Demographic Distribution by Eco-belt in Nepal (A case study of Solukhumbu, Kathmandu, and Chitwan)

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Abstract

Nepal is divided into three ecological belts viz. Mountain, Hills and Terai. Mountain region consists about 24% of country's total area, hilly region covers 56% and Terai consists 20% of country's total area. The study has selected three districts from these three ecological parts with objective to identify the demographic distribution based on the selected household. Out of the 77-district based on the Small Area Estimation – calculating the poverty variability keeping the max poverty rate and min poverty rate, the study chosen the 3 district - Solukhumbu, Kathmandu and Chitwan. Total 880 households were drowned from the selected villages by using the simple random sampling. Structured questionnaire survey and interview checklist were used to collect the data from selected households. The study area which are known as the vulnerable group. The community and local government should ensure the security of families. Besides that,

unemployment status was also found in the study area which might encourage for the aboard migration of youth. So, the concerned authorities should address such problem for the development of rural society.

Keywords: Chitwan, Demographic, Distribution, Kathmandu, Solukhumbu, Topography

Introduction

The study has identified the demographic distribution of selected households in Solukhumbu, Kathmandu and Chitwan district. These three districts represent Mountain, Hill and Terai/Plain topography of Nepal. Nepal is one of the developing and landlocked country in the world. It has wide variety of culture, religion, and ethnic group of individuals. The total area of Nepal is approximately 147,181 Sq. Km. The average length and width are 885 Km and 193 Km. Nepal lies in between latitude of 28.3949°N and longitude of 84.1240°E. Nepal is bordered by India in the East, South and West and by China in the North. World's highest peak Mount Everest lies at Nepal along with other peaks. Moreover, Nepal is divided in three ecological parts viz. Mountain, Hills and Terai. Mountain region consists about 24% of country's total area, hilly region covers 56% and Terai consists 20% of country's total area. Previously, administratively, country was divided into five development regions along with 75 districts and 14 zones. But presently, there are 77 districts and 7 provinces.

Population of Nepal is composed of 52.6% female and 47.4% male according to the report 2014/15. About 46% population were productive age group of 15-44 years. There were 20.1% population that were below 10 years and 9.1% were above 60 years. The sex ration is 90 males per 100 females(CBS, 2016). The average household size was found to be 4.5. About 47.3% of the household heads are between the age group of 30-49. There is increasing trend of female head (27.9%) in recent years. This trend is more in urban areas (32.2%) than rural areas (19.3%) (CBS, 2016).

It is very important to study demographic structure of country in order to know different aspects of study. Thus, demographic changes give idea of population size with its composition, distribution and development (Aryal, 2013). According to (Yadav, 1993), population size not only depend on less fertility rate but also with other parameters of population. In most of the developing countries poverty, hunger, illiteracy and other economic factors are affected by the high population growth rate. Due to high population growth rate, there will be problem in arable land and natural resources, literacy, skilled manpower, and development of rural society. The study was conducted in three districts of three geographical belts – Solukhumbu district from

Himalayan region, Kathmandu district from Hill region and Chitwan district from Plain/Terain region. The study was conducted to identify the demographic distribution in these three districts.

Objective of Study

The main objective of this study is to identify the demographic distribution of selected households of Solukhumbu, Kathmandu and Chitwan district. These three districts represent Mountain, Hill and Terai/Plain topography of Nepal. The study has given the comparative status of demographic distribution of study households.

Study Methods

The study was based on the mixed method – both quantitative and qualitative data were collected from the field. The study has run the statistical model to analyze the quantitative data and narrative analysis for the qualitative data. Out of the 77-district, the study chosen the 3 district - Solukhumbu, Kathmandu and Chitwan. A few village development committees (14 former VDC) were chosen by calculating the household income level. Among these former 14 VDC, simple random sampling technique was adopted to select the household within the sample domain. Total 880 households were drowned from the selected villages by using the simple random sampling. Structured questionnaire survey and interview checklist were used to collect the data from selected households.

Study Findings

Age distribution of household head

Household head is the main person of a house. Mostly, household person is those people who have their income and have social responsibility of the house. Moreover, household head is mostly male. They play key role in decision making of a family. Age distribution of a household head vary from one another. Mostly middle age group who are independent of other family member are household head. In some case, age distribution of a household head might be small as compared with other.

This survey helps to find the age distribution of household head. It is very important to know the age of such decision making and playing key role in a family. Table 1 shows such age distribution of household head. It was seen that most of the head of household was between the age 30-39 (70.0%) while least was from between the age group of 0-19 (2.0%).

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District/Age	Under 19	20 -29	30 -39	40 – 49	50 - 59	60 and	Total
Group	(%)	(%)	(%)	(%)	(%)	above (%)	(%)

Table 1: Age Distribution of Household Head

Solukhumbhu	1	13	15	26	20	25	100
Kathmandu	1	9	28	20	23	19	100
Chitwan	0	15	27	20	19	19	100

Source: Field Survey: 2019

In Solukhumbhu, the age distribution of household head was highest in the age group 40-49 (26.0%) whereas only1 per cent household was headed by under 19 years. In Kathmandu, the age distribution of household head was highest in the age group 30-39 (28.0%), whereas lowest (1.0%) household was headed by under 19 years old people. Similarly, in Chitwan, the age distribution of household head was highest in the age group 30-39 (27.0%) whereas lowest (15.0%) household was headed by 20-29 years old people.

It was seen the most of the household had male as head. Mostly, they were independent and have possession of income, land or any other property. The study had taken interview of some key respondents to know their experience. Mr. Khatri of age38 years from Kathmandu said that he earned money in his house and it was his responsibility to look after his family. He decides everything in his family though he listens other's words. But he was reluctant to take decision from his family members. He added that men were superior in every respect and other should accept his decision in his family. Similarly, in the interview, Ms. Sharma, 26, from Chitwan said, *"We Hindu people should respect what our husband decides for my family. He works hard for our family for our better life. So, my husband is the head of our family. I cannot be head as I am a female and know only household work."*

Population distribution by age

Nepal is multiethnic country which comprises more than 125 ethnic groups (UNFPA, 2017). Mostly, ethnic groups are categorized in five groups: Chettri/Brahmin, Janajati, Terai caste, Dalit, and Muslim. The study of distribution of population in any country is very much important. It can give the information of current situation so that there would be planning accordingly. Over the year, distribution of population has changed. In 1971, about 62.0% of total population lived in hill and mountain region. This decreased to 50% by 2011. State 3 have highest percent of population which is 21.0%. This is followed by state 2 with 20.0%, state 1 and state 5 have 17.0% each, state 7 have 10.0% and state 4 have 9.0% (CBS, 2014)). Thus, study of population by age could give information about children, working age population, sex ratio, old age people and other. Country decides the future by knowing the population distribution.

Table 2 gives the information of population distribution by age. It showed that most of the population was between the age group 15-19 (465) while least population was between the age group 55-59 (143).

Age Group/Sex	Solukhumbhu	Kathmandu	Chitwan	Total
0 To 4	105	174	40	319
Male	47	75	21	143
Female	58	99	19	176
5 To 9	110	196	34	340
Male	70	91	19	180
Female	40	105	15	160
10 To 14	171	208	52	431
Male	83	122	36	241
Female	88	86	16	190
15 To 19	180	233	52	465
Male	88	127	27	242
Female	92	106	25	223
20 To 24	187	229	47	463
Male	99	117	17	233
Female	88	112	30	230
25 To 29	139	197	52	388
Male	72	110	26	208
Female	67	87	26	180
30 To 34	88	169	41	298
Male	54	79	21	154
Female	34	90	20	144
35 To 39	112	171	37	320
Male	51	98	15	164
Female	61	73	22	156
40 To 44	105	102	28	235
Male	51	56	16	123
Female	54	46	12	112
45 To 49	98	125	25	248
Male	48	42	16	106
Female	50	83	9	142
50 To 54	90	84	31	205
Male	48	45	15	108
Female	42	39	16	97
55 To 59	40	91	12	143
Male	24	53	6	83

Table 2: Population Distribution by Age

Female	16	38	6	60
60 and above	147	174	56	377
Male	77	72	27	176
Female	70	102	29	201

Source: Field Survey: 2019

We can interpret that most of the population was in the age group 15-19 (465). This was followed by age group 20-24 (463), 10-14 (431), 25-29 (388), 60 or more (377), 5-9 (340), 35-39 (320), 0-4 (319), 30-34 (298) and other. The least population was in the age group 55-59 (143). The least number of male and female was also in the same age group. In all age group, male population were higher than female group except between the age group 0-4, 45-49, and 60 and above.

In Solukhumbhu, most of the population was in between age group 20-24 (187) followed by age group 15-19 (180), 10-14 (171), 60 or more (147), 25-29 (139), 35-39 (112) and others. The least population was in the age group 55-59 (40). Similarly, in Kathmandu, most of the population was in between the age group 15-19 (233) followed by 20-24 (229), 10-14 (208), 5-9 (196), 0-4 and 60 or more (174) and others. The least population was in between the age group 50-54 (54). Moreover, most of the population was in the age group 60 or more (56), 10-14 (52), 15-19 (52), 25-29 (52) and others. The least population was in the age group of 55-59 (12).

Most of the population was in the age group of 15-59. In addition, there are also high number of old age people. Government and private sector should invest in working age population in order to have sustainable development. Most of the young people have migrated to foreign country for employment because of the lack of adequate opportunity in their area. They try to settle in foreign land and also want to settle their whole family in foreign land which causes the disturbance in rural development. Moreover, there were a smaller number of populations in rural and village area as the member of family moved to the urban areas in search of employment and education. These kinds of migration also varied according to gender. Migration of male population were higher almost in every age group than female population.

Female headed household

Gender inequality is prevalent in Nepal from ancient time. The role of gender in Nepal vary with context, caste, ethnicity, religion, and socio-economic class. The traditional family structure believed that men is superior to women. So, women and girls in Nepal are disadvantaged by traditional believes and practices. These types of belief still exit in the form of dowry, early marriage, stigmatization of widows, family violence, polygamy, separation of women and girls during mensuration and others. It is also seen in education as most of the parents in rural areas prefer to provide education to their son. They believe that girls should do household work and

should care less about their study. Girls or women still don't have participation in decision making for their families or communities (HAMI, 2019).

Table 3 shows the percentage of female headed household in the studied areas. It was found that least percentage of household had female headed household (25.0%).

Table 3: Percentage of female headed households					
Districts	Female headed HH (%)				
All	25				
Solukhumbhu	23.2				
Kathmandu	22.1				
Chitwan	40				

Table 3: Percentage of female headed households

Source: Field Survey: 2019

In Nepal, the head of household is generally the person who has economic and social responsibility for the household. Female headed households formed 25% of the total sample. It showed that most of the household still had male as the family head. The female headed households were high in Chitwan District (40.0%) as compared to Solukhumbhu (23.2%) and Kathmandu (22.1%).

In recent years, the situation of women and girls have been changed. Different women groups have been formed with the objective to empower the women and girls for their equal participation in decision making in family, society and national level. There is traditional belief that a high-caste, educated women shouldn't go outside the home for work. So, it is difficult for them to go outside for work than a rural Dalit woman. Women should look after their children, household activities, husband and parents. Thus, their work-load in much more than male. Due to increase in economic pressure, many men have forced to migrate to cities or abroad and their traditional belief have been lost. Presently, women make a significant contribution to the economy of Nepal but they tend to have lower socio-economic status. Due to insufficient support from the stakeholders and lack of awareness among women of their rights, they are still far behind in every sector. This is mostly seen in rural areas than urban areas. Important change in economic, political, social and cultural status of women are needed to increase their access to decision making and other opportunities (HAMI, 2019; CARE, 2015).

Unemployment Situation

Nepal is one of the developing countries and unemployment rate is high in Nepal. Due to difficult topography, lack of investment, lack of infrastructure and illiteracy, there is high unemployment in Nepal. In addition, there are high unskilled manpower in Nepal. Though Nepal is agricultural country, but due to lack of advancement in agricultural tools and instruments people are not interested in agriculture. They have to work hard but still they have low output. Thus, the economic condition of rural people is vulnerable. There is lack of youths in village as they are out of their village in order to search jobs. As employment opportunities are low, most of the people prefer to go foreign country in order to get job and increase their living standard of their family. But it was seen that labor migration has decreased over last two years due to various region (Kathmandu Post, 2018). In recent years, though there is increased focus on productive employment but unemployment has become biggest problem (ILO, 2013).

Unemployment status helps to know the situation of a country. Aboard migration is one major cause of youth unemployment. Researcher had studied unemployment situation in these districts. The data presented in Table 4 shows that the unemployment situation in these districts was 4.3 percent.

Districts	Total (%)
All	4.3
Solukhumbhu	6.3
Kathmandu	3
Chitwan	3.9

Table 4: Unemployment situation of 15+ years

Source: Field Survey: 2019

An overall unemployment rate of 15 years and above population stands at 4.3 percent. The unemployment rate varies substantially across three district Solukhumbhu (6.3%), Kathmandu (3.0%) and Chitwan (3.9%). Solukhumbhu has double fold unemployment rates above age 15 than Kathmandu. Unemployment rate was almost similar to Kathmandu and Chitwan.

Mountain area has difficult topography and also lack of adequate infrastructure so it is hard to get employment opportunity than hill and Terai region. Cultivation in mountain region is also very hard due to difficult weather condition and lack of irrigation facility. Urban areas have more employment opportunities than rural areas. So, people want to visit the urban areas for the employment. From the interview with Mr. Sudarsan Rai (name changed) of age 38-year, said that he was permanently from the rural area of Solukhumbu district and he went to urban areas in search of employment. He added that he lived in rural areas and there was not much facilities and

opportunity. There was lack of adequate productive land, lack of investment in other sector in his village were the reason for migration.

Youth Employment Status

Youth are the backbone of a nation for the rapid progress and development of society. Status of youth in a country is very important as it gives many information about them in terms of employment. Moreover, it helps to know about current status and future development in certain areas. Development of any country is determined by the involvement of youth in different work. In past, youth populations helped to restore democracy through different revolutions in Nepal. Their involvement helped to overcome poverty, inequality, social discrimination, unemployment and others (Poudel, Podder, Aditya, & Gyawali, 2011). Gender has become one of the most pronounced issues of the current decade. Youth status according to gender is most important to know for the development of a country. This is the fact that developing country like Nepal has strongly experienced a wider gender gap in socio-economic indicators. There is difference in youth status as compared with gender. Female is lagging behind in every sector like literacy, educational attainment, and school/college attendance etc. than male. With time, due to awareness, women have got opportunities for their own progress and these opportunities has uplifted the status of female youth. As female youth status has started lately but also female youth are more active in economic status than male youth (MOYS, 2014).

As youth status of a country is an indicator of development, it was very important to know their impact or contribution to the development. So, researcher asked different questionnaire to the people of these three districts to know about their involvement in work. The Table 5 shows the youth status by gender in three districts. The data shows that most of the youth were employed (62.0%) followed by 29.6 percent youth were outside labor force.

District	Employed (%)	Unemployed (%)	Outside Labor Force (%)	Total (%)		
All	62	8.4	29.6	100		
Male	59.9	11.1	29	100		
Female	63.7	6.2	30.2	100		
Solukhumbhu	55	9	36	100		
Male	64.2	6.7	29.1	100		
Female	47.6	10.8	41.6	100		
Kathmandu	67.2	8.4	24.5	100		
Male	55.4	16.2	28.4	100		
Female	77.1	1.7	21.1	100		

Table 5: Youth Employment Status

Chitwan	67.1	6.3	26.6	100
Male	62.5	6.3	31.3	100
Female	70.2	6.4	23.4	100

Source: Field Survey: 2019

Gender has become one of the most pronounced issues of the current decade. This field survey also indicates such gender gap within the youth status. We can interpret that, most of the female youth (63.7%) were employed in comparison to male youth (59.9%) while most of the male youth (11.1%) were unemployed as compared to female youth (6.2%). In addition, most of the female youth (30.2%) were outside labor force as compared to the male (29.0%). In the similar way, most of the youth were employed in Kathmandu (67.2%) followed by Chitwan (67.1%) and Solukhumbhu (55.0%). Also, unemployed youth were least in Chitwan (6.3%) followed by Kathmandu (8.4%) and Solukhumbhu (9.0%). Similarly, most of the youth outside labor force was in Solukhumbhu (36.0%) followed by Chitwan (26.6%) and Kathmandu (24.5%).

In Solukhumbhu district, most of the male youth (64.2%) were employed in comparison to female youth (47.6%) while most of the female youth (10.8%) were unemployed in comparison to the male youth (6.7%). In addition to this, most of the female youth (41.6%) were outside labor force than male youth (29.1%). Similarly, in Kathmandu, most of the female youth (77.1%) were employed in comparison to male youth (55.4%) while most of the male youth (16.2%) were unemployed in comparison to female youth (1.7%). Additionally, most of the male youth (28.4%) were outside labor force in comparison to male youth (21.1%). Whereas in Chitwan, most of the female youth (70.2%) were employed in comparison to male youth (6.3%) were also unemployed in comparison to male youth (6.3%). In addition, most of the male youth (31.3%) were outside labor force than female youth (23.4%) in studied areas of these districts.

The analysis of the above table indicates that nowadays, females were more active in participation in every economic sector than males. According to the result of data, female youth were more conscious and serious for the future and they are fulfilling all the duties and responsibilities. They had much pressure to look after their family and they were engaged in socio-economic sector. From the discussion with female respondents, they shared that they were not more satisfied with the wage rate and incentives though they had to do job in order to manage the daily needs. It was seen that most of the male didn't want to do work that has low wage as compared to female youth. Unemployment status of Female was higher in Solukhumbhu as compared to other districts. This was due to the fact that they were mostly involved in household activities and due to less arable land, their work went in vain. Moreover, due to education, awareness and social responsibility, female youth were more employed than men youth. In the face-to-face interview, Ms. Parbati Magar (name changed) of age 33-year

Kathmandu, said that she was not hesitant to do any work unless it feels right. She added that she had to look after her five children so support for her husband was needed. The earning of her job had helped her to manage basic life.

Conclusion

The study has analyzed the demographic distribution of selected household in study areas of Solukhumbu, Kathmandu and Chitwan district. It was seen that most of the head of household was between the age 30-39 while least was from between the age group of 0-19. It was found that least percentage of household had female headed household (25.0%). The female headed households were high in Chitwan District as compared to Solukhumbhu and Kathmandu. The result shows that there was child headed and female headed family also in the study area which is known as a vulnerable group so local government and society should provide more support and ensure the security of such family. The situation of youth unemployment was prevalent in the study area which could encourage the aboard migration. The possibility of rural development is dependent upon the availability of human resources in local areas because public participation is important for the sustainable development of rural society. The study had not covered other housing facilities of study areas so the future researcher can do comparative study to identify the housing pattern and household facilities in three ecological belts of Nepal.

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