaster and adopt policies and practices that can reduce the risks of vulnerable population and involve them in building cultures of safety and resilience.

Japan made some progress in integrating gender into disaster management laws and frameworks since the Kobe earthquake of 1995; however, in reality the implementation lagged behind. In the aftermath of the Wenchuan earthquake of 2008 China issued specific policy directive to further protect those who were most in need, namely the disabled, the orphans and the aged. Japan saw better integration of gender into disaster management cycle following the Great East Japan Earthquake in 2011 by encouraging more women to take part in the decision-making processes and activities related to disaster risk reduction.

Integrating social protection in DRR

Probably the best entry point for mainstreaming the issues of DRR in social protection is to integrate the issues of social protection in the policies and guidelines of the newly created institutions of disaster management in the region. Following the Hyogo Framework of Action almost every country of the Asia-Pacific have either revised or created new legislations, policies and institutions for disaster management. So far the approach of these institutions has been heavily oriented towards disaster response and relief, but as they have graduated through the initial phase of basic disaster management they can systematically look into the issues of social and economic vulnerabilities to reach out and work through the specialized institutions to mainstream and integrate the issues of disaster risk reduction for the welfare, development of empowerment of the vulnerable population.

The national governments of every sub-region of the Asia-Pacific have expressed their commitments in principle on both the issues of mainstreaming and integration. The barriers that hinder the integration are: (a) vulnerable group segregated data are not available at the national and local level, which makes it difficult to design appropriate programmes; (b) there are institutional barriers between two diverse sets of institutions working for the welfare of the vulnerable population and for disaster risk reduction; The specialized agency, stakeholder group who work on the social and development issues of the vulnerable groups need to be drawn into look into the DRR aspects (c) there are barriers in mind set and social barriers to recognize, tap and to involve and capacitate 'vulnerable groups' in disaster risk management. (d) there are constraints of resources for such integration and lack of capacities to develop country specific process guidelines for such integration and implementation of the same focusing on the issues of vulnerabilities and capacities. The priority requirements to

facilitate the process of integration include developing database on vulnerable groups, creating tools and processes for mainstreaming across sectors, building capacities for such integration and documenting good practices for advocacy and replication.

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