Study on literature reviews and disasters

(Cooper, H. , 1998) in the journal A Guide for Literature Reviews has discussed about Synthesizing Research: He says literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work.

Most often associated with academic-oriented literature, such as a thesis, a literature review usually precedes a research proposal and results section. Its ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area.

A well-structured literature review is characterized by a logical flow of ideas; current and relevant references with consistent, appropriate referencing style; proper use of terminology; and an unbiased and comprehensive view of the previous research on the topic.

2. 2 NEED FOR LITERATURE REVIEW:

(Anson, 2000) The Longman Handbook for Writers and Readers, Second edition. New York: Longman, 2000. Literature reviews act like a handy guide to a particular topic. If you have limited time to conduct research, literature reviews can give you an overview or act as a stepping stone. For professionals, they are useful reports that keep them up to date with what is current in the field.

For scholars, the depth and breadth of the literature review emphasizes the credibility of the writer in his or her field. Literature reviews also provide a

solid background for a research paper’s investigation. Comprehensive knowledge of the literature of the field is essential to most research papers.

2. 3 DISASTER:

(B. Wisner, P. Blaikie, T. Cannon, and I. Davis (2004). At Risk – Natural hazards, people’s vulnerability and disasters. Wiltshire: Routledge).

A disaster is a natural or man-made hazard that has come to fruition, resulting in an event of substantial extent causing significant physical damage or destruction, loss of life, or drastic change to the natural environment. A disaster can be extensively defined as any tragic event with great loss stemming from events such as earthquakes, floods, catastrophic accidents, fires, or explosions.

In contemporary academia, disasters are seen as the consequence of inappropriately managed risk. These risks are the product of hazards and vulnerability. Hazards that strike in areas with low vulnerability are not considered a disaster, as is the case in uninhabited regions.

Developing countries suffer the greatest costs when a disaster hits – more than 95 percent of all deaths caused by disasters occur in developing countries, and losses due to natural disasters are 20 times greater (as a percentage of GDP) in developing countries than in industrialized countries.

2. 3. 1 CLASSIFICATION OF DISASTER:

Disasters can be classified into two types:

2. 3. 2 NATURAL DISASTER:

(Barton A. H. (1969). Communities in Disaster. A Sociological Analysis of Collective Stress Situations. SI: WardLock)A natural disaster is a consequence when a natural hazard (e. g., volcanic eruption or earthquake) affects humans and/or the built environment. Human vulnerability, caused by the lack of appropriate emergency management, leads to financial, environmental, or human impact. The resulting loss depends on the capacity of the population to support or resist the disaster: their resilience. This understanding is concentrated in the formulation: " disasters occur when hazards meet vulnerability". A natural hazard will hence never result in a natural disaster in areas without vulnerability, e. g., strong earthquakes in uninhabited areas.

2. 3. 3 HUMAN MADE DISASTER:

Man-made disasters are disasters resulting from man-made hazards (threats having an element of human intent, negligence, or error; or involving a failure of a man-made system), as opposed to natural disasters resulting from natural hazards. Man-made hazards or disasters are sometimes referred to as anthropogenic.

2. 3. 4 BIGGEST NATURAL DISASTER FROM 2000 TO 2010 IN THE WORLD:

(U. S. Geological Survey, World Health Organization, Associated Press, disasterrelief. org, NOAA, GuinnessWorldRecords, Oxfam, 2010)

On January 26, 2001, An earthquake hits Gujarat, India, killing more than 12, 000.

On February 13, 2001, a 6. 6 magnitude earthquake hits El Salvador, killing at least 400.

On May 21, 2003, an earthquake in the Boumerdès region of northern Algeria kills 2, 200.

On December 26, 2003, the massive 2003 Bam earthquake devastates southeastern Iran; over 40, 000 people are reported killed in the city of Bam.

On December 26, 2004, one of the worst natural disasters in recorded history hits Southeast Asia, when the strongest earthquake in 40 years hits the entire Indian Ocean region. The massive 9. 3 magnitude earthquake, epicentered just off the west coast of the Indonesian island of Sumatra, generates enormous tsunami waves that crash into the coastal areas of a number of nations including Thailand, India, Sri Lanka, the Maldives, Malaysia, Myanmar, Bangladesh, and Indonesia. The official death toll from the Boxing Day Tsunami in the affected countries stands at approximately 230, 000 people dead or still missing.

On October 8, 2005, the 2005 Kashmir earthquake kills about 80, 000 people.

On May 3, 2008, Over 146, 000 in Burma/Myanmar are killed by Cyclone Nargis.

On May 12, 2008, over 69, 000 are killed in central south-west China by the Wenchuan quake, an earthquake measuring 7. 9 Moment magnitude scale. The epicenter was 90 kilometers (55 miles) west-northwest of the provincial capital Chengdu, Sichuan province.

2. 4 DISASTER MANAGEMENT:

(D. Alexander (2002). Principles of Emergency planning and Management. Harpended: Terra publishing) The local communities at the time of disaster or before the disaster make groups for helping the people from suffering during the disaster. These groups include First Aid group, Health group, Food and Welfare group etc. They all are well trained by some local community members. All the groups are sent for helping any other local community that is suffering from a disaster. They also migrate the people from the area affected from disaster to some other safe regions. They are given shelter and every possible facility by those local management communities. Today, Government is also making effort to provide good facilities during the disaster. In India, in the rural areas, the community (group of families) are choosing a leader and developing their Disaster management skills to protect themselves and other local communities as well.

2. 4. 1 DISASTER MANAGEMENT AND INDIA:

2. 4. 1. 1 THE HISTORY OF DISASTERS IN INDIA:

(Kapur Anu, Neeti, Meeta, Deeptima, Roshani, and Debanjali. 2005. Disasters in India: Studies of Grim Reality. Jaipur, India: Rawat Publications) say India should hang her head in shame. With the Bengal famine, Orissa Super Cyclone, Latur earthquake, Bhopal chemical disaster, Andhra cyclone, Gujarat earthquake, recurring floods, Mumbai 2008 bomb blasts and many other disasters there is no foyer in the world with space large enough to exhibit the collective pain on the face of India. India has ranked at the top or near top in almost all type of disasters with number of deaths and people affected. India does not appear in the world tally of damages in financial

terms due to disasters because of poverty and lack of infrastructure. Indian history is dappled with so many disasters that it is difficult to cover in a section of the chapter in a book. Therefore, only a sample of disasters is given in this chapter. Some type of disasters and some of the disasters need to be excluded due to space limitations.

2. 4. 1. 2 HISTORY OF INDIAN EARTHQUAKES:

(Indian Metrological Department, 2009. List of Some Significant Earthquakes in India and its Neighbourhood. New Delhi: Indian Metrological Department). There was a earthquake in 1618 in Mumbai in which 2, 000 people lost lives. The loss of lives is estimated to be 300, 000 in the Bengal earthquake of 1737 (that time Bangladesh was part of Bengal). The January 16, 1819 Kutch earthquake was of 8. 0 on the Richer scale (XI intensity on Modified Mercalli scale) razed to the ground chief towns of Tera, Kathara and Mothala. An area of 250, 000 square miles was affected by January 10, 1869 earthquake of 7. 5 Richer scale in Assam.

In the neighboring Shillong there was wide spread destruction when 8. 7 Richer scale and XII Modified Mercalli scale earthquake struck on June 12, 1897. Kanga, in Himachal Pradesh had an 8. 0 on Richer scale earthquake on April 4, 1905, killing 20, 000 people.

In Bihar, India (near the Nepal border) there was 8. 3 Richer scale and XI Modified Mercalli intensity earthquake in 1934 in which 6, 000 people were killed. In the following year, at Quetta (now part of Pakistan), there was an earthquake of 7. 5 and IX Modified Mercalli intensity, killing 25, 000 people. In the year 1941, in the Andaman Islands there was 8. 1 on the Richer scale

(X on Modified Mercalli scale) earthquake causing very heavy damage. It is contemplated that survivors passed on the earthquake survival knowledge by oral tradition, which saved many local inhabitants in the 2004 Indian Ocean Tsunami.

Assam faced yet another huge earthquake of 8. 6 Richer / XII Modified Mercalli Scale in 1950 (earlier earthquake in Assam were in 1869, neighboring Shillong in 1897, and 1918) killing 1, 500 people. On August 21, 1988, Assam, once again, had an earthquake. This time it was 7. 2 on Richer scale (IX Modified Mercalli scale intensity) killing people. Twenty million people were affected from this earthquake, which is the 2nd largest number of people affected by any earthquake. Anjur in Gujarat had a 7. 0 Richer or XII Modified Mercalli intensity earthquake in 1956 killing hundreds of people. Anjur is very near to the epicenter of 2001 Gujarat earthquake (see below).

The Latur, Marthawada region of the Maharashtra state, had a 6. 4 on the Richter Scale (or VIII Modified Mercalli intensity) earthquake struck http://en. wikipedia. org/wiki/Indiaat 03: 55 AM on September 30, 1993 affecting primarily Latur and Osmanabad districts of Maharashtra. Approximately 7, 928 people died and another 30, 000 were injured. A reconstruction project was launched with the help of the World Bank and the victims were given structurally safe constructed houses.

The 2001 Gujarat earthquake struck India at about 08: 14 AM when India was celebrating its republic day on January 26, 2001. It was 7. 6 to 8. 1 Richer scale earthquake, which was felt widely in India and Pakistan. In the aftermath of the earthquake, about 25, 000 people died in different parts of

Gujarat, including Bhuj, Bachao, Anjur, Ahmedabad, and Surat. There were 6. 3 million people affected, which is the third largest number of people affected by any earthquake in the world. Immediately after the earthquake there was a total failure of command and control system, but afterwards many innovative changes and institutional mechanisms were initiated. One of the important innovation was the training of people and their involvement with labor along with professional mason in rebuilding their own houses.

The December 26, 2004 earthquake of magnitude 9. 3 on the Richter scale off the coast of Sumatra in the Indonesian archipelago generated tsunami that affected nearly 2, 260 kilometers of the mainland coastline of Tamil Nadu, Kerala, Andhra Pradesh and Pondicherry, as well as the Andaman and Nicobar Islands, with tidal waves up to 10 meters high penetrating up to 3 kilometers inland. This tsunami took at least 10, 749 lives, and resulted in 5, 640 persons missing. It affected more than 2. 79 million people across 1, 089 villages. It is estimated that 11, 827 hectares of crops are damaged, and that about 300, 000 fisher folk have lost their livelihoods (Gupta Forthcoming).

On October 8, 2005 there was an earthquake of 7. 6 richer scale intensity near the Muzaffarabad city of Pakistan killing 79, 000 people in Pakistan; 1, 309 in Kashmir of India; and 4 in Afghanistan. The severe cold weather conditions increased the sufferings of the evacuees sheltered in tents.

2. 4. 1. 3 HISTORY OF INDIAN FLOODS:

(National Disaster Management Authority, 2008. National Disaster Management Guidelines: Management of Floods. New Delhi: National Disaster Management Authority, Government of India). Floods recur every

year during the monsoon season in India. On an average every year, 1, 588 lives are lost, 7. 5 million hectares of land is affected, and the damage caused to crops, houses and public utilities is 18 billion Indian Rupees (Rs.) due to the floods between 1953 to 2005, a total of 84, 207 lives were lost due to the floods in India, with maximum of 11, 316 in 1977, and a minimum of 37 in 1953. The only other year that had less than 100 deaths was 1965.

The data regarding each year’s flood damage, with totals, averages, and maximum losses from 1953 to 2005 in terms of human lives lost, cattle lost, population affected, monetary value of damage to public utilities, and total monetary damage loss, area affected, crops damaged, and houses damaged could be seen in National Disaster Management Guidelines: Management of Floods (National Disaster Management Authority 2008, 89-90).

On average, 32 million people are affected due to flooding. The maximum people affected were in 70 million in 1978. The total damage due to the floods during the 1953 to 2005 period of half a century was Rs 977 billion, a staggering figure for a poor country. The maximum damage was Rs 88 billion in 2000, and the average damage during 1953 to 2005 was Rs 18 billion. Heavy flood damages have occurred during the monsoon years of 1955, 1971, 1973, 1978, 1980, 1984, 1988, 1989, 1998, 2004, 2005 and 2008.

There were wide spread floods in Gujarat in the beginning of July 2005, taking away lives and disrupting many lives. This was followed by the eighth heaviest ever recorded 24-hour rainfall figure of 994 mm (39. 1 inches) which lashed the Mumbai metropolis on July 26, 2005, and intermittently continued for the next day. That day 644 mm (25. 4 inches) rain was

received within the 12 hour period between 8 AM and 8 PM. Apart from Mumbai, many parts of Maharashtra state were also flooded. Many people in the cars on the roads of Mumbai could not open their car doors to escape and died. Due to disruption of the transport system people could not reach their homes in the night. At least 1, 000 people are feared to have passed away.

In 2008 there were floods in many parts of India. There was diversion of water by Nepal near the India-Nepal border which lead to the flooding of the Koshi (is a Hindi word that literally meaning angry) river in Bihar. The severe floods made it difficult to reach the marooned people due to logistic difficulties. Many people remain trapped in flood waters for days. Approximately 1, 500 people died due to Koshi river flooding.

2. 5 INDIAN OCEAN TSUNAMI – 2004:

(Lay, T., Kanamori, H., Ammon, C., Nettles, M., Ward, S., Aster, R., Beck, S., Bilek, S., Brudzinski, M., Butler, R., DeShon, H., Ekström, G., Satake, K., Sipkin, S., The Great Sumatra-Andaman Earthquake of December 26, 2004, The Science Journal, 308)

The 2004 Indian Ocean earthquake e was an undersea mega thrust earthquake that occurred at 00: 58: 53 UTC on Sunday, December 26, 2004, with an epicenter off the west coast of Sumatra, Indonesia. The quake itself is known by the scientific community as the Sumatra-Andaman earthquake. The resulting tsunami is given various names, including the 2004 Indian Ocean tsunami, Asian Tsunami, Indonesian Tsunami, and Boxing Day Tsunami.

The earthquake was caused by subduction and triggered a series of devastating tsunamis along the coasts of most landmasses bordering the Indian Ocean, killing over 230, 000 people in fourteen countries, and inundating coastal communities with waves up to 30 meters (100 feet) high. It was one of the deadliest natural disasters in recorded history. Indonesia was the hardest hit, followed by Sri Lanka, India, and Thailand.

With a magnitude of between 9. 1 and 9. 3, it is the third largest earthquake ever recorded on a seismograph. This earthquake had the longest duration of faulting ever observed, between 8. 3 and 10 minutes. It caused the entire planet to vibrate as much as 1 cm (0. 4 inches) and triggered other earthquakes as far away as Alaska. Its hypocenter was between Simeulue and mainland Indonesia.

The plight of the many affected people and countries prompted a worldwide humanitarian response. In all, the worldwide community donated more than $14 billion (2004U. S. dollars) in humanitarian aid.

2. 6 WOMEN SELF HELP GROUPS:

(Imran matin, David Hulme and Stuart Rutherford . 2002 Finance for the poor from micro credit to micro financial services, Journal of International Development). A self-help group (SHG) is a village-based financial intermediary usually composed of between 10-20 local women. Most self-help groups are located in India, though SHGs can also be found in other countries, especially in South Asia and Southeast Asia.

Members make small regular savings contributions over a few months until there is enough capital in the group to begin lending. Funds may then be lent back to the members or to others in the village for any purpose. In India, many SHGs are ‘ linked’ to banks for the delivery of microcredit.

SHGs are member-based microfinance intermediaries inspired by external technical support that lie between informal financial market actors like moneylenders, collectors, and ROSCAs on the one hand, and formal actors like microfinance institutions and banks on the other. Other organizations in this transitional zone in financial market development
include CVECAs and ASCAs

2. 6. 1 ROLE OF WOMEN SELF HELP GROUP IN DISASTER MANAGEMENT:

(Enarson, Elaine and Betty Hearn Morrow, 1998, The Gendered Terrain of Disaster- Through Women’s eyes. Laboratory for Social and Behavioral Research- Florida International University) 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 are 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.

(Betty Hearn Morrow, 1998)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.

2. 6. 2 ROLE PLAYED BY WOMEN IN PAST EARTHQUAKES:

(GokhaleVasudha,(2008), Role of Women in Disaster Management : An Analytical Study with Reference to Indian Society. World Conference on Earthquake Engineering), 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 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 Maharasthra 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. Jamnagar and Kutch.

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 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.

2. 6. 3 ROLE PLAYED DURING BHUJ GUJRAT EARTHQUAKE 2001:

(Yogesh Chhabra, 2005, “ Stemming the Wave”, Construction World, Construction Business Magazine,)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.

2. 6. 4 ROLE PLAYED DURING INDIAN OCEAN TSUNAMI OF 2004:

(Fatima Burnad, 2005. The Tsunami exacerbates Dalit women’s sufferings from caste discrimination . Asia pacific forum on women , law and development)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.

2. 7 THE NEEDS FOR WOMEN IN DISASTER AND EMERGENCY'S:

(Raymond E. Wiest, Jane S. P. Mocellin, D. Thandiwe Motsisi.(Winnipeg, Manitoba, 20 June 1994)(Revised Edition)), The needs of women in disasters and emergencies) Problems of women in the broad context of disasters and emergencies have only recently been addressed. Gender usually has not been a conscious criterion employed by relief agencies to effectively assist the so called " vulnerable groups" in their special needs when an emergency or disaster occurs. Vulnerability of women is a fact, based on the larger number of women and woman- headed households in emergencies and on the responsibilities borne by women related to the stability of the domestic Group, including a disproportionate responsibility for dependent children. Vulnerability, from this perspective, is primarily cultural and organizational. Natural disasters and emergencies often produce Single-parent families. Vulnerability can be minimized if adequate measures of assistance and physical and legal protection are adopted.

(Jane S. P. Mocellin, 1994)A thorough methodology should be developed to identify vulnerable individuals and groups and to assess the extent of their vulnerability. This assessment can be accomplished by distinguishing each

group’s ability to recover from disruptions due to disasters and emergencies. To facilitate analysis of psychosocial stressors for women in disasters, a temporal model of disaster response is presented. It can be readily linked to other models involving analysis of hazard, disaster, and development questions. An important distinction must be made between pre-disaster – the phase in which the prevailing conditions in most developing societies have generally impeded local formation of institutions to enhance disaster preparedness and the crisis generated upon impact of disaster. The resulting social disruption makes the crisis phase one of the most severe in the emergency spectrum.

(Thandiwe Motsisi, 1994) Disruption may include immediate forced relocation to shelters, an incomplete assessment of the danger of the situation, and an awareness of the loss of loved ones and friends. The combined action of these elements profoundly affects men, women, and children. Discrimination against women, particularly against girls, is more noticeable during the crisis phase, when limited resources in disaster areas are in dispute, especially in developing countries. Relief agencies urgently need to address the integration of women as primary distributors of emergency rations. Current and future assistance plans need to incorporate women into the decision-making process of camp environments in emergencies and disasters. Women should be seen as partners when interacting with men during an emergency or disaster response.

2. 8 WOMEN EMERGE MUCH STRONGER THAN MEN IN COPING WITH