

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Migration is the third component of the population change the other two being fertility and mortality. It affects not only population size but also its structure and characteristics. According to change and development in the life of human being the form of the of also changing. People used to live temporarily one place but slowly development of Agriculture system people start migrant. People have different purpose of migration such as economic, social, employments, higher study etc. Most of the people migrant for the purpose of earning money and study. Thousand of people migrant for work in the different other countries. Now day by day increased the employment people, so they cannot fulfill their need and start the migrant for get a job. Migration can be classified according to motive, distance and duration. Migration can be classified in to two major types i.e. internal and external. Migration being one of the factors of population change may affect socio economic condition at both the place of origin and place of destination. It influences the size, composition structure and other different characteristics of population.

According to UN report, migration is a form of geographical mobility of population between one geographical unit to another. Migration refers to the change in residence from the place of origin or place of destination. Migration is an event that occurs a time interval and hence the temporal aspect is also important, as is the spatial. When such movements occur within a country they are referred to as internal migration while if they involve crossing national boundaries, they are referred to as international migration, and emigration refers to migration out side the country and immigration inside the country from other countries (UN, 2001).

Migration is one of the dominant demographic process along with fertility and mortality. It affects not only population size but also its structure and characteristic. A generally accept definition is of migration that migration is the movement of population involving the change place of usual residence and the crossing of a defined boundary, Migration has been defined by the population census of Nepal as “A change of residence for Month or more either within the country or outside the country (CBS, 2011)

Migration is one of the demographic phenomena with cause significant change in various aspects of life. The change can be of different natures like social, culture, economic or a combination of two or more features. In the context of Nepal, migration has taken place mostly in the form of migration. The term migration refers to the temporary movement of workers. The present study focuses on external movement of workers who have gone outside of the district for work (Manandhar, 1999)

Migration often analyzed as responses to 'pull and push factors characterizing the zones of departure and arrival. This kind of analysis has been practically applied to attention for some time on the one hand, under employment and poverty in the rural area, the lack of facilities and services, population pressure in the land and so on, have been cited as push factors; on the other, the greater opportunities for employment in the city, the better change for the presence of facilities and services, the more varied social life, greater liberty of individual behavior, and so on have cited as pull factors(UN, 1956)

Migration is one of the demographic phenomena, which cause significant change in various aspects of life. The change can be of different natures like social, cultural, economic or a combination of two or more feature. Today an estimated 105million persons are working in a country in a country other than their country of birth. Mobility has become a key feature of globalization and the global economy with migrant workers earning US\$440 billion in 2011, and the world bank estimating that more than \$350 billion of that total was transferred to developing countries in the form of remittance. However, the effects made to ensure the protection of migrant workers, many remain vulnerable and assume significant risks during the migration process (IOM 2011)

According to lee each factors in the origin and in the destination is hypothesized to have asset of positive and negatives factors which attract and repel migrants. The greater difference among these push-pull factors, the higher probabilities of migration. Intervention obstacle limit migration to those persons with the ability to surmount these difficulties. The positive and negative effects at the area of origin and the intervention obstacle very with potential migrants personal characteristic such as education skill level, sex, race and personality (lee, 1981)

Unfortunately, earthquakes on April 25th 2015 and May 12th 2015 in Nepali instigated prevalent destruction to housing as well as loss of life of about 9,000

people. The government of Nepal statistics designate that 602,257 houses were fully damaged, and 285,099 houses were partially damaged with more than 8 billion dollar losses (NPC, 2015). For facilitating earthquake victim of Nepali, for highly affected 14 districts, government of Nepal has projected many categories of sustenance to the tangible earthquake victims of Nepal.

1.2 Statement of Problem

Big Earthquake hit Nepal on Baisakh 12, 13 and 29. Our country face the huge loss of human life and physical properties. These was be the heavy shock of Earthquake of magnitude of 7.6, which has its epicenter at Barpak of Gorkha District. Due to adverse effect of devastating earthquake of Saturday afternoon. The most part of the country faced from this terrible natural disaster. Immediately these were the sign of miserable situation in different nook and corner of the city and countryside and remote village too. Till the date of (6 May, 2015), more than 7652 innocent people are already died and more than 16,390 people are seriously injured and still missing 266 persons fully damaged house are 191,909 and partially damaged house are 174,092. All over the country fourteen districts are most affected districts and more than one and half dozen are also affected by devastatingly earthquake. 'SANKAT MOCHAN' is the named of operation launched by the Nepalese Army for rescue and relief during the great earthquake 2072 in Nepal. There are 34 countries soldiers in rescue and relief during the great earthquake 2072 in Nepal.

The most devastatingly affected districts namely Sindupalchok, Kavrepalanchok, Gorkha and Sindhupalchok districts. In Kathmandu valley all three districts also adversely affected.

Past records have shown that Nepal can be aspect to earthquake of magnitude 7.5-8 on the rector scale every 40 years and one earthquake of magnitude of 8+ in rector scale every 8 years. According to the research there are around 92 fault lines which result earthquake in Nepal. And also in the line of most dangerous country of earthquake Nepal is in the 11th position as well as the city in which there was be more human casualties, Nepal is a first position (www.lebret-irfed.org/spip.php?article 787) Nepal line on the junction of Asian tectonic plate an Indian tectonic plate is prone to earthquake. The deadliest earthquake on record popularly knows as "90 salkobhukampa" occurred during Magh of 1999 B.S. (16 Jan 1934 A.D.) the earthquake is also known as great Nepal Bihar earthquake occurred at around 2pm.

The magnitude 8.4 rector scale earthquake killed 8, 519 people destroyed 80, 893 building and severely damage 126355 more than house. At that time the government spends NRS 206, 500 thought the Earthquake relief fund in Kathmandu valley along the earthquake fund established by the king offered loan to the earthquake effected people. After 80 years Nepal has again been hit by major earthquake lot of live and properties has been lost and started temporary migration.

1.3 Objectives of the Study

Every research has its own objectives without any objectives the study cannot fulfill. The main objective of the study is find out the status of temporary migration due to recent earthquake in the study area. The followings are the specific objectives of this study:

- a. To Examine Social and demographic characteristics of the migrants.
- b. To assess Push and Pull Factors for migration
- c. To analyze livelihood impacts of migration in destination area.

1.4 Significance of the Study

- a. The significance of the study is as follow:
- b. This study was be useful for the academicians record for Municipality.
- c. This study was be give guidelines for the planners, policy makers, health worker and related NGO's and INGO's.
- d. This result of study was be helpful other researcher.

1.5 Delimitation of the Study

No research can be conducted with any limitation and this research is not and exception due to the shortage of time and resources. This study is restricted only to Chautara Municipality 6, PipaldandaSindhupalchok district. Thus, this study also has the following delimitation:

- a. It is a micro level study, thus the study cannot be generalized the hole Sindhupalchok district.
- b. All the information was be collect with the help of Interview schedule.
- c. This study was be delimited within migrated people of Municipality during earthquake economic impact and health status of migrated people of Chautara Municipality 6, Pipaldanda.

1.6 Organization of the Study

This thesis and proposal is to be carried out as the partial fulfillment of Master's Degree program of Rural Development Department of Humanities and social sciences, Tribhuvan University campus. Organization of the study was have five following chapters.

Chapter First

The chapter first was include the introduction, which includes general overview migration in Nepal. It also includes the background of the study, statement of problem and objective of study as well as organization of the thesis report was incorporate in this chapter.

Chapter Second

This chapter was includes the theoretical review, review of previous study findings as books, reports, ethnography writing or the forms of published dissertations. This chapter was comprise the strength and weakness of the variable left by previous writing.

Chapter Third

This chapter was related to the methodology of research project. Rational of the selection of the study area, research design nature and source of data, nature of universe, data collection techniques, reliability and validity of the data processing and analysis was incorporate in the chapter.

Chapter Fourth

The fourth chapter was be data presentation and analysis of the data. The collected data was gather, analyzed and interpreted in the present section. It was relate general introduction of the study area, labor-based approach and impact of labor-based rural road construction on socio-economic aspects of study area.

Chapter Fifth

The summary of the study was be placed in this chapter. Similarly, what is conclusion of this study was include along with the recommendation of the study in this chapter. At last, Bibliography and annex was enclosed at the end of the thesis.

CHAPTER TWO

REVIEW OF THE RELATED LITTERATUR

Literature review is an integral part of the entire research process and makes a valuable contribution to almost every operational step. It involves systematic identification, location and analysis of documents containing information related to research problem. It enables to explore the different variables of research problem. It also helps new researcher to conduct the research systematically and scientifically.

2.1 Migration Overview and Studies in Nepal

Migration is one of the important fields of research but it has given less priority in Nepal in comparison with other two major components of population change likes fertility and mortality. There are limited studies have conducted by both public and private sectors. The process of migration affects the size of population of both areas as well as product remarkable alternation in the structure and distribution of population in the measurement of the migration is more complex because it is a socio economic phenomenon which involves involving a complex mechanism of social, psychological, economic, political, institutional and so many other determinants. The heterogenety of people indicates consequences of early Mongolid migration from east and north, followed by series of Europid groups from the west along mid Hills the Terai region provided an ecological barrier, some groups moved from plains into fertile valleys to Hill and many more settle along southern Terai (New ERA, 1981).

The first population was taken in 1911 during the regime of Ranaprime minister ChandraSamsher. The first modern census was taken in 1952/54 it was also called scientific census in Nepal. Out of total absentee population 2,16,853 (2.6%) of the total population in (1952/54), 18,733 (8.2%) absentee population resided with in the country and overwhelming (91.4%) had migrated outside the country.

In 1961 census collected data on both internal and international migration on the basis of citizenship and place of birth. The data of foreign citizens is available for India, China, Pakistan, other countries and unstated. The data by place of birth and by six is categorized into native born and foreign born. For native born, data is available by sex only for the category as a whole. The country of birth for foreign born population includes India, Pakistan, China, Burma and Malaysia only three countries where listed as options for foreign citizens- India, China and Pakistan. As regards absentee

population, the census indicates the destination countries as India, Malaysia, Burma, China and Pakistan (Khatiwoda, 2001:3). The 1961 census recorded 4,22,402 persons as lifetime migrants and 3,86,424 as absented population. Among the absented population, only 15.1 percent were residing with country.

Census of 1971 was conducted after the political division of districts but 55 districts in 1961. The 1971 census collected data De-jure method of the total inter regional migrants. 68.3 percent originated from the Mountain and Hill with net less of 1,05,997 persons moving to inner Terai and Kathmandu valley, the volume of inter regional migrants increased 1,70,137 in 1961 to 4,45,128 in 1971. The Hill and Mountain together originated 96.3 percent of all interregional migrants. The mountain, Hill and Kathmandu valley experienced net loss of 3,39,925 persons absorbed by the Terai, these are native born of population (New ERA, 2000:3).

The 1981 census collected migration data by set and broad age group (0-4 years, 15-59 years and 60 years above). The foreign born population has same of additional information as;

-) Duration of study in Nepal
-) Duration of in present place of residence, and
-) Reasons for stay in the present place of residence.

In the present place of residence for foreign from population categorized as;

-) Trade and commerce
-) Agricultural
-) Service
-) Study/Training
-) Marital relation and
-) Others unstated

According to census 12,72,288 persons as total life time internal migrants, which constituted 8.5 percent of the total population of the country. The interregional migration volume 1981 census was 1,03862 (81.7%) of the lifetime migrants. Total 14,18,206 interregional migration in 1991, there were 1,61,655 out migration from the Mountain and 7,58,923 from Hill and gained by Terai. In 1991 census of Nepal, the annual growth rate of population was found 2.7 percent in Terai, 1.62 percent in Hill

and 1.04 percent in Mountain (CBS,1992). The difference in growth rate among regions are also caused by migration from Mountain, Hill to Terai.

In 1991 census of Nepal migration data is available by birth place ,citizenship and by regions and countries destinations for absence population. Migration data is available by sex and in five years age groups in addition to destination countries of foreign born population have been broadly categorized given groups as a) SAARC countries b) Other Asian countries C) European countries D) Other countries and countries is not stated.

Census of 2001 also includes the questionnaire of 1991 census with refine form. The major stream of internal migration rural to rural (68.1%) rural to urban (25.5%) in 2001 and urban to rural (3.5%) are lesser importance. Nepal has a 58 designated urban center with a total population of 3,227,879 out of this total 95.6 percent where native born and 4.4 percent were foreign born in 2001. Out of the total native born 3,085,104, 73.2 percent (2,257,392) were internal migrations of others districts. In rural areas, where as 24.2 percent migrated from other municipalities internal migrates from rural areas of other districts constituted 31.6 percent in Kathmandu valley towns followed by 23.3 percent in Terai towns and 16.9 percent Hills towns. Census of 2001 includes five main reasons for migration such as a) Trading b) Agriculture c Employment d) Study training e) Marriage . internal migration in Nepal has been very much a permanent phenomenon as 44 percent of the total inter district migrants were living in the destination for more then lower in 2001 (CBS, 2003:156). The reasons comprised 31.3 percent marriage, 27 percent agriculture 15.8 percent employment 10.6 percent study follow this. The dominant reasons for migration for females was marriage i.e. 47 percent.

In addition to census, there are various kinds of survey regarding migration, both from government and private sectors. The official level sample surveys are found to begin after the implementation of fifth five year plan. Some of such surveys which particularly focus the internal migration, are described as follows

CBS (1987) conducted another major longitudinal survey entitled ‘The Demographic Sample Survey 1986/87’ covering an observation period of 12 months from spring 1986 to spring 1987. It was based on multistage national probability sample of 129 identifiable clusters throughout Nepal. This report provide single figures for both immigrants and emigrants. According to the report there were 28 immigrants per 10,000 population for the country whole. The immigration rate was higher among

females than males, there were 41 immigrants per 100 females in the country. While only 14 immigrants per 100 males. As for emigrants the study revealed that there were 12 emigration states were higher among males than females. There were 20 males emigrants per 1000 female population in the country, while it was only 4 per 1000 female population.

CDPS (1997) conducted a survey on migration, employment and birth, death and contraception which was funded by the United Nations Population Fund (UNFPA). The study, conducted in 1996, is based on a nationally representative probability sample survey of about 20,000 households from 6000 clusters in 73 districts of Nepal. The survey contain a separate section on migration situation in Nepal and it encompasses separate interpretation for both internal and international migration. As regards international migration, the survey concludes that 2.9 percent of the sample population were foreign born and most of them were from India, majority of them were the females 78.6 percent as against of (77.3%) males. The study also concluded that majority of the emigrants were the literate ones. However, majority of the immigrants were the illiterate ones. The survey further found that among the literate immigrants, India were less educated than those from outside India. Once the country majority of emigrants were literate.

The major of such types include CEDA, 1971/1974, NCP 1981/1983 and MOPE,1996. The seminar of population and development conducted by CEDA, 1971 was the first of this kind in Nepal. Migration related issues raised by this seminar were,

-) Adaptation labour intensive technique in agriculture to absorb the surplus labour force.
-) Improvement in land ownership and land tenure system to make more room for employment.
-) Encourage migration from Hill to the Terai for resettlement.
-) Need for assessing the impact of migration within and out side country.
-) Provisions for training facilities for Nepalese in order to replace Indian labour by Nepalese industries.
-) Need for the registration of birth and citizenship.

-) Need for research on impact of person and security system, land reform, resettlement and the like. There is however, no direct discussions found on international migration.

The 1974 seminar on population and development was said to be the landmark in the history of Nepalese population studies (New ERA, 2000: 13). Most of the policy related issues on population, rising today, are the contribution laid by this seminar.

The first attempt to integrate data on interregional migration up to 1971 was made by New ERA (1981) and was later officially published by NPC (1984). Although there were no compatible data for international migration, it initiated interest in migration research in Nepal. The next task force run by MoPE in 1996 studies on international migration Nepal; An analytical review of situation. The study critical appraised the quality, reliability and limitations of migration data from census data, sample surveys record on migration from the department of immigration, vital registration and depart of labour. The study also raised the research studies and reports on international migration. It also estimated immigrants in Kathmandu in various occupations, activities and industries, on the basis if its own surveys and research in Kathmandu, it also reviewed newer destination of Nepalese emigrants such as West Asia, students going abroad and new employment destinations.

The study also analyzed the issues related to international migration in Nepal in terms of economic and socio-cultural implications, problems of social identity, marital ties between India and Nepal, language issues, political implication, issues of citizenship, issues of refugees in Nepal (especially Bhutanese and Tibetan refugees), border regulations, and issues of Gorkha recruitment. Data problems and gaps were also revised and finally it encompasses recommendation relating to data information collection system, the need of define international migration, regulation of migration, border regulation and topic area for future research.

New ERA (2000) studies on Migration Policy in Nepal; Review and Recommendations. This survey highlighted the policy related literature on different area with regard to international migration in Nepal. Some of such reviews are on international boundary, immigration law, trade policy, industrial policy and labour policy. In the second part of the study recommendation on international boundary, immigration policy, citizenship trade, industry labour and employment, land use policy, urbanization, regional development, vital registration and census region have been encompassed.

The study of refugees is also a must in course of identifying different nature of data for international migration. The immigrants in Nepal represented by voluntary and involuntary or forced refugees. After the recognition of Nepal as a sovereign and independent country by Treat of Peace and Friendship between Britain and Nepal in 1923, the dense forest of the plain area to the south was reclaimed for the people who were migrating from Hill and Mountain regions of Nepal. But the place was also occupied by the India immigrants. Now only this Nepal witnessed a large influx of domiciled Nepalese from the Burma when the Japanese over ran Burma during the World War II. In 1959 when the People's Republic of China took over the control of Tibet, Nepal witnessed the large influx of Tibetan refugees across the Nepal China border,

Refugee problem in Nepal thus has been the most serious, especially since the last decade. The seriousness of it was felt when more than 100 thousand Bhutanese came to Nepal to take shelter in the decade of last 90s. There is also a next assumption that more than 16 thousand refugees from China are taking shelter in Nepal.

The Bhutanese refugees are sheltering in the two districts of Nepal, Jhapa and Morang whereas the Chinese, mostly the Tibetans are sheltering in 22 districts of Nepal. According to Ministry of Home there districts include; Darchula, Humla, Dolpa, Baglung, Manang, Mustang, Gorkha, Tanahu, Rasuwa, Kaski, Sindhupalchok, Sindhupalchowk, Solukhumbu, Ilam, Sankhuwasava, Morang, Kathmandu and Lalitpur. According to the official report, the refugees in Nepal are from only the two countries Bhutan and Tibet, China's autonomous region. This situation is however, different in reality (INSEC 1993: 446). For some years in Nepal has been expressing the increasing pressure of displaced persons from countries like Bangladesh, India, Pakistan, Afghanistan and Arabian countries in West Asia. Not only are this some Russian nationals also observed in Nepal to be setting.

2.2 Theoretical Literature

Revenstain (1885, 1889) enunciated the "the law migration" which was be based on the historical experience of west Europe. He has introduced the 7 laws of migration which is migration and distance, steam and counter steam. Urban-rural differences, predominance female among short distance, technology and migration and motive behind migration. In relation to the distance and set the beginning of an attempt to

formulate migration there in a system way.(Journal of Royal statistical society, Vol. 49)

Lee (1970) and miller (1966) state the migration is selective by age, sex, social and economic status. On the other hand some observation on migration differential which tend to characterize.

Everett Lee (1966) presented a paper entitled “A Theory of migration the annual meeting of Mississippi valley historical association, Kansas city. He detuned migration as a permanent or semi permanent change resistance from one place to another. He further defined four act of migration, which is as follows:

- Factor associated with the area of origin.
- Factor associated with the area of destination.
- Personal factors(Age, sex, education etc)

Thus basically is scribed migration relationship between place of origin and place of destination. (Theory of migration, Demography vol.13)

Zip has studied Migration and brought out an article in 1941. These articles he had focus on the reason that compelled the migrants to move. He has expressed the views systematically and theoretically, on the destination of migrants that where the origin and where the destination of migrating (Zip, 1941).

Todaro (1969) has given the most significant contribution to the title of volume migration. He is of the view migration mechanism can be explained by the different is expected rather than actual earning between two place. He has formulated migration models which has four type features as;

1. Migration is estimated primarily by national income consideration of relative benefit, which are mostly financial and also psychological.
2. The decision to migrate depends on expected rather than actual new or old real wage differentials, where the expected differentials are dominated by the interaction of two variables. The actual new or old wage differential and the probability of successfully obtaining employment in the new sector.
3. The profitability of obtaining employment in the new sector is inversely related to the unemployment rate in new sector.
4. Migration rates of new employment opportunities growth rate are not only possible but also rational and even likely in the face of wide new or old expected income differentials. High rate of unemployment in the sectors are therefore inevitable

outcome of the serious imbalance of economic opportunities between new and old out areas of most under developed countries (Todaro, 1969)

2.3 Policies Review

Both internal and international migration in Nepal are legally defined as a migratory activity with change of residence of persons from one area of municipality or village development committee in Nepal to another or as migratory activity these to and from foreign states or vice-versa for period of more six month (VRS, 1976,section 2).

Migration related laws and policies in Nepal some of them mentioned as follows;

Civil code (MulukiAin, 1854) they vary not only in status ranking and prerogative as ordinate.

Bio-diversity and socio-cultural diversity in Nepal are interrelated. Diversity and minority rights are interrelated (Bhattachan, 2003).

A total of 27 Articles and sub articles of constitution and nice section of the New National Code of Nepal, 1963, more than those dozens of special acts are identified as having indigenous people (IBID, 2003).

A secular constitution is mandatory for national integrity. Nepal never experienced colonism, nor did she the ethic violence. Gurung this context writes further:

“The state of Nepal has been maintaining its dependent status since much earlier than much South Asian Countries, but has fallen short of emerging as a nation due to its socio-political and economically disintegrated policies.

Various migration related policies, laws and coercive measures are responsible for the explosion of the anguish and frustration among the Nepalese people who settle in remote areas and are deprived of various socio-economic and development opportunities. To cite some examples, “Nepalese emigration to India from India emigration was primarily induced by the state apparatus through opportunities land and labour policies, agricultural the British Army (KC, 2000).

Thus Nepal-India Treaty, 1950 is the fundamental base of special and unequal foreign relationship between these two countries. Many arguments and controversies regarding this treaty have been raised especially by the Nepalese academics political parties and other nations.

Nepal’s fifth five year plan (1975-80) comprehensive population policies and stressed for immigration to control. However, the policy couldn’t stipulate rules and

regulations for the migrants so as basic in terms of various caste and ethnic groups. This policy rather encouraged those who were already landlords in the hills areas to capture a huge quantity of land compelling the poor to remain poorer, no matter they migrate or not. The passport act, 1967 and regulates this movement to the third foreign states other than India only passport act 1992 states the Nepali citizens can travel to the foreign states with the possession of the valid passport their own name.

International Migration is basically governed in Nepal By;

-) International Migration Related Laws of Nepal (IMDLS)
-) Nepal-India Treaty of Peace and friendship, 1950 (NIT, 1950)
-) Nepal-India Opens Boarder (NIOB); and
-) Refugee Immigration (RI).

2.3.1 Three Years Interim Plan (2064/065 -2066/067)

The plan has categorized two kinds of objectives about population policies and porgrammes. The population policy of Nepalwas be effectively connected with eradication of poverty and appetite. In the specific objectives, it emphasizes the management of migration. Highlighting Strategies, the plan emphasizes that programmeswas be identified co-operatively, appropriate policy and programmeswas be made. The plan further emphasizes the study and research to manage migration. It was be emphasizes to Development of small towns in village area, interrelationship between rural and urban area are other priorities to manage urban management and internal migration.

2.4 Empirical Review

The reinforcement and dimensions of these bands shall be made as per A band shall consist of two (or four) longitudinal steel bars with stirrups embedded in 75 mm (or 150 mm) thick concrete. The thickness of the band shall be made equal to, or a multiple of, the masonry unit and its width shall equal the thickness of the wall. The steel bars shall be located close to the wall faces with 25 mm of covel-, and full continuity of steel shall be provided around corners and through junctions. The minimum steel requirements for various buildings for these bands or ring beams are shown in Table . Such bands are to be located at critical levels of the building, namely at the plinth, lintel, roof and gable according to the requirements specified in Clauses 7.1 to 7.4.

Steel bars shall be installed at the critical sections (ie., the corners of walls, junctions of walls, and jambs of doors) right from the foundation concrete. They shall be covered with cement concrete in cavities made around them during the masonry construction. This concrete mix should be kept to 1:2:4 by volume, or richer. The vertical steel at openings may be stopped by embedding it into the lintel band, but the vertical steel at the corners and junctions of walls must be taken into either the floor and roof slabs or the roof band.

One of the major hurdles in the implementation of NBC was that Law required all codes to be published in Nepali language in the National Gazette in order for it to acquire a legal status. The building codes are in English language and it was felt impractical to publish the full building code in the gazette.

In a typical rural stone house, thick stone masonry walls (thickness ranges from 600 to 1200 mm) are built using rounded stones from riverbeds and mud mortar. These walls are constructed with stones placed in a random manner and hence do not have the usual layers (or courses) as seen in brick walls.

These un-coursed walls have two vertical layers (called *wythes*) of large stones, which is filled in between with loose stone rubble and mud mortar. In many cases, these walls support heavy roofs (for example, timber roof With thick mud overlay). These buildings are one of the most deficient building systems from earthquake-resistance point of view. The main deficiencies include excessive wall thickness, absence of any connection between the two wythes of the wall, and use of round stones (instead of shaped ones). Such buildings have shown very poor performance during past earthquakes. In the 1993 *Killari (Maharashtra)* earthquake alone, over 8,000 people died, most of them were buried under the rubble of traditional stone masonry dwellings. Likewise, a majority of over 13,800 deaths during 2001 *Bhuj (Gujarat)* earthquake is attributed to the collapse of this type of construction. The main patterns of earthquake damage include: (a) bulging/separation of walls in the horizontal direction into two distinct wythes (b) separation of walls at corners and T-junctions, (c) separation of poorly constructed roof from walls, and eventual collapse of roof, and (d) disintegration of walls and eventual collapse of the whole dwelling (DUDBC, 2015).

The wall thickness should not exceed 450mm. Round stone boulders should not be used in the construction! Instead, the stones should be shaped using chisels and hammers. Use of mud mortar should be avoided in higher seismic zones. Instead,

cement sand mortar should be 1:6 (or richer) and lime-sand mortar 1:3 (or richer) should be used. (b) Ensure proper bond in masonry courses: The masonry walls should be built in construction lifts not exceeding 600mm. Through- stones (each extending over full thickness of wall) or a pair of overlapping bond-stones (each extending over at least 3/4 thickness of wall) must be used at every 600mm along the height and at a maximum spacing of 1.2m along the length. (c) Provide horizontal reinforcing elements: The stone masonry dwellings must have horizontal bands. These bands can be constructed out of wood or reinforced concrete, and chosen based on economy. It is important to provide at least one band (either lintel band or roof band) in stone masonry construction. (d) Control on overall dimensions and heights: The unsupported length of walls between cross-walls should be limited to 5m; for longer walls, cross supports raised from the ground level called *buttresses* should be provided at spacing not more than 4m. The height of each storey should not exceed 3.0 m. In general, stone masonry buildings should not be taller than 2 storeys when built in cement mortar, and 1 storey when built in lime or mud mortar. The wall should have a thickness of at least one- sixth its height (DUDBC, 2015).

Although construction practice of stone masonry of such type is deficient as regards to earthquake resistance, its extensive use is likely to continue due to tradition and its low cost. But, to protect human lives and property in future earthquakes, it is necessary to follow proper technique of stone masonry construction as described above.

Six years ago on February 27, 2010, a devastating 8.8 magnitude earthquake struck Chile. Since the earthquake occurred in the middle of the night (3:34 a.m. local time on Saturday), most people were asleep in their homes. According to the United States Geological Survey (USGS), the location of the earthquake was estimated to be 95 kilometer (60 miles) to the northwest of Chillan, 105 kilometer(65 miles) to the northeast of Concepcion, 115 kilometer (70 miles) to the southwest of Talca, and 335 kilometer (210 miles) to the southwest of Santiago. The quake also triggered tsunami waves which crashed many coastal islands. The quake was recorded to be the fifth-largest earthquake in the world since 1900. Extensive damages were dealt across the coastline of Chile. The total economic loss in Chile due to the earthquake was approximately 15- 30 billion US dollars(USGS,Earthquake, 2011).The earthquake shaking caused a wide range of damage to buildings within the affected area. The region has a lots of old houses, churches, and other buildings built with adobe or

unreinforced masonry. Absence of reinforcement and connection between adjoining walls resulted in the collapse of about 80,000 houses. Falling debris was a cause to many human deaths. About 300,000 houses and 400 churches were partially collapsed and unsafe to occupy (USGS, Earthquake, 2011).

The 2010 8.8 magnitude Chile earthquake was the second strongest earthquake that hit Chile recorded since 1960. According to USGS reports, the 1960 Chile earthquake was estimated to have a magnitude of 9.5, which is the largest earthquake in the world. Similar to the 2010 Chilean quake, the 1960 Valdivia earthquake was created by the release of stress caused by the subducting Nazca Plate and the South American Plate. This event was so strong that it killed around 1,600, 3000 injured and left 2 million people homeless. The cost of the damage was approximately 400 to 800 million US dollars (this would be about 2.9 to 5.8 billion dollars in today's standard because of inflation) The earthquake also caused a deadly tsunami that harmed people living as far away as southern Chile, Philippines, southeast Australia, Hawaii, Japan, eastern New Zealand and the Aleutian Islands. In addition, the quake caused several landslides west of Tralcan Mountain, which blocked the outflow of Rinhue Lake. The lake's water level quickly rose above the 24 meter high dam in less than 5 hours after the main shock. As a result, it flooded several nearby towns and the city of Valdivia affecting 100,000 people living in the area. Strict design codes were enforced in Chile after the event (USGS, Earthquake, 2011).

Some of the conventional details for the bracing of façades were inadequately designed for this earthquake. But out of all high-rise buildings, only the Alto Rio collapsed completely, and the O'Higin building collapsed partially. Given the number of structures in the affected area, this performance implies generally good engineering and construction practices. In conclusion, Chile's infrastructure and modern buildings generally protected the population. However, there are some issues that need to be addressed. Many bridges that collapsed during the earthquake require good continuity of reinforcement and well-confined ductile members. Alto Rio condominium needed stricter management and control to prevent from a total collapse. Although the structural designer of Alto Rio satisfied the Chilean seismic code requirement, his design did not provide proper lap splices and confinements in the shear walls to resist the 8.8 magnitude quake, hence the building failed (USGS, Earthquake, 2011).

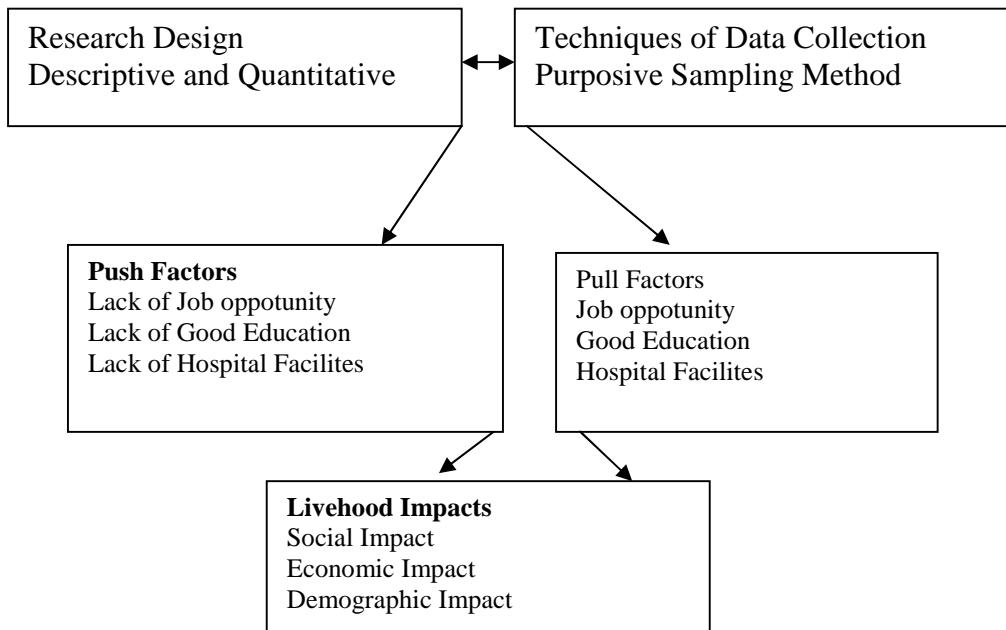
The reinforced concrete sections are designed according to the Egyptian Code of Practice for Design and Construction of Reinforced Concrete Structures, 1995 using the limit states design method. To evaluate the seismic risk for Egypt a method for seismic risk evaluation suitable for buildings in Egypt proposed by (Sobaih, 1992) is used. The distinctive feature of the method consists in the possibility of a practically continuous description of the seismic quality of the buildings. By applying this method, the cost of damage due to an expected earthquake occurring during the expected life-time of the building can be evaluated.

Model BMM- 1.1 is a single storey building which consists of three rooms and a verandah along with an attics pace at the upper level. The construction materials used is brick masonry with mud mortar, where CGI sheet with is used for roof covering along with wooden rafters and purlin. Similarly, in order to make the earthquake resistant structure, provision of horizontal R.C.C band and vertical reinforcement is made. Locally available construction materials such as stone, timber, sand, aggregate and soon has been introduced in construction. Local climatic condition, social and cultural aspect is kept in mind while designing the structure (NRA, 2015).

2.5 Conceptual Framework of the Study

There is a question why does migration volume varies when change in socio-economic milieu takes place in origin and destination. Causes and consequences of migration studies have sub-sequent demographic, economic, social welfare and development related outcomes. Theoretically the relationship between dependent and independent variables of causes and consequences of migration causes the lack of physical facilities and job opportunities and other demographic variables like age, sex, and marital status.

Available living condition is depends on to the social structure, demographic factors, modern facilities, political environment and physical environment. Migration decision is determined by information and cost of living such migration is affected by in-migration and out migration. This shows the consequences of migration as change in both original and destination places. After migration changes of economical, demographical, environmental, cultural and social values.



CHAPTER THREE

RESEARCH METHODOLOGY

For any research work to be carried out systematically and successfully, we need to follow some pattern and method. Though there are several methods that can be employed in researches but the nature of the method however depends upon the level and objectives of the study to be carried out. This chapter was to show how the information or data was collected and processed for analysis. This section mainly deals with the steps of the procedure that was followed to carry out the research.

3.1 Research Design

Research design is the blueprint for any research study which helps to the researcher to follow certain plans and procedure of study. This study was based on descriptive and quantitative research design. However a qualitative technique was used for analysis and interpretation of information. This study was focused on affecting factors for Rural to Urban Migration : A case Gokarneshwor Municipality Kathmandu.

3.2 The Field : Rationale

Field visit is one of the essential factors in research work. For the collection of primary data, researcher was visited the study area. Field visit helps to bring real information. After making detailed work plan, researcher was mobilized immediately in the field for the data collection process. The quality control was strictly followed and applying extra care while filling out the questionnaire. Questionnaire is the backbone of the survey. After completing a day's work researcher checked each questionnaire in the evening and correct any mistakes or inconsistencies immediately. 83% populace has chosen Model SMM- 1.1 for constructing their building in this Municipality. Whereas, 2.61 % has chosen "Others" because they were not sure about constructing building. BMM-1.1 and SMC-1 .1 are chosen as second option and BMC-2.4 seems most undesired model. Details can be seen in table 4. 15. Many buildings were already reconstructed due to late donation distribution policy of the government. Hence, perception of the people is that with plaster at the finishing or outside of the wall is considered as an earthquake resistive building.

3.3 Nature and Source of Data

This study was based on primary data. The primary data was collected through interview, whereas secondary data was collected from journals, previous research report, related documents.

3.4 Sampling and Population

There are 3125 people in Chautara Municipality 6, Pipaldanda. There are 750 people of 150 Household are migrated due to Earthquake. The population of the study was the same migrated people by during the Earthquake.

3.5 Techniques & Tools of Data Collection

The researcher was to follow the purposive sampling methods to collect the data because the research was based on fulfilling the objectives. There are 3125 people and 1025 households in this Municipality ward no, 6 in this Municipality total migrated household is 150 so that total migrated household was selected in the study area. The study was closed for data collection on migrated household.

3.6 Reliability and Validity

After preparing the interview schedule was pre-tested among ten migrant households of people for required modification to make them more understandable, simple, reliable, valid and socially acceptable. After piloting tools, it was revised and finalized on the basis of results obtained from analysis and after getting necessary suggestions from the supervisor.

3.7 Method of Data Analysis and Interpretation

To analyze data, figures and tabulation were presented. The data there was analyzed by using simple static methods like frequency and percentage. The collected data was analyzed in detail. The collected data through various methods and techniques was put together in separate chapters. The analysis and interpretation was done with the help of tables, graphs and charts to make the presentation more clear. Finally the conclusion was drawn and the

3.8 Ethical Considerations

In my research process I follow ethical issue. I was conform to omit plagresam and none of the fake information was use in this study. In the process of data collection I was take consent of the respondents and concern authority.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of the data and information which was collected from the field study. This chapter includes both qualitative and quantitative data that was obtained from the study which is tabulated and is kept in sequential order according to the need of the study. The study was conducted mainly to identify socioeconomic and cultural factors, to analyze the level of knowledge and use of contraceptives, to assess the impact of contraceptives on the health status of married women of reproductive age of Chautara Municipality of Sindhupalchok district.

The data has been analyzed and presented here in three parts namely demographic, cultural and socioeconomic factors affecting the family planning in the first part, level of knowledge and use of contraceptives in the second part and to and impact of contraceptives on the health status of married women of reproductive age in the last part. The analysis and interpretation of the collected data is done herewith in different topics.

- Roof band: Roof band were provided at the top—level of walls, so as to integrate them properly at their ends and fix them into the walls. The height was found as 75mm.
- Reinforcement: Main reinforcement was 4 or 2-12 dia bar as per thickness of concrete band. 6mm diameter rings were at 150mm. Hook length was 500mm. Bars had a clear cover of 25mm concrete.

From the Discussion with KU in the conventional building mostly these horizontal band were absence so those building faced devastation in earthquake and somewhere in conventional building, the horizontal bands were presence in the form of wooden band, stayed safe in Earthquake .So, by comparison it with codal provision and Discussion With KU ,these provided horizontal Band in 17 model was said to be a Earthquake resistant feature. Besides these elements of earthquake resistant building,

following are the Basic factors which were present in 17 Model Building causing the earthquake resistant building.

4.1 religion

All the participants of the study were Hindu by religion. So comparison among the different religions about the utilization of the family planning methods was not done.

4.1.1 Educational Status

The common Nepali people did not have way into education till 1950 (before democracy). Prior to 1951, higher education in Nepal was in a very deprived condition. After democracy, the new political system made provision for education for all Nepali people. Since then, Nepal has targeted to increase its literacy rate along with educational attainment of the people in each plan.

Census data are the main source of statistics regarding literacy in Nepal since very few studies have been carried out. In earlier censuses of Nepal the literacy was defined as the ability to read and write. Since 1991 population census, the definition of literacy was redefined and it incorporated the ability to read and write with understanding and to perform simple arithmetic calculations (CBS, 1995). The literacy rate has increased greatly over the last 45 years.

ii) Cost of Conventional Type Based on SMM-1.1: Stone Masonry In Mud Mortar:

This model is based on SMM-1.1 because all the required quantity for constructing is same besides the plinth band, sill lintel band. The materials for the elements were local wood. The cost difference between these two models was the cost of plinth band, sill lintel band. From table 4.5 it can be evidently seen that for building proposed model, it was the costing about total Rs. 6,64,343.76. This was numerically 22.11 % lower than that of the cost of earthquake resistant model SMM1.1. Furthermore, During FGD and KII the wooden material is locally available at Nrs 1200/-per cubic feet which means Nrs 42,336/- per cubic meter cost. But for the estimation purpose approved district rate was taken in consideration. So cost

difference between Conventional building and earthquake resistant building assuming wood available in least cost was near about 16.46% of the total cost of the building

4.1.2 Caste/Ethnicity

Classification of population by caste and ethnicity is only tentative. While the 1991 census has recorded 60 caste and ethnic groups, the National Ethnic Groups Development Committee has identified 65 such groups. The census of 2001 has listed 103 caste/ethnic groups including “unidentified groups”. The current data of the census 2011 has showed 127 ethnic groups including unidentified group. The caste system of Nepal is basically rooted in Hindu religion. On the other hand, the ethnic system has been rooted mainly in mutually exclusive origin myths, historical mutual seclusion (isolation) and the occasional state intervention (NESAC 1998).

The major caste/ethnic groups identified by this research work are tabulated and analyzed below.

Table 4.1 Ethnic Composition of the Respondents

Caste	No. of Respondents	Percentage
Brahman	121	81%
Chhetri	24	16%
Dalit	5	3%
Total	150	100%

(Field Survey, 2018)

Out of the total respondents of the study area, the larger proportion of the respondents was found to having the caste Brahman, a few of respondents were found belonging to caste Dalit and moderate proportion having caste Chhetri. The percentage of respondents having caste Brahman, Chhetri and Dalit were found to be 81%, 16%, 3% respectively. From this data observed, we can analyze that the use of contraceptives is affected by caste/ethnicity. The use of contraceptives among Dalits was found very low, which may be due to the lack of knowledge among the Dalit society towards contraceptive.

4.1.3 Types of Family/ Family Size

Family background helps to improve behavior of the people of the society. Their all activities depend on family because everybody belonging to a family learns the responsibilities as well as good behavior from other family members. There are many types of family in our society like nuclear, joint and extended family. In this study two types of families have been found. They are nuclear and joint families. Table 4.5 shows the type of family of the respondents.

Table 4.2 No. of Respondents According to Type of Family

Types of Family	No. of Respondents	Percentage
Joint	66	44%
Nuclear	84	56%
Total	150	100%

(Field Survey, 2018)

From the tabulated data two types of family were found. Most of the respondents were found to live in nuclear family, out of the total 150 respondents, 84 respondents were found to live on nuclear family, which is 56 percent. Similarly, 44 percent of respondent were found to live in joint family. It may be due to traditional norms and values since in ancient time, it was thought that all people should live together in joint family for better social security. But as the society became more and more civilized and educated, people came to know that social security is not only the thing that can lead to quality life. So there has been a tendency to live in nuclear family since last few years. So the population that lives in a nuclear family is more likely to use contraceptives as there is lack of manpower to take care of the children if there is close birth spacing. On the other hand, in joint family, there are enough people to take care of the children born so there is no felt need to use contraceptives. This might be the probable reason why people living in joint families are less likely to use contraceptives. From this study it was found that the women living in joint family are more likely to use Temporary Migration instead of other measures of contraceptives because it is relatively easy to maintain privacy as it has to be used less frequently. On the other hand, the women living in nuclear family are more likely to use other

methods of contraception like condoms and pills rather than Earthquake as they do not find difficulty as one living with joint family does.

4.1.4 Age at Marriage

Age of marriage directly affects the reproductive duration and reproductive rate. So, age at marriage and ratio of peoples who are going to marriage are taken as important factors in analysis of fertility as well as while considering the people using contraceptives.

In the context of Nepal, though the legal age of marriage is 18 for both boys and girls with parental consent, but in practice it is not found so. The practice of early marriage is seen in most areas of Nepal. Most of the girls get married within the age of 20 year of age in the far western hilly areas of Nepal. In many ethnic groups, this legal age was hardly followed in the beginning and the mean age at marriage was quite low then. The following table shows the age at marriage of the respondents of this study.

Table 4.3 Age at Marriage of the Respondents

Age at marriage	No. of Respondents	Percentage
<18	36	24%
18-21	63	42%
22-25	46	31%
>25	5	3%
Total	150	100%

(Field Survey, 2018)

From table 4.7, it is seen that the percentage of user getting married at the age group 18-21years is maximum which is 42% and those getting married at age greater than 25 is minimum which is 3%. 24% of the respondents were found to married at age less than 18 years and 31% were found to married at the age group of 22-25 years. This result directly indicates that the average age of women getting married at the age group of 18-21; in which Earthquake users are maximum.

4.1.5 Type of Marriage

Marriage is compulsory for all men and women in Nepal. For women besides the social need to produce progeny, marriage is also seen as a primary means of livelihood for women in almost all communities. This results in high proportion of married population. In our concern, there are different types of marriage like Arrange marriage, Love marriage, Court marriage and other. The following table illustrates the number and percentage of type of marriage of the respondents of our study.

Table 4.4 Type of Marriage

Type of Marriage	No.of Respondents	Percentage
Arrange Marriage	125	83%
Love Marriage	17	11%
Court Marriage	0	0%
Others	8	5%
Total	150	100%

(Field Survey, 2018)

Table 4.8 shows that respondents who got the Arrange marriage are maximum in number i.e. 83% of total population; those having Love marriage are 11%; having other marriage are 5% and no respondents were found to having court marriage.

4.2 Awareness level

It is a known fact that heavy loss of life and properties during earthquakes is mainly due to weak buildings and lack of preparedness resulting from the low awareness level and lack of sufficient capacity to incorporate earthquake resistance features into the construction practices. Survey was carried out to find the awareness level on use of earthquake resistant features in building construction for both house owner and local contractor at study area. During the survey, their perception about the additional cost of earthquake resistant building was also observed.

4.2.1 Knowledge of House Owner on Earthquake Resistant Features and about NBC

The acceptance scenario in this district also said that more than 80% of people choose the Model no. SMM 1.1. which is weakest model among the 17 design model and according to NBC Code the model Falls on the low strength masonry (NBC203) and cost of this model is lowest among the 17 model according to plinth area rate. So in this way people of this locality did not have knowledge about earthquake resistant, they only thought about the minimum Cost for the construction. Also the field survey also shows the Knowledge level of that locality. Earthquake resistance features in building construction and about the national building code of Nepal. That means 90%,83.33% &76.67% of respondent were unknown about earthquake resistant features in Municipalitys respectively and overall 83.33% were unknown about earthquake resistant features which shows that awareness level on Earthquake resistant construction among the house owner is very low. In Nepal, NBC code was launched lately in 1994 AD and due to lack of strict policy in the

4.2.2 Shape of House

En 17 models building there are 4 building with two and half storied, whereas 7 buildings are two storied and rest others are one storied only. Furthermore, 17 model buildings span of wall is less and equal to 4.5 m and area of individual floor panel is not more than 13.5 square meters. The height of wall is not more than 3.0 meters The Key factor of the design is planned in square and rectangular. Long and narrow structure was not more than 3 times of its width of the Building. Hence relating all 17 buildings design with NBC-201, 202 and 205 it can be concluded as it was earthquake resistant Building comparison with coda! provision. According to FGD and KIT the people built their building according to their land and they did not have idea about shape building regarding to earthquake. Mostly shapes of buildings were rectangular, T Shape and L shape found during FGD and KIT. The T shape and L shape is not suitable according to Earthquake and that type of building faced damage in earthquake during Ku. So it was found that shape of 17 model building was according to codal provision.

4.2.3 Foundation

Load on footing at the foundation depends upon the position of footing and load from the superstructure. Generally it has been defined the position of footing in three terms, that is, face, corner and interior. Depending upon the load coming from the superstructure and position of footing, there is different stress at the different footing of the building. Assuming suitable type of soil with the appropriate bearing capacity, footing size can be determine for each footing in the building and it can be different from each other. Generalizing the closer size of footings, it can reduce the types of footing. Fig4.5, table 4.2 clearly demonstrates the width of footing in 17 models building. Majority of the 17 models base width is 800 mm (80%), the rest was found to be 900 mm (15%) and 650 mm(5%), which was all greater than 600mm as per codal provision. The foundation trench was of uniform width and bed was on the same level throughout the foundation in flat area. Furthermore, dejth of foundation is 800 mm for one story and 900mm for two storied. During KIT,the most of conventional Building did not follow the codal provision given below and they faced damage in earthquake. people who choosed the 17 model design, the oundation details were as per drawing .following footing section was found in different 17 model buiding with the different soil type soft, medium,& Hard.

4.2.4 Walls

For all models, width of wall is 350 mm for stone wall and 230mm for one storey and 350 mm for 2 storied in brick wall. Besides using 1:4 cement mortar in joints all the mortar joints lies within 10-20 mm thickness .All the walls of 17 models satisfied the minimum requirement of NBC-202. During KII & FGD with house owner and most of local contractor did not have a idea about the through stone in masonry construction. As result in earthquake, the wall faced damaged due to delamination. If beneficiaries choose alternative plans besides 17 model they should follow the minimum requirement provided by NBC-202.

4.2.5 Openings

All 17 models having less than 600 mm distances between openings and Openings were located away from inside corners by a clear distance not be less than 600 mm. Not only that, total length of openings of wall did not exceed half of the length of wall. e.g. in SMC-2.3 total length of opening is only one fourth of the total length and the lintel level was same for door and Windows.

Hence it satisfies the minimum requirement of Codal provision. During FGD and KII, it was found that house owner did not have idea about opening, minimum clear distance from inside corner and lintel level of door and window were not same.

4.2.6 View of Building Owners and Local Contractor about Additional Cost of Earthquake Resistant Building

80 out of 90 building-owners that means 88.89% and 45 out of 60 local contractors that means 75% in Chautara Municipality think that earthquake resistant building incurs more than 20% additional costs to their normal building cost. Those owners who were constructing RCC house thinks that additional cost of earthquake resistant building is not costing more. But those who were constructing load bearing structure using stone and mud, their perception is that it is costing more than 50% for earthquake resistive house.

4.2.7 Knowledge of Local Contractor on Earthquake Resistant Features and about NBC

Chautara Municipality out of 20,20,20 house-owners, 15,16,13 respectively of them don't know about earthquake resistance features in building construction and about the national building code of Nepal. That means 75%, 80% & 65% of respondent were unknown about earthquake resistant features in Chautara Municipalitys respectively and overall 73.33% were unknown about earthquake resistant features which shows that awareness level on earthquake resistant construction among the local contractor is very low. Some local contractors was aware of earthquake but there perception was NBC code is for only RCC building. Despite knowing the earthquake resistance features some contractors do not want to acknowledge to the owner because

they are being paid only in Rs./Sq.ft. not for the extra work they are conducting. Contractor perception is using, band and lintel is going to reduce their profit.

4.3 Occupation

Occupation status shows the living standard of respondents. Economic status also depends on occupation then it determines the level of education, level of knowledge and use of contraceptive. Thus, the occupation of the respondents is the most important in this context.

Table 4.5 Occupation of the Respondents

Occupation	No. of Respondents	Percentage
Agriculture	36	24%
Services	42	28%
Labour	21	14%
Housewife	51	34%
Total	150	100%

(Field Survey, 2018)

According to the presented data (Table 4.3), the large number of respondents was found working as housewife which is 34 percent of the total no. of the respondents. Similarly, few of respondents have been found working as Labor, which is 14 percent of total respondents. Like this way, 28 percent respondents in services and 24 percent of total respondents were dependent on Agriculture. In fact, most of the respondents who said they were housewives also said that they also worked in agricultural fields.

4.3.1 Economic Status

Persons of all ages consume goods and services while only a part of the entire population of a country is engaged in producing such goods and services. Obviously, all youngest oldest, males, females and physically and mentally incapacitated do not engage in such economic activity because of the inability to do so. Some do not engage or partially or fully engaged in producing goods and services and to become able to earn money. Monthly income of working population of the family affects the economic status of the family directly because it is used by dependent population also.

If somebody is working and is able to earn enough money to fulfill her need, then she is likely to make decisions on her behalf and use contraceptives. So the use of contraceptive is directly or indirectly dependent upon economic status of the family. The following table shows the monthly family-income of respondents of this study.

Table 4.6 Monthly Income

Monthly Income	No. of Respondents	Percentage
Less than Rs 5000	42	28%
Rs 5000-10000	47	31%
Rs 10000-15000	41	27%
More than Rs 15000	20	13%

(Field Survey, 2018)

From table 4.6, we see that out of the total respondents, 31% had the monthly income of Rs. 5000-10000; 13% of the respondents had the income of more than Rs. 15000; 28% of had the income of about less than Rs.5000 and 27% of the respondents had the monthly income of Rs. 10000-15000. From this study, it is seen that most of the respondents who were using Earthquake as a contraceptive measure were having income less than 10000. Though studies support that the use of contraceptives is supported by higher economic status, but in this case it was found just opposite because the percentage of people having higher monthly income was relatively less.

4.3.2 Level of Knowledge and Use of Contraceptives

Family planning services were made available to general public in 1968. After the implementation of third five-year plan, so many programs were launched to increase the level of knowledge of public about family planning but the level of knowledge is determined also by different socio-economic status, different geographic regions etc. The level of knowledge among the people determines level of use as well.

In this study, most of the respondents (about 83%) said that they had knowledge about family planning while others said they had no knowledge of family planning. This indicates that some of the respondents only had heard about the family planning methods and they did not have enough information, and adverse effects of using

contraceptives. They may be using contraceptives just because their friends also used it or because they were forced to use.

4.3.3 Source of Information for Knowledge Regarding Methods of Family Planning

To get knowledge about something there should be a source of information. After getting information, people are likely to use contraceptives because they get to know how to use it and what are its merits and demerits. Nowadays awareness about family planning is created by circulating information via different communication methods and manually. When respondents were asked about the source of knowledge on contraceptive device, their answers were found as following.

Table 4.7 Source of Information

Source of Information for Knowledge Regarding Methods of Family Planning		
Sources	No. of Respondents	%
Communication Media	34	23%
Health Workers	38	25%
Friends	26	17%
School	26	17%
Self	0	0%
Total	124	83%

(Field Survey, 2018)

Table 4.11 shows that large fraction of respondents got knowledge regarding family planning from Health workers and from Communication media. Friend and school were also important source of information. Nobody was found to have knowledge herself. Though there could be lot more sources of information but the sources of information prevalent in our area were only these. The information delivered from health workers and friends was more effective than others because there is two way communication and they can clear their queries.

4.3.4 Reasons for using Family Planning Methods

For every user, there underlies a reason to use family planning methods. There are many reasons to use contraceptives but mainly the reason that triggers the user to use it is considered mostly. This study showed following reasons for use of Family planning methods.

Table 4.8 Causes of Using Family Planning Methods

Causes of Using Family Planning Devices		
Cause	No. of Respondents	Percentage
To prevent unwanted pregnancy	38	25%
To limit the fertility rate	42	28%
To limit the birth Spacing	42	28%
To improve maternal and child health	12	8%
All of Above	16	11%
Total	150	100%

(Field Survey, 2018)

Table 4.12 shows that most respondents used family planning devices to increase the birth spacing and to limit the fertility rate which is 28% each. About 25% of the respondents said that they used the contraceptive to prevent unwanted pregnancy. About 8% of the users said that they used contraceptives to improve maternal and child health and 11% of the users said that they used contraceptives for all the aforementioned benefits. Most of the respondents had an understanding that it is not very effective to use to improve the maternal and child health.

4.3.5 House Condition of Respondents

Nepal is a poor country. So, that here is poor people. Many people are build house by stone and mud. A little person's house are cemented. The stone and mud matter house are totally damage. Which shown by following condition of house.

Table No. 4.9 House condition of Respondents

Situation of house	Number	Percentage
Totally damage	137	91
Half damage	10	7
No damage	3	3
Total	150	100

(Field Survey, 2018)

According to the above table 91% house are totally damage 7% half damage and 3% house are no damage. This result directly indicates that many Nepali house are made by stone and mud. It's totally damage by recent earthquake.

4.3.6 Condition of Family Member

The big earthquake hit by day time. So that many people was saved. Which condition is shown following table.

Table No. 4.10 Condition of Family Member

Condition	Family
Death	2
Injured	21
Fine	127

(Field Survey, 2018)

From the table shown we see that out of the total respondents family, 2 was death, 21 injured and 127 family were fine condition we always that many family member are saved with the time earthquake.

4.3.7 Domestic Animals Killed by Earthquake

Nepal is an agriculture country. Many people have had domestic animals such as Cow, Buffalo, Sheep, etc many domestic animals are died by earthquake. The following domestic animals are died.

Table No. 4.11 Domestic Animals Killed by Earthquake

Animals	Number
Cow	10
Buffalo	13
Got	2
Sheep	8
Other	25

(Field Survey, 2018)

From table shows that large domestic animals are killed by earthquake. 10 cows 13 Buffalo, 2 Got, 8 Sheep and other 25 animals are die.

4.3.8 Destores daily use materials

People need to live use many materials. Such as cloth, food furniture etc. The house's are totally damage by earthquake with day used materials are also damage.

Table No. 4.12 Destores Daily use Materials

Materials	Cost (Rs.)
Cloth	223000

Food	500350
Furniture	810200
Others	280400

(Field Survey, 2018)

According to the above table furniture are destroys Rs 8,10,200, Food 5,00,350, cloth, Rs. 223000 we find out the result. High properties daily used materials is furniture.

4.3.9 Dry Landslide in House Area

The huge earthquake hit in Nepal which is 7.8 magnitude. It's crake many field. The part of mountain are dry land slide which following shown.

Table No. 4.13 Dry Landslide in House Area

Situation	No.of household
Probability	120
Agriculture land	78
House area land	55
No	5

(Field Survey, 2018)

According to the above table 78 respondent agricultural land dry land and crake with earthquake 55 house area land, probability are 1200 and sucured are was 5 only we analysis that many agriculture land and house area land age crake and land side by earthquake.

4.3.10 Communicable diseases

Communicable diseases are transmitted early from one person to another persons by air, water sold the direa, cold, are many communicable disease on migration area. The following are shown in migration area with earthquake.

Table No. 4.14 Communicable diseases

Diseases	Number
Diria	55
Cold	88
Other	7

(Field Survey, 2018)

According to the above table the migrated area people suffering by cold, 88 direa 55 other 7.

4.3.11 Place of Checkup

Check up is uncommon in Nepal very low percent of respondents have received person checkup in the study area.

Table No. 4.15 Place of Checkup

Health center	No.of respondents
Health post	8
Private clinic	33
Sub health post	44
Hospital	2
No	63

(Field Survey, 2018)

In the table percent respondent has to check up, percent respondent has check up sub health post 33 private clinic and 8 had checkup health post 20 hospital.

4.3.12 Source of drinking water

Nepal is 2nd rich of water in world but. Here is no in off drinking water. The earth quake time many water source are polluted. The following source of drinking water use by respondent.

Table No. 4.16 Source of drinking water

Source	No.of respondent
Tap	24
River	177
Kuwa	1
Other	9

(Field Survey, 2018)

Table shown that most respondents used a tap by drinking water 117 used river 9 respondent used to other sources of drinking water. Most of respondents had used cause is river is able in resident.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND IMPLICATION

5.1 Summary of Finding

This study entitled Factors Affecting Temporary Migration : A Case Study of Chautara Municipality 6, PipaldandaSindhupalchok District” is based upon 150 respondents of the study area. The main objectives of the study were to identify migration during earthquake and its effects on the health migrated people. For the study, the main tool used was Interview Schedule, which was administered to only carefully selected populations by snowball sampling method.

The main findings of this study are as follows:

1. Plinth Band, Sill band, Lintel Band, Verticle Core, Stitch Band and Gable Band are earthquake resistant features in 17 models building but these features were not followed in conventional Building.
2. This study also shows that the total cost of earthquake resistant model building was 16.67% higher than that of cost of conventional building.
3. Though the model SMM 1.1 is LowStrengthMasonryBuilding as per NBC 203, the SMM 1.1 was the most accepted design among all 3 selected Municipalitys with 80.53 %,84% &83% with overall acceptance of 82.86 %.
4. In this study, only 73.33% of Local contractors and 83.33 % of house owners were unknown about the earthquake resistance features and National Building Code and 88.89% of house owners, 75 % of local contractors thought the cost of earthquake resistant building incurs more than 20% of the cost of total building cost.
5. Thus the study found the local contractor &house owner were not clear about the cost difference between earthquake resistant building and ConventionalBuilding.
6. Most of house owner believe that in the earthquake resistant building, engineer should be engaged during the whole construction period increased the cost as

supervision fee and avoidance of local materials. Also from the research, it was found that 88 out of 90 houses were built under owner-built mechanism which means overall 97.77% of house owner built their houses by their own decision practice.

7. This shows that Owner-Built types of building construction mechanism are more in practice in society. The owner-builders tend to do as much themselves as possible to keep costs down.

5.2 Conclusion

Plinth Band, Sill band, Lintel Band, Vertical Core, Stitch Band and Gable Band are the core earthquake resistant features in 17 models of load bearing Residential building.

The cost of 17 models ranging from Nrs 4,01,643.36 (SMC-1.2) to 21,21,078.75 (BMC-2.4) for constructing of load bearing residential building in Sindhupalchok. According to Plinth Area Rate, Nrs 8,52,950.64 (SMM 1 .1) is the Least costing Model.

The cost difference between earthquake resistant building and convention type building was found to be Rs. 2,10,345.09 which is 16.67 % cost more than conventional type building. But the expected cost of damage due to expected earthquakes that may occur during the life-time of residential buildings are higher than the additional cost of a seismic design which means that the earthquake resistant design of buildings in Nepal is profitable.

The Main difference between earthquake resistant building and convention type normal load bearing is earthquake resistant features. The research concluded that most of the conventional building have lack of the earthquake resistant features and the cost of the features is the cost difference between the earthquake resistant building and conventional type.

SMM 1.1 is the most accepted design for the reconstruction in Sindhupalchok District due to minimum plinth area cost among the 17 models, though it was low strength masonry building as per NBC 203. Local contractor & house owner are not aware for

constructing earthquake resistant building due to their low in knowledge about earthquake resistant features and NBC code. People believe that earthquake resistant building construction is much costly than the buildings build in a conventional way.

5.3 Implication

As far as my knowledge prevails, this is the first research of its kind, done in a ChautaraMunicipality of Sindhupalchok District. I am very hopeful that this study was encourage any researcher to explore areas in contraceptive use (especially Earthquake) in Far Western region of Nepal. This study was also help those researchers who are studying further in this subject, government, NGO/INGO, Health workers of that area, and local government of that area. This was also help the policy makers to make policies that was help to improve the condition of contraceptive use. I recommend future researchers to explore the hidden areas of knowledge in following topics:

- a. Factors Affecting Temporary Migration Structural Features and Cost Implication for the Construction of Earthquake Resistant Load Bearing Residential Building in Sindhupalchok District.
 -) Proper management of migration.
 -) Co-operate on local development.
 -) Depelop the physical services and facilities in ChautaraMunicipality reference to the migration trend.

5.4 Future Direction

-) Secure the right and dignity of migration in local level plan and policy.
-) Launch the special awareness programme to improve socio-economic status of immigrants.
-) Develop the ChautaraMunicipality as "ModelVillage".
-) Maintain equity and equality of social service security.
-) Conduct small but long-term generating programme.
-) Develop the awareness on right and obligations of earthquake migration.
-) Develop coexistence between migration and local people.
-) Advocate systematic migration.
-) Proper management of earthquake migration.

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APPENDIX-1

This is Completely a thesis work and it does not carry any official record please answer the question honestly. the importance of this study depends on your valuable answer. Your privacy will always be secured and information you provide does not effecton it . so please answer the following question on your knowledge and practice freely. During the process, if yot don't feellike answering the questions you have the right to do so .

Factors Affecting Temporary Migration : A Case Study of Chautara Municipality 6, PipaldandaSindhupalchoks

About Respondent

Name of respondent: _____
Age: _____
Sex: _____
Occupation: _____
Family
member: _____ Male: _____ Female _____ Total: _____
Interview place: _____
Date: _____

Section A (Socio Economic Condition of Respondents)

1. What is your academic qualification?

- a) Illiterate
- b) Grade 5th-Grade 10th
- c) Grade 10th-SLC Passed
- d) Above SLC

2. What is your cast?

- a) Dalit
- b) Janajati
- c) Brahmin/Chhetri
- d) Others

3. What is your mother tongue?

- a) Nepali
- b).....

- c) Others
- 4. What is your main occupation?**
- a) Agriculture & Livestock
 - b) Business/Trade
 - c) Day labor
 - d) Others
- 5. What is your annual income?**
- a) 1, 00,000-1, 10,000 NRS
 - b) 1, 10,000-1, 20,000NRS
 - c) 1, 20,000-1, 30,000NRS
 - d) 1, 30,000-1, 40,000NRS
 - e) 1, 40,000-1, 50,000NRS
- 6. What is the type of your house?**
- a) Stone, Mud, wood
 - b) Cemented
 - c) Others
 - d) Others
- 7. What is the source of drinking water?**
- a) Tap at home
 - b) Tube well
 - c) Pond/Cisterns
- 8. What is cooking energy of your home?**
- a) Firewood
 - b) Kerosene
 - c) LPG Gas
 - d) *BhuseChulho*

7. How much does he/she/they earn monthly?

- a) 10,000-20,000 NRS
- b) 30,000-40,000 NRS
- c) 40,000-50,000 NRS
- d) 20,000-30,000 NRS
- e) More than 50,000 NRS

8. How frequently do he/she/they send money?

- a) Once a year
- b) Twice a year
- c) Three times a year
- d) Other than that or, more than three

9. How do he/she/they send money?

- a) through friends
- b) through banks/finance institutions
- c) through hundi
- d) others

10. How much he/she/they save monthly?

- a) 0%-25%
- b) 25%-50%
- c) 50%-75%
- d) More than 75%

11. In which area is the remittance money used most?

- a) food
- b) children education
- c) health treatment
- d) clothing
- e) Payment of debt
- f) giving loans

12. How do you invest/mobilize remittance money?

- a) purchase livestock
- b) Purchase gold
- c) purchase additional land
- d) initiate a new business
- e) Others
- f) saving in institutions

13. Has there been any change in the agricultural production due to labor migration?

- a) increased
- b) decreased
- c) No change

If it has increased, why?

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.....

If it has decreased, why?

.....
.....

