

Role of Women in Disaster Management : An Analytical Study with Reference to Indian Society.

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ABSTRACT :

Disasters have had an impact on the lives of women all around the world. Generally women are looked at in disasters only as victims despite the fact that the majority of victims in disasters are women and children. The central role of women in facing the aftermath of disasters is totally neglected. India is one of the most vulnerable countries to natural disasters. The country has faced a number of natural disasters in the last decade which have claimed hundreds thousands of precious lives and heavy economic losses. It has been observed that more than half of the victims in the past disasters were women. During the last major natural disasters of the decade it has been observed that in India women do not have technical knowledge about disaster occurrence in general. The participation of women in the planning, designing, implementing and monitoring emergency programs and rehabilitation projects is still on a low key profile. Present paper discusses the position of Indian women and role played by them in past natural disasters. Based on survey and study of 2004 Sumatra Tsunami affected areas of Tamilnadu, India it will put forth the problems and difficulties Indian women face during and after occurrence of a natural disaster. It endeavors to suggest strategies to train and educate them to make them capable of performing their expected duties in such an event. It also defines their responsibility and input which they can offer for inculcation of disaster safety culture amongst the society.

KEYWORDS:

India, Tamilnadu, Sumatra, Women, Children

1. INTRODUCTION

Women are especially hard-hit by the social impacts of environmental disasters. Existing inequalities are the root cause of women's disaster vulnerability. Global forces and social changes placing more people at greater risk of disaster also disproportionately impact women. Women are particularly vulnerable because they have fewer resources in their own right and under their own control. They have no permanent place in decision-making systems and they suffer traditional, routine and gratuitous gender-biased oppression. By virtue of their lower economic, social, and political status, women tend to be more vulnerable to disasters. Women's high rate of poverty as well as cultural constraints on their activities in some societies means they are more likely to suffer losses of life and property in the face of natural disasters. Their role in ensuring household food security, and their dependence on natural resources to do this, reinforces the impact of disasters, for example drought and slow flooding, in search of supplemental income; this leaves women to fend for themselves and assume even greater responsibility for caring for their family. In post disaster situations women are often more vulnerable than men. Their care giving roles expand dramatically after a disaster and experience shows their access to resources for recovery is constrained. Reports from many disaster affected parts of India reveal that even when women have had access to cyclone (or community) shelters, they have had to work harder than usual, and in defiance of their own safety imperatives, to gather fuel wood for cooking. Their special health needs, in fact especially those of pregnant and lactating women, are ignored. Women play a predominant role as far as use of resources is concerned. Women role in rural areas remains circumscribed by the domestic sphere. However, the relationship of women strengthening the groups most vulnerable to disasters is an essential part of building disaster-resilient communities.

2. EFFECT OF DISASTER ON WOMEN

Highly vulnerable women have specific needs and interests before, during, and after disasters. Gender shapes capacity as well as vulnerability. Women are active and resourceful disaster responders but most often are regarded as helpless victims. There are a number of causes which are primarily responsible for vulnerability of people and social structure as far as occurrence of a natural disaster is concerned (table 1)

Table 1. The fundamental causes influencing the vulnerability of people and social structures

Vulnerability	Causes
Material/economic vulnerability	Lack of Access to resources
Social vulnerability	Disintegration of social patterns
Ecological vulnerability	Degradation of the environment and inability to protect it
Organizational vulnerability	Lack of strong national and local institutional structures
Educational vulnerability	Lack of access to information and knowledge
Attitudinal and motivational vulnerability	Lack of public awareness
Political vulnerability	Limited access to political power and representation
Cultural vulnerability	Certain beliefs and customs
Physical vulnerability	Weak buildings or weak individuals

The increased vulnerability of women, though primarily due to biological reasons, is also associated with factors which are socially and culturally deeply rooted in the community. They have to face different situations at various stages of disaster. After the immediate post-disaster period when adequate relief did not pour in, they have been bartered for food. In the late post-disaster period, girls may be married off at a much younger age or wedded to older persons, who may buy them under the guise of marrying them.

2.1. Psychological Aspects

After a major disaster, it is seen that women are more prone to depression and other emotional disturbances. The psychological vulnerability of women predominantly arises from their inherent family instincts. After disaster loss of shelter and family poses a tremendous pressure. On occurrence of a natural disaster women are expected to play the

role of care taker to the family without paying attention to their own losses. Feeding the children or other family members becomes their first concern and they immediately start getting involved in various activities. Thus, with trauma and stress added burden of duty and responsibility make the women more vulnerable to physical, mental and emotional stress.

It is supposed that men, are stronger both physically and emotionally but it is evident that women are better capable of handling emotionally charged issues, physical pain, and stress. Men think in the now, in present situation while women think more in the long term, big picture mode. When confronted with an emotional issue, women tend to look at how the resolution will affect those involved, while men usually look at the resolution itself as the end result. Men are more concrete thinkers, and women think on the emotional level due to differences in thought processes, women are better equipped psychologically to handle emotional situations than men.

2.2. Socio-cultural Consequences

Following a major disaster, women tend to lose the entire social support structure which they badly require. Women have to deal with the grief of having lost their spouse along with the burden of increased responsibility towards their surviving family with young children. In such a circumstance they have to take on new roles of bread earner and protector for which they might not prepared both psychologically and physically. Various socio cultural consequences are graphically presented in the figure 1.

Figure 1. Socio-cultural Consequences

Physical impact	Emotional impact	Socioeconomic impact
Soreness, Sleep disturbance Eating disturbance Gynecological problems Injuries Miscarriages Aches and pains Physical impairments, Rape	Anxiety, Fear, Humiliation Dreams and nightmares Degradation, Disbelief Listlessness Shame, Embarrassment Denial , Irritability, Anger	Dealing with new societal roles like being a widow, single parent, or head of house. Inability to work, Feeling isolated, Feeling stigmatized. Withdrawal from external life Loss of trust Disorganization and discontinuity of life routines

3. STATUS OF INDIAN WOMEN

The status of women in modern India is a sort of a paradox. The sex ratio of India shows that the Indian society is still prejudiced against female. There are 933 females per thousand males in India according to the census of 2001, which is much below the world average of 990 females. There are many problems which women in India have to go through daily. The main problems which Indian women face includes malnutrition, poor Health, maternal Mortality, lack of education, mistreatment, overworked, lack of power, marriage , dowry and Female infanticide. Table 2 demonstrates status of Indian women in world.

Table 2. Status of Indian Women

Social Indicator	India	World
Infant Mortality Rate, per 1000 live births	73	60
Maternal Mortality Rate, per 100,000 live births	570	430
Female Literacy, %	58	77.6
Female School Enrollment	47	62
Earned Income by females, %	26	58
Total Fertility Rate	3.2	2.9
Contraception usage, %	44	56
Low birth weight babies, %	33	17

Source : <http://www.mapsofindia.com/culture/indian-women.html>

4. ROLE PLAYED BY WOMEN IN PAST EARTHQUAKES

In Maharashtra and Gujrat states of India a number of non governmental organizations involved who encouraged local women to participate in relief and recovery operations after earthquake occurrence. They made various groups to build the skills and capacities required to train the members for post disaster recovery to long-term development. The remarkable work by an Ngo called Swayam Shikshan Prayog (translated as “learning from one’s own and others’ experiences”) which had more than 15 years experience of working for women and poor communities in rural India proved the capability of women in handling disasters. In 1993 Latur Maharashtra earthquake, they contributed in repairing and strengthening of damaged houses. In 2001 Bhuj, Gujrat earthquake the grassroots women’s groups from Maharashtra traveled to this neighboring state to share experiences and pledge long-term assistance.

Swayam Shikshan Prayog (SSP) was established as an NGO to build the capacities of rural women’s groups to access and manage development resources and to participate in decision-making processes affecting their families and communities. In year 1980 they developed in a pilot collaborative effort with the government to enhance women’s economic participation in an existing antipoverty program , funded by UNICEF (the United Nations Children’s Fund) and the national and state governments. SSP facilitated a dialogue between community-based women’s groups and local government officials in six districts in the Marathwada region of Maharashtra State. During this period, SSP piloted methods such as district wide information fairs and community-to-community exchanges and dialogues for women designed to help them to learn to work with banks and government agencies. Today SSP, with a staff of more than 60, partners with women’s collectives and communities across 889 villages, including 1,680 savings and credit groups that represent more than 22,000 female members. These women’s groups address urgent issues such as credit, food security, water and sanitation, health, education, and social infrastructure by initiating demonstration projects, community planning, and skills training, and by increasing their participation in local governance. To support these efforts, SSP, with headquarters in Bombay, operates field centers in the Maharashtran districts of Amaravati, Beed, Latur, Nanded, Osmanabad, Solapur, and the Gujarat districts of Jamnagar and Kutch.

More than 1000 women who were taught the basic construction techniques used for adapting and strengthening traditional village houses and learned how this type of construction would protect residents from future tremors. These women groups proved that they could inform, motivate, and supervise local homeowners. The information assistants and women’s groups took their responsibilities to homeowners and community groups and worked to ensure that people knew how to access and use their entitlements and understood and were able to supervise the use of earthquake-safe features in construction and make use of appropriate technology and local resources. They worked, as well, to involve women in planning and designing their houses and interacted with government agencies on behalf of their communities.

4.1. Bhuj Gujrat Earthquake 2001

A powerful earthquake, with an epicenter near Bhuj, struck the Indian state of Gujarat in late January 2001, and nearly a million families were left homeless. The Kutch region, a large part of which lies in the highest seismic hazard zone in India, was the hardest hit accounting for 90 percent of all deaths and almost an equal share of all destroyed assets. Role of women in this event can be said noteworthy where local women benefited from the help of their peers from Maharashtra.

The remarkable contribution given by women in 1993 Latur and 2001 Bhuj earthquake once again proved their capacity as far as disaster management is concerned. The women’s groups underwent training to take on their role to motivate householders, build technical capacity, demonstrate collective arrangements, provide feedback, and monitor reconstruction. Over time, women acquired the confidence and skills to become community-development intermediaries, monitoring basic services, voicing women’s priorities in their communities, initiating local development projects, and facilitating dialogues between their communities and government officials. Training of public agency staff concerning community and women’s participation was also critical in ensuring the success of this process. As a result, 250,000 households were involved in earthquake-safe construction in Gujarat and Latur. As 4,000 women and families took loans; 1,200 women started businesses, and livelihoods and assets were stabilized. Communities organized for long-term development. Today, more than 800 women’s groups work on health,

education, water, and sanitation in their communities.

4.2. Indian Ocean Tsunami of 2004

On December 26, 2004 the Indian Ocean Tsunami took away the lives of 12,000 people, displaced 650,000 and injured over 5,000 in Tamil Nadu, India . The material damage by the tsunami is estimated at US\$ 437.8 million, and the livelihood damage at US\$ 377.2 million making it the total of US\$ 815 million.

In this event more women and children died in the worst affected areas for example in Nagapattinam in Tamilnadu, where about 2,406 women died compared to 1,883 men. When tidal waves reached the coast most of the fisherman were out fishing at sea, where the waves passed over the waters relatively calmly, while the women were on the shores waiting for the catch as a result they washed away. Besides, many women died trying to protect children and the elderly. More significantly, women died because traditional taboos prevent them from entering the sea in this highly patriarchal society of meenavars (fishing community). Many women simply do not know how to swim. The Tsunami revealed the sheer physical helplessness and dependency of women on men.

Survey has been conducted to find out various socio-cultural consequences of disasters directly indirectly affect women in the affected areas of Cuddalore, Tamilnadu. Survey results indicated that women suffered in a number of ways some of which are listed below:

- Women becoming widows which result in lack of interest in life.
- Girls becoming orphans and they become more vulnerable by and large.
- Sexual and physical assault on women by others and their family members in addition to coercion to keep quiet about the assault makes their life pathetic.
- Lack of legal help particularly for illiterate women.
- Lack of privacy in emergency/semi permanent shelters creating a feeling of insecurity amongst women who are already in trauma.
- Increased responsibility towards family in such a situation where it is difficult to even arrange for day to day needs.
- Increase in domestic violence

It has been observed that there are women who would never see the dead bodies of their spouses or children, who seem to have disappeared suddenly. This adds to their grief and pain by not providing an emotional closure.

Being emotionally attached with the family a number of women who had lost her children in the tsunami lost interest in daily life. Initially they demonstrate some emotional reactions initially and then others will come up later. They may keep sitting silently, stop eating or may have problems sleeping at night.

4.2.1 Disaster and Emotional Reactions in Women

Response of women with respect to occurrence of a natural disaster can be classified in two categories, initial reactions and long term reactions(Figure 2 and 3)

Figure 2.
Initial reactions

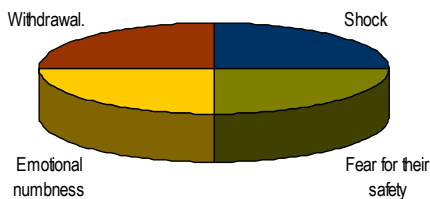
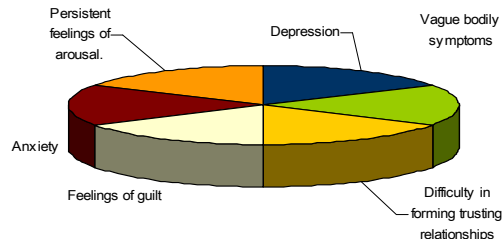
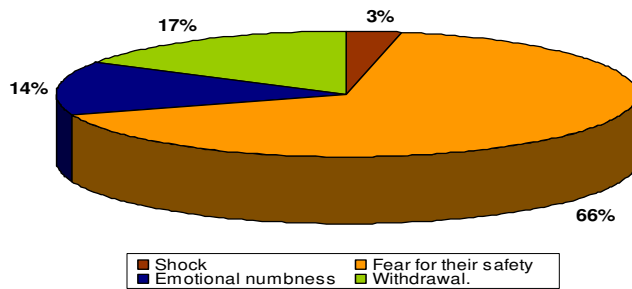


Figure 3.
Long-term reactions



Initial reaction of a disaster is shock. A number of women were found in a state of shock as they saw their husband being washed away by the waves. A large number were reacted that they are not feeling safe any more, while many of them suffered with emotional numbness and withdrawal (figure 4)

Figure 4. Emotional Response of Women



Many of the victims are found to be skeptical about the safety of their children and themselves. Such a scenario can become more anxiety-provoking especially to those women who were earlier not working outside their homes. In such cases, even day-to-day living becomes an ordeal. Some may deny the event; report disturbing dreams and recurrent and intrusive distressing recollections of the event, also known as flashbacks.

It is evident that women have difficulties in going through the legal procedures to obtain compensation, providing food for their children and in sending their children to school. In Kilinjalmedu village, a mechanized boat was given to a female tsunami victim. The village authorities felt that a women do not need a boat and it was taken away from her similarly an auto-rickshaw was snatched away from a women. Again, the village authorities wanted to snatch it away. In Chinnankudi village, women survivors were given Rs.4,000 as immediate compensation. Considering women's needs are less than men's half of it was taken away from the women.

In Cuddalore Tiruvarur and Sirgazhi districts women actively participated in post disaster activities under guidance of a number of NGO's. Many programmes and activities were initiated to enhance women's status in the society. The programmes run by women members received more response from victims. These include training of women for more livelihood opportunities which resulted in an increased confidence and self respect amongst them. Women in affected areas formed their own groups and jointly worked together for restoring their lives. Women were engaged in traditional crafts like ropes, basket making which also gave them substantial income to support their family. This phenomenon provided illiterate women tremendous strength and hope for a better future (figure 5, 6).



Figure 5. Grieving women at a mass burial site in Cuddalore.



Figure 6. Hope for future.

The existence of women group has been resulted in reduced harassment of women by their male counterparts. In a survey conducted in the affected areas of Cuddalore a remarkable shift in the mindset and confidence level has been observed amongst women. Earlier men were resisting this and now they have accepted the need of women groups to have access to money and bank finance. Women have started participating in rehabilitation activities, taken up community issues and additional livelihood activities such as tailoring, computer literacy, teaching and running petty shops. A woman's group in the village of Sonangkuppam in Tamil Nadu's Cuddalore district has developed a crafts program in hopes of selling

shell-based decorative items to visitors and tourists who are starting to return to the coastal areas. Figure 7 and 8 shows active participation of women in after disaster activities.



Figure 7. Women working at construction site.

Figure 8. Basket Weaving as a source of livelihood

WOMEN ROLE IN DISASTER MANAGEMENT : CURRENT SCENARIO

Although women's social, economic and political position in society makes them more vulnerable to natural hazards, they are not helpless victims. Women are important agents for change and need to be further strengthened as such. Recognizing and mobilizing their skills and capacities as social force and channeling it to enhance efforts to protect their safety and that of their communities and dependants is a major task in any disaster reduction strategy.

Indian women are the backbone of the rural subsistence economy. Their respective role in family which is of productive nature to a large extent makes the family and society sustainable but it is not acknowledged by and large. Women's work in agriculture is often seen as an extension of their domestic responsibilities, rather than a separate economic activity. In rural areas which are more vulnerable to natural hazards since rural population depend more on the natural resource base for all aspects of life. Securing food, water and fuel are key community concerns, which are predominantly taken care of by women. There are many examples of women's informal community involvement in disaster reduction, but women are still largely excluded from formal planning and decision-making and need to be empowered to do so effectively. This is essential to ensure effective disaster reduction policies. If some decision-making is shifted Emergency relief and aid processes particularly disadvantage women who must organize food provision, shelter, and child and family care according to chaotic aid-delivery systems and entitlement procedures that rarely take their work or opinions into account. Although women commonly organize themselves to distribute supplies, establish shelter, and pool labor and resources to create community support services to meet basic family needs in the emergency period, their efforts are often invisible or go unacknowledged.

Indian women face a number of hurdles in applying and qualifying for aid after a disaster this primarily because of illiteracy or limited literacy, limited access to information on how to apply and navigate the bureaucracy in addition to the eligibility requirements. In majority of instances it has been found that relief and rehabilitation schemes favor men over women, where priority has been given to property owners, tenants of record, bank-account holders, and perceived heads of households. Women's economic condition becomes critical because in large number of cases employment assistance concentrates on workers in the formal economy and business aid is awarded to formal enterprises.

Post disaster aid and investments generally undermine women's collective capacity to surmount day-to-day problems adversely affecting the economic base of women. There is no consideration for women's productive and reproductive activities as far as conventional disaster response in India is concerned, It is not at all reflect how important housing and informally held resources and assets are to women's security. The impact of disaster on women's day to day work is great. In such a situation generally support systems such as child care, schools, clinics, public transportation and family networks are disrupted or destroyed, resulting in an increased domestic work. They

have to face loss of workspace, tools, equipment, inventory, supplies and markets or even domestic violence.

CONCLUSIONS

It has been noticed that women's groups that participate in emergency relief, resettlement, and reconstruction efforts following a natural disaster acquire significant knowledge and expertise that can greatly benefit communities that subsequently experience similar crises. When mechanisms are established for promoting the transfer of this knowledge from community to community, poor women are enabled to come out of their homes and form groups to assess their situation, organize, and participate in the range of decisions and programs. When disasters strike, the opportunities to decrease women's marginalization arise early on, when norms of social control and male-dominated family structures are temporarily disrupted and weakened by the chaos that ensues. If affected women can meet and benefit from the experiences of other women who have managed to deal successfully with disaster-related issues, much valuable time can be saved and mistakes avoided.

Gender issues must be urgently and effectively integrated into disaster research, planning, and organizational practice. Women have a definite role to play in disaster relief and reconstruction activities. Considering this a new approach to disaster needs to be developed out and disaster research, planning and practice should look into their vulnerabilities and requirements.

REFERENCES

- Alice Fothergill, 1996. Gender, risk, and disaster. *International Journal of Mass Emergencies and Disasters* 14 (1): 33-56.
- Arnold Christopher, Elsseser, E.(1982), " Building Configuration and Seismic Design", John Wiley and sons, New York.
- Dowrick, D.J., (1972) "Modern Construction Techniques for Earthquake Areas", ,Proc.4thEuropean Symposium on Earthquake Engineering, London.
- Gokhale Vasudha A. (2002) " Optimization of Building Systems in earthquake Prone Areas of India", Ph.D. Dissertation, Department of Architecture & Planning, I.I.T. Roorkee, Roorkee, India.
- Vulnerability Atlas of India, (1997) Expert Group Govt.of India, Ministry of Urban Affairs & Employment, Building Material & Technology Promotion Council, India.
- Wiest Ray, 1998. A comparative perspective on household, gender, and kinship in relation to disaster. Pp. 63-80 , Enarson, Elaine and Betty Hearn Morrow, 1998.
- Yogesh Chhabra, "Stemming the Wave", *Construction World, Construction Business Magazine*, Vol.7 February 2005. asapp Media Pvt.Ltd. Mumbai, 2005.
- SSP website: <http://www.sspindia.org>.