

## Disaster and Disability in Nepal : An Experience of 2015 Earthquake

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*The earthquake of 25 April 2015, Nepal faced a 7.6 magnitude and its regular aftershocks created massive damage in Nepal. It was followed by more than 300 aftershocks of greater than 4 magnitudes. There were over 8,790 casualties and 22,300 injuries. The person with disability suffered more in compared to the ordinary people. In every steps of rescue, relief, rehabilitation the disabled people suffered more. Due to various obstructions and discrimination they were deprived of basic human services and facilities. According to the data published by the National Federation of the Disabled Nepal (NFDN) more than 150 disabled people died during the devastating earthquake. This article tries to identify and explore the relationship between disaster and disability and find out the effect of disaster in Person with Disabilities (PWDs). Disaster makes the situation worse for PWDs with regard to access to essential goods and services. Presence of debris as a result of the earthquake will not only create challenges for person with disability to move around, but also in accessing relief, rehabilitation and reconstruction related works.*

**[Key Words :** Vulnerability, Disaster, Disability, Earthquake, Nepal]

### 1. Introduction

Nepal faced a 7.6 magnitude of earthquake on 25 April, 2015 and its regular aftershocks created massive damage in Nepal. There were followed by more than

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300 aftershocks of greater than 4 magnitudes. There were over 8,790 casualties and 22,300 got injured (NPC 2015). About 2 percent (or 513,321) of the total population have some kind of disability in Nepal. Physical disability constitutes 36.3 percent; followed by blindness/low vision (18.5 percent), deaf/hard to hearing (15.4 percent), speech problem (11.5 percent), multiple disability (7.5), mental disability (6 percent), intellectual disability (2.9 percent) and deaf-blind (1.8 percent) (CBS, 2011). Within the 14 most affected communities, it can be deduced that 322,110.78 have physical disability, 163,043 of which are women and girls. However, although there is no data available, it can be assumed that this figure has increased due to injuries sustained in the earthquake (NPC, 2015).

A total of four thousand four hundred people became disabled due to the earthquake of 2015. Among the seriously injured people referred in big hospitals of Kathmandu, 6% of them had spinal injury, 4% lost their hands or legs or both and 2% went through injured spinal nerves. 3% of them are suffering disability of moving due to broken legs and 5% of them have gone through injuries in various organs of their body (Annapurna Post, 2016). In this way, the earthquake has led to an increase in disability. This article is basically centered in the issue of what were the problems the people with disability went through during the earthquake. This has also tried to analyze the various social, financial, psychological and physical problems faced by them.

This article is based on the qualitative facts and data. Both primary and secondary data have been taken. For primary data collection, interview, key person interview and focus group discussions were carried out while secondary data have been collected from published articles, books and other materials. This article is divided into four sub-chapters.

## 2. Understanding Vulnerability, Disaster and Disability

Vulnerability is a condition that increases susceptibility to disaster. According to the International Strategy for Disaster Reduction (2004) "the conditions determined by physical, economic, environmental, social and cultural factors which increase the susceptibility of a community to the impacts of hazards." Natural hazards have different impacts on different groups in society. The vulnerability of a population depends upon the features of its disability, physical conditions, residential areas, access in resources and other facilities available to it for use in handling the hazardous situation (Adger, 2006).

Disable groups are vulnerable not only because they do not have resources for survival or rebuilding, but also they do not have access to services and information easily and not able to move anywhere easily (Buckle, 1998). Social, political, economic and cultural processes differentially structure the lives of different groups of people, whereby some are more vulnerable to disaster than others (Wisner et al., 2004). Disability, ethnicity and class have important factors to create a social vulnerability in the community level (Bolin, 2006).

However, the notion of vulnerability is changing nowadays. It is hazard that is natural phenomenon, but that for a hazard to become a disaster it has to affect vulnerable people like person with disability. Vulnerability is a set of prevailing or consequential conditions, which adversely affect an individual, a household or a community's ability to mitigate, prepare for or respond to the hazard (EVRC-2 2002). Cannon (1994) argues that vulnerability is linked with social systems, it generate unequal exposure to risk by making some groups of people like people with disability, and some society more prone to hazards than others.

Social vulnerability is the product of social inequalities. While reviewing the literature on vulnerability, it gives emphasis on physical, social, economic and political relations of individual and community. Disability is a key characteristic for understanding the vulnerability to disaster. Mainly, physical condition, ability to mobility, lack of information, lack of access to power, structures and resources comprises disability concept which progress people towards vulnerability.

The term "Disaster" is frequently used to refer to the occurrence of natural phenomena. Thus, events such as hurricanes, landslides, earthquakes, tsunamis, volcanic eruptions and floods have been considered direct synonyms for disaster (Darcy, 2008). Disaster describes the interaction of different natural as well as socio-economic factors leading to a serious disruption. Disaster also leading to widespread adverse human, material, economic, or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery (IPCC, 2012). Sociological meaning of disaster links disaster with social behavior, social organization, and social structure (Fischer 2003). Some interpretations have led to the idea of disasters as being sprung fourth from supernatural or divine causes (Darcy, 2008). Some considered disaster as "acts of God" (Aleman, 1999 cited in Darcy, 2008).

Some scholar challenges to classic frameworks and emphasizing that disaster are socially constructed rather than "act of God" (Blaikie et al., 1994). They argued that disasters themselves constructed in social conditions and processes that encourage settlement in hazardous areas, poverty and other forms of social inequality, low capacity of self-help among subgroups within populations, and failures in physical and social protective system and disaster is caused by human beings and not by nature (Carr, 1932; Phil et al.; 1979, Britton, 1986).

According to Ostrow (1996) disaster disrupts so many aspects of daily life; many problems for disaster survivors are immediate and practical nature. During the study, we have adopted the modern perspective to identify the causes of disaster. Disaster is not due to super natural power but it is completely socially constructed phenomena. And we strongly believe that there are social causes behind the disaster.

Disabilities as a condition which may restrict a person's mobility, mental, sensory functions or perform are limited. Defining disability is complicated as it is 'complex, dynamic, multidimensional and contested' (WHO & World Bank, 2011).

Disability is part of the human condition-almost everyone will be temporarily or permanently impaired at some point in life, and those who survive to old age will experience increasing difficulties in functioning (WHO & WB, 2011). General disability is a situation where taking part in regular daily activities by themselves is possible if there is no social and environmental obstacle. The UN Convention on the Rights of Persons with Disabilities (UNCRPD) recognizes that 'disability is an evolving concept'. 'Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others' (UNCRPD, 2006).

According to Rights for Person With Disabilities Act (2074 B.S), 'person with disability' as "the persons who are prevented from full and effective participation on the grounds as of other persons due to long-term physical, mental, intellectual or sensory impairments in interaction with various barriers" (Nepal Law Commission, 2074 B.S.). In this act, disability has been classified into 10 categories, on the basis of physical and sense organs' difficulties.

Major types of disabilities are as follows (Source : Nepal Law Commission, 2074 B.S.) :

- » Physical disability
- » Disability related to vision (2.1. Blind, 2.2. Low vision, 2.3. Full blind)
- » Disability related hearing (3.1. Deaf, 3.2. Hard of hearing)
- » Deaf blind
- » Disability related to voice and speech
- » Mental or psychosocial disability
- » Intellectual disability
- » Disability related hemophilia
- » Disability related autism
- » Multiple disability.

Classification of disability based on the seriousness of weakness for propose to distribute of identity cards to people with disability has four categories :

- » Complete disability ('A'),
- » Severe disability ('B'),
- » Moderate disability ('C'),
- » General disability ('D')

We can say that, on the basis of above lines, there is no single definition of disability; it may be visible or invisible, and it can be by birth or during childhood, working age years like young age or old age too. It reflects the major shift in global

understanding and responses towards disability. Disability is a most vulnerable group in world today.

### 3. Case Story of Seti Tiwari

My name is Seti Tiwari of 48 years. I cannot listen and speak, I am a deaf by birth. I am a resident of Panchkhal municipality ward no. 1, Thanti tole, Kavre district. In the midday of 25 April 2015, suddenly, shake up the land. I am not able to understand why shake the land? My husband (Hari Tiwari, he have not right leg) point out to me to run outside. When he was trying to stand up with crutches, he fell down. Then, I hold him and his crutches and slowly take him out. When we reached in door, the wall began to fall, the clay and the stone pieces were in out body but did not big harmful. In that time, our two sons were not at home, we were afraid and worried about them. However, we are not able to move anywhere else.

Two neighbors came and release buffalo and goat from rope. Until then, my house and the roofs and the walls were almost destroyed. All goats could not be saved. Other people cannot understand my language except my husband even he also did not understand some sign or gesture. I did not think and doing anything after seeing at such a kind of my destroyed house. That day, we were sat in open sky, we cannot sleep. I did not know what was happening this, I was deprived from all information due to illiterate and being deaf. First time, I became more frustrated from my disability. The next day, elder son told me that, many people lost their homes, many homes were destroyed, and said that there are difficult situation and some are killed.

Our family lived in under the open sky. We began to search pots which are buried in destroyed house, and we are able to found some pots and foods. One month later, an organization gave a plastic tent, under the same way we spend the summer and winter days in it even we had not a warm blanket. It is not easy to say, lots of day we were hungrier and crying for food and medicine. There was no toilet, no food to eat at home. He (my husband) could not walk, I could not speak and listen, and sons were too young. We could not go for relief. Once, elder son had brought 5 kg rice and pulse. After one year, one organization gave *Jasta Pata* (steel sheet) and made only one room, we are settling in this room yet. The condition of shed is same, kept the animal in only grass roof there is no wall.

There is a small land covered with the same house and some goats & buffalo. My husband works at hotel for wages. Similarly, I cut the grass for goats and rearing goat and buffalo for livelihood. The Nepal government is providing 3 lakh for reconstruction of home; we have get 50 thousand as a first installment. We are near to finished DPC but we are spending one lakh for only two small rooms. There had spent his wages, sold the some goats, now there is nothing to spend further work. Officials said that, we will get 1 lakh 50 thousand rupees, we have dilemma and tension about to make house in that amount. According to neighbors, it takes 12 lakh to make home.



Previously, I had forgotten the pain in hope to be home but It is not easy to make home due to the disability and also it will be not a disability friendly house. At the time of disaster, the deaf people are not get information about the risk, so we are more vulnerable in that time than other. Also, there if no access to relief because we cannot get information timely in other hand nobody understand our sign language which is more informal and locally made. We faced more problems because both of we are disabled. I am suffering from more trouble. I do not agree to make same kind of house for all people including with disability. I want to made disability friendly home to avoid disadvantages. To avoid disadvantages of disaster, people with disabilities should be taught how to save from that but it seems like we are not prioritized.

#### 4. The Disaster in Nepal and People with Disabilities

The Person with disability suffered more in compared to the ordinary people. In every steps of rescue, relief, rehabilitation the disabled people suffered more. Due to various obstructions and discrimination they were deprived of basic human services and facilities. According to the data published by the National Federation of the Disabled, more than 150 disabled people died during the devastating earthquake (as per interview with administration and program chief of National Federation of the Disabled, Manish Prasai in 23 December, 2018). While seeing the cases of some PWD purposively selected from Kavre, Ramechhap and Kathmandu Valley, they seem to have been affected by the earthquake in various ways which are incorporated in this article.

##### 4.1 Problems faced by the People living with Disability in Earthquake 2015 of Nepal

People with disabilities are some of the most neglected and socially excluded groups during the disaster period. Disaster events like earthquake can cause bodily harm resulting in disability. Disable people constitute one of the most vulnerable social groups during the disaster (Wolbring, 2011). 14 Districts of Nepal were mostly affected during the earthquake of 2015 April. The disaster took place in the mid day when most of the people were out of house; similar was the case for the disabled people. Though, the people who had difficulty in moving were inside the houses. They faced difficulty in moving towards the safe place. Those who had the blindness problem faced exceptional problems. Suraj Lama from Ramechhap who also had the blindness problem states the problem faced by him during the earthquake as :

During the earthquake I was taking rest inside my house by finishing my meal. All of the sudden, the house started moving. I could not control myself. The house got cracks and broke down. I shouted and asked for help. All people were running to save their own lives. I could not run and got to stay inside. Only a part of the house had been broken while there was an exit in another side of the house. But I could not get out because I did not see that

exit. A neighbor heard me shouting and rescued me after half an hour. I was much terrified that it took many days for myself to recover.

Nepal lacks disabled friendly physical infrastructures. Neither there is disabled friendly society. The disability is taken as curse from previous life so people usually do not help disabled people. So they are facing difficulty in day to day life, the situation is worse during the disaster. Amod Karki from Ramechhap describes the problem faced by him as :

I can get into and out of the house only with the help of wheelchair. I was staying inside the house during the earthquake. I got terrified when the house suddenly started moving but I could not help myself get out of the bed. The house did not destroy completely and I got to live. Otherwise I had to die because of my disability.

People with various kinds of disability suffered a lot during the disaster. Being safe at the place where they were staying, going to the safe place and staying in safe place were challenges to them. Those people who needed other's support even during the day to day activities could not get support during the disaster. While ordinary people were saving their own life, they couldn't get support. Those who move with the help of wheelchair could not get the way, they were not carried by people either. Those people with blindness got much difficulty to go to toilet. The deaf could not hear what was going on while big mass ran to the safe place during the earthquake. Intellectual and deaf people could not shout for help when they were buried inside the house. This led to delay in rescue.

#### 4'2 Relief

The PWDalso suffered a lot during relief distribution and rehabilitation. Various relief packages were distributed from national and international level including basic needs like food and clothes. The government of Nepal distributed 15 thousand rupees to all the earthquake survivors at the beginning. Later 10 thousand rupees to each affected household was distributed in the name of warm clothes. There was difficulty for the disabled people to receive those relief packages.

The unmanaged kind of relief distribution could not reach to disabled people who were facing difficulty in the daily life. The powerful people who could run got more relief materials in compared to the disabled people. No governmental, non-governmental or private sector could distribute those materials to the disabled ones. While there were aftershocks going on, disabled people could not easily leave the safe place and go for getting relief packages where those were distributed. No one raised the voice of the disabled people. Som Bahadur Bishwokarma from Ramechhap who has blindness problem says :

My white stick was buried inside the house during earthquake which led to problem in moving. I got to know about the relief distribution, my granddaughter took me to the place. It took 2 hours for me to reach there. All the relief materials had already been distributed until I reached there. I heard

that two or three family members received the package from the same household. But I had to return bare handed.

Similar was the case of physically disabled persons. Om Bahadur Karki from Ramechhap who cannot move his both legs says :

I can't move both of my legs. Luckily, I was outside of house during earthquake so I got to survive. But my wheelchair buried inside the house. I needed a helper to take me inside and out of the house. I even needed help to go to toilet. Many relief packages came to our village but we could not receive any. My wife did not have time to go and queue for relief receiving by leaving me alone in the house, my children are out of the country for employment purpose. Thus we did not receive any relief package except 25 thousand rupees distributed by the government.

Many got only one material while relief package was being distributed. For example, those who received rice did not receive utensils. While the distributors did not distribute all kind materials at a time, people had to queue time and again to receive them. The disabled people could not go for queue time and again. Lilamaya Bhujel from Ramechhap says :

One of my legs has been cut off. I can move only with the help of crutch. I received utensils like plate and bucket by remaining in queue for a whole day but I did not have any food to eat. I could not go to queue to receive the food materials and thus missed it.

Generally, the one who is powerful dominates while receiving any kind of relief. It is more pronounced during the disaster period. Mr. Devidatta Acharya, Executive Director of Disable Empowerment and Communication Center (DEC, Nepal) Says :

While powerful people were collecting relief packages for whole year, there was nothing to eat with powerless persons. Basically this problem was more prominent among the disabled people. The distribution process was similar in all the 14 affected districts. Powerful persons used their access with organizations and used other networks to bring the relief in their locality. The people living with disability generally have less social network, social capital and cultural capital. They could not manage to get relief during the earthquake.

#### 4'3 Problems during Reconstruction

The people with disabilities had to go through special kind of problems during the reconstruction process. The reconstruction has been advancing in very slow pace. While it could not commence on time, the PWD had to live in the temporary settlement. This not only created difficulty in day to day lives but also they faced various health problems. They are facing problem in receiving the grant, approval of the maps from technicians and receiving the last installment amount. Krishna Gopal Shrestha with physical disable from Kavre says :

There is a rule that the house should be constructed by the earthquake survivors themselves. I have been facing difficulty in searching the



manpower and purchasing rod, cement, aggregates and stones from market. I started constructing house very late as compared to others in the village. It is yet to complete. The technicians had to approve the DPC and then only the whole house could be constructed. I was unable to go to office to call the technician and so I am yet to complete my house.

The owner driven reconstruction (ODR) approach has been adopted in Nepal for the reconstruction process. The earthquake had affected basically in the rural areas. Generally, Agency driven reconstruction (ADR) approach or community participation model are being adopted in other countries. Without discussing on these two approaches ODR approach has been adopted in which the house owner becomes responsible for reconstructing the house. Lack of manpower, skill, means and resources, the house owner is unable to carry out the works effectively. More worse is the case when the house owner is disabled.

The table below makes clear on the various problems faced by the people living with disability during the earthquake of 2015 in Nepal :

**Table-1 : List of problems faced by the people living with disability during the earthquake**

Type of Disability	Problems faced during the Earthquake	Problems faced during Relief Distribution	Problems faced during the Reconstruction
Deaf	<ul style="list-style-type: none"> <li>• they could not hear the sound and so could not rush out with other people</li> <li>• those buried inside the buildings could not hear the rescuer calling them</li> </ul>	<ul style="list-style-type: none"> <li>• got problem in receiving relief</li> <li>• they did not get information during relief distribution</li> <li>• other people did not help in receiving relief packages.</li> </ul>	<ul style="list-style-type: none"> <li>• the radio had been broadcasting the news about reconstruction but they could not hear</li> <li>• they could not hear the government employees talking while they visited the offices</li> <li>• they also faced problem during material purchase, searching manpower and other activities related to reconstruction</li> </ul>
Physical Disability	<ul style="list-style-type: none"> <li>• they had problem while they were not able to get out of house without wheelchair.</li> <li>• While they were safe • the themselves, wheelchair of many of them buried inside house or got broken which led to difficulty in moving.</li> <li>• they were not able to get to the safe place due to lack of support from others.</li> </ul>	<ul style="list-style-type: none"> <li>• they faced problem in reaching to the places where relief packages were being distributed.</li> <li>• the wheelchair and crutch • they were broken during earthquake so they could not move.</li> <li>• the in certainty of where was the package being distributed led to difficulty.</li> </ul>	<ul style="list-style-type: none"> <li>• they could not construct temporary housing, so were compelled to live in camps for long.</li> <li>• they had difficulty in searching manpower, collecting materials and making agreement with government for reconstructing their houses.</li> <li>• they faced difficulty in going to office and call for the technicians who would approve their DPC level and permit for constructing whole house.</li> </ul>

	<ul style="list-style-type: none"> <li>• those who were safe themselves but had their family members buried inside the house could not help.</li> <li>• they had difficulty in making temporary camp.</li> <li>• they faced problems due to lack of toilet in temporary settlements.</li> </ul>	<ul style="list-style-type: none"> <li>• while the distribution works could not be justified they faced difficulty in receiving those.</li> <li>• those who received relief packages could not carry those to their temporary houses.</li> <li>• they got cooking materials but no place to cook.</li> </ul>	<ul style="list-style-type: none"> <li>• due to lack of road facility, they faced problems in bringing the building materials and going to the site.</li> </ul>
Blind	<ul style="list-style-type: none"> <li>• they got difficulty in moving out of the house during earthquake.</li> <li>• the day to day life got disturbed while the white stick got buried inside the house.</li> <li>• they faced difficulty in moving to the safe place.</li> <li>• they had difficulty in moving in the new and temporary housing while they were used to with their own house.</li> </ul>	<ul style="list-style-type: none"> <li>• they had difficulty in going to the place where the relief was being distributed, those who got the relief packages faced difficulty in bringing them to their houses.</li> <li>• They did not see what types of materials were being distributed, thus the quality materials were taken by others and they had to bring the quality less and weak materials.</li> </ul>	<ul style="list-style-type: none"> <li>• they faced problem while the government offices are not disabled friendly.</li> <li>• they faced problem in searching manpower and purchasing building materials.</li> <li>• The businessmen could deceive them regarding the quality of materials when they could not see.</li> </ul>
Intellectual disability	<ul style="list-style-type: none"> <li>• they couldn't even guess what was happening they couldn't shout while they were inside the houses.</li> <li>• they face problem while they cannot express their feelings.</li> </ul>	<ul style="list-style-type: none"> <li>• during the relief distribution, people who could bargain by shouting got more materials.</li> <li>• those who could not speak had to satisfy on quality less material.</li> </ul>	<ul style="list-style-type: none"> <li>• they had difficulty on reporting about their houses.</li> <li>• they had difficulty on reporting to those technicians who had come to collect the details of destruction.</li> </ul>

## 5. Conclusion

Person with disabilities have been heavily affected by the earthquake 2015 in Nepal. Disasters make the situation worse for PWDs with regard to access to essential goods and services. Presence of debris as a result of the earthquake will create challenges for people with physical disability to move around, but also in accessing relief items. Access to temporary shelters, toilets, could be another challenge which needs to be addressed in the design of community shelters. Similarly, many PWDs are taken care of by their household members who are often female. Disasters can lead to loss of caretakers and or additional burden on the caretakers (NPC, 2015).

The PWDs fall under a vulnerable group. This community always becomes socially excluded. Those people are politically powerless. Their mobility is very less frequent. They are socially, culturally, economically and politically excluded. Due to this they have to face difficulty more prominently than the ordinary people during the disaster. They have to face problems in rescue, relief, rehabilitation and

reconstruction. As said by Hewitt (1997) vulnerability is a social condition which is embedded in social, structure, institutions, relations and processes and it is a product of social inequalities. This kind of inequality is faced mainly by the PWDs in the society. The earthquake of Nepal 2015 seems to have mostly affected the people with disabilities.

## Acknowledgement

This research paper is made possible by the generous support of the Disable Empowerment and Communication Center (DEC, Nepal). The contents expressed here are solely the responsibility of the authors and do not by any means reflect the views of organization.

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