

# Disaster, Women and Vulnerability: A Study of Earthquake 2015 in Nepal

Dipesh Kumar Ghimire<sup>1</sup>

## Abstract

*This study focuses on the impact of Nepal's great earthquake 2015 on women and girls. The context of women's vulnerabilities to disaster is shaped by social differences in roles and responsibilities of women and men. The difference in the division of labor that forces women to stay within the house put them at more risk of death than men. Women are engaged in domestic tasks and caregiving responsibilities, which delay their response and escape from the buildings during emergencies. The lack of education, good health, hygiene and early warning system or absence of disaster awareness made women more vulnerable than men during 2015 earthquake in Nepal. Women relate to different social, physical, psychological, and economic vulnerability in, during and post disaster period.*

*This paper explains the relationship between disaster and its impact over women in the context of Nepal. This article is identified as qualitative research. This research is based on interpretive and descriptive methods. Researcher therefore has collected qualitative data derived from both primary and secondary sources. To analyze and prove the effect of earthquake ethnographically, interviews and key-informants' interviews are employed. Total 16 interviews and 4 key informants' interview, and one focus group discussion were held in study area. Researcher also collected secondary data from multiple sources—books, articles, journals, review papers, government documents and archives, non-governmental reports, newspapers and online materials. The findings of this paper are that women are specifically more vulnerable during disaster because of their socio-economic and cultural positions. Women encounter different types of problems like social, cultural, economic difficulties. Women's vulnerability is increased by social differences in roles and responsibilities of male and female during the disaster. The paper strongly argues that gender-based discrimination, inequalities, access to resources and decision-making process are the key factors, which directly affect the women during the disaster.*

**Key Words:** Disaster, Women, Vulnerability, Earthquake, Nepal

---

1 Mr. Ghimire is an assistant Professor of Sociology at Central Department of Sociology, Tribhuvan University, Kirtipur, Nepal. Email: dipesh.ghimire33@gmail.com.

## Introduction

Nepal experienced an earthquake of magnitude 7.8 Richter scale, its epicenter being at *Gorkha* district on April 25, 2015. The Government of Nepal claimed that 8,790 people were killed, more than 23,000 people were injured and more than 500,000 private houses were destroyed (NPC, 2015). More than 8 million people were affected by the earthquake. Total 14 districts out of 77 were pronounced “crisis hit” and other 17 as partially affected. The disasters like earthquake however do not affect all people equally. There is difference in effects in terms of gender, caste, class, age, ethnicity, geography among others.

The Traditional perspectives is that the disaster affects men and women equally. Though, this study shows that women and girls are more affected by disaster than male and boys. According to the data published by Nepal Police, more women and girls died in the earthquake compared to men and boys. It mentioned that 55 percent of the casualties were women and girls (The Kathmandu Post, 2015). This chapter tries to describe the impact of 2015 earthquake on women in Nepal. Also, this study has tried to identify the types of vulnerability increased in women due to earthquake.

For this research, site investigation was carried out during September and October 2019 in *Kholakharka* village (Name changed) which is around 140 km far from Kathmandu valley. It is heterogeneous community in terms of caste and ethnicity. This village is one of the most affected and all the houses were destroyed by 2015 earthquake. However, the number of men going abroad for employment from that village is negligible. Most of the men and women are involved in agriculture and animal husbandry. Basically, this village is a rural village equipped with basic facilities like transportation and media. There is also facility of school and health post in the village. Most of the women from this village work as homemaker. This area was enlisted among the most affected areas in which 103 houses were destroyed but with no human loss.

This study is based on primary data for identifying the kinds of vulnerabilities increased by earthquake of 2015 in women of this village. This research is identified as qualitative research.

Researcher selected respondents from diverse caste like Brahmin, Chhetri, Newar and Dalit community. This research is based on interpretive and descriptive methods. Researcher therefore has collected qualitative data derived from both primary and secondary sources. To analyze and prove the effect of earthquake ethnographically, interviews and key-informants’ interviews are employed. Total 16 interviews, four key informants’ interview and one focus group discussion were held in the study area. Researcher also collected secondary data from multiple sources—books, articles, journals, review papers, government documents and archives, non-governmental reports, newspapers and online.

## **Understanding Disaster and Women, Vulnerability**

Disaster is not well-defined concept; different scholars define it through different perspectives. Disaster studies try to explain the collective stress situations as mass emergencies. These situations are created by natural hazards, technological accidents and violent conflicts which span over from discreet individuals, households, societies to nations. Blaikie (2014) argues that disaster must be seen as a part of everyday life and produced by a complex combination of social, political, and economic forces that emanate vulnerabilities during the time of hazard. Disaster is a serious disruption of the social functioning along with widespread human, material and/or environmental losses which exceeds the ability of the affected society to cope with resources at their own disposals (GPEN, 2007). Enarson and Morrow (1998) argue that the disasters tend to show existing global to local power structures and its relation.

Gender relations affects all sectors such as social, political, cultural, economic, and personal life as well. Gender relations have evolved in such a way that women occupy a subordinate status within family, society, class, caste, and age too. They possess different and distinct vulnerabilities and experience disasters differently. According to Moser and Moser (2005) gender refers to socially constructed roles, behavior and expectations associated with females and males. So, where gender discrimination is tolerated, women are more vulnerable.

The concept of vulnerability emerged in 1970s. Vulnerability is a key concept in prediction and understanding of differentiated impacts of disaster on various groups of a society (Blaikie, 2014). It refers generally to people's capacities to avoid or cope with and recover from disaster which is dependent to a complex interplay of political, economic, social, and ideological practices in household, societal and national level at a given space and time.

Women's vulnerability is increased by social differences in roles and responsibilities of male and female during the disaster and inequalities, access to resources and decision-making as well (WHO 2000). Neumayer and Plümper (2007) study shows that limit on social roles corresponds to women's lack of skills, and access to resources, social exclusion and high deprivation leads to high vulnerability to women.

Vulnerability can be gently categorized into economic (resources), social (gender and other social matrices), psychological (trauma), physical (disability) and political. According to Bradshaw (2004) vulnerability is directly related to impact on the human life. Physical vulnerability indicates the homeless, social vulnerability indicate the dependency on others and psychological vulnerability is the trauma of the experience of loss.

Cannon (1994) argues that women are specifically more vulnerable during disasters because of their socio-economic and cultural positions. Women encounter different types of problems like social, cultural, economic difficulties (UN, 2009). Enarson (2000) defined the gendered

vulnerability as characteristics of male and female, their situation influencing their capacity to anticipate, cope, resist and recover from the impact of disaster. According to UNDP (2010) due to disaster not only is the percentage of women and girls' deaths greater but also incidence of violence like rape, trafficking and abuse are known to be exponentially increased during and after disasters. Gender is the main organizing principle of households and societies as well. Disaster and gender are both socially constructed and provide separate trajectories for men and women to face and cope with disasters (Weber, 2013).

Nepal is one of the most hazard prone countries in South Asia. The complexity of geophysical and socio-economic condition of Nepal provides tentative bases that Nepal faces landslides, avalanches, floods, earthquakes, glacier bursts, droughts, and blizzards and their disastrous aftermath. Additionally, weak institutions, resource constraints and frail economic conditions, lack of awareness, lower literacy levels and absence of modern technologies exacerbate the disasters (Chhetri, 2001). In such a situation, there is no study in Nepal about whether the impact of disasters on men and women is the same or different. This research focused to the impact of the disaster on women.

### **Disaster, Women and Vulnerability: An Experience of 2015 Earthquake in Kholakharka, Nepal**

This study grounds the experience of women during the 2015 earthquake in Nepal and attempts to understand the social context that shaped differential gender-based vulnerability in *Kholakharka*. Social vulnerability refers to the socio-economic and cultural factors that entail risks and resilience of the community members unevenly. Assessment of social vulnerability looks at the wellbeing of individuals and communities and it includes access to quality education, human rights, health, and hygiene and so on.

In *Kholakharka*, those women who correspond to lower socio-economic and cultural conditions and have lower or limited access to resources became more vulnerable than others. Many women in *Kholakharka* got injured by earthquake because they were involved in domestic tasks inside or near outside of their houses. During pre-earthquake period women got fewer opportunities of disaster preparedness awareness training and information. During and post-earthquake, women were less represented in relief packages and reconstruction work teams. During the stay in temporary shelters, women and girls faced frequent abuse from male and work overloaded. The households headed by elderly women, widow and landless women faced worse social, cultural and economic conditions. They were in extreme level of poverty, within marginalized and disadvantaged group.

This research has found that social, economic, and cultural factors are most important factors for increased vulnerabilities of women and girls in the earthquake. Women vulnerabilities relate to different aspects like; lack of inclusion in decision making processes, lack of adequate information, girls school dropout, workload, difficulties created by dress up of

women, feeling of insecurity, weak health status and health facilities, cultural acceptance of violence, unequal access of resources (UNDP, 2010). In the developing country like Nepal, women are more vulnerable than men due to the mentioned reasons.

**a) Workload in Indoor and outdoor work:** There is inequality in workload between men and women. Socially assigned roles and responsibilities of men and women caused by respective roles affect vulnerability of women (Neumayer and Plumper, 2007). Gender roles differentiate men and women into domestic and public spheres. Parziale (2008) argues that gender inequality is permitting people different opportunities due to perceived differences based merely on issues of gender. Barriteau (2003) gives importance to power relations. According to him, power relations underwrite and complicate all relations of gender in the society. There existed many forms of gender-based discrimination between men and women in *Kholakhark* which manifest in communal and familial everyday activities like education, property rights, community activities, agricultural work, and so on. .

During the study women who were engaging in public sectorial works were found to be pressured to accomplish both indoor and outdoor tasks. Women have lot more burdens on weekends. They must complete lots of household works so that they have great rush inside the houses. The earthquake took place on Saturday so most of the women were expected to be engaged in household works inside houses. A 37 year old local woman says:

*“Saturday is holiday in Nepal though it’s a burden day to working women. I am working in a private company so I must have to finish my whole week’s works on that day. Because of lot of work, I was in a rush. I was washing dishes in kitchen, suddenly plates and bowls started to shake. Immediately I realized it’s an earthquake, but I was confused either to stay inside or run out, when the walls went on cracking, I came out but one of my legs got injured.”*

Because of being women, they must take care of children, elderly, and ill family members. This increases risks and vulnerability of women in disaster. Women are more vulnerable, and their vulnerability is closely related to their gender roles.

Similarly, it was found that workload in women increased dramatically after the disaster in *Kholakhark*. They were engaged in several disaster related works. When men were busy playing cards inside the tent, women were busy in collecting grass for animals, cooking, and taking care of their families. They also had to engage in cleaning tents and repairing their houses which were less affected and could be repaired. Also, certain groups of women felt increased workload; had to work more with their kids in managing stress and taking their care and daily fulfilling necessities like water and food grains during crisis. Poor income households and single mothers were already highly vulnerable and overburdened conditions made the pay the highest cost after the earthquake in *Kholakhark*.

**b) Lack of access to adequate information about disaster:** In many cases, women do not receive hazard warnings and information on time. The rural women have very limited access to sources of information like newspaper, radio, television, email, internet compared to men. One example from Bangladesh can be adequate proof for this. According to Genanet (2004) Bangladesh Cyclone of 1991 warning information was transmitted by men to men in public spaces. Women didn't receive information directly causing high casualties of women. The social and cultural norms and practices in rural areas of Nepal requiring women to seek protection of male members restrict their mobility and their ability to escape. Due to domestic workload and social stigma, they couldn't receive pre information and early warnings on time. When women got information and warnings, they will not have reached in safe place on time because they have to evacuate others first including small children and infants and they can't instantly decide what to do.

They're existed ample evidence of the absence of women in disaster preparedness programs in *Kholakhark*. Three day long pre-earthquake awareness program was conducted just a month ago in the village by Red Cross Nepal. But most of the women, from poor and marginalized community were not informed and they did not participate in the program. Few women who were informed also were absent in the program because of domestic works and thus only men were participated. A 44-year-old woman from the village speaks on the problems due to restrictions in information:

*“During earthquake I was with my two years old son inside the house, I got trapped and I became unconscious. After a minute, son's squeal woke me back. The regular shaking made me anxious. I had no idea how to protect my family and especially son. After earthquake, I suffered from psychological trauma for a whole month. Later, I heard that two weeks before, two institutions had provided earthquake awareness program in the village but I was totally unaware.”*

Women do not have much access to the radio and television in the house. Majority of women do not have mobile phones with them. If they have mobile, they do not carry with them, instead, they put it in a safe place in room and engage in work. Thus, they are not able to coordinate with people during and post disaster. Similarly, traditional socio-cultural practices neglect women to be a part of public affairs. In addition, women themselves give less concern about these types of public programs. They think it as the men's world. As a result, lack of pre-disaster information and awareness, women lacked skills to survive during emergencies.

**c) Dress up of women.** Women are far more likely to be injured than men during disasters in *Kholakhark*. One of the major factors is socially constructed code that restricts free mobility. Nepali dress codes for females: *sari, lungi, salwaar, kameez* etc. gives trouble to be safe during the disaster in *Kholakhark*. These dresses hinder women to safely step outside their homes successfully and promptly at the time of disaster.

The respondents in *Kholakhark* mentioned difficulty in running downstairs during the earthquake in *sari*. These respondents belonged to Brahmin, Chherti, Newar and Dalit community and were over 50 years old. Women who belong to Hindu (mostly) community mostly wear *sari*. Culturally mandated dresses limited the mobility of women during the earthquake. One 68 years respondent said.

*“I was in second floor with my tasks, unexpectedly I felt shaking and I speculated it might be an earthquake. I was terrified, then tried to run out hastily but as I stepped down the ladder, I fell from fourth step and broke my left hand because my legs entangled in the sari.”*

Women in some cultures, mostly in Hindu community, have been strictly following the tradition of wearing *sari*. Nowadays, younger generation from the same community do not feel obligation to wear *sari*. But elderly women are wearing the same cultural dress *sari*. That dresses sometimes push towards risk during the disaster period.

**d) Weak health status.** The Ministry of Health and Population (MoHP) has a network of 4, 118 health posts and hospitals around the country. Out of total public health institutions, 19 percent are located in most-affected 14 districts and 23 percent are in the moderately affected 17 districts (NPC, 2015). Approximately, 250,000 children from ages six months to 59 months and 135,000 pregnant and lactating women were affected by earthquake. They faced the brunt of earthquake more severe than others (Ibid). Pregnant and lactating women faced more difficulties. In post-disaster period, reproductive roles and needs, pregnancy, childcare, infections, and violence, are generally overlooked.

Disasters lead to reinforcing of gender inequalities. Cannon (2002) found that the women have already poor nutrition that seriously affects coping with disasters. During and after the disaster women need more nutritional food because they have unique demands for the same (especially when they are pregnant and breastfeeding). The pregnancy and childbirth occurred during the disaster puts women in a more difficult situation. They require nutritional food, proper rest, and more care from the family members. But lack of timely and proper nutritious food and care in this situation has pushed women towards more vulnerability.

In *Kholakhark*, all of the 105 houses were either partially or totally destroyed. All the residents stayed in tents; the respondents who were pregnant during disaster also stayed in the tents for a long time. Pregnant women living in tents were not getting proper rest and enough care. They lacked comfortable rest area inside the tents. Also, they faced psychological stress due to recurring aftershocks. A woman who was pregnant during earthquake says:

*“I was pregnant for eight months with my first child. Of course, it was difficult for me. I was scared for miscarriage because I didn't get proper nutritional food, rest and extra care. To stay in open area with lots of social, physical, and environmental trauma was worse, which I never can imagine in upcoming days.”*

The lack of adequate nutritional food, proper care and rest, and regular medical facility burdens pregnant women and frustrates their safe motherhood.

**e) Weak health facility;** Women are more likely to die and suffer from ill health effects during disasters. Gender-based prejudices and behavioral patterns were causative of social, economic, and cultural vulnerabilities of women in *Kholakhark*. Women who were socially marginalized and economically insecure lacked the basic needs like food security, safe water supply/sanitation/hygiene and adequate clothes and mattresses during the earthquake. While staying in tents, majority of women from disadvantaged groups said they always slept on the ground due to lack of mattress. So, they contacted cold-related illnesses. Those who were already ill or chronic patient or senile, their health deteriorated. They could not get any of normal treatment during the disaster. Due to this, a few lost their lives due to a lack of normal treatment. This situation exacerbated vulnerability to diseases for poor, and even more for ill and aged women.

**f) Girl's school dropout.** Educational services in the affected areas were severely disrupted by the earthquake. According to the government of Nepal total losses in education sector was estimated to be NRs. 31.3 billion. More than 80 percent of this loss accounted for 14 most affected districts. The classrooms and toilets have been destroyed. This made girl students uncomfortable to go to school. About one million people were pushed towards poverty (NPC, 2015). The girls had to go to work in daily wages due to lack of food and other basic needs and they had to drop school for these reasons.

In *Kholakhark*, socially and economically disadvantages poor, dalit and ethnic minority kids and young girls were more likely to dropout from schools after the earthquake. Socially constructed gender roles and responsibilities compelled them to leave the school. Gender based discrimination between daughter and son pushed girls more likely to engage in household works. After disaster, poor and landless households of *Kholakhark* moved outside the village in search of works to sustain their livelihood. Economic shattering caused by the earthquake forced some parents to let their girls out of schools than boys. A 14-year-old girl who left school at grade 7 from a local school says:

*“We are landless .... wage labor is family's occupation, aftermath of disaster pushed my parents to work outside the village. After that I am obliged to take up all responsibilities of family, especially my five years old brother, so, I left my school. My parents told me I am a girl, and I should have to be responsible for indoor tasks after getting marriage.”*

Gender norms and practices forced women and even younger girls to adopt indoor works and responsibilities. Therefore, disaster can hinder education attainment of girls and promote to girl dropout rates.



**g) Cultural acceptance of violence:** The stress of disaster may lead to increased violence perpetrated against women. Women, and girls face increased risk of sexual abuse and gender-based violence at the point where loss of assets combines with loss of family protection and desperation of alternate livelihood (NPC, 2015).

Patriarchal domination and subordination of women was clearly reflected in the cultural acceptance of violence in *Kholakhark*. A common theme conveyed by many of the respondents was a cultural acceptance of certain forms of violence against women in *Kholakhark*. Some types of violence become part of their life. They have already internalized and usually some women accept physical, psychological, and sexual harassment from their husbands or other family members. They have culturally been trained that their husbands are symbol of prestige and economically as the breadwinner. So, women never raised the voice against it.

Violence against women in *Kholakhark* increased after the earthquake mostly in the poor and marginalized people's family. Poor, dalit and ethnic minority women of *Kholakharka* in post disaster time faced much violence like fear, nervousness, helplessness, and depression. Alcohol and drug intake often increased, particularly when women lose control over income and men get depressed about their inability to earn during disaster and post-disaster phases. Alcohol and drug usage further depletes familial resource and increases domestic violence (Moser & Moser, 2005).

One of the crimes that may occur in temporary shelters is sexual harassment of young girls. Though there were not any formal complaints made by *Kholakhark* women. But the respondents mentioned that they got many unwanted activities from male. Women, especially girls faced uncomfortable gestures, stares and talks during the time in temporary settlement from male.

**h) Economic insecurity:** Economic insecurity is a main factor to promote social vulnerability in post disaster situation for women. Disasters can destroy houses, kill livestock and damage harvested food. People also lose their jobs and works. Compared to men, women relatively have less access to entrepreneurial skills, aptitudes, and opportunities and they feel more vulnerable than men (GPFN, 2007). The main effect of disasters on women is the loss of economic resources and worsening of economic status. Women largely engage in agriculture and livestock rising in Nepal. The large scale of labor migration has caused feminization of farming in rural areas of the country. Earthquake damaged agriculture, and also affected livestock. So, the self-employed women felt economically insecure in post disaster time.

Majority of respondents (13 out of 16) in *Kholakhark* shared their anxieties of post disaster. After disaster, insecurity in women economy increased as their productive assets

destroyed. The women from poor households did not have alternative access to savings or credits or employments that provide protection. A 56-year-old woman respondent says.

*“Agriculture and livestock were main sources of livelihood in my family. I lost all harvested food and crops and livestock due to earthquake. I was completely empty and didn’t have any saving. I survived for several days with few pieces of biscuits and noodles provided by relief distributors.”*

Employed women were also affected in *Kholakhark*. Women tend to have their low skills, low pay, and low prospects for social climbing. With limited access to resources and menial job descriptions, women’s employment structures are the first to crumble after the earthquake. Those women, who work as homemaker, in agriculture, husbandry, private schools, local hospitals felt challenged after disaster, and, complained about their dilemma on whether to take care of their family members or those in their duties. A private hospital and three private schools were destroyed and likewise jobs became insecure. Total five women who worked in private hospital and private school were worried whether their jobs will still exist after the disaster or think about resumption of their jobs.

Vulnerability in women at post-disaster period corresponding to economic, social, political, physical, and psychological dimensions is represented in Table 1.

**Table 1: Disaster, Women and Vulnerability**

Situation	Types of vulnerability
<ul style="list-style-type: none"> <li>- Lack of inclusion in decision-making processes.</li> <li>- Lack of adequate information.</li> <li>- Girls school dropout</li> <li>- Workload</li> </ul>	Social vulnerability
<ul style="list-style-type: none"> <li>- Difficulties created by dress up of women</li> <li>- Lack of self-confidence</li> <li>- Feeling of insecurity</li> </ul>	Psychological vulnerability
<ul style="list-style-type: none"> <li>- Weak health status</li> <li>- Weak health facility</li> <li>- Pregnancy, childbirth, and childcare</li> <li>- Lack of physical facility like housing</li> <li>- Cultural acceptance of violence</li> </ul>	Physical vulnerability
<ul style="list-style-type: none"> <li>- Unequal access to resources</li> <li>- Economic insecurity</li> <li>- Lack of saving and cash in hand and regular income</li> <li>- Lack of food.</li> </ul>	Economic vulnerability

Source: Content Analysis, 2021

It can be clear from the table above on what kinds of situation are faced by women and types of vulnerability increased during and post disaster periods.

#### 4. Conclusion

The 2015 earthquake of Nepal has more effects on women than men. Basically, the vulnerability on men and women is different based on socially determined differences in roles and responsibilities of women and men. This study shows that women are most vulnerable group during the disaster like earthquake. Women face more problems because of unequal access to social, cultural, and economic resources. In *Kholakharka*, women are excluded in financial, social, cultural, and political capital and power. Similarly, structural inequality and division of labor takes toll of women survivors. There are many social causes which play a major role to affect women more than men in disaster. Women have comparatively larger indoor and outdoor workload, they do not have access to adequate information about the disaster. Similarly, cultural values like dress up of rural women, weak health facility and status, cultural acceptance of the violence in the rural area are other reasons behind it. In the same way, increase in the school dropout rate of girls, economic insecurity and losses and overburden workload are other problems faced. These kinds of gender inequalities, imbalances, and practices in pre and post disaster phases put women and girls at higher risks than male in *Kholakharka*.

#### References

- Barriteau, E. (2003). *Confronting Power, Theorizing Gender in the Commonwealth Caribbean*. In *Confronting Power, Theorizing Gender: Interdisciplinary Perspectives in the Caribbean*. E. Barrieau (ed). Kingston: The University of The West Indies Press.
- Baruah, H. K. (1961). The Air Sopra of a Cowshed. *Microbiology Society* 25(3): 483-491.
- Blaikie, P. (2014). *At Risk: Natural Hazards, People's Vulnerability and Disasters*. London: Routledge.
- Bradshaw, S. (2004). *Socio-Economic Impacts of Natural Disasters: A Gender Analysis*. United Nations Publications. New York: Santiago Chile
- Cannon, T. (2002). Gender and Climate Hazards in Bangladesh. *Gender and Development* 10 (2): 45-50.
- Cannon, T. (1994). *Vulnerability Analysis and the Explanation of Natural Disasters, in Disasters*. In *Development and Environment*. A Varley (ed), New york: Jhon Wiley and Sons Ltd.
- Chhetri, M.B. (2001). A Practitioner's View of Disaster Management in Nepal: Organization, System, Problems and Prospects. *Risk Management: An international Journal* (4):63-72.

- Enarson, E. & Morrow B. H. (1998). Women will rebuild Miami: A Case Study of Feminist Response to Disaster. *The Gendered Terrain of Disaster*. E. Enarson and BH Morrow (eds).1998.: 185-199.
- Enarson, E. (2000). *Gender and Natural Disasters*. Geneva: Recovery and Reconstruction Department.
- GPFN. (2007). *The Study on “Women in Times of Disaster”*: The Integration of Gender Issues and Gender Perspectives in Disaster Management. Singapore: Asia-Pacific Economic Cooperation.
- Moser, C. and Moser, A. (2005). Assessing Gender Vulnerability within Post-Earthquake Reconstruction: Case Study from Indonesia. *Procedia Economics and Finance*18(14):763-771.
- Nash, J. C. (2008). Re-thinking Intersectionality. *Feminist Review* (89):1-15.
- National Planning Commission (NPC). (2015). *Nepal Earthquake 2015: Post Disaster Needs Assessment*. Vol. A: Key Findings. Government of Nepal, National Planning Commission.2015.
- Neumayer, E. & Plumper Thomas. (2007). The gendered nature of natural disasters: The Impact of Catastrophic Events on the Gender gap in Life Expectancy, 1981–2002. *Annals of the Association of American Geographers* 97(3):551-566.
- Pariziale, A. (2008). Gender Inequality and Discrimination. In *Encyclopedia of Business Ethics and Society*. Robert W. Kolb (ed). Thousand Oaks: SAGE Publications. doi:10.4135/9781412956260.n365.
- TheKathmanduPost(2015)Earthquake:55pcofdeadarewomen,children. Retrievedfrom <https://kathmandupost.com/miscellaneous/2015/05/19/earthquake-55-pc-of-dead-are-women-children> on 13 April 2020.
- U.N. (2009). *Making Disaster Risk Reduction Gender-Sensitive Policy and Practical Guidelines*. Geneva, Switzerland:UNISDR, UNDP and IUCN.
- UNDP. (2010). *Gender and Disasters*. United Nations Plaza New York NY 10017 USA, 2010 October. (Available at [www.undp.org](http://www.undp.org)) .
- Weber, L. (2013). *Engendering Disaster: Lessons from Hurricane Katrina*. Sage Publications (2013): 732-735.
- WHO (2002). *Gender and Health in Disasters*. Department of Gender and Women’s Health 20. Avenue Appia Geneva: Switzerland.