
QUALITIES OF HOUSEHOLD RESILIENCE AFTER 2015 EARTHQUAKE: A STUDY OF DHUGIN LAMATAR

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Abstract

Disasters usually, create unexpected large scale destruction and disruption within short periods of time. Be it an earthquake, floods, or landslides, all explicitly disrupts the general trajectory of people's lives. After a disaster, people need resilience to recover from the situation. Nepal confronted horrendous seismic tremors on 25 April and 12 May 2015. In such a context, this paper tries to explore what type of household able to stand again and the major objective of this research is to find out the qualities of household resilience in terms of disaster. Furthermore, this article tries to yield the answer to the research question is, How households able to stand again after the 2015 earthquake? Nepal earthquake 2015 destroyed the houses, took the lives of people in Dhugin chowk. Dhugin chowk, Lamatar is carefully chosen for this research because it is the most impacted area among many in the Nepal earthquake 2015.

Random sampling and interview methods are exercised to take the depth information from the field and this research has been conducted using the qualitative method. My finding is: shocks adopting and absorbing the capacity of household help to create disaster resilience which is determined by capital, fixed assets, education, and regular income in the research area.

Key Words: *Disaster, Resilience, Nepal Earthquake 2015*

Introduction

This paper is about “qualities of household resilience after 2015 earthquake” and it is explicitly about Dhugin Chowk (See map on appendix Section 1) of Lamatar town in the edges of Kathmandu that is currently part of Mahalaxmi Municipality in Province No 3, which is also the "most influenced" territory of Nepal tremor 2015. Dhugin chowk is the part of Lamatar where we used to observe one fine settlement of small houses made with brick, mud, and stone before the 2015 earthquake. This place lies on the lap of Lakuri Bhanjyng so it is rich in natural beauty. The settlement was formed by 66 houses and houses were completely/partially destroyed by the Nepal earthquake 2015. Some are able to build house, some are able to grab previous situations and some not. In such a context, in order to understand, what type of households thrive to start a new normal life aftershock and why other households fail to augmentation again. Dhugin chowk is one of the best research area because it has been perceived in preliminary observation of field visit before research planning that people experienced not only life and property loss in disaster also

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learning how to cope from disaster in Dhugin chowk that's why the place is chosen for research purpose.

On Saturday, 25 April 2015 at 11:56 local time, a 7.6 magnitude earthquake as recorded by Nepal's National Seismological Centre (NSC), struck Barpak in the historic district of Gorkha, about 76 km northwest of Kathmandu. Nepal had not faced a natural shock of comparable magnitude for over 80 years. The catastrophic earthquake was followed by more than 300 aftershocks greater than magnitude 4.0 (as of 7 June 2015). Four aftershocks were greater than magnitude 6.0, including one measuring 6.8 which struck 17 days after the first big one with the epicenter near Mount Everest. To date, there are over 8,790 casualties and 22,300 injuries. (PDNA, 2015)

The issue of disaster resilience got its prominence among Nepali scholarship in the aftermath of the 2015 earthquake. The resilience approach emphasizes the capacity to cope with uncertainty and surprises while maintaining overall system persistence and also resilience is about learning from error how to bounce back in better shape.

The major purpose of this descriptive research tries to focus on people's perspectives towards resilience. However, the main characteristic of this method is that the researcher has no control over the variables; the researcher can only report what has happened or what is happening about the current (Kothari, 2009). The methods of research utilized in this descriptive research are interview methods including focused group discussion and observation. Moreover, Comparative analysis has been done too. Before and the post-earthquake condition has been compared of a household.

Additionally, this study employs random sampling. Thus, a random sample of 22 respondents for each category was carried out. Out of 66 households in Dhugin, samples are taken leaving two houses in between following by same way. Even with limited resources and time limitations, depth interview was conducted with 22 respondents. In random sampling, the following caste division has been observed though it was not intended. So, the researcher received the idea of caste structure its connection with resilience. Nine individuals from the Dalit. Families, 7 from Newars household and 6 from Brahmin Chettri household respondents have participated in the interview.

Understanding the Notion of Disaster Resilience

Resilience is defined as the amount of change that a system can undergo while still maintaining control of its structure and function, or the system's ability to self-organize and the degree to which the system is capable of learning and adaptation (Carpenter, Lance H. Gunderson, 2001). What I have understood in a very short form, from the Carpenter.et al definition is that resilience is the capability of learning and adapting. Generally, resilience is a much-needed capacity for everyone in every difficult time. Since our immemorial, we have been facing a wrath of disasters. Disasters and crises have been part of the human experience since people started living in groups. Through the centuries, however, new hazards and risks have emerged that have added to the possibilities of new disasters and crises arising from them (Quarantelli, Lagadec, & Boin, 2007). Disaster has many synonyms. Events such as hurricanes, landslides, earthquakes, tsunamis, volcanic eruptions, and floods have been considered direct synonyms for disaster (Darcy, 2008).

As a part of my research, I am taking one major disaster “Earthquake” because it is one of the major disasters of Nepal.

Nepal is facing the fury of natural and human-induced disasters with greater frequency and intensity” (MoHA, Government of Nepal, 2018). The vulnerable communities and poor people have not been able to mitigate, prepare for, effectively respond to and overcome the impact of multiple hazards in various parts of the country (MoHA, National Position Paper on Disaster Risk Reduction and Management in Nepal, 2018).

Nepal is the 11th most earthquake-prone country in the world. Ever since the first recorded earthquake of 1255 AD that killed one-third of the population of the Kathmandu Valley and its King, Abhaya Malla, Nepal has experienced a major earthquake every few generations. The last great earthquake of magnitude 8.4 in 1934 AD resulted in more than 10,000 deaths in the Kathmandu Valley. Most of the infrastructure and major heritage sites had to be rebuilt. There have since been earthquakes causing a severe human and physical loss in 1980, 1988, and 2011 (PDNA, 2015). Nepal was confronting minor and serious tremors and the " Nepal quake 2015" stayed one of the overwhelming serious debacles for Nepal.

These menacing events of nature causes harm to the human population in multiple ways. They may also promote terrors and disorder- rooted in problems associated with these physical losses (Berrebi, 2011). They may displace people from their settlements and disturb their livelihoods. The loss of property and resources, as well as the vulnerabilities and threats imposed by these on the livelihood security of the affected population, also differ among households (Cutter, et al., Felima 2009). These differences are rooted in their gap of access to adapt to these vulnerabilities and impacts. Their resilience is different according to their social status, economic access, demographic, facilities economic, and social lives of their respective domestic unit (Households). And my research basically focuses on what type of household recovered soon or what type of household still struggling to recover from the situation analyzing household resilience capacity.

“Disasters disproportionately affect poor countries, and erode development gains” (UNICEF, 2014). More people and nations who have low income have the low coping capacity and more casualties are reported in disasters that occur in low-income nations. According to (UNDRR & CRED, 2015) “Of the 1.35 million people killed by natural hazards over the past 20 years, more than half died in earthquakes.

Therefore, with the keywords, resilience, disasters, Nepal earthquake 2015, I have concentrated on what variables help to construct strength and at last how individuals stay on the way of defenseless so my exploration leads to the conclusion.

Post Nepal earthquake 2015, the reproduction and recuperation process has been moderate. Sections of casualties are remaining in transitory asylum till to date. Individuals are constrained to live in a high hazard zone to debacles. Nepal seismic tremor 2015 and the human just as property misfortune that the nation experienced, individuals battle to recoup from that circumstance, that a transitory sanctuary where individuals consuming their quantifiable time on earth pulled in me to convey this examination. So as to comprehend the hidden reasons for moderate recuperation process, lacking the strength to the fiasco, I am conveying this research from sociological points of view

The attributes of the resilience that demonstrates its resilience fluctuate from family to family unit. According to CARE, here are following attributes of disaster resilience.

Anticipate risks is one of the capacity which helps to create resilience at the household level. Basically anticipate risk means foresee and therefore reduce the impact of hazards that are likely to occur and be ready for unexpected events through prevention, preparedness, and planning. Similarly, another quality are absorb shocks where people accommodate the immediate impacts that shock and stress have on their lives, wellbeing and livelihoods, by making changes in their usual practices and behaviors using available skills and resources, and by managing adverse conditions. On the other hand, qualities to adopt the shocks equally create disaster resilience. Adopt to evolving conditions that adjust their behaviors, practices, lifestyles, and livelihood strategies in response to changed circumstances and conditions under multiple, complex, and at times changing risks. Furthermore, the ability to transform is one of the attributes of resilience. Transform the environment and drivers of risk and create individual and systemic changes on behaviors, local governance, and decision-making structures, market economics, and policies, and legislation.

Resilience, therefore, the ability to anticipate, absorb, adapt, and transform the shocks and recover from those circumstances. Nepalese individuals are confronting different kinds of perilous dangers because of assorted geological conditions notwithstanding being wealthy in normal decent variety. Since Nepal is in danger from various debacles because of normal perils, each year, in normal in excess of 500 different grievous episodes happen coming about the loss of physical frameworks and human life and influencing occupations. In most recent 45 years (1971 to 2015), in excess of 40,000 individuals have lost their lives because of calamities. This number is multiple people losing life consistently. These fiascos have become an extreme weight to the individuals and the network all over Nepal. In the majority of the districts of Nepal, disasters occur recurrently, where more than 90 % of the populations are at high-risk of death due to two or more than two types of disasters (ActionPlan, 2018).

Disasters is a result of hazard and vulnerability. The most vulnerable group consists of financially disadvantaged and poor families, marginalized and socially excluded communities, women, children, elderly, and people with disabilities. (GON, 2018). Vulnerability in this context can be defined as the diminished capacity of an individual or group to anticipate, cope with, resist, and recover from the impact of a natural or man-made hazard. The concept is relative and dynamic. Vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure, and defenseless in the face of risk, shock or stress. (IFRC, 2015).

Findings

One month-long visit in the research area, interviewing with 22 respondents, (See the photo in Appendix Section) discussed with the focused group and direct observation of the research area (Photo in appendix section) leads towards the research conclusion. In general, absorbing and adopting capacity in people, so far, made them resilient after the earthquake. They absorb/adopt the shocks considering that disaster comes and goes but it doesn't mean life should be ended. Rising again is necessary so they used their knowledge, skill, resource, and asset whatever they have. On the other side, those who couldn't manage to utilize or they don't have these things

remained under the category of vulnerable. In this article, only the resilience part has been observed. Residents of Dhugin absorbed and adopt shock in multiple ways. Livelihoods played a vital role in resilience.

Livelihoods

Ten family units out of 22 were able to restart their own skill (Tailoring) as same as before the Nepal earthquake 2015. Respondent clarified if something happens we should rise again that is the reason I have dealt with my vegetables cultivating. Correspondingly, because of little kids, we had to begin our shop soon else we didn't have a choice to take care of our children clarified another women respondent. We lost our home not courage therefore, we did our best to move on. They started to handle their livelihoods immediately after the earthquake which helps to earn, to get busy, to construct houses so that they gradually move towards a normal life. Getting back to normal life and capacity to tackle with situation showed by ten families can be considered like the quality of resilience. The absorbing ability has been observed in Dhugin area is determined by livelihoods and vocational skills.

Cataclysms not only bring reliably change in normal life, but a portion of the time also conveys more mental determination to stand. Furthermore, it incorporates the estimation of life, estimation of work in human life which finally drives the strategy towards disaster resilience. Moreover, restarting livelihoods as same as before additionally intends to skip back to ordinary life. However, engrossing stuns and get begin everything typical isn't sufficient to be resilient. Five respondents changed their occupations after the earthquake as disaster pound all the system of livelihoods. In such a context, five respondents started their livelihoods but in a different way. One respondent said that she used to have two cows and she lost bovines and shed both by the quake. As she can't redo such things she started new lifestyles. Also, she is fighting to fabricate a private house so she had to join a new occupation as soon as possible. In this circumstance, catastrophe brought a colossal change in people. It not just harm physical structure additionally ruin the family as individual life therefore, people need resilience to move on. People who were able to settle their livelihoods after the Nepal earthquake 2015, they are resilient because they showed their shock absorb/adapt.

Hence, yet respondents trusted themselves resilient in terms of disaster results has been watched unfriendly because few credits aren't sufficient to meet resilience since weakness cover on the versatility face. With this livelihood part, life skill plays an important role to create disaster resilience.

Using Available skills:

Field report 2019 Dhugin shows that households retain stuns utilizing their skills. Each household story is extraordinary. Pariyar or Dalit family were engaged in sewing and selling the fabric. After the Nepal earthquake 2015, they use their skills and tie-up with the market to sell their product so that they managed their two times meal. Dalit families are dependent on the landowner in the Dhugin area and they are comparatively poor in comparison to the Brahmin family. Being poor and vulnerable doesn't mean that they are not resilient to disaster. Other features like strong

kinship and social capital are helping the Dalit community to be resilient to disaster. Response received from these households says that they have strong kinship relations around there so that they help each other in times of difficulties. Households required more fabric to start and simultaneously they didn't understand they should work because all the sewing machines were damaged. After six months when the donor Oxfam distributed sewing machines to all the Pariwar families, the Pariwar families set up temporary shelters and started their own businesses utilizing their own skills. Gradually, they get a few markets but were not enough. Moreover, they sell their labor in the nearest village that's how they absorb shocks gradually.

Two households from Newar have utilized their driving abilities. They couldn't join a previous job as the factory was destroyed, where they used to work. Few months later they joined in a cement company as a driver utilizing their available skill and succeeded to adopt the shocks.

Respondents from the Newar family explain how they adopt the shocks. He started vegetable farming because he had an idea about seasonal vegetable farming. He used to work in a factory but the factory was destroyed by the Nepal earthquake 2015 and it's completely closed so he didn't have any option except utilizing his own knowledge.

Utilizing available skills, members of the household adopt the shocks gradually. In such a way, resilience to disaster also increased. They learned from their experience. Also, they started to take the onus of their own life instead of depending on the government. Analyzing the data from the field, adopting capacity is one of the attributes of a household which is determined by other factors including skill.

Resource and Assets

In order to absorb the shocks and build resilience, resources and assets help in many ways. All 22 household members expressed their perspectives on resources and assets. People living in a temporary shelter lamenting that they don't have enough resources to build back better and on the other hand people who had bank balance, land, and other assets able to build back better. Build back better in terms of social status. According to a general conversation with people, social status is determined by land, tall and strong (Pakki ghar) house and good social capital. Similarly, received a response from the interview brief that landless and poor families are not resilient to disaster. They are still living in temporary shelters and they have low social status. Even their name is called in a dominating way. In an interview, explaining about the landless family, Brahmin and the landowner was shouting on one Pariwar working boy. (yiniharu lai jati gare ni nahune, talai masine). Masine was not a nickname rather landowner dominant trend could be observed. Later on, he explained by himself that landless is working in his field and whatever he gives they take so they are having a very difficult life. In order to take data from the field, one focused group was organized with six people. People with good social status respond properly and one respondent xertz water three times while responding and as per him he is fighting for land with his owner so he seems nervous. From the focus group discussion, it is concluded that the dominant group is dominant and the reason behind the lack of resources and assets. Again, lack of resources and asset people are having a difficult time getting social status. And those having social status they are more resilient in comparison to other households. Data shows that four households with good social status seem more resilient.

Conclusion

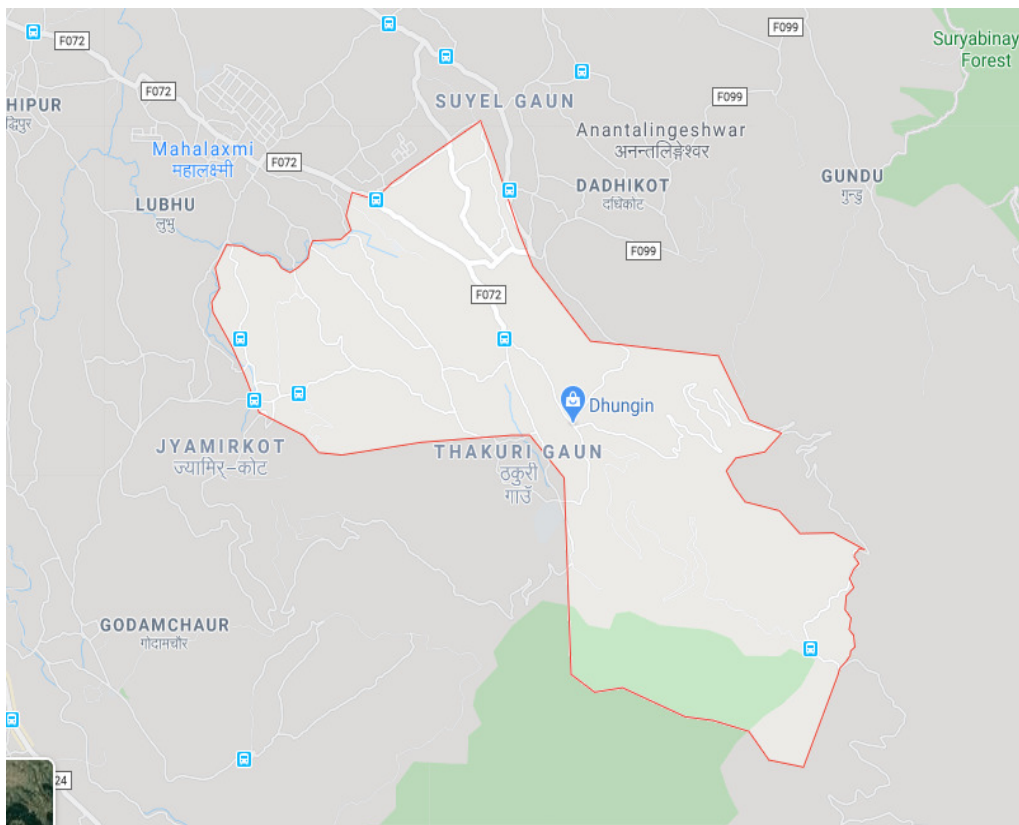
Qualities of resilience varies from household to household. Both type of households, who show less resilience and high resilience has been observed but a household with asset (Land, Bank balance, House, Permanent Job) show high resilience. Similarly, Household members who utilize their skill as per time demand show moderate resilience. Resilience also depends on internal factors like their ability to create social capital, the income of the family member, and their education level. Also, the Household's individual member resilience plays a vital role in the overall resilience of the household. A resilient household to a disaster quickly adopts and absorbs the shocks effectively which results build back better. Nepali society is determined by a social structure where caste, class, gender, religion and other factor plays a role. Concluding this article, Dhugin area is not escaped from this social structure. It means that class, caste gender, and other factor are determining the household level of disaster resilience. There may be other qualities of resilience apart from above mention finding, therefore, more research is necessary for this field.

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Appendices

Appendix I



Appendix II

(Researcher with residents of Dhugin in process of Interview)



In Process of interview (One of the resilient household)



Temporary shelter, earthquake victims are still staying in it.