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MSc. International Development Studies

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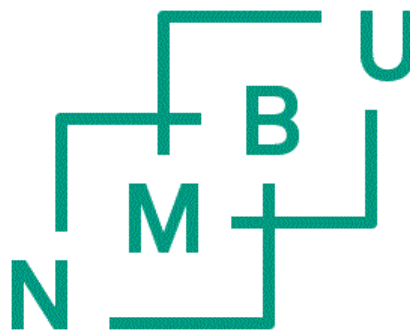
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2016

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Declaration

I, **Neeraj Katwal**, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature and Date:

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Abstract

Almost after a year when last major earthquake occurred in April 24, 2015 in Nepal, the survivors who had lost their houses were facing major difficulties in getting back to normal livelihood in Ramechhap district of Nepal. This study showed the contrasting differences in livelihood recovery of people living in municipality and VDC within a district. Many of the households, service centres, health posts, schools were destroyed ending the normal livelihood of people in various parts of already poor and rural Ramechhap district.

Post disaster livelihood recovery phase in Ramechhap seems to be going in slow pace even after a year with multiple projects implemented from various governmental and non-governmental organizations. Government body seemed to be slow in addressing the needs of the people and delivering the service to the affected people as compared to non-governmental bodies working in Ramechhap. However neither of the authorities have initiated permanent livelihood rehabilitation process in Ramechhap, organizations still seem to be revolving around humanitarian assistance even after the year of major disaster.

In spite of series of difficulties and challenges ahead in recovering livelihood of the affected population, togetherness of community and unity to overcome crisis situation showed the resilient nature in group of people living in Ramechhap which might be the biggest asset in post-disaster livelihood recovery- not only in Ramechhap, but whole Nepal.

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Abbreviations

ADB: Asian Development Bank
BBC: British Broadcasting Corporation
CBS: Central Bureau of Statistics
CDO: Chief District Officer
CDS: Community Development Society
CFE-DMHA: Centre for Excellence in Disaster Management & Humanitarian Assistance
CNDRC: Central Natural Disaster Relief Committee
CPA: Comprehensive Peace Accord
CPN: Communist Party Nepal
DDC: District Development Committee
DFID: Department of International Development
DMP: Disaster Management Program
DUDBC: Department of Urban Development and Building Construction
FAO: Food Agriculture Organization
FGD: Focus Group Discussion
GDP: Gross Domestic Product
GoN: Government of Nepal
HDI: Human Development Index
HH: Household
INGO: International Non-governmental Organization
LPG: Liquid Petroleum Gas
LSGA: Local Self Governance Act
MoHA: Ministry of Home Affairs
NPC: National Planning Commission
NGO: Non-Governmental Organization
NPHC: Nepal Population and Housing Census
NSDRM: National Strategy for Disaster Risk Management
NDMC: National Disaster Management Council
NDMA: National Disaster Management Authority
NRs: Nepalese Rupees

PASSA: Participatory Approaches for Self-Shelter Awareness

PDNA: Post Disaster Need Assessment

SPSS: Statistical Package for Social Science

UNDP: United Nation Development Program

UN-OCHA: United Nation Office of the Coordination of Humanitarian Affairs

USD: United State Dollar

WFP: World Food Programme

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Background

Nepal is a small, landlocked country in South Asia wedged in between two large nations, that is, China to the North and India to the South, East and West. In total, 26.5 million people live in Nepal and the mainstay of the Nepalese economy is based on agriculture. 81% of the total population is Hindu, with hundreds of different ethnic groups spread over various parts of the country (CBS 2014: p8, Figure 1.1 The social causation of disaster). It has a rugged and fragile geophysical terrain, complex geology, variable climatic conditions and lies in a highly seismically active region. Its altitude varies from 60 m in the south to 8848 m in the north and its highest variation of altitude is within 193 km of distance (Chhetri 1999). These factors make the country particularly vulnerable to various natural calamities like earthquake, landslides and flood.

Nepal is a developing country that suffers from extensive and intensive poverty. Gross Domestic Product (GDP) growth rate of Nepal on 2014 was 5.1 annually before the earthquake occurred (World Bank, 2016). Unemployment rate averages 2.8% in Nepal, every day 1500 Nepalese migrant workers travel to foreign land for better employment opportunities (Seddon, Adhikari et al. 2002). According to the Human Development Report (HDI), Nepal is 145th ranked country in the world, which is very low. 25.2% of the people are living under the poverty line. Rural Nepal is more deprived, with reports suggesting that 20% of the people are under the poverty line in rural areas as compared to 15% in urban areas of Nepal (WFP 2015).

Political scenario in Nepal

Political situation within Nepal has been really fluctuating during the recent decade. Latest fluctuation can be traced back to the start of civil war, officially started on 1996 which was labelled 'peoples war' by the then insurgent group 'Maoist'. The war was up against the monarchical suppression and inequitable resource distribution which lasted almost 10 years with rebels from the Communist Party Nepal-Maoist (CPN- Maoist) demonstrating. The aggressive way of protesting took over 10,000 lives of people living in the nation (Collier 2003). Following the Comprehensive Peace Accord (CPA) treaty on 2006 signed by major political parties including Maoist ended the miserable period of civil war in 2006, Maoist gained the status of political party as stated in CPA. In 2008, with the reunion of major political parties in Nepal, intense demonstrations to abolish monarchical government was initiated throughout the country which lasted 19 days. On 28th may 2008, Nepal began its new political

journey as a young republic nation and the previous monarchical constitution was abolished. However, with the damages left by civil war and long awaited demolition of Monarchy, it took a while to formulate a new constitution. November 2013 elections resulted a peaceful power transformation which took a step towards formulating an inclusive and democratic state.

Nepal is a Democratic Republic, the politically youngest country in the world right now, as they have recently drafted the constitution in 2015 after constitutional monarchy was expelled in 2008. Although, Nepal's political history remains highly fluctuating. After 2008, the eighth Prime Minister finally concluded drafting the constitution in 2015.

With over 92% of voting in favour of new constitution from Nepal's parliament, it was still not enough for Nepal's neighbours, India. After the constitution was drafted, India has been hugely dis-satisfied with the newly drafted constitution scratch one of the two "drafted constitutions" in the sentence, stating that new constitution of Nepal didn't guaranteed equal rights to all citizens, especially the *Madhesis* of Nepal- the ethnic community living near the borderline between Nepal and India. And as a result, unofficial trade blockade on all necessary goods and supplies was made by the Indian government without notice to the Nepalese government. Contrasting views on Newspapers of Nepal and India were to be seen regarding blockades- an article in *Nagarik News*¹ of Nepal claimed that India was responsible for the blockade. However, there are no such official reports claiming that India was solely responsible for the blockade. Indian government later clarified that tensions in the borderlines is from the ethnic group itself, and they were the main cause of trade hindrance. Reason behind the blockade is yet to be finalised. However in any case, major required good such as day to day rations, petroleum supplies such as petrol, diesel and Liquid Petroleum Gas (LPG) and medical supplies were blocked from being imported in Nepal which made life harder for the citizens (Lamichhane 2015). On top of that inflation on available goods and black market fostered. Much of the effect was felt by the victims of an earthquake, so it also seems to be a major challenge in the earthquake livelihood recovery process.

Besides this, there are many problems which are being faced by the country for a long time, for example - chronic energy crisis of electricity and petroleum products. Enormous political structure changes continuing in the country, poverty, the unwelcomed massive disaster and a blockade has brought down the whole newly born nation to the ground in many aspects –

¹ Nagarik News is one of the biggest news portal in Nepal, This article in Nagarik News: *Blockade in Nepal* covered the issues created by Indian government to cause blockade in Nepal.

hundreds and thousands have lost their job and livelihood and were left with very minimum access to public services, markets and common facilities. ‘Loss of food grains for consumption and seeds for planting during forthcoming rainy season added to the stress on immediate recovery’ (WFP 2015).

Disaster History in Nepal

The recorded history of earthquake in Nepal stretches back to 1934 where more than 10,000 people lost their lives (CFE-DMHA 2015). Since then six major earthquakes scaled 6.5 Richter scale or above has occurred and with that comes thousands of deaths and casualties, millions of people left homeless and massive loss of physical infrastructure has occurred every time with the disaster. However, Nepal has recovered from high profile earthquakes every time.

Nepal is one of the most vulnerable countries in the world in terms of seismic activity, ranking 11th most at-risk. In particular Kathmandu, the capital city of Nepal is most vulnerable because the valley in which it is located used to be a lake long time ago. Rapid urbanisation has led to haphazard development of the city, many buildings have been constructed with traditional methods using low standard materials other than the current official National Building Code, implemented in 1994 (CFE-DMHA 2015). Even though Kathmandu is viewed as most vulnerable to earthquake, there are many villages and districts in rural area of Nepal that are equally or more vulnerable to disaster because of various reasons such as accessibility, poor economic status and economically vulnerable people.

Nepalese Context

The physiography of the earth is slowly undergoing change due to its tectonic activity and universal planetary action (which means the planet earth is thoroughly changing the position of tectonic plates). Such kind of activities are more experienced in Asia (Oceania) and South America. Among them, Himalayan region and some pockets of Oceania are most active (Chhetri 1999). Major portions of the Himalayas lie in Nepal, making it more vulnerable to major earthquake than any other part of the world.

A high profile earthquake in Nepal on 25th April 2015 took the lives of approximately 8,857 people and nearly 21,952 were injured (BBC 2015). Thousands were left homeless and many ancient homes and heritages were broken down into rubble. Kathmandu, the capital city of Nepal was left stranded and felt most of the damage because of the dense population and fragile infrastructure. The disaster did not affect only Kathmandu, but property and livelihoods of the people in rural areas of Nepal as well.

The earthquake and its subsequently occurring aftershocks have had devastating effects in Nepal. From a physical to psychological point of view, the earthquake affected the growth of the country and have severely affected the livelihood of the people. According to a report presented by National planning commission of Nepal (NPC), the livelihood of over 2.28 million households and 8 million people altogether in over 31 districts are directly affected by the earthquake. The disaster has pushed an additional seven hundred thousand people below the poverty line (NPC 2015). Due to the earthquake, more than 3.5 million people are insecure with food (Golam Rasul 2015). The country is in post disaster phase, in other words – post disaster recovery phase.

It has been a year after this major disaster struck, this research paper intends to examine the after effects of the earthquake on rural communities of Nepal in terms of vulnerability and ability to cope up with the disaster. This paper also aims to critically examine the activity of the government and its roles in socio-economic recovery of the people who were severely affected during the earthquake. In general, this paper aims to generate good understanding of vulnerability, livelihood-recovery process and stakeholders' roles in the livelihood-recovery process.

Statement of Problem

This research paper attempts to highlight the process of livelihood recovery in a developing country after the occurrence of a major disaster. There are many developing nations in the world like Nepal, which are vulnerable in many aspects as discussed previously and which have been affected by many different natural calamities. This research paper assumes that people/communities living in a country like Nepal with many uncertainties around, need special attention from the government. The preparation and awareness level of the community must be spot on to enhance ability of the community to cope with pre and post disaster situations, and for that stakeholders Non-Government Organization's (NGO's) and International Non-Governmental Organizations (INGO's) along with the people/communities of the nations should play an integral part to overcome the natural hazards of an earthquake.

Rationale/ Justification of Study

As various studies suggests, there has not been any concrete procedure and remedies extracted for livelihood recovery process from each earthquake Nepal has faced. The geographical location of Nepal is such that it has been and always will be vulnerable to earthquake. In this case, higher involvement from government sector is expected from the phase of rescue to

rehabilitation. And at the same time, a blueprint for recovery must be drawn to trace what is more important during the phase of rehabilitation.

So this study carries a major significance as to get the general idea about how the recovery process is undergoing in Nepal. This research assumes that it is important to trace out the major stakeholders involved and their roles in the livelihood rehabilitation process. Especially the role of the government. Even though this study is carried out in one of the rural places of Nepal i.e. Ramechhap, the research aims to highlight the needs of rural areas which are vulnerable to natural disasters like Nepal. Even though? Study will attempt to give the proper impression about the vulnerability of the people living in rural areas. And also examine the ability of stakeholders and government as well as the affected community to come out through the difficult situation.

Objectives of the Study

The primary objective of this study is to create a better understanding of the recovery process after the earthquake in Nepal. The research is broadly aimed at enhancing the understanding of the recovery process after a major earthquake and critically examine the role of the government to address the impacts and needs of vulnerable communities.

The specific objectives and research questions are depicted in bullets and sub-bullets below:

1. To study the socio-economic vulnerability of people living in Ramechhap District of Nepal and its livelihood recovery after disaster.
 - What has the social and economic impact been following the earthquake in affected areas?
 - How are people responding to the earthquake situation?
2. To examine the roles of various actors in the livelihood recovery process.
 - Who are the actors that have been involved in the livelihood recovery process?
 - What has the role of these actors (government, NGO, civil society) been?
 - What were the lessons learned from past disaster and recovery experiences?
 - What is the role and importance of the state in the livelihood recovery process?
3. To study what improvements can be achieved in the recovery process.
 - How can livelihood recovery be strengthened?

Although several studies regarding the livelihood recovery is being undertaken after the recent earthquake in Nepal, the specific process of recovery is insufficient in the context of Nepal, specifically in Ramechhap district. After a major disaster, rehabilitation process is a natural process to rehabilitate the original situation before the major disaster. So in future this paper can be used as a guide for developing better understanding of livelihood recovery process, preparation and roles of stakeholders, especially government in rehabilitation process.

Limitations of the study

The study is centred on Ramechhap district which is 1 of the 31 severely damaged districts in Nepal during the recent earthquake in 2015. Within Ramechhap 5 out of 57 Village Development Committees² – *Bijulikot, Rakathum, Bhirpani and Pakarbas* (VDC's) and *Manthali Municipality* of Nepal were visited to draw general findings and analysis of this research. This small-scale study limits itself to a small part of Ramechhap, and within Ramechhap only five locations were picked as sample for the study. Generalisation of findings from this research may not be equally valid to other different VDC's in Nepal or Ramechhap District itself. Despite limitations, the overall situation of rural settings may be generalized, assuming the characteristics of rural areas in Nepal are similar to each other (Raut, Thapa et al. 2015). While conducting this research, the earthquake situation in Nepal was still fresh, and not much of the studies in current perspective of paper are yet to be done and specifically in Ramechhap District, in this regard the significance of this study may remain higher.

² The concept of Village Development Committee (VDC) is explained in Field Study Section of this paper on Page 7

Field Study Area

Nepal is divided into 3 geographical regions: *Terai*: Flat land situated in southern belt with 55% of the total population living in the area, *Hill*: The land covering high altitude hills with 45% of rural settlements is covered by this part of the land in Nepal. *Mountain*: This region covers the Himalayan belt in Nepal covering some of the tallest mountains in the world including the world's highest peak- *Mt. Everest*.

Politically there are **5 development regions** and **75 districts** in Nepal. As shown in Fig 1, there are five development regions in Nepal, stretching from East to West- Eastern Development Region, Central Development Region, Western Development Region, Mid-Western Development Region and Far Western Development Region and each of the regions are sub divided into districts. In every district, District Development Committee (DDC) acts as the central headquarter of government body, within several Village Development Committees (VDC) exists. VDC is the macro level government body which is located in each of the villages in Nepal.(Levine 1987)



Fig 1: Political boundaries of Nepal highlighting Ramechhap District.

After the earthquake in Nepal in April 2015, almost half of the districts (31 out of 75 districts) were affected heavily. This study was conducted in one of thirty-one highly affected district in Nepal – Ramechhap.

District Profile: Ramechhap

In this research, the study was carried out in *Ramechhap* - one of the 75 district in Nepal with a total population of 202,626 and more than 44,000 households. Ramechhap covers 57 VDC and is located in central part of Nepal. Ramechhap is 132 KM south-east of Kathmandu valley- the capital city of Nepal. It takes roughly about 4 hours' drive to arrive headquarter of

Ramechhap district: *Manthali* from Kathmandu. Even though, Ramechhap is in short distance to the capital city, the location of this area is rural. Ramechhap is situated in mid-hill region of Nepal with fragile land structure and almost 70% of the total district does not cover proper road facilities that connects each VDC's and Municipality (Lafranchi 1998). This deprives most part of the district with trade and market facilities which may affect access to income generation opportunities and accessibility of quality goods for the people.

Ramechhap is home to various different indigenous groups in Nepal. Majority of people living in this area are- Tamang, Sherpa, Gurung, Newar and Majhi's. These groups are considered to be the poorest and most vulnerable group in the district given their level of livelihood quality. The people living in this area are highly marginalized and economically vulnerable. More than 60% of the population in Ramechhap fall below the poverty line, mainly the marginalized and indigenous people living in VDC's of Ramechhap (Golam Rasul 2015). Agriculture is the major source of income for the people living there, however the productiveness of agriculture is seasonal and the majority of people is dependent on day-to-day labour for wages. Geographically, Ramechhap district is located in Hilly region of Nepal where uneven land and high hills are situated. Ramechhap only has one municipality, Manthali which is significantly different from any other study cluster VDCs in Ramechhap. Many essential facilities like roads, communications and market is accessible in Ramechhap given the direct road connection with capital city of Nepal, Kathmandu. However generally Ramechhap altogether remains as rural area given the overall income source of the people based on agriculture and low economic activity of the district.(CBS 2014)

Ramechhap is 11th most vulnerable district in terms of earthquake in Nepal as suggested by recent report from United Nation Office of the Coordination of Humanitarian Affairs (UN-OCHA). The same report suggests that- across Ramechhap district 18,693 (40.68%) public and government houses were completely destroyed and 22,271 (48.46%) houses were partially damaged (UN-OCHA 2015). According to British Broadcasting Corporation (BBC), the analysis of the satellite images taken before and after earthquake have shown that more than 180 buildings in the congested city centre of Kathmandu were destroyed by 7.9 magnitude earthquake. Among the cities hit by earthquake, *Sindupalchowk*, *Ramechhap* and *Kathmandu* were the worst. More than 2000 and 1000 people were killed in respective cities where infrastructures were also damaged hugely including many 18th century old monuments and temples and palaces in Kathmandu district (BBC 2015).

Study Clusters

To conduct survey 4 VDC's and 1 Municipality was taken as a sample cluster to collect data, each of the site details are depicted below and geographical presentation of the study cluster are shown in Figure 2. Majority of population of Ramechhap District is sheltered by indigenous groups who are also known as *Janajatis* in Nepal. *Janajatis* is an indigenous ethnic group who is regarded as marginalised group in Nepal. Janajatis are usually dependent upon traditional techniques to generate income for their livelihood for example- Agriculture, fishing, clay-pot making and manufacturing traditional wooden and metal products (souvenirs, weapons and buckets) and selling in the market, occupation is based upon the ethnic community and average income is varied from the type of occupation as community has opted from their forefathers. This is a little unclear at the end) Politically, Representation of these ethnic groups in

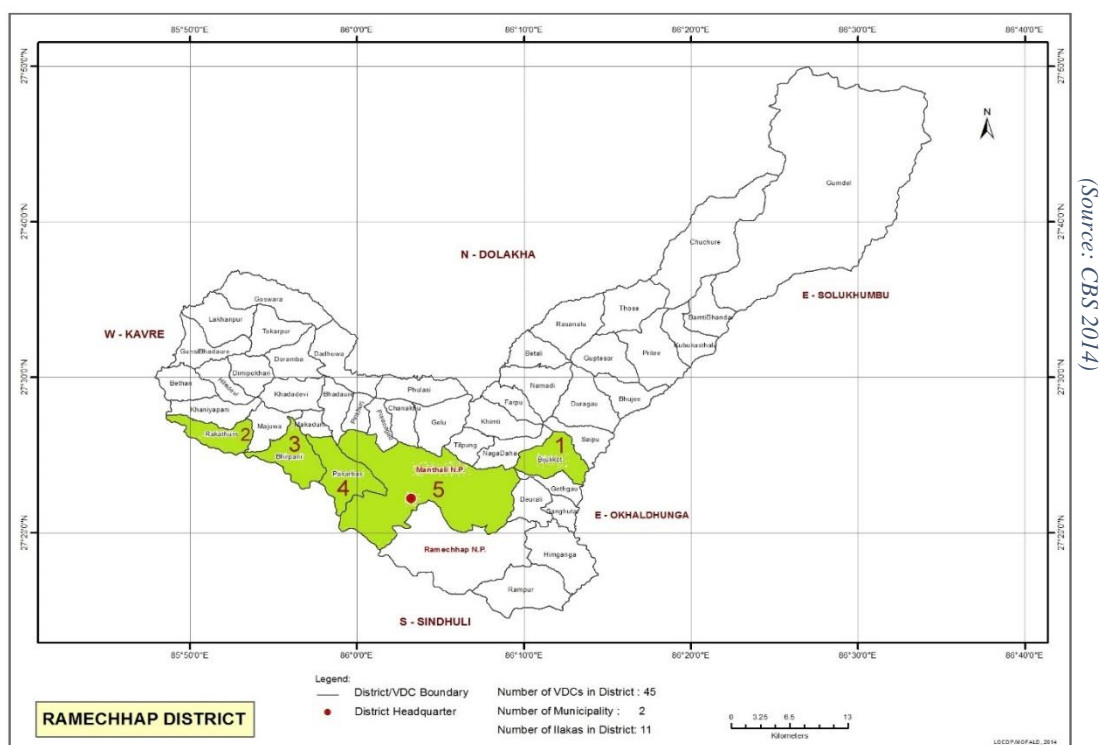


Fig 2: Geographical and Political boundaries of Ramechhap District of Nepal

parliament is less than 5%, which is also the main reason why this portion of population are known as marginalized (CFE-DMHA 2015). According to CBS report, more than 60% of HH in Ramechhap district is composed of various ethnic group. The practice of livelihood of ethnic groups are traditional may not be effective from economic point of view in this modern era because of the accessibility of the market to sell their products is very tough (rural) and even after that competing with existing cheaper goods and products in the market is very challenging

(CBS 2014). As shown in **Fig 2**- the map of Ramechhap district, highlighted in green are the **five study** clusters visited to collect data.

Table 1: Study areas and number of households.

	<i>Study Clusters</i>	<i>Cluster Type</i>	<i>No of Households (census 2011)</i>
1	Bijulikot	VDC	1087
2	Rakathum	VDC	716
3	Bhirpani	VDC	764
4	Pakarbas	VDC	1177
5	Manthali	Municipality	2018

(Source: CBS 2014)

The overall demography pattern of every VDC are similar in terms of income, occupation, and ethnic communities. However the type of ethnic community are varied from cluster to cluster by their caste and culture. Indigenous ethnic groups like Tamang, Newar and Majhi holds the majority of the population in each of VDC's whereas in municipality majority of population is held by elite caste group Brahmins' and Chhetris'. Municipality is an urban area with better facilities of roads and infrastructures than VDCs and case of Ramechhap is no exception as discussed before in district profile of Ramechhap. Communities are varied by cast from each VDC's in every study clusters, some are majorly covered by marginalized ethnic group, and some by elite ethnic group.

After earthquake report from United Nation – Office for the Coordination of Humanitarian Affairs (UN-OCHA) revealed that almost every VDC's and Municipality in study clusters suffered massive destruction by latest earthquake in Nepal, an estimated 80% or more houses were destroyed in each of the VDC in study clusters, Bijulikot, Rakathum, Bhirpani and Pakarbas. However the survey to find out exact number of casualties in these areas are being undertaken by the government officials (UN-OCHA 2015). Demographic information and situation after earthquake of each study clusters are explained briefly below-

Cluster 1 – Bijulikot

Majority of population of this area is inhabited by **Tamang Community** also known as **Janajatis** - Indigenous ethnic group. According to CBS report, more than 60% of HH in this area is composed of *Tamang* community. This study cluster is the third biggest VDCs among sample study clusters holding 1087 HH in total. According to VDC profile report of Ramechhap, 80% of the people living in the village falls below poverty line and majority of people belonged to marginal community.(CBS 2014). The main source of income of people in

this VDC is agriculture and mostly dependent on labour works such as potter in district headquarter *Manthali Municipality*.

Cluster 2 – Rakathum

Rakathum VDC is the smallest VDC among the sample study clusters covering 716 HH in a village. More than half of the population in this VDC i.e. 55% is composed of ***Newar Community*** (indigenous community but regarded as elite in indigenous group as well). This VDC is farthest from district headquarter Manthali and regarded as one of the most rural VDC in the district. The Newar community are those ethnic group whose main source of income is agriculture. Almost 80% of the people living in this area were engaged directly on agriculture activity and sell the produced goods in the market. Despite being remote and farthest among other study cluster VDCs, CBS report showed that this cluster had a bit higher average income of the people among VDC's (CBS 2014).

Cluster 3 - Bhirpani

According to CBS, majority of population in this VDC of Ramechhap is poised of marginalised indigenous ethnic group. Out of 764 HH, 71% percent of total HH living in this village belonged to ***Majhi Community (CBS 2014)***. *Majhi community* are basically associated with the people whose traditional income source is based upon fishing in riverbanks and selling fish in the market. *Bhirpani* VDC is one of the highly isolated area in terms of accessibility in Ramechhap district of Nepal. Road access connecting district headquarter is non-existent, walking is only the alternative to reach headquarter which is almost 10Km from where? and facilities like electricity and communication is the major priority of Government of Nepal (GoN) in the area before earthquake occurred in Nepal(NPC 2015). Majority of people living in this area are reliant on wage based works, 68% of youths and men either worked in brick industry or some other cheap labour based works like dishwashers and potter in district head quarter Manthali or the capital city Kathmandu (NPHC 2011, Koirala 2015). Hence, Average income of this VDC is less then compared to any other sample study clusters.

Cluster 4 - Pakarbas

Out of 1144 HH's, 70% of total population in this area are composed of ***Chhetri and Newar community***. *Chhetri* community are regarded as one of the elite caste group in Nepal after Brahmans. Between these two communities, major chunk of population in this VDC belonged to Chhetri community, however the ratio of *Newar* community is also significant as population is shared 47% by *Chhetri* community and 32% by *Newar* community and rest is covered by

the marginalised individual groups such as *Majhi's* and *Tamang's*. In spite of being a big village between all sample VDC's and less marginalised group in this area, the average income of the people according to CBS report showed the similar pattern like other 3 VDC's as agriculture being the primary source of income.

Cluster 5 – Manthali

This area is the only municipality in all of Ramechhap district where Brahmans & Chhetris being the major residents of the area. In this study, Manthali Municipality is the biggest among all the study clusters with the coverage of 2018 HH's altogether. There are few criteria's which are needed to be fulfilled such as basic infrastructures like road, communication and electricity. Consequently, the infrastructures has certainly helped the people living in this area and made them more accessible to variety of income generating activities such as business and trades. Manthali is the business hub for all the VDC's in Ramechhap. All the agriculture products produced in different VDC's are traded in the market. Marginalised communities like *Majhi's* and *Tamang's* migrate to Manthali municipality for job opportunities. Health centres, schools and colleges are well established in this region and almost all the government bodies operated in Ramechhap is located in Manthali.

Study Cluster Summary and situation after Earthquake:

The five clusters in this study are very much different to each other. However composition of society is somewhat in similar between VDCs with majority of population belonged to different ethnic group in each of sample VDCs. Even before the major earthquake occurred in Nepal, people living in VDC's of Ramechhap seem to be vulnerable in terms of livelihood with majority of the population living in sample areas fall well below poverty line. Marginalized community in VDCs are basically involved in low income generating activities which yields low income. Minimal coverage of roads, communication and market area are the common characteristics of the clusters covering VDC's. Located in Hilly region of Nepal, uneven landscapes is the basic distinct features of land in Ramechhap. These uneven landscape may also become a major challenge for government of Nepal to reach every VDC and facilitate with infrastructures of development apart from Manthali Municipality.

Manthali being a municipality seems to possess stark contrast between VDCs with availability of basic development infrastructures like roads, electricity and communication facilities.

Economically, Manthali seems to be the most active region in Ramechhap and providing economic opportunities for other people living in different VDCs of Ramechhap.

After Earthquake in Nepal on April 2015, these 5 study clusters of Ramechhap was severely damaged. Pilot survey report of UN-OCHA after massive earthquake reveals that more than 70% of the households were destroyed in Ramechhap and almost every individual from sample VDCs – *Bijulikot, Rakathum, Bhirpani, Pakarbas and Manthali* were displaced in temporary shelters and supported by relief programmes through various government and non-government agencies (UN-OCHA 2015). Recent survey from National Planning Commission of Nepal also showed that 90% of the destroyed house were composed of mud and stones in Ramechhap (NPC 2015).

Chapter 2 - Research Methodology

'Research is an art of investigation' – C.R. Kothari

Research is performed at various levels to find out the answers. Research is an art of learning what is applied in every field of study. Finding new things, finding new answers, finding unknown or finding something which is hidden. Generally when people talk about research, they tend to understand- scientific research, where facts and data are more frequently used and undoubtedly it carries huge significance in the field of science too. However, research has its significance in various fields like business, industry, scholarly purposes etc.

Research is equally important in social field to study the social relationship and to look for various answers to many existing social problems. There are two research approaches: Quantitative Research Approach – This type of research is based on the generation of quantitative data which is later processed to derive facts in quantitative or numeric form in formal fashion. Whereas, 'Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behaviour' (Kothari 2004: p5).

Research Design and Approaches

Qualitative research approach was applied in this research for descriptive analysis to derive conclusion of this paper. Several methods are used for data collection according to the need of research questions. Both primary and secondary data are collected to gather as much information as possible. The study area was selected by making few considerations. The recent case of earthquake in Nepal was selected for this research bearing in mind the socio-economic condition of Nepal which typifies the situation of developing nation and the latest earthquake placing Nepal in post livelihood recovery phase. Some of the few interesting issues such as nation being politically youngest and recently drafted constitution issues with India made it more interesting to select the study area.

Sampling Techniques

Four out of 57 VDC and a municipality of Ramechhap district was chosen as sample, bearing the extent of their rural setting. Four out of five samples: Bijulikot, Rakathum, Bhirpani, Pakarbas are VDC and Manthali is the only municipality among the sample taken. District office is located centrally in Manthali municipality, so the other four VDCs were chosen according to convenience in accessibility from the central area. There was also a significant role of Donor Agency - Organizational Development Network (*Sanjaal*) during the selection

of the sample for this research who were already working in various projects for livelihood recovery of people living in Ramechhap.

Table 2: Sample area and sample size in each of the study clusters

Study Clusters	Cluster Type	Sample Size	Sample Percent	
1	Bijulikot	VDC	23 out of 1087	2.11%
2	Rakathum	VDC	16 out of 716	2.23%
3	Bhirpani	VDC	14 out of 764	1.83%
4	Pakarbas	VDC	21 out of 1177	1.78%
5	Manthali	Municipality	38 out of 2018	1.88%
			112 out of 5762	1.9 %

Approximately 2 percent of the households were randomly selected in each of the study clusters for conducting a semi-structured questionnaire survey and unstructured in-depth interview. The list of the people living in those areas were provided by the local NGO and project implementing donor organization – *Sanjaal*. Later, I figured out that those data were collected from government district office in *Manthali, Ramechhap*.

The list of affected people were put into alphabetical order with assigned numbers starting from 1 and with the help of later random numbers were picked and information of respondents were gathered for contacting the respondents. The task was made easier by the co-ordinated network of NGO and social mobilizers in each of the villages who also helped in picking the random numbers from the long list of affected population.

Data Collection Method

Various data collection techniques are used in this research. This report is mainly based on primary data which was collected during the field survey in Ramechhap. However, secondary data are also used to tally the facts and to generalise the context of the study. For data collection for the field six and half weeks were allocated. **11th January 2016 – 24th February 2016** was the set date for data collection in Ramechhap, Nepal. Research activities are furthermore broken down and explained in their respective data collection method below:

Primary data collection

Major findings in this paper are based on primary data, so the vast majority of data used in this paper are from primary source. During the development of research questions and context of the study- the requirement of originality of the paper was kept on high priority. Some of the basic techniques of primary data collection are used in this paper. As of primary data collection method, set of semi-structured questionnaire was developed to conduct interview with the informants in selected study clusters. Significant help from a Donor Agency – *Sanjaal* was received in reaching the informants and scheduling interviews, formal and informal sessions with the key informants and local people. Observation of different sites was also carried out to get familiar with the extent of disaster in the area.

Semi Structured interview

In beginning of the research design phase, household survey with structured questionnaires were developed. Initial intention was to solely gather the direct problems faced by the respondents in study clusters. However, during initial survey phase some of the questions in questionnaire was made flexible to draw out the opinion of respondents to gather more qualitative data for the research and to know the opinion of the people. The flexibility in placing respondent's opinion in questionnaire paid off during intensive interviewing phase. Finally I did setup a semi-structured questionnaire with open-ended questions. With the help of social mobilizers employed by local NGO, I was guided through the community in study clusters and conducted my interview with the randomly selected respondents. In the beginning, I surveyed **Cluster 1: Manthali Municipality** where I first arrived and stayed. I conducted 38 households in that area and analysed the pattern of data I was collecting, more or less I could analyse that the data acquired were in linear pattern. However later, the social mobilizers helped me to pick the key houses for survey in each of the clusters. This step was crucial during the interview phase with the growing amount of pressure of limited time, convenience during survey, and to make sure the variability in representative of every income level group of the community. Since each of the clusters had huge coverage in households, I decided to visit every clusters in similar modified pattern. I could gather as much data as possible and much faster by the changes made during the selection of houses and making sure it represented the diversity of the population of every community visited thereafter. Altogether **112** households out of **5762** in five different study clusters were surveyed further. The household owner or the chief of the household (elder member) was interviewed in each of the survey considering that they have more experience and information about the social and economic conditions and to trace out the real effects of

earthquakes in their areas. Respondents were given freedom to express their feelings and gather original and qualitative data. This phase of data collection was done to collect necessary data for my **research question 1**.

All the interviews were thoroughly initiated in Nepali language by myself and assisted by my fellow social mobilizers provided by CDS. While interviewing, some of the respondents were confused about my research and treated me like a project holder. Though I was assisted by the Donor Agency, and local NGO's during my data collection, all the respondents were well informed about the purpose of my data collection. Each and every respondents were well informed before interview that all the data provided will be kept anonymous and the data will only be used for research purpose for my studies. And on respondents consent, some of the videos and audio clips were taken as audio and visual information for the studies.

Key informant Interview

Key-informants were selected prior interview, personnel holding the special status in the society were regarded as the key informants for this research - political leaders, social activists, government official, non-governmental organization representative, donor organization and key-informant from local community were selected for interview. The main purpose for adapting this method was to find the issues regarding earthquake in various perspectives from different levels. Data necessary for **Research question 2** was mainly addressed from this method. Special arrangements were made by organisation Sanjaal to meet the key personnel for the meeting. Appointments were scheduled at district headquarter- Manthali. It was far more convenient to gather every key personnel at one place then visiting them in their area. Even if I visited the households in every VDC of Ramechhap and asked about the key informants in each of them, the key informants were however in central headquarter for their personal work or for their job.

Representative from government official Chief District officer, was interviewed separately on 11th February 2016 as he had limited time for the meeting. The meeting with government chief of the district was held separately for in-depth and sensitive data collection. However, the representatives from non-governmental organization, including donor, local political leaders and community representatives were interviewed between 12th February 2016 and 14th February 2016.

Focus Group Discussion (FGD): Manthali

Focus Group Interview or discussion is largely becoming popular in research activity if you are especially writing a qualitative research paper. It is the in-depth method to get data from selected participants who are purposive and have a major influence in dynamics of the particular area where they are involved (Rabiee 2004). In this research guidelines for Focus Group Discussion (FGD) with stake holders and general affected people was formulated to find out the core issues and challenges as addressed in **research question 2 and 3**.

Representative of all four VDC were present along with representative from municipality. One representative each from Bijulikot, Rakathum and Bhirpani were present in the FGD discussion whereas representative from Pakarbas didn't managed to be able to be present. Participants included the political representatives from few major parties who were not first intended to be included in FGD, however on field I decided that their presence would provide different dimension towards the issue which were about to be discussed. Altogether 16 participants were present for focused group discussion including governments' Chief District Officer (CDO) and representatives from donor and local NGO.

Focus group discussion was held on 15th February 2016 after key-informant interview was completed. Guidelines for focused group discussion was pre designed and was used to find the general understanding of the group of the people living in 5 different areas of Ramechhap. Guidelines basically intended to find the preparedness level of people living in the sample study clusters and government preparedness plan in those areas. FGD was also designed in such a way that we could figure out, ongoing post disaster intervention from government and non-government organizations and to find out how it's affecting the livelihood of the people. Overall the main purpose of FGD was to trace out the gaps between Government sector, non-government sector and general affected people and identify the possible solutions between them.

Observation

Observation is one of the way of gathering the data just by watching the situation or the process in particular setting (Kothari 2004). In this research observatory approach was used during the field visit to observe the situation of 5 selected study clusters in Ramechhap district after recent major earthquake. During my field visit I mostly stayed in Kathmandu and Ramechhap. These two districts are the most affected districts during the earthquake. Even though I was actively collecting data through my questionnaires and sheets and papers, I gained better understanding

of the situation of those places by experiencing it first-hand. I got the idea of the social and economic standards of the people living in Ramechhap (rural) and Kathmandu (urban). During my stay I also experienced earthquake aftershock which measured 5.5 Richter scale, the first hand feeling of earthquake situation. Insight of this part of my field helped me to gather and understand the issues which were essential for discussion and finding part of my research.

Secondary Data collection

Secondary data are the data which are already published and analysed by the researcher with findings on specific situation or topic (Kothari 2004). Secondary data can be in various forms such as- Journals and Reports from national and international organisations, Newspaper, books and magazines, research reports from scholars and so forth.

The relevant published Journals, Ministry reports, International NGO's and NGO's related to the topic were collected for this research to link the situation with the topic. Published data used in this report mostly are collected directly from the concerned office or downloaded from their websites. Some of the offices visited in during field visit were UNHABITAT, UNICEF and *Sanjaal*. Central Bureau of Statistics, Nepal was also visited twice during my stay in Nepal to get the recent and updated data.

Research Challenges

There were many challenges during my data collection. Earthquake in Nepal 2015 a high profile tragedy and need of humanitarian assistance is on high priority of every national and international organization including government. On February 2016, data collection of this research was being carried out, which was almost a year after since earthquake occurred in Nepal.

My research is based on primary data and direct interview approach is the main activity during my data collection. When I was in field, I figured out that people were already tired of the researchers coming and asking the same questions again and again. At times respondents behaved with me aggressively with their point of view, referencing me as 'one of many' researchers who come, asked and went back with same questions and with same answers and never showed their face again. I encountered as many as five similar incident during my data collection phase. But each of the respondents were made aware that this research is particularly based on study purposes and respondents were also made aware about the main motive of my study.

The most challenging situation I faced during my field visit was energy crisis situation in Nepal. Almost every day there was 16 hours load shedding which made life miserable and very hard to get up to date with my schedules and internet connection. Charging my laptop was a prime problem I faced every day during my stay in Nepal. Contacting my supervisor in Norway was another challenge given the situation of load shedding in Nepal. Apart from electricity, fuel crisis was another major problem I faced during my field stay. I travelled in a vehicle owned by an organization Sanjaal during my field visit, however fuelling vehicle was a problem due to trade blockade.

Data Processing and Analysis

Overall 112 households were surveyed using direct interviews as a tool. Questionnaires were categorized in several sections to locate the socio-economic status of the people living in 5 study clusters as we already described in previous section. In this research, questionnaire aggregates the major indicators of livelihood recovery in terms of:

- Preparedness,
- Economic status
- Social status
- Roles of government and NGO's

Each of the questionnaire is processed in Statistical Package for Social Science (SPSS). These indicators are shown in percentage in each of the five different study clusters visited in Ramechhap district. Furthermore, it is discussed in results and findings with graphical presentation. Only questions with definite answers were put into statistical tool to trace out the percentage, for example: Yes, No questions.

However, the questions with qualitative answers were put together based on each study clusters and general thoughts and sentiments with similarity were highlighted in discussion part with reasons. Feelings of people are very hard to judge and thoughts are very hard to measure. With maximum effort, sensitive data like - the thoughts of individual towards government effectiveness in disaster management, perception on role of NGO's and INGO's and priority needs of the people are portrayed in discussion part of this research. According to the data based on the interviews, FGD, key informant survey and observation method the general findings are first categorized specifically from each study cluster area. Later all of the VDC's data are processed together to draw out conclusion as a whole.

While processing the data, the number of household destroyed were converted into ‘disaster percentage’ on each VDC. These are official data from the recent UN report³ published after recent survey. ‘Disaster percentage’ ranking in this research is the categorization of the affected area in three different levels High, Moderate and Low. The assumption for this three levels are explained further below:

- Below **25%** of total household destroyed and or damaged was ranked as ‘**Low**’
- Between **26-50%** of total household destroyed and or damaged was ranked as ‘**Moderate**’
- **50%** and above of total household destroyed and or damaged in a VDC is ranked as ‘**High**’

Conversion and translation

All the figures related to income were first gathered in national currency of Nepal i.e. Nepalese Rupees (NRs) and it was later converted into Dollar (USD) while processing the data. This was done for better understanding and to relate the figures in international standards. The title of the thesis was also translated into Norwegian by the help of native translator with respect to the official language of the country.

³ (UN-OCHA, 2015)

Chapter 3 – Theories, Literatures & Contextual Description

Understanding Livelihood and Vulnerability

The term '**Vulnerability**' is widely been used in recent days because of its boarder aspect when it comes to its real meaning to address various aspects. For example, vulnerability is used when there is a situation of losing the original state. According to Adger (2006), 'Vulnerability is the state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt.'

Vulnerability usage and its meaning is getting broader in recent days, sometimes it is often been used without any real reference to any kind of environmental hazard or risk. Social scientist refer vulnerability as the socio-economic factors that determines the ability of the people to cope with the stress. The stresses can be in different form – natural or manmade hazards. Hazards in current context is mentioned as 'climate events' which is measured in terms of humans for e.g. loss of lives, loss of properties, number of people affected. These measures are the outcome of hazards which is mediated by the 'property of human system' which is affected by hazard. (Adger, Brooks et al. 2004: p28) . 'Property of human system' according to the author is the system or pattern of livelihood of the people.

The nature of social vulnerability is dependent upon human system. Social vulnerability is not the part of hazard but hazard is a part of social vulnerability however the 'property of human system' may or may not effect different type of hazards for example the quality of housing might be an important factor in reducing the vulnerability of earthquake but may not be equally effective to the hazards like drought.

Besides Adger, different authors have presented different way of understanding components of vulnerability and its inter-linkages. As Terry Cannon (2008) discusses there are **five** different 'interacting components' of vulnerability –

1. Livelihood strength and resilience
2. Wellbeing and base line status
3. Self-protection
4. Social protection, and
5. Governance

According to Cannon, these five components are interlinked with each other to draw understanding the causes of vulnerability and to formulate the design of policies to reduce it. The most important components are those that affect the **livelihood** and **social-protection** - both of these two components are hugely dependent upon governance (government and or society) and its effectiveness (Cannon 2008). Similarly Adger has also pointed out similar understanding as cannon and explained them in broader perspective as cannon has listed out the ‘property of human system’ as the Cannon’s ‘interacting components’ of vulnerability.

However the main catalyst In reducing the livelihood vulnerability of the people is majorly dependent upon ‘governance of the society’ who determines the distribution of resources between different groups of people in the society. In other words we can say that livelihood of people is strongly related to the type of governance in system and how society is functioned.(Cannon 2008).

According to Cannon, Twigg et al. (2003: p23, Fig 2.2) relationship of hazard and vulnerability of livelihood during as shown in Figure 1, a person’s measure of vulnerability is dependent upon preparedness, resilience and health which is closely buckled down by their strength of

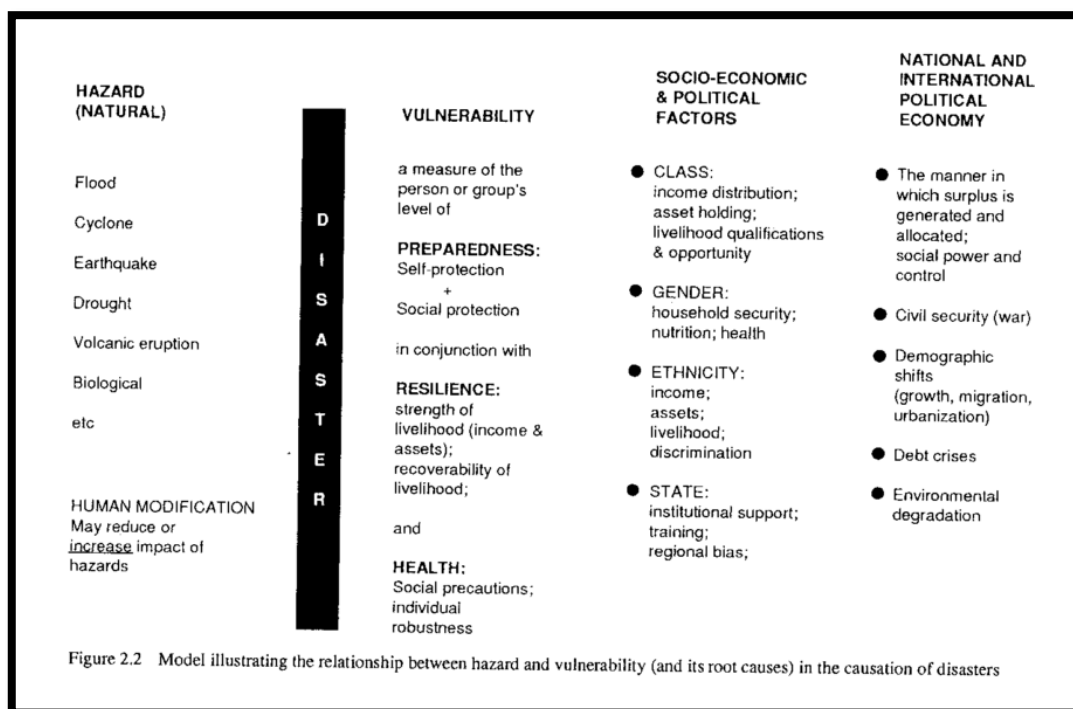


Figure 2.2 Model illustrating the relationship between hazard and vulnerability (and its root causes) in the causation of disasters

Figure 3 Cannon's Model illustrating Relationship between hazard and vulnerability

livelihood. Cannon’s model shows the vulnerability is categorized in terms of class, gender, ethnicity and overall state and topped off with national and international policy. This figure explains the proper relations between the components of socio-economic and political

indicators with international and national political economy. This table covers all the five components of vulnerability as explained above by Cannon⁴ and their linkages between components.

In this paper, the term ‘**vulnerability**’ is mainly associated with the ‘**Livelihood**’ of the people which refers to, ‘a combination of the resources used and the activities undertaken in order to live’ Scoones (2009: p172) .The resources here may include various things such as food, income, skill to earn, resources to live or earn and opportunities provided to gain access to meet day to day needs.

Every livelihood activity requires a person or a group to have resources or capitals such as tools, livestock, farmland, etc. The person or a community who doesn’t have their own livelihood (such as – child, senior citizens, disabled, etc.) are either dependent on the family member for their livelihood or charity from government or other agencies especially NGO’s and INGO’s (Wisner, Gaillard et al. 2012).

A livelihood may involve countless types of income-generating actions ranging from begging to business, farming to working in an industry. In relation to threats, livelihood is one of the basic component or capacity to protect themselves. Like we discussed while explaining vulnerability with the role of government to provide the opportunities to the people for living a less vulnerable life. Livelihood vulnerability of the people is largely dependent on the level of income available to the household to fulfil the criteria of preparedness, awareness and make them resilient to cope after disaster phase. (Cannon 2008)

Generally, when we talk about vulnerability, it is linked with livelihood of the people or the community. When we thoroughly look at Cannon (2008: p25), the main indicators are categorised specifically into **two** aspects :

- The amount and the quality of capital owned or accessible to the person to enable his/her productive and income-generating activity.
- Access to employment activities or other income-generating opportunities when lacking the productive capital

If we see the overall nature of livelihood, it has a significant linkage with the governance. The type of facilities people are using and the resource are distributed among the communities are

⁴ Extended version of cannon’s components of vulnerability is explained in detailed figure in Blaikie, P., et al. (2014). At risk: natural hazards, people's vulnerability and disasters, Routledge.

influenced directly by the power distribution and governance procedure of a state or the governing body (which also could be the society itself). However the components of vulnerability are influenced by various other determinants like caste, class, gender, level of knowledge of the people and community, etc. Table 1, below explains about the components of livelihood vulnerability and its relation with components and its determinants.

Table 3: Components of Vulnerability, Livelihood and determinants.

<i>Type of Vulnerability</i>	<i>Components</i>	<i>Determinants</i>
<i>Livelihood Vulnerability</i>	<ul style="list-style-type: none"> - Income opportunities - Livelihood type - Assets and Savings - Health status. 	<i>Socio-economic :</i> <ul style="list-style-type: none"> - Class Position - Gender - Ethnicity - Age
	-----Action of state ----	

(Source:(Cannon, Twigg et al. 2003))

As shown in the **Table 3**, livelihood vulnerability consists of various determinants like socio-economic factors such as cast, gender. However, as we discussed earlier in ‘Cannon’s Model’⁵, the components of livelihood vulnerability is determined by the action of the state and influence in resource distribution of the people in the area.

In this particular research, ‘**livelihood vulnerability**’ as a term is used to indicate the vulnerability of the people living in *Ramechhap* district of Nepal after natural hazard. Livelihood vulnerability in this paper is centred on ‘earthquake’ as a major ‘*natural hazard*’ of people living in Ramechhap district of Nepal. Ramechhap as a remote area of Nepal already vulnerable⁶ in terms of socio economic status and accessibility. Earthquake has made the people of Ramechhap, district of Nepal further vulnerable- vulnerability overlapped with another vulnerability. This paper tries to accumulate the livelihood vulnerability of the people living in terms of socio-economic condition, preparedness and ‘*governance*’ role in strengthening the capacity of people in pre and post-disaster phases.

⁵ Cannon, T. (2008). "Reducing People's Vulnerability to Natural Hazards." Communities and Resilience.

⁶ As referenced under heading ‘District Profile: Ramechhap’ of this paper in Chapter 1, Page No. 7

Explaining Natural Hazards and Livelihood Vulnerability in Context of Nepal

Fluctuation in certain '*determinants of livelihood*' alters the level of livelihood vulnerability of the people and or community. Determinants may be controlled by the set of people or ethics, for example: Caste, gender, etc. or by the governing body- government itself- the major determinant of livelihood vulnerability comes from 'natural hazards' (Adger, Brooks et al. 2004)

According to Blaikie, Cannon et al. (2014: Chapter 2, p14) , 'Nature presents humankind with a set of opportunities and risks which vary greatly in their spatial distribution. Conventional analysis of the relationship between human kind and the environment has tended to emphasize nature as a set of determinants, without adequately integrating nature with social and economic systems.'

Man-made risks and hazards can be controlled or mitigated in terms of their predictability. But nature presents different set of dynamism when it comes to livelihood vulnerability because of its unpredictability of its occurrence and magnitude of the disaster. For example, People in rural areas in countries like Nepal, which is one of the most vulnerable countries in the world in terms of the seismic activity – makes the livelihood of the people living in those area most vulnerable given the nature of disaster occurrence. However, the level of vulnerability can be lowered if it not mitigated. Adger, Brooks et al. (2004) discusses about increasing adaptive qualities of society or a community referring as '*Human action of adaptation*'. Human action according to author are all the actions that a mankind can perform to normalize or minimise the intensity of 'natural hazards', this includes wide range of actions from individual livelihood level to national level. If livelihood is strengthened, people are less vulnerable to natural hazards because they will be able to generate enough income for themselves to put themselves in a situation where they can prepare for shock disaster situation. Given the situation of Nepal, and its vulnerability in earthquake: preparedness and protection of socio-economic vulnerability of affected people of disaster by government could be the '*human action of adaptation*' in minimising the extent of disaster and efficient post-disaster recovery. As explained earlier in this paper, Environment provides various set of opportunities and risks. The threat and resource distribution carried by various regions (geographical) are different to each other. There are production resources such as land, water, minerals and energy sources provided by the nature which may vary from place to place and equal resource distribution may not be possible in every situation or country which could be the major challenge for the governing body of the country for e.g. Nepal. A country being extremely exclusive in terms of

geographical orientation and poor economy and vulnerable to earthquake- small country holding the longest range of high Himalayas and extreme geographic variation within small amount of distance could make government more handicapped by geographical location of villages where accessibility might be the major issue in reaching every people in every parts of the country.

Relationship between humans and nature provides different set of dynamism. Activity of the human beings some-times provoke the disaster situation from nature and when nature is provoked, vulnerable are - the humans. The nature and humans are co-dependent and interlinked by various set of factors such as social, economic and political system. Model illustrated in Cannon, Twigg et al. (2003: Chapter 2 - p23, Fig 2.2), Cannon (2008: p23, Fig 2.2 Chapter 2), explains the relationships between natural hazard that leads to livelihood vulnerability and role of 'governance' to reduce the level of threats provided by nature to the people living in *Ramechhap* District of Nepal.

History of Earthquake in Nepal

Nepal as we discussed earlier in background- is very vulnerable to earthquake. Due to the geographical situation of Nepal where tectonic plates are just located beneath the line of mountain makes the land very vulnerable to seismic activity. Almost 20 million years ago, Eurasian tectonic plate was shifting towards India which resulted in disappearance of 'Tethys Sea' completely from earth, the sediments rising from its sea beds formed the mountains beneath the sea bed. With each of the plates pushing each other continuously over millions of years has formed the high mountains in Nepal (Nature, 2011). Thus, continuous pressure of tectonic plates has made Nepal seismically vulnerable for sustained period of time.

Earthquakes in Nepal can be traced as early as 1255 AD and major earthquakes are felt during 1408, 1681, 1801, 1833, 1934, 1980, 1988 and 2011 (Dahal, Bhandary et al. 2013). During that period many lives were taken, property were destroyed and millions were left stranded to face the situation of crisis in their livelihood.

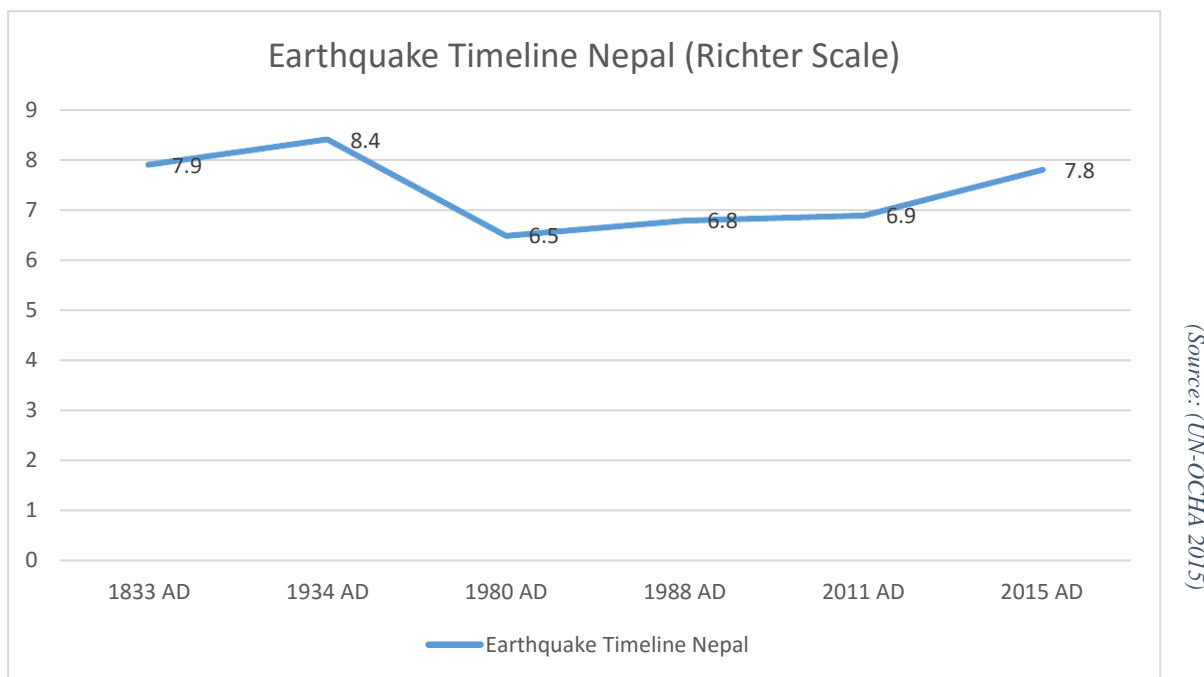


Figure 4: Historical timeline showing major earthquakes in Nepal

Shown in **Fig 4** above is the time-line of last six earthquake faced by Nepal over the years. As we can see in the graph above, the time frame between each of the major earthquake occurred is varied one after another. Nature of disaster- earthquake itself is unpredictable which makes it even more dangerous and people living in Nepal more vulnerable to its hazards. And all the major earthquake Nepal has faced was way above 6.5 Richter scale. And the average occurrence time difference between each major earthquake is in decreasing state. So the trend of disaster occurrence make Nepalese people vulnerable to earthquake more than ever.

Overview of Nepal Earthquake 2015

The latest high-profile earthquake in Nepal was on 2015 recorded as of **7.9 Richter scale** took lives of more than 8,000 lives, 22,000 were left injured and displaced 100,000 and 2.28 million households were directly affected by the earthquake. More than 700 thousand people were further pushed below the poverty line. Majority of people living in rural area have not been able to gain access to policy and priority actions of government. (Golam Rasul 2015).

After major earthquake followed by more than 150 aftershocks which averaged magnitude of 5 Richter scale, the government of Nepal declared emergency state after disaster. The expectation of food shortage, labour crisis and shortage of basic needs. From government perspective this kind of natural hazard is shock to its economy and national budget if we consider the diversion of national budget in recovery phase of disaster then it hampers the overall economy of the country as well (Koirala 2015)

Impact of Earthquake in National Economy of Nepal

Economic growth rate of Nepal is considerably slower to its neighbours at 4.6% per annum, the rate of growth certainly expected to be decreased after a year earthquake occurred. However, the GDP growth rate due to direct foreign grant and relief for the reconstruction phase is projected to be increased. Nepal is a one of the poorest nation in Asia with over 40% unemployment rate and ranking 126th out of total 175 countries for most corrupted nation in whole world (Koirala 2015). Threats of increased unemployment rate and increased corruption in relief funds may be the crucial challenge for the government to control during emergency phase. Moreover, regulating efficient laws and channelling the resources to concerned and maintaining the previous economic growth rate and further improvement of the growth rate may be another challenging task for the government of Nepal in upcoming days.

Nepal's Government in Disaster Management

In Nepal there is no such ministries directly related to disaster management. However under Ministry of Home Affairs (MoHA) of Government of Nepal (GoN) have formulated Central Natural Disaster Relief Committee (CNDRC) which looks after overall formulation of policies and acts on preparedness, response and recovery and ensuring their implementation is proper and effective. Under the chairmanship of Home Minister, CNDRC regulates various different acts emphasising in creating natural hazard resilient community in every part of Nepal (Koirala 2014). Some of the acts of GoN related to natural hazard are explained briefly below:

- **Local Self Governance Act (LSGA), 1999:** The basic theme of this act was to empower the community in grassroots level to become resilient to natural disaster such as earthquake, flood, drought and other epidemics in Nepal. The power of judicial authority is vested to the local governing bodies to control and formulate the resources provided by the central authority, in our case VDCs and Municipality.(Koirala 2014)
- **National Strategy for Disaster Risk Management (NSDRM), 2009:** The long term strategy of this act as same as LSGA – ‘creating disaster-resilient community’. However unlike LSGA, it doesn’t only focus on grassroots level but the role of government in overall approach to formulate the plan of preparedness for mitigation of disaster such as floods, soil erosion and lower the risk of severe damage by earthquakes by providing ‘vulnerable’ with required facilities. This act realises that

disaster management is a multidimensional and multi sectoral-responsibility. Sectors are divided into broadly into nine areas:

- i. Agriculture and Food security
- ii. Health and Education
- iii. Shelter
- iv. Infrastructure and Physical Planning
- v. Livelihood Protection
- vi. Water and Sanitation
- vii. Communication Co-ordination and Logistics
- viii. Search and Rescue
- ix. Damage and Need Assessment

Further, NSDRM formulated two separate councils: National Disaster Management Council (NDMC) which is chaired by the Prime Minister and National Disaster Management Authority (NDMA) to control the preparedness, rescue and relief and reconstruction. This strategy shares the idea of integrated, participatory and collaborative involvement of ‘partners’. ‘Partners’ here in this strategy referred to UN agencies, donor community, inter-governmental agencies and civil society (Koirala 2014)

Apart from this acts, Government of Nepal had always included Disaster Management Programs (DMP) in long term national plans. First time DMP was introduced in Nepal’s 10th national plan (2002-2007) by GoN, since then each year the emphasis of disaster management had always gone up in every other plans after that including current three year interim plan (2013/14- 2015/16). (Koirala 2014)

Post Disaster Need Assessment (PDNA): National Planning Commission of GoN (2015)

As disaster occurred in Nepal, government bodies were in immediate effect planning for post disaster recovery phase. This section shares the brief review of PDNA⁷ formulated by National Planning Commission (NPC) of GoN. PDNA discusses the ‘needs of people’ after earthquake in four different perspective: social sector, productive sector, infrastructure sectors and cross-cutting sectors.

Social Sectors in PDNA emphasise the importance of reconstruction of housing and buildings destroyed by earthquake which is causing problems in livelihood of the people. The massive impact on health and population, nutrition, education and cultural heritage is also broadly identified the important indicators which were highly affected by the recent earthquake in Nepal. Reconstruction of houses and buildings after massive destruction remains the main priority need in social sector. Some of the priorities activities set by government in social sector were:

- a) Disaster-resilient core house for those households were fully damaged
- b) Shelter during transitional phase
- c) Demolition and clearance
- d) Training and facilitation

These major activities were particularly set to strengthen the livelihood of people for further enabling them to be resilient before and after natural hazards like earthquake in upcoming future. (UN-OCHA 2015)

Productive sectors such as agriculture, irrigation, and commerce and tourism industry were identified as affected by earthquake in PDNA. Earthquake had an adverse effect in bringing down the economic growth of the country. With already low growth rate and agriculture driven economy of the country earthquake further pushed the economy of the country back by loss of estimated USD 283.6 Million (UN-OCHA 2015).

Infrastructure sectors in PDNA are the basic infrastructure taken into an account while assessing the needs. Electricity, communication, community infrastructures (government buildings), transport and roads, water sanitation and hygiene were identified as the main

⁷ This section is the brief review of Government of Nepal’s immediate action plans and need assessment after earthquake in 2015 in Nepal, only selected indicators are discussed in this 134 page policy paper. For detailed strategy and plan formulation process please follow the reference. NPC (2015). "Nepal Earthquake 2015." Post Disaster Need Assessment A : Key Findings.

components in this section. Infrastructure sector in Nepal is already facing crisis of energy for almost a decade now. After earthquake, the crisis of electricity in Nepal further increased by suffering a severe damage in hydro electricity grids which produced 115 Mega Watt less than its total producing capacity of 787 Mega Watt. Rehabilitating those plants are the priority focus of National Planning Commission of Nepal. Few of the activities set by government to rehabilitate infrastructures in disaster affected areas according to PDNA are as follows:

- a) Worst hit districts receive both telecommunications and internet services
- b) The construction of disaster recovery integrated data centres
- c) Improvement of reliability of highways district roads and village roads which may not have been affected by the earthquake but a road to access the affected community or area.

Cross-Cutting sectors are the major sectors identified in assessing the needs of the people, here in this sector the actors and stake holder's needs were identified by National Planning Commission of Nepal. Need of Governance, disaster risk reduction, environment and forestry, social protection and gender equity and inclusion were the major components identified in this sector of PDNA which were majorly affected by the earthquake. The term 'governance' is heavily used in PDNA.

According to NPC (2015), 'the ability of the government to lead the post-earthquake recovery work has been severely affected. Rebuilding and repair of government infrastructure is critical for ensuring service delivery to people' Many of the government buildings and offices were damaged after earthquake, total 1,711 government buildings all over the country were fully or partially damaged. Government facilities cannot be delivered to the targeted groups until and unless government structures were functional again. Strategy of government in addressing cross cutting sector is by:

- a) Reconstructing government housings
- b) Measures to strengthen information and communication between stakeholders of affected areas
- c) Continuation of Skills trainings to develop manpower, and raising awareness programs

Explaining Post-disaster Livelihood Recovery

Outside the purest form of economic survival, there is not any quoted or defined international standard definition of livelihood recovery in a post disaster perspective. Livelihood recovery after natural disaster does not take into account the situation of the vulnerability before natural

disaster. The phases of post disaster situation varies from country to country given their economic condition to cope with calamities. The issue becomes more complicated when the country, place or the region is affected by the political and security crisis. (Gaillard, Texier et al. 2008). Political and Security crisis according to author means, the crisis within governance of the country which may include instability, social insecurity (education, health, income). As discussed earlier in the text, the concept of livelihood covers various parameters and situation of livelihood differs from situation to situation. An emerging international consensus according to Gaillard, Texier et al. (2008: p3) of post disaster livelihood recovery are briefly pointed out below:

- i. Emergency relief is a crucial role during first weeks and months after disaster
- ii. The livelihood recovery process may include the wider perspective beyond relief material supply. Ensuring minimum safety, stability and confidence building of the affected population is a must.
- iii. The role of humanitarian agencies must stop as stability of affected population is ensured and should be followed by the reconstruction and development aid. International grants and domestic incentives should be used to enable the affected populations to get back to their normal livelihood within the shortest possible time.

For example, the case of Tsunami in Indonesia (2004), the participatory approach were used to involve local districts and stakeholders of the affected villages to identify and implement the rehabilitation projects. Government and international agencies effectiveness in participatory approach helped Indonesia to achieve the target of rehabilitating the affected population in quick succession. Later, the task of rehabilitation was deemed successful by FAO, and participatory approach was the key to address the needs of every affected area. However, the issue didn't solved without any challenges, abuse of foreign aid was the main problem while applying this approach. The Local NGO was appointed by donors to choose the local beneficiaries in order to avoid community clashes, in spite of that, the conflicts of 'interest involving bribery' existed in the community as the main hurdle to achieve the targets of rehabilitation. (Gaillard, Texier et al. 2008)

Post Disaster in context of Nepal

The Indonesian case and Nepalese can be related to each other, post disaster situation in Nepal is in full effect with government bodies active in disaster recovery. And the emerging consensus of post disaster recovery is being put forward as disaster was occurred. Many international agencies such as United Nations, Asian Development Bank (ADB), Department

of International Development (DFID) were active in providing humanitarian assistance and support to the affected population over the country. Government of Nepal looks to be active in assessing the Post-disaster needs of the people and as a result PDNA was designed which identifies the ‘needs of the people’ and made it as the guideline for needs in various disaster affected sectors.

As expected after major disaster, various disaster management acts from GoN seem to be in effect in during the recovery phase. The ‘collaborative involvement of partners’ like UN and Nepal’s government local bodies were seem to be rescuing and implementing recovery programs for livelihood recovery in various different disaster affected areas covering from rural to urban areas. Some of the plans of ‘partners’ currently active in Nepal have set their own targets and goals and rehabilitating the ‘livelihood vulnerable’ in rural areas.

In case of Nepal, the active ‘partners’⁸ of government looked to be more precisely working on main ‘humanitarian needs’ rather than ‘needs of the people’ which is more holistic and long term. Humanitarian needs identified by UN-OCHA (2015: p6) such as:

- Access to safe drinking water and sanitation and hygiene
- Food Security
- Emergency shelter and essential items
- Access to medical care and
- Protection of the most vulnerable populations

UN-OCHA has referred ‘vulnerable populations’ as people living in rural affected area with poor socio-economic condition. The direct effect of earthquake has seen poor people being the major victims who has low standard of livelihood and living well below poverty line. Vulnerable people with low standard housing, low quality health and education status and low income becoming are target of ‘partners’ UN-OCHA in short term ‘humanitarian needs’.

Both government and non-government agencies seems to be bilaterally working together in short term and long term plan in post-disaster livelihood recovery of vulnerable population. After a year (2016) of major earthquake incident in Nepal, the plan and policy implementation phase is expected to be in full-fledged. Various needs in various different sectors and levels were identified by government and non-government bodies. However, attending those needs are challenge in itself.

⁸ As mentioned in **Chapter 3, p29 of this paper.**

Given the scenario of Nepal and the magnitude of livelihood loss of large chunk of rural population from natural hazard, the livelihood recovery process seem to be a challenge in itself considering the 'political and security concerns' in Nepal.

In current scenario a 'Case study of 'Earthquake in Nepal 2015' is taken considering the profile of Ramechhap District of Nepal and its vulnerable population after natural hazard.

Chapter 4 - Results, Findings and Discussion

General Findings

The findings are based on the sample interviews and data collected from five study clusters in Ramechhap district of Nepal. Findings from every study clusters are integrated together to derive the generalised conclusion of the overall study area. In the beginning of this research, it was assumed that almost every VDC in Nepal have similar demographic composition, needs and challenges. This research’s findings also appears to be revolving around the challenges faced by the poor people during post-disaster phase in rural area of developing nation. Study revealed interesting facts and figures and need of people in every clusters during post-disaster phases in Ramechhap District of Nepal.

Before earthquake, the core issues and needs of the affected people were more or less the same in every clusters. However, after earthquake, the priority needs during livelihood recovery seems to have altered the needs of the sample VDCs in Ramechhap.

Table 4: Summary of Study clusters and households visited

	Study Cluster	Disaster %	Sample Household	Male	Female
1	Bijulikot (VDC)	High	23	7	16
2	Rakathum (VDC)	High	16	5	11
3	Bhirpani (VDC)	High	14	6	8
4	Pakarbas (VDC)	High	21	9	12
5	Manthali (Municipality)	High	38	26	12
	Total		112	53	59

Pre-earthquake Situation in Ramechhap

Social status:

Out of 112 respondents, 53 respondents were male and 59 of them were female. Gender perspective was kept in mind while collecting the data to capture the view of both men and

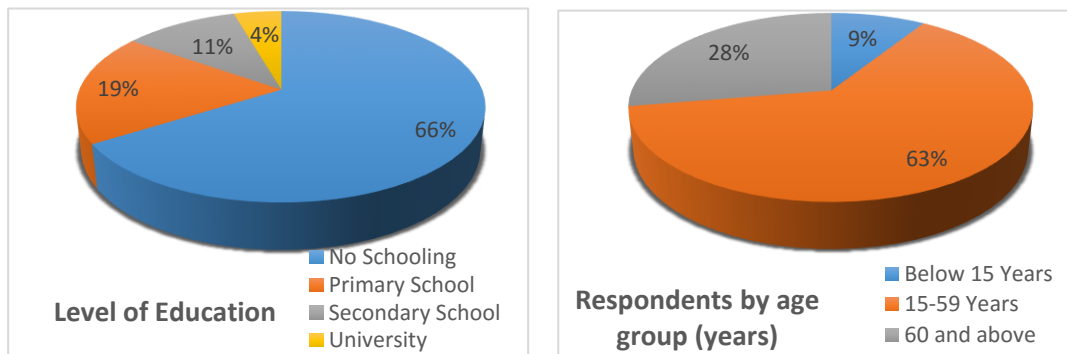


Figure 5: Pie chart showing the level of education of the respondents and composition of sample population by age group.

women regarding effects of earthquake. Among the respondents majority of respondents were belonged to economically active group⁹. Sixty- three percent of the total respondents belonged to age group between 15 and 59 years. Out of the total respondents, more than 65% of the respondents did not received any kind of schooling- this included all the female respondents from the household (HH) survey and most of the respondents belonged to VDC's.

Five of the respondents were educated in university, those where the residents of Manthali- the district headquarter. When asked why they didn't go to school, the major reason for low level of education pointed out by female respondents were gender biasness (patriarchal society)¹⁰, poverty and culture, whereas accessibility and income source were the main causes pointed out by the male counterparts. A boy aged 19 year complained that each of the VDC in Ramechhap only possessed primary schools and to get access to secondary education they need to travel to district head quarter, Manthali.

Almost all respondents knew about importance of health, education and sanitation in livelihood. However each of the VDC had a small health post operated by VDC with reduced services. Reduced services by them meant, only first aid services were delivered in villages with locally trained health assistants. According to respondents No doctors and nurses worked in the health posts in VDC, whereas Manthali possessed the facilities as every individual would expect to be in Municipality with improved health and education services.

⁹ As of explained in Wyndham, C. (1981). "The loss from premature deaths of economically active manpower in the various populations of the RSA. Part I. Leading causes of death: health strategies for reducing mortality." South African medical journal= Suid-Afrikaanse tydskrif vir geneeskunde **60**(11): 411-419.

¹⁰ Nepal is a patriarchal society favouring men than women. Women in rural areas of Nepal are considered as a liability. Furthermore about patriarchal society in Nepal are explained in Morgan, S. P. and B. B. Niraula (1995). "Gender inequality and fertility in two Nepali villages." Population and Development Review: 541-561.

Economic Status:

Majority of the people living in this area fall well below poverty line earning less than a dollar per day. Females in study area were more or less dependent upon their counterparts, more than 95% of the female respondents directly dependent upon their husband's income.

Stability in income generating activity almost seemed to be null- especially in VDC's, 85% of respondents from four different VDC visited were dependent on low seasonal income sources for e.g. - labour (dish washers, brick factory, road construction, etc.), rest of the respondents were living on low income from agriculture (fishing, growing vegetables and selling in market).

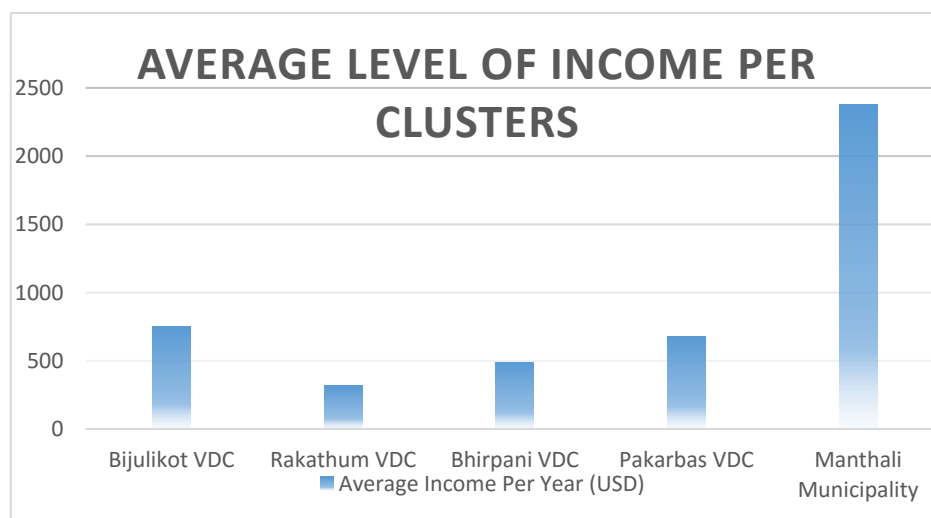


Figure 6: Bar diagram showing the average level of income in each sample study clusters

On the other hand, municipality respondents were indulged in higher income activity within agriculture and service sectors. The land holding capacities of VDC respondents were significantly lower than respondents compared to Municipality. Respondents from VDC averaged 0.02 hector per HH to 0.05 hector per HH in municipality. However, the land distribution pattern didn't seem to be consistent with the average figure because some respondents had really big lands and many respondents didn't have any land except the land covered by their houses.

Four of the respondents were earning more than USD 10,000 per year, all of the respondents were residents of Manthali municipality. *Figure 4* shows the average income level of the respondents living in each cluster. Manthali municipality's respondents were the highest income source holders as compared to other VDC's. Rakathum VDC had the lowest average income level between all the study cluster area where highest number of marginalised

population lived. The bar chart shows the average level of income of the people living in various study clusters in United States Dollar (USD)¹¹

Disaster Preparedness:

In terms of disaster preparedness, very few households seemed to be ready for earthquake. As shown in figure 5, the preparedness for earthquake in every study cluster is low. Asked if they had attended trainings and awareness program regarding earthquake and had learn methods to cope before and after earthquake, 95% of respondents from VDC’s had zero knowledge about trainings since they don’t have any kind of means¹² to get knowledge regarding earthquake. However, 7 (10%) respondents out of 67 from Bijulikot, Rakathum and Pakarbas were aware

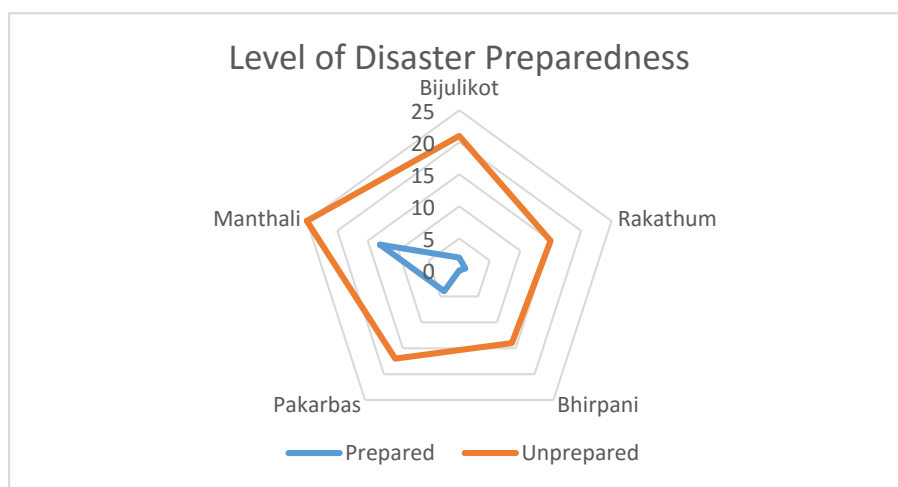


Figure 7: Radar showing the level of disaster preparedness of respondents in each study clusters

about preparedness (also included verbal means of communication) since the respondents had access to the ‘means’. It was also remarkable to find that out of seven respondents who knew about earthquake preparedness featured none of the respondents from Bhirpani. However, neither of those respondents were trained or educated properly about disaster preparation from government or non-government bodies. Some of the respondents shared that they had already experienced the major catastrophe in 1988 which was 27 years ago. In spite of that, almost none were aware about preparation for earthquake situation in VDC’s.

It was interesting to know from an eighty two year old lady who already had experienced the catastrophe twice (1988 and 2011) thought that earthquake was natural process and couldn’t

¹¹ USD 1 was equivalent to NRS 102 according to exchange rate of 18 February 2016, converted from www.xe.com. As mentioned earlier in methodology of this paper, the local figure was translated into USD to keep the better understanding for the international readers who are unaware about the Nepalese currency.

¹² Means referred in this text are particularly linked with any form of communication or communication facilities, this may include Television, radio, newspaper or any other means of communication.

be mitigated. She also shared the fact that after the major earthquake she faced for the first time it took a while to get back to her livelihood- more of clearer data regarding livelihood recovery couldn't be extracted since it was a long time ago. However it was made clear that she and her family were unprepared for earthquake even after experiencing it twice.

On the other hand district headquarter Manthali seemed to be quite prepared as compared to all VDC combined. Altogether 13 (34%) out of total 38 respondents from Manthali seemed to have known about the earthquake and its preparedness. Apart from the aware respondents, majority of them said either- they didn't seem to care about earthquake before it happened or they were too busy with their livelihood and never expected the earthquake.

Post-Earthquake Situation

Social Impacts

After the occurrence of a natural catastrophe as major as Nepal's earthquake, impact on social level is inevitable. Social impacts may be in various level, education, health and income. All these levels defines the level of livelihood of the people. All of the mentioned primary schools in every VDC were destroyed completely by earthquake and has been out of function ever since. However, temporary schools from INGO were established to run primary schools. All



Photo 1: Temporary Houses in outskirts of Manthali Municipality

of the respondents surveyed had lost their houses, 60% percent of the HH surveyed were living in temporary shelters as supplied through relief programs in collaboration of government and international agencies. Rest of the respondents who didn't lived in temporary shelter either rebuilt their houses or living in a partially damaged house. When cross questioned to those

respondents who managed to rebuilt their houses that if any agencies helped them to rebuilt it – each of the respondents said that it was a personal investment without relief or any other support from government or any organizations. And majority of them belonged to Manthali municipality with higher income source.

Health posts situation overall seemed to be worse in terms of social impact to the people. All of the health posts even with reduced service in VDC's were not in operation due to severe damage in the building. Temporary health post were none existent in all the study clusters including Manthali. However, the health post in Manthali was not completely destroyed and was functional.

Due to damage in toilets along with houses, sanitary problems seemed to be visible in study areas. Further questions were asked to the respondents to get clearer idea on social impact, one of the question was: did earthquake brought any kind of social differences in individual or communal level? 45% of the respondents replied that they have realised social differences between higher class and lower class. By social differences they mean, the families with better livelihood had better reach to the resources (relief goods and facilities), there were also certain claims of corruption and false channelization of resources by the stakeholders, however the claims didn't have sufficient amount of evidences to make it concrete. Thirty percent of total respondents said corruption on relief card¹³ distribution was a major problem after the earthquake which created disharmony in between people. Sixty five percent of respondents felt difficulties in accessing day to day essentials of livelihood such as food, water, shelter and sanitary facilities.

¹³ Relief Card is the official registration proof of the affected people according to the severity of damage incurred by earthquake which was issued by the government of Nepal.

Economic impacts

As there were social impacts, economic impact after earthquake is also inevitable. Almost each of the surveyed respondents were directly affected in economic terms after the earthquake, more than 95% of the sample respondents said that they were directly affected by earthquake

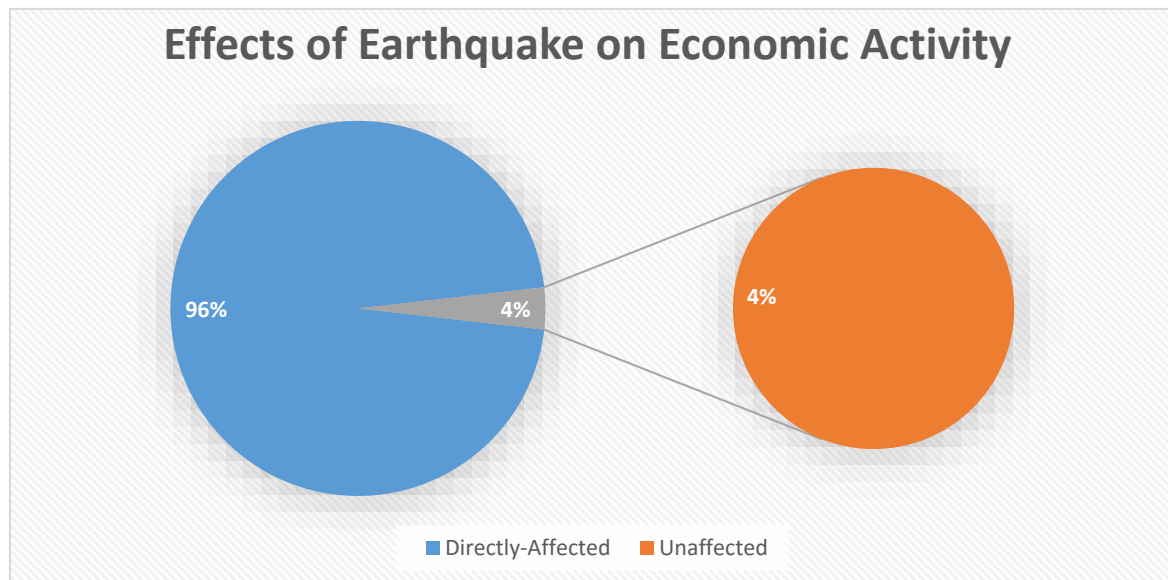


Figure 8: Chart showing the effect of earthquake on economic activity of respondents.

in terms of income generating activity. Income generating activity involved travelling back and forth from their village to district headquarter which they couldn't manage after the major catastrophe. There were various other reasons stated for their disturbance in income generating activity, some of them were- loss of property which included their housing, unstable livelihood of their own have not allowed them to think about going back to earning, facilities destroyed for e.g. vulnerable roads and lack of communication facilities

Excluding 4% of respondents from Manthali Municipality, everyone said they were not involved in any kind of income generating activity after major earthquake occurred in April 2015. Majority of people responded as being reliant on various relief programs in their villages. When asked to a 42 year old respondent in *Bhirpani* who had his business as a small petty-shop in his house in Manthali was unable to resume his business after disaster due to loss of house and losing his two members of family said he is 100% reliant on relief goods and services from various organizations ever since the disaster occurred.

Similarly one of the respondents in *Manthali Municipality* was the owner of the tomato farm in Ramechhap who had lost his house during the earthquake in Nepal. Later, he revealed that after earthquake, state of his business was in disorder since his inability to get back to his

normal livelihood, now he is one the residents of temporary house without income source since the earthquake occurred in last year's April i.e. 2015.

Government Intervention:

As we discussed earlier, the role of state should be on prime to rehabilitate the livelihood of the affected people. In Nepal's case and especially in Ramechhap, the role of government seem to be minimum in affected areas. According to respondents, each of the sample respondents received tents for temporary shelter and clothes from government sector after couple of days. During emergency situation, government provided quick humanitarian assistance like relief food, tents and clothing's in every visited study clusters. To be precise, those who lost their shelter completely, USD 150 was distributed per HH and USD 100 Per HH was distributed to partially damaged HH.

However, respondents were more critical about government sector not being too effective to rehabilitate the situation after the humanitarian assistance. Government, according to one of the respondents 'went to sleep' after the initial support to the victims. None of the health posts, houses and sanitary facilities and infrastructures were built or rehabilitated to its function.

Each and every surveyed respondents were aware about government support plans as indicated in PDNA. However, **78.2%** of respondents showed their discontent with government's relief programmes and plans as they referenced 'delay in service delivery' as a major problem of their toughening livelihood. According to the respondents



Photo: State of house in Rakathum destroyed by earthquake in April 2015 (photo taken in February 2016 during field visit)

in VDC's, difficulties in getting back to normal livelihood was toughened by the loss of their infrastructures and further aided by their pre situation of poverty before disaster. However, 5% of respondents seemed to be satisfied regarding government upcoming plans and quoted them as 'best policies' and looked hopeful about improved livelihood situation after some time. But those thoughts were limited to hopes besides there were no any concrete reasons when asked why they seemed hopeful.

Influence of National and International organizations

There were stark difference between perception of respondents towards government and NGOs/INGOs in study clusters. Most of the respondents were satisfied with tasks of non-governmental organization and deemed every activity of NGO's and INGO's were better than government's, 85% of respondents belonged to this group. However, 10% were critical about the resource distribution and priority projects of the NGO's and INGO's. Those were the people who thought the local stake holders (village representative for donors) were biased in distributing the resources (tents, relief food and humanitarian support) equally to all the affected people. One of the *Tamang* respondent in Bijulikot was particularly critical about the selection process of representative of affected villages as they were chosen without participatory approach of the community in Bijulikot. As research further revealed that, in every other study clusters representative were not chosen through community but designated by donors or local government authority.



Figure 9: Tents, as a temporary shelter provided by INGO as a relief to affected HH in Bhirpani

Respondents were much happy with the service of non-governmental organization- as the resources supplied to the people were better in quality then the humanatarian goods supplied by the government during emergency relief period. Some of the respodents were well and truly devastated by the earthquake situation and none of the trust to either of the sector i.e government and non-government organization was placed. Five percent of respondents belonged to that particular group who were totally hopeless about getting back their life in better shape or at least normal.

Respondents Perspective

Respondents were given open choice to list out the priority projects or activities that they think are most important in livelihood recovery. According to the respondents from every clusters, following priority needs were identified and ranked from higher to lower values as shown in the table below:

Table 5: Priority ranking of projects according to the respondents

Rank	Priority Project/ Activity
1	Loan/grant for house reconstruction
2	Drinking water pipe channel reconstruction
3	Toilet reconstruction
4	Market Accessibility
5	Health Post reconstruction
6	School reconstruction

According to the respondents, most of the people didn't had their permanent housing and were regarded as the top needs as listed in the table above. Many of the needs of the respondents were based on the basic livelihood of the people to get back their life on track for example safe drinking water, health, school and sanitation facilities and more importantly market accessibility.

Key points from Focus Group Discussion

As discussion session was held on district headquarter office in presence of government official - Chief District Officer (CDO), Donor agency representative, Local NGO chief and key stakeholders of each VDC and municipality. The main purpose of this group discussion was to find out the gaps, co-ordination level and existing relationship between every leading sectors during livelihood recovery in Ramechhap. When issue was raised about the tasks of government - the government representative, CDO detailed few of the activities set by the Post Disaster Need Assessment (PDNA), CDO insisted that reconstruction project implementation of government sector was handed newly to Department of Urban Development and Building Construction (DUDBC) of Nepal government. CDO also highlighted that ongoing rehabilitation projects were stalled in Ramechhap because the government of Nepal is setting DUDBC administration offices in every affected district of Nepal. CDO also admitted that poor co-ordination between government bodies (Central region to VDC) and passive action plan implementation were key to delayed service delivery. However, he also insisted that some time

co-ordination from NGO and INGO's to government body remained non-existent during program implementation and shared the blame of increasing social conflict between affected people and negativity towards the government.

However from organizational point of view is a bit opposing to the points illustrated by CDO- ineffective policy implementation through government, slowness in every government procedure and less or no communication (response) were the faults illustrated by donor representative. However, some the other challenges during program implementation from donors were, limited accessibility in affected areas due to less or no infrastructure and fragile land structure of Ramechhap.

As Observed in FGD, most of the external participants were affiliated to political parties¹⁴, FGD was rather pointing out the blames who did wrongs then finding the possible solution. It was observed that there were clear communication gap between Non-governmental and governmental organizations while working on field. Post livelihood recovery issues were discussed less and majority of the time government representative referenced PDNA as the blueprint for rehabilitation. None of the institution agreed completely accepted the accountability for slow livelihood recovery scenario, governmental official persisted focusing on future then short term plans, and organizations focus were opposite to government. Besides that, much of policy, rehabilitation plan and plan implementation strategies were discussed in focus group discussion.

¹⁴ Field period was during of Nepali Congress local representative election, and FGD was held on District headquarter meeting hall and FGD was open to everybody who wanted to join the discussion and present their view, which led some of the political representatives in the discussion to put out their views on the issue which were being discussed.

Discussions

There are sufficient amount of evidence in this report to reveal that people living in rural setting of Ramechhap district are more vulnerable or exposed to further vulnerability in disaster situation. If access is limited then usually it's known as rural area. People living in remote areas are likely to become more vulnerable because of their limited opportunities to access the required resources to overcome the crisis situation. Factors such as poor socio-economic condition of vulnerable population, critical political situation of nation, and sluggish government effort were identified as stressing factors in post disaster livelihood recovery phase in Ramechhap district in Nepal.

Nepal's vulnerability in earthquake was ever present since the beginning of time, however this study suggests that education level and awareness between the people regarding earthquake seems to be minimal. Preparedness and awareness program regarding earthquake seemed to be hardly initiated by the government before earthquake.

Earthquake has effected the majority of livelihood in study clusters. People have lost their property, family and their day to day routine. The effects of the disaster was seen among the diverse range of community and settlements across various different study clusters. Many INGO's and NGO's were seem to be active and efficient during recovery process. As observed in field, many of the households were viciously down to rubble with major infrastructures as drinking water system and schools were completely damaged. The major share of responsibility to control such factor is usually managed by the government. However, in this case government seemed to be sluggish, as people's perceived. Post-Disaster Livelihood recovery seemed to be in worst possible condition as anybody would imagine after a year when major incident occurred. It was good to see, majority of the people in Ramechhap seemed to be determined enough to take themselves out of the crisis situation and be more involved in solving the problem.

Socio-economic condition of the people in Ramechhap area is itself a challenge to overcome. Marginalized people with low level of education and awareness, lack of road access, lack of market access and patriarchal society with high dependence on male counterparts were the basic characteristics of the study areas. The income source of people in this area is highly unstable and dependent totally upon cheap labour market which results low average income. Some of the contrasting differences between the studies clusters were revealed. The economic and social condition of the people living in VDC were far worse than people living in

municipality area. All of the households in study area were totally destroyed including health and school facilities. Socio-economic indicators such as income opportunities, access, income source, accessibility and infrastructures were not constant between study clusters. VDC clusters was always overwhelmed by municipality in any given indicators. However, majority of participation of females was experienced in interaction session in VDC's. Where as in municipality- participation was overwhelmed by men, unusual in my view point: given the situation of rural setting as more patriarchal society than urban. The earthquake has further lowered the income source of the people, disabling them to get back to day to day business for their income source and further more destroying the property people already possessed.

Access to the near health facilities was limited after disaster. Sanitation, nutrition to infants and even adults were major concern. Some of the respondents said that after disaster, people were struggling to gain access to health centre and had to walk 2.5 hours, before it took just 10 minutes'. However, there were very few details suggesting that, inter VDC conflicts occurred due to disaster. Togetherness within the community and support among themselves to overcome the crisis situation were visible while interacting with the people in study areas of Ramechhap.

Post-Disaster Livelihood Recovery

NGO's and INGO's are generally the supporting hands of governments to achieve holistic objective of improving livelihood standard of the people. However the activity and influence of those kinds of organizations were excessively seen in Ramechhap District. Even the work rate and efficiency of non-governmental organizations in post disaster recovery were seen well above than governments'. The state seems to be failing or too slow to figure out its own problem of then to be more involved in rehabilitation process by implementing recovery plan and policies properly. Livelihood recovery components are very sensitive, it includes the basic needs of the people which also determined various internal and external factors¹⁵

Among the five component of livelihood by Terry Cannon- livelihood, well-being, self-protection, social protection and governance. Governance is such a component which determines the quality of social protection and resources allocation (Cannon, Twigg et al. 2003). It's obvious that, during the phase of post disaster livelihood recover- the role of government is more important than ever to ensure the safety of affected population in the

¹⁵ Internal factors are assumed as the factors which can be controlled totally by state for example, law, policy formulation and implementation. External factors here are the factors that cannot be controlled by the state for example Natural calamities, international policy or interference.

country. In Ramechhap, the impact of government recovery plans didn't seem to be effective in bringing back the routine livelihood schedule of the affected people even a year after earthquake. Respondents in various VDC in Ramechhap were not happy about the effort of government. Reasons such as corruption, slow service, biasness in terms of areas where addressed behind negativity towards government. Role of government in terms of reaching the affected population especially in deeper rural setting of Nepal, especially Ramechhap appears to be poor.

However, all didn't looked too gloomy and ugly from the government perspective. As planned by the government of Nepal there were various projects and relief actions to be initiated in near future. As recited in need assessment paper of government, there were various government activities initiated over the period of time focusing on livelihood-recovery of the affected population such as employment generation – cash for work, direct monetary help to rehabilitate the affected population, trainings, further plans to reconstruct the destroyed houses and settlements including schools and health posts.

The most effective actors in field were non-governmental organizations as discussed earlier-international and national organizations. Various small and effective need based projects were launched to involve the affected community in livelihood recovery process. According to various respondents, some of the activities included - Capacity building trainings such as- Participatory Approaches for Self-Shelter Awareness (PASSA). The participation of people in those kind of programs were seen extensively, and results seems to be positive according to the representatives of NGO's and INGO's. Respondents were also positive about the effects of non-governmental organizations after earthquake and their work. As mentioned in findings of this paper, fast service delivery, effective communication and active involvement of organization were the main reasons to feel positive about non-governmental organizations.

As this study revealed, there were more external factors then internal factors which has heavily contributed in slow and ineffective post disaster livelihood recovery in Ramechhap, Nepal. First comes the political situation of the country, Nepal is politically youngest country in the world right now. For the past decade, political instability has always become an intruding problem in Nepal's policy, plan implementation and development. From 1996 Maoist civil war followed by huge mass protest and dethronement of monarchy on 2008 to new constitution drafting in 2015, there is far too frequent political shaking inside the country's governing hierarchy. If centre of governance is affected then it's obvious that ineffectiveness of system

can be seen in the rural places like Ramechhap on Nepal. The point can further be supported as observed in Focus Group Discussion, the representative of political parties and key stakeholders of society were politically influenced and focused only in terms of their political agenda rather than the need of the people.

‘Unofficial Trade Blockade’¹⁶ from India on every essential goods imported in Nepal became country’s major problem. It is believed that India’s dissatisfaction on Nepal’s newly drafted constitution led to unofficial blockade in trade of essential goods and services to Nepal. Already suffering Nepal’s economy with high inflated market rate eclipsed further more bringing even urban areas into chronic crisis situation. While the issues of black market on essential good remained highly substantial during my field visit, the blockade played significant role on already poor livelihood recovery process in Ramechhap. On top of that, energy crisis remains the ever growing problem in Nepal. Sixteen hours of electricity cut off in a single day in capital city speaks volumes in itself regarding the chronic energy crisis in the country. Aided by trade blockade, the situation of availability of petroleum products also reduced the usage of alternative energy which made life of affected people even harder. Majority of respondents had to use firewood as fossil fuel to cook their food which also puts environment issue in vulnerable state. Livelihood recovery after disaster in Ramechhap is facing various challenges which seems difficult to overcome in quick succession aided by chronic external factors.

Respondents in each of the study clusters had their own priority in terms of their livelihood. Most of the respondents illustrated, poverty as a major handicap for their livelihood recovery. Varied perspectives were there to be observed in study field, vast chunk of respondents in Ramechhap thought that government lack of authoritative nature and corruption within the system are depriving them to receive proper facilities to get them back to their original state.

However on the other hand, I observed in during my interview was also observed that some of the respondents in study clusters were so much happy and relaxed to enjoy reliefs and facilities provided to them by government and non-government agencies. The complacency in majority of the respondents in Municipality area could be realised.

¹⁶ It is believed to be a trade blockade from India on essential goods soon after the new republic democratic constitution was drafted in Nepal, however there were no official claim that blockade was done by the India. It remains to be seen what the cause behind the trade blockade were.

Recommendation

When I asked to an old women, why they were not prepared even though they faced major earthquake in 1988 – jokingly she answered ‘prepare for what? To feed myself and my children after earthquake?’ and smiled. Even though in sarcastic way of expressing the bitter experience, the severity of the poverty on earthquake post recovery phase in her reply can be imagined. Ramechhap needs much more strengthening in various fields during post disaster livelihood recovery. First thing we can observe is the people living in the area are not being able to properly live their life after the shocks of earthquake, even though initial humanitarian reliefs were provided further rehabilitating programs were not launched. Government could be more effective in addressing the real needs of the people in this areas.

Policy introduction to formulate the distribution of relief and facilities should be carried out. Humanitarian relief goods are still being supplied by the non-governmental organizations to the affected people for more than one year can be seen as a threat in a long run as people may become dependent on relief goods then getting back to normal livelihood.

There remains to be seen that how other challenges to government like- blockade, electricity crisis and inflation will be checked. Main focus of government should be first stabilizing the needs of the affected people by providing them required platform. However, the quality of communication between governmental and non-governmental organizations should be highest and quickest as possible to meet the needs of the affected population. Communication is also vitally important to minimise the duplication of recovery activity in same area.

Chapter 5 –Conclusion

Conclusion

Almost after a year when last major earthquake occurred, the survivors who lost their houses are still facing major difficulties in getting back to normal livelihood in Ramechhap district of Nepal. This study showed the contrasting differences in livelihood recovery of people living in municipality and VDC within a district. Many of the households, service centres, health posts, schools were destroyed, ending the normal livelihood of people in various parts of already poor and rural Ramechhap district.

Post disaster recovery phase in Ramechhap seems to be going in slow pace even after a year with multiple projects implemented from various governmental and non-governmental organizations. There were not any traces of a functional school and health posts in VDC's, the difference between the facility of municipality and VDC were all there to be analysed. In spite of that, the effort of Nepalese government seemed to be less effective from various perspectives as indicated in findings, however the external issues rather than earthquake cannot be put into isolation in government inefficiency- mainly 'the trade blockade'.

After analysing the public perception from this report, it cannot be denied that non-governmental organizations were more involved in community level and were more effective on meeting people's temporary needs than government agencies but still after a year of major incident, humanitarian relief program seems to be still hanging on with NGO's and INGO's. On other hand, government of Nepal seemed to have a phase wise livelihood recovery plan to supplement the needs of the people in a long term and focus on larger area then just in Ramechhap. Government's goal in long run are indicated as sustainable recovery plans. However, people's loss of faith in government can be regarded as a major disadvantage to the Nepalese government to implement their future livelihood recovery actions. It's important that affected people are taken care and be made capable to recover and get back to their basic livelihood. However neither of the authorities have initiated permanent rehabilitation process in Ramechhap. Most of the livelihood recovery process are either limited to discussion or on papers.

In spite of that, community togetherness and unity to overcome crisis situation showed the resilient nature in group of people living in Ramechhap which might be the biggest asset in post-disaster livelihood recovery- not only in Ramechhap, but the whole nation.

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Some pictures during Field visit in Ramechhap 2016, Nepal:



A broken house- Picture of broken house in Bhirpani taken by Neeraj Katwal during field visit on February 2016



Photo during HH survey in Rakathum



Temporary settlements in Bijulikot and Manthali



Another destroyed house in Rakathum



An Interview with an old man in Pakarbas



During community group discussion in Pakarbas

Respondent Number:

Post Disaster Livelihood Recovery; A case of earthquake in Nepal 2015
Questionnaire for House-Hold Survey:

1) Respondent's Background

Full Name:

Age:

Gender:

VDC:

Ward No:

1) Did you prepared for Earthquake before it happened?

a. Yes

b. No

If No, Reasons?

2) Any trainings you attended regarding safety measures to cope up with Earthquake?

a. Yes

b. No

If yes, who provided training and what type of trainings were done?

3) Was your house technically built to resist earthquake?

a. Yes

b. No

4) What is the income source of the family? (Individual income and source if available)

a. Agriculture/ horticulture

b. Livestock farming

c. Trade and Business

d. Foreign Remittance

e. Others

5) What is the annual income of the family?

6) Is your source of income directly affected by earthquake?

- a. Yes
 - b. No
- If yes, how?

7) Do you know any information about upcoming government plans for victims?

- a. Yes
- b. No

8) If Yes, What have you heard or read?

9) What kind of relief have you received from government immediately after earthquake? (can be multiple)

- a. Food
- b. Temporary shelter
- c. Temporary Health centres
- d. Temporary schools (If destroyed)
- e. Hygiene kits
- f. If others, mention

10) Are you satisfied with what government have done or provided?

- a. Yes
 - b. No
- If No, Why? List reasons:

11) Are there any other agencies working in this place besides government?

- a. Yes
- b. No

12) If yes, can you name them? (Skip if data not available)

- a.
- b.
- c.
- d.

13) Are programs/intervention from NGO's and INGO's are very different from government's effort?

- a. Yes
- b. No

If yes, then can you say what kind of differences you have experienced or faced

14) Do you think you are receiving proper care from Government and NGO's/INGO's?

- a. Yes
- b. No

If No, Why do you think so?

15) If you have to compare between NGO's and INGO's, whom do you think are most active and benefitting?

- a. NGO/INGO
- b. Government

16) Why do you think it is better? (not sure If I have to list options or keep it open)

17) Have crisis situation brought any social conflict between community members or taking advantage of the current situation in anyway?

- a. If yes then could you please explain how and whom you think are responsible?

(A bit vague but I think I can get an idea of how people on ground perceive and see situation from their eyes)

Open Question to check views of respondents:

- 1) What would be your priority based need if you have to choose in this current recovery situation? (will collect it if valid and feasible)

S.No.	Details	Priority Ranking (1-10)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

(If you think I should add some more questions then please let me know)

FGD Guidelines

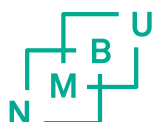
Focus Group will be comprised of Stake holders/actors working closely with communities along with community representatives.

Participants Expected to be on FGD:

- Chief District Officer (If available) or Government representative
- Local NGO representative
- Community level representative
- Social mobilizers from NGO (closely working with communities)

Components that where I will stress on Focus Group Discussion

- Disaster Preparedness
 - Government policy review
 - Level of preparedness in community level (Selected research cluster : Ramechhap and Kathmandu)
- Post Disaster INGO's/NGO's Intervention
 - Immediate Programme /Projects
 - Effectiveness
- Government Disaster Policy Implementation
 - Immediate Programme/Projects
 - Effectiveness
 - Project Coverage (Project Reach)
- Socio/Economic Impacts (qualitative)
 - Production/Economic Impact
 - Social Impacts
 - Destruction Level
- Lesson learnt
- What shall be done?



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