ANNUAL HOUSEHOLD SURVEY
2016/17

(Major Findings)

Government of Nepal

National Planning Commission

Central Bureau of Statistics

Preface

The Annual Household Survey (AHS) is a nationally representative household survey carried out to update the information on the consumption pattern of the Nepali households collected in Nepal Living Standards Survey (NLSS). The data collection of AHS 2016/17 was conducted from September 2016 to July 2017.

Annual Household Survey, 2016/17 is the fifth survey of its kind, the first one was carried out in 2012/13 following the structure of NLSS 2010-11. Annual household surveys are conducted to provide estimates of some major socio-economic indicators on annual basis which would not be possible with other periodic survey such as Nepal Labour Force Survey (NLFS) and Nepal Living Standards Survey which are undertaken at longer intervals. The survey basically aims to provide estimates of consumption by sex, urban-rural area and by consumption quintiles/deciles. Although the major thrust of AHS is on consumption and employment situations, other sectors like education, housing and demographic characteristics are also included. However; this survey does not contain information on employment situation as in previous annual household surveys because NLFS was carried out concurrently this year.

The results of AHS 2016/17 are presented in this statistical report covering six chapters of introduction, household consumption expenditure, literacy and educational attainment, housing and housing facilities, demographic characteristic and food security.

I would like to extend my sincere gratitude to all the respondents who generously spared their time and cooperated with us by supplying their personal information to make the survey a success. Members of the steering and technical committee of the survey have provided invaluable inputs for the survey and I am equally thankful to them.

I am thankful to Mr. Nebin Lal Shrestha, Deputy Director General of Social Statistics Division of the bureau, who contributed for the overall survey operation. The whole AHS operation was successfully conducted by the household survey section under the leadership of the then Director Mr. Dilli Raj Joshi and Director Mr. Devendra Lal Karanjit of the section. The central core team members who were involved in the survey were Statistical Officers Mr. Chet Bahadur Roka, Mr. Prithvi Vijaya Raj Sijapati, Mr. Ana Raj Tiwari, Computer Officer Mr. Pushpa Raj Poudel and Statistical Assistant Ms. Ambika Regmi.

Similarly, my appreciation goes to all the members of data collection teams, heads of the Statistical Offices and other personnel from CBS who contributed in various stages of the survey operation. I would like to express my special thanks to Director of household survey section Mr. Ambika Bashyal who initiated to publish the report and Director of the bureau Mr. Ram Hari Gaihre, who contributed on the final edit of the report. Finally, I request all the users to fully utilize the findings of the report and also request them to provide us invaluable suggestions for improvements of the survey in the future.

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Abbreviations

AHS	Annual Household Survey
CBS	Central Bureau of Statistics
DDS	Dietary Diversity Score
FCS	Food Consumption Score
GER	Gross Enrolment Ratio
NLFS	Nepal Labour Force Survey
NLSS	Nepal Living Standards Survey
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
Rs.	Nepalese Rupees
UNDP	United Nations Development Programme
USU	Ultimate Sampling Unit

Executive Summary

Introduction

1. Nepal has shown progress in socio-demographic indicators in the past decades but the economic growth has been very slow. Slow GDP growth coupled with persistent inequalities, high youth unemployment rate and gender gaps for most socio-economic indicators have been a challenge for the government. Therefore, there has been demand for frequent information to monitor the changes undergoing in the socio- economic situation of the country. Central Bureau of Statistics (CBS), besides periodic censuses and surveys, decided to provide socio-economic information on an annual basis by conducting Annual Household Surveys. This survey is a recent endeavor of the CBS focusing primarily on data related to household consumption and employment. It provides data that are useful for updating the estimates of the expenditure side of GDP, employment indicators and other socio-economic indicators as well. This Annual Household Survey 2016/17 is the fifth survey of its kind.

Consumption

2. The average annual household consumption of Nepal in 2016/17 is Rs. 362,617 which is spent on goods and services. More than half (52 percent) of the consumption goes for food followed by rent (12.7 percent), durables (7.1 percent), education (4.1 percent), alcohol and tobacco (3.7 percent), utilities (2.4 percent) and the remaining 18.1 percent goes for non-food (others) that includes medical, social security and cultural expenditure, etc. The average household consumption has increased by Rs. 39,871 this year from the previous year when it was Rs. 322,730.
3. The annual consumption of rural households in 2016/17 is Rs. 301,824. Urban households consume about 1.5 times higher than rural households.
4. By consumption quantiles, the annual consumption of the richest 20 percent households is Rs. 726,001 which is 4.7 times higher than that of the poorest 20 percent households which stands at Rs. 155,183. In 2015/16 this ratio was only 4.19. It shows the gap between the richest and the poorest is widening over years, which also indicates a less equitable consumption trend of the society.
5. In per capita consumption terms, individual Nepalese on an average consumes Rs. 80,807 in a year in which average urban consumption is Rs. 103,146 and rural is Rs. 64,701. It indicates that urban consumption is about 1.6 times more than rural, in terms of per capita consumption. This urban rural variation was double in the year 2015/16.
6. On food, the per capita consumption is Rs. 34,978 and on non-food it is Rs. 26,839. In food expenditure, the largest share is for 'grain and cereals' (27.9 percent) followed by 'meat and fish' (16.1 percent) and vegetables (12.4 percent). In non-food, largest spending goes for educational expenditures (15.4 percent) and medical expenditures (10.8 percent). However, non-food (others) has the largest per capita share of 58.1

percent in total non-food consumption that accumulates different non-food categories like personal care, communication, social and financial services, house rent, etc.

7. The average per capita food consumption when measured in kg per year for some basic staple foods, shows that in 2016/17, Nepalese consumed a total of 336.9 kg of basic food. This average rate is almost similar for urban and rural. Average annual consumption of some major food in the survey year by Nepali are Coarse rice 68.9 kg, Fine rice 43.0 kg, Potato 29.9 kg, Wheat 21.2 kg, and Banana 3.1 kg. The per capita consumption of Fine rice in all over Nepal was 38.5 kg and of Coarse rice was 92.8 kg in 2015/16, both of which are found increased this year.
8. Variation in quintile groups regarding average food consumption by quantity is observed. The poorest 20 percent consume 249.8 kg of basic food whereas the richest 20 percent consume 420.9 kg. Also, the consumption of Fine rice shows increasing pattern from the first to fifth consumption group. The consumption of Coarse rice is found declining sharply in the fifth quintile.
9. The mean food consumption score of Nepali households is 65.2. Sixteen percent of households have inadequate food consumption and 9.7 percent of households have poor dietary diversity. The urban/rural divide related to the household food consumption persists, with 10.1 percent of households having inadequate food consumption in urban areas compared to 20.1 percent of households in rural areas. A strong association between households' economic well-being measured by per capita consumption quintiles and deciles and household food security is observed: households in the poorest quintile group are 12 times more likely to consume an inadequate diet compared to households in the richest quintile group.
10. Overall, no significant differences have been observed in the food security indicators between the AHS V (2016/17) and the AHS IV (2015/16).

Education

11. The literacy rate of the population of age 5 years and above is 68.3 percent. The male literacy rates is 76.8 percent and the female literacy is 60.5 percent. Literacy rate for the population of 6 years and above is estimated to be 69.8 percent while the adult literacy rate of 15 year and above population is 66.8 percent. Literacy rate has increased slightly from 2015/16, as in the previous year this rate for 5 years and above was 65.9 percent, for 6 years and above it was 66.8 percent and that for 15 years and above it was 65.6 percent.
12. The urban rural difference in 5 years and above literacy is found wide with 73.8 percent in urban and 64.3 percent in rural. This urban rural difference of 9.4 is narrow than in 2015/16 when the difference was wider (16.2 percent). Similar narrowing in difference is observed in the urban and rural literacy for 6 years and above and for 15 years and above population.
13. In 2016/17, 31.9 percent of the population are found currently attending schools, 39.7 percent have attended schools in the past and 26.6 percent have never attended school. Significant variation is observed in the population of 'never attended school' by

urban rural and by sex. While 26.6 percent children never attended school in Nepal, about double female than male had never attended school (18.1 percent male and 34.5 percent female) and also the proportion of rural people who never attended school is more than double than urban (21.8 percent urban and 30.2 percent rural).

14. The gross enrolment ratio, GER of primary, lower secondary and secondary level of schooling in 2016/17 are 118.5, 93.4 and 85.9 respectively. GER of the primary level in urban is 120.4 and in rural it is 117.4. Comparing the current GER with the previous surveys, the decline over time is observed except for the secondary level. In 2015/16 the national level GER at the primary level was 120.5 for lower secondary it was 90.9 and for secondary it was 86.2.

Housing and household facilities

15. Currently, 85.6 percent of the households reported that they live in their own house. In rural 93.8 percent live in their own houses and in urban 75.3 percent live. The proportion of population living in their own house has increased in this survey from 2015/16 when it was 84.7 percent. Currently, 12.5 percent of the households reside in rented house. It is interesting to observe that 98.4 percent households of the poorest quintile live in their own house whereas 30.1 percent of the richest quintile group live in rented house. In 2015/16 in the poorest quantile, 98.4 percent were living in their own house and 28.7 percent of the richest quantile group were living in rented house. Now in Nepal, 4.5 rooms on an average is available for a household.
16. Nepalese houses are mostly having outer walls that is mud bonded bricks/stone (34.2 percent) which is predominant in rural area (41.9 percent in rural and 24.5 percent in urban). It is interesting to note that the percent of outer wall of cement bonded brick/stone houses has increased from 36.6 in 2015/16 to 38.3 in 2016/17.
17. Majority of the houses of Nepal are constructed with mud bonded foundation (36.6 percent) which is also prominently a rural feature (44.9 percent in rural) as well as poorer households feature (43.5 percent in the first decile group). By construction material of the roof, more than one third (37.5 percent) house in Nepal have galvanized/corrugated iron sheets roofs, and more than one fifth (28.4 percent) are having concrete roofing. Concrete roofing which is stronger and safer type of roofing, is found near about three times in urban (44.4 percent) than in rural (15.7 percent). It is interesting to note that the housing units of concrete/cement roof has increased and also that the poorest quintile group are having more such roofs compared to the previous year. In 2015/16, only 28.8 percent houses were having concrete roof, 15.2 percent in rural and 10.7 percent of the poorest quantile.
18. Near about half of the households is found using piped drinking water supply (49.6 percent). More than half of the households (50.9 percent) are using flush toilets with connection to septic tank. When the country is heading towards 'Open Defecation Free (ODF)' area, 11.5 percent household still have no safe toilets. In urban 7.4 percent and in rural 14.8 percent have no safe toilet. There is no toilet facility in 33.1 percent of the poorest quintile groups, 18.9 percent of the second quintile, 10.3 percent of the third,

4.5 percent of the fourth, and 0.5 percent of the richest quintile. It indicates that there is a strong association of prosperity with available toilet facility. However, the proportion of households with 'no toilet' has significantly declined from 2015/16 when it was 18.70 percent. Currently, more than two-third households (69.1 percent) have no access to sewage facilities.

19. Electricity has become the prime source of lighting for Nepalese households as 85.2 percent of the households are using electricity, 91.2 percent in urban and 80.4 percent in rural areas. Use of solar energy has decreased by 9.6 percent as compared to 13.4 in 2015/16. Solar power is found more popular in lower quintiles and rural households which should be due to the special subsidies by government to these groups. Solar energy is used by 13.1 percent rural and 5.2 percent urban areas, and by 13.7 percent of the poorest quantile.
20. Firewood is still a major source of cooking fuel in Nepal as more than half (52.4 percent) are using it. In urban, the use of LPG has increased and the use of firewood has decreased from last year. Now in 2016/17, in urban areas 54.1 percent households are using LPG and 35.4 are using firewood which in 2015/16 was 53.3 percent for LPG and 37.9 percent for firewood.
21. Mobile phone is currently used by about 88.4 percent households in Nepal, mostly by urban (92.0 percent) as well as rural (85.7 percent) Landline telephones are used only by 7.8 percent. Cable TV is used by 44.8 percent households. Although, internet and emails are the easiest communication medium to get worldwide information, currently only 12.7 percent households use internet, 19.0 percent in urban and 7.8 percent in rural areas.

Demography

22. The average size of family in Nepal is 4.5 person which is 4.3 in urban and 4.7 in rural area. There are 16.9 percent nuclear households (family size 1-2) in Nepal. Nearly half (47.1 percent) of the household heads are in the age group 30 to 49 years and 24.8 percent households are headed by female members which may be due to the high proportion of male labour out-migrants.
23. Population of Nepal is comprised of 48.4 percent males and 51.6 percent females. Looking at the productive age population of 15 to 59 years, about 60.5 percent population belongs to this productive age group. The sex ratio of Nepal is 94 which is 93 for urban and 94 for rural. Currently, the dependency ratio of Nepal is 65 indicating there are about 65 persons who depend upon the population of the productive age group. The dependency ratio is declining in Nepal each year. Last year in 2015/16 the dependency ratio was 70.

Chapter I: Introduction

1.1 Survey Background

There has been demand for frequent information to monitor the changes undergoing in the socio-economic situation of the country. Central Bureau of Statistics (CBS), beside periodic censuses and surveys has been attempting to provide socio-economic information on annual basis by conducting Annual Household Surveys (AHS). AHS is a recent endeavor of the CBS focused primarily on data related to household consumption. It provides data that are useful for updating the estimates of the expenditure side of GDP, poverty rate and other socio-economic indicators as well.

1.2 Survey Objectives

General objective of the survey is to provide data required to monitor annual changes in consumption and other socioeconomic indicators of Nepal. The specific objectives of the survey are:

- to measure the changes undergone in the structure and the level of household consumption expenditure of Nepalese households,
- to provide other socio-economic information useful for economic planning and annual budgeting.

1.3 Scope

The survey, based on the objectives has scoped broadly in topics such as consumption expenditure, housing and household facilities, demography, literacy and educational attainment.

1.4 Methodology

Annual survey, by nature is smaller in terms of sample size, domains of analysis and also in terms of the length of the questionnaire. The survey has collected data from the selected households using a structured questionnaire aimed at collecting data on household consumption, and other socio-economic indicators with different reference periods. The survey has followed multistage sampling design with stratifications of the households into urban and rural areas.

Sampling frame

A complete list of wards with number of households provided by National Population Census 2011 was used as a sampling frame for the survey. In order to avoid extremity of the size of wards, some big wards were segregated into blocks or enumeration areas (EAs).

Sampling procedure

The survey aims to provide estimates for Nepal, urban and rural area, and accordingly, the population is stratified into urban and rural area. Wards or sub-wards (EAs) are the primary sampling units (PSUs). The number of PSUs to be selected are 150 from rural and 150 from urban area making a total of 300 PSUs. The sample size was determined on the basis of the

sampling variance of previous surveys. PSUs were selected on the basis of probability proportional to the size (PPS), the measure of the size being the number of households in each ward. Selected PSUs spread over 71 districts.

Households were the ultimate sampling units (USUs) selected with equal probability on the basis of systematic random sampling technique. Fifteen (15) households were selected from each PSU. Altogether 4500 households (2250 from urban and 2250 from rural) were selected for the interview.

In a nutshell, procedures followed to select sample households were:

- selection of PSUs based on PPS from the frame,
- listing of households in the selected PSU,
- selection of USUs from the updated list of households in the selected PSU.

1.5 Statistical Unit

A statistical unit or a unit of enumeration of the survey is the basic entity for which the data are gathered. The unit of enumeration basically is a household. So, household becomes a statistical unit for the analysis of housing, consumption etc. whereas an individual becomes so for the analysis of demographic and economic activities.

Household

The concept of household is based on the "arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living". A household may consist of one person or a group of two or more persons. The persons in the group may pool their incomes, may have a common budget or may constitute a combination of persons both related and unrelated.

Households and individuals were listed in the place of their usual place of residence. An individual usually residing for more than six months in a place is considered as a member of the household though he or she may be temporarily absent. Institutional households such as barracks of military and police, orphanage, old age homes, jails were outside the coverage of the survey. Foreign nationals residing in hotels and lodges were also not covered.

1.6 Survey instruments

Listing schedule

Listing schedule was administered during the field work of the listing operation. The purpose was to facilitate selection of households from the updated list. The listing schedule contains information on identification of household such as PSU code (ward/sub-ward), urban/rural, district, name of the head of the household, number of household members, random start, etc.

Survey questionnaire

Contents of the questionnaire are basically guided by the objectives of the survey. The questionnaire mainly contains household and individual information. Parts 2, 3 and 4 cover

housing, food and non-food consumption expenditure while part 1 covers individual information. Part 1 contains questions on demographic characteristics, migration, and education.

The survey has attempted to follow concepts, definitions and international recommendations. For the purpose of exhaustive coverage, consumption of own account production, purchase from the market and received from other sources have been captured under the part of household consumption. System of National Accounts (1993 SNA) and Classification of Individual Consumption by Purpose (COICOP) have been followed to classify goods and services.

1.7 Reference period

Demographic information is collected as of the date of the survey. The reference period of food consumption is a week (last seven days) prior to the date of enumeration. Annualization was done from the data of last 7 days. Nonfood consumption and consumer durables refer to the last 12 months from the date of the survey.

Chapter II: Household Consumption Expenditure

2.1 General household consumption pattern

The annual average consumption of a Nepalese household in 2016/17 is Rs. 3,62,617. It is observed that out of the total household consumption, 52.0 percent goes for food, followed by rent (12.7 percent), education (4.1 percent), alcohol and tobacco (3.7 percent), durables (7.1 percent), utilities (2.4 percent) and other non-food (18.1 percent) (Table 2.1). The current annual household consumption shows an increase compared to the previous year. In 2015/16 the annual household consumption was Rs. 3,22,730. However, the current consumption pattern shows very little shift from the last year, with food remaining the highest consumption item in both surveys. In the year 2015/16, consumption expenditure for food was 53.8 percent followed by rent (12.9 percent), education (4.0 percent), alcohol and tobacco (3.8 percent), durables (5.5 percent), and utilities (2.2 percent).

Meantime, the consumption of non-food (others) is found to be the second largest expenditure category after food which represents health, personal services, administrative services, etc. The expenditure on non-food (others) is 18.1 percent for 2016/17 (Table 2.1).

2.1.1 Urban rural variation

The averages household consumption of urban and rural households in 2016/17 stands at Rs. 4,39,732 and Rs. 3,01,824 respectively (Table 1.1). This shows that urban households consume about 1.5 times higher than the rural households. This ratio of urban to rural household consumption in 2015/16 was 1.7. However, the urban rural variation should be interpreted keeping in view the price variation between the two areas, increment in urban sample proportion and also the difference in the household size of the two areas. Food is the major expenditure item in both urban and rural areas in 2016/17 with a proportion of 57.1 percent in rural and 45.5 percent in urban area. For rent, rural households are spending 9.0 percent of their total expenditure which is almost double spending for rent by urban households (17.3 percent). Meantime, the consumption of non-food (others) in rural area is 18.4 percent and in urban, it is 17.7 percent.

2.1.2 Average consumption by consumption groups

By consumption deciles, the average nominal household consumption of the poorest group (1st decile) is Rs. 1,39,711 and the richest group (10th decile) has consumed Rs. 9,82,005 (Table 2.1). Thus, the gap between the poorest and the richest is observed quite wide. The ratio of the richest decile group to the poorest is about 7 when compared their average household consumption. In 2015/16, this ratio was only 6.4. This shows the gap is widening over years among consumption groups, which indicates a less equitable consumption trend of the society. Similarly, by the consumption quintile groups, the average household consumption in the first quintile is Rs. 1,55,183 and in the fifth quintile it is Rs 7,26,001. This shows that the richest 20 percent households spend about 4.7 times higher than the poorest 20 percent. This ratio was 4.2 in 2015/16.

Table 2.1 Nominal household consumption (Rs.) and its distribution by category (percent)

	Household Consumption	Food	Alcohol & Tobacco	Rent	Utility	Education	Durables	Nonfood (Other)	Total
Urban/Rural									
Urban	439,732	45.5	2.6	17.3	2.6	5.1	9.2	17.7	100
Rural	301,824	57.1	4.5	9.0	2.2	3.3	5.5	18.4	100
Consumption Quintile									
Poorest	155,183	64.9	3.9	8.9	1.9	2.3	1.9	16.2	100
Second	203,893	61.3	4.4	9.0	2.1	3.0	2.7	17.4	100
Third	243,872	58.1	4.8	9.6	2.2	3.5	4.1	17.7	100
Fourth	319,377	50.2	3.6	13.1	2.5	4.8	7.2	18.6	100
Richest	726,001	34.6	2.3	19.5	2.7	5.8	15.7	19.5	100
Consumption Decile									
Poorest	139,711	66.5	3.7	8.9	1.7	1.9	1.7	15.6	100
Second	168,630	63.5	4.0	8.9	2.1	2.6	2.0	16.8	100
Third	198,753	61.5	4.0	9.0	2.1	2.8	2.7	17.9	100
Fourth	208,506	61.2	4.7	9.0	2.2	3.2	2.8	17.0	100
Fifth	228,538	58.5	5.0	9.5	2.2	3.4	3.5	17.9	100
Sixth	258,542	57.8	4.6	9.6	2.2	3.6	4.8	17.5	100
Seventh	292,212	53.0	4.0	11.6	2.5	4.6	6.1	18.3	100
Eighth	344,870	47.6	3.3	14.5	2.6	5.0	8.2	18.9	100
Ninth	443,914	41.6	2.8	18.1	2.8	5.6	10.4	18.8	100
Richest	982,005	28.2	1.9	20.7	2.7	6.0	20.4	20.1	100
Nepal 2016/17	**362,617.3**	**52.0**	**3.7**	**12.7**	**2.4**	**4.1**	**7.1**	**18.1**	**100**
Nepal 2015/16	**322,730.0**	**53.8**	**3.8**	**12.9**	**2.2**	**4.0**	**5.5**	**17.8**	**100**

2.1.3 Total nominal household consumption

In terms of total nominal household consumption, Nepalese households spend a total of Rs. 1,555.4 billion in the reference year 2016/17 which is Rs. 753.2 billion by urban and Rs. 802.3 billion by rural (Table 2.2). The total nominal household consumption is Rs. 880.1 billion for food and Rs. 675.3 billion for non-food.

Table 2.2 Total nominal household consumption (Billion Rs.)

	Food	Non food	Total
Urban/Rural			
Urban	397.1	356.1	753.2
Rural	483.0	319.3	802.3
Consumption Quintile			
Poorest	91.1	37.1	128.3
Second	130.6	59.7	190.3
Third	168.3	85.7	254.0
Fourth	205.0	138.3	343.3
Richest	285.1	354.5	639.6
Consumption Decile			
Poorest	39.1	14.8	53.9
Second	52.0	22.3	74.4
Third	60.4	26.9	87.3
Fourth	70.2	32.8	102.9
Fifth	77.9	39.7	117.6
Sixth	90.4	46.1	136.5
Seventh	98.1	59.5	157.6
Eighth	106.9	78.8	185.7
Ninth	125.6	102.1	227.8
Richest	159.4	252.4	411.8
Nepal	**880.1**	**675.3**	**1555.4**

2.2 Average per capita consumption

The average per capita food consumption of Nepal in 2016/17 is Rs. 80,807 which is Rs. 1,03,146 for urban and Rs. 64,710 for rural households (Table 1.3). Substantial variation in average household food consumption is noted among the households of different quintiles and deciles. The per capita consumption of households of the fifth quintile is Rs. 2,05,549 and for the first quintile it is Rs. 26,213. Thus, the richest 20 percent consumes about 7.8 times higher than the poorest 20 percent in terms of per capita consumption. This ratio was lass (7.3) in AHS 2015/16. Also, the per-capita consumption of the richest (10^{th}) decile group is Rs. 2,91,497 and that of the poorest is Rs. 21,924. Hence, the ratio of the richest to poorest decile group is about 13.3. This ratio was only 11.9 in 2015/16 (Table 2.3).

Table 2.3 Nominal per capita consumption by quintile/decile

	Urban		Rural		Total	
	Amount	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
Consumption Quintile						
Poorest	26,202	3.2	26,217	10.3	26,213	6.5
Second	39,738	5.9	39,664	14.4	39,688	9.8
Third	53,886	8.0	53,853	19.4	53,863	13.3
Fourth	80,039	18.8	77,551	20.3	78,812	19.5
Richest	202,859	64.1	211,346	35.6	205,549	50.9
Consumption Decile						
Poorest	21,962	1.3	21,911	4.3	21,924	2.7
Second	30,317	1.9	30,581	6.0	30,510	3.8
Third	36,599	2.7	36,648	6.7	36,632	4.5
Fourth	42,777	3.2	42,718	7.7	42,738	5.3
Fifth	49,470	3.6	49,448	9.0	49,455	6.1
Sixth	58,073	4.4	58,344	10.4	58,255	7.2
Seventh	69,931	7.1	69,856	10.4	69,889	8.6
Eighth	87,735	11.7	87,696	9.9	87,718	10.9
Ninth	121,380	17.5	116,630	11.6	119,595	14.8
Richest	271,444	46.6	349,059	24.0	291,497	36.1
Nepal 2016/17	**103,146**	**100**	**64,710**	**100**	**80,807**	**100**
Nepal 2015/16	**101,659**	**100**	**52,007**	**100**	**70,680**	**100**

2.2.1 Average per capita consumption on food categories

The average per capita consumption expenditure on *food* that comprises 13 different food items including alcoholic beverage and tobacco is Rs. 34,978 which across urban and rural areas are Rs. 37,683 and Rs. 33,029 respectively. The highest expenditure on food items of Nepalese households in 2016/17 is *grain and cereals* (27.9 percent) followed by *meat and fish* (16.1 percent) and *vegetables* (12.4 percent) (Table 2.4).

Nepalese individual on an average spends Rs. 9,766 on grains which slightly vary across urban and rural area (Urban Rs. 9,412 and Rural Rs. 10,021). Per capita expenditure on *meat and fish is* Rs.5,627 which is slightly higher in the urban area (Rs. 6,067) as compared to the rural (Rs. 5,310). Per capita expenditure of urban individuals is higher than rural area for all

categories except grains, oil and ghee and restaurant meals and others. The per capita expenditure on fruit is Rs. 1,619 which is higher in urban (Rs. 2,183) than in rural (Rs. 1,213). Also, per capita expenditure on alcohol is increased in both urban and rural areas which is Rs. 3,551 in urban and Rs. 1,843 in rural whereas the national average is Rs. 2,559. In AHS 2015/16 alcohol consumption was Rs. 1,256 which is an increase of Rs. 1,303 and this increase is more significant in urban area than in rural area.

By consumption quintile group, the poorest 20 percent consume Rs. 18,083 per capita in food and the richest 20 percent consume Rs. 56,658. Similarly, by decile groups, the first decile group consumes Rs. 15,507 per capita in food (Table 2.4).

2.2.2 Average per capita consumption on non-food categories

The average per capita consumption expenditure on non-food categories for Nepal is Rs. 26,839 which is Rs. 33,789 for urban and Rs. 21,831 for rural area (Table 1.5). The average per capita consumption on non-food has slightly increased from AHS 2015/16 when the national average was Rs. 24,137. In non-food expenditure, Nepalese households spend the highest for education amounting to Rs. 4,134 which is 15.4 percent, followed by medicine (10.8 percent) and Cultural and Other expenses (8.9 percent). This excludes the 'Non-food other' items that comprises of accumulated expenditure on house rent, luxury goods, etc. where 58.1 percent non-food expenditure goes. This 'Non-food other' expenditure has decreased significantly from 2015/16 when it was 64.2 percent (Table 2.5).

The figures vary substantially across urban/rural and across expenditure deciles. Education and medication are considered two most important aspects for socio-economic development of a family. If we compare the spending on these two important non-food items by the richest and poorest decile groups some interesting pattern of consumption is observed. Survey shows that the poorest decile group spends about 24.3 percent of their total non-food expenditure in medical expenditure and 7.6 percent in education whereas the richest decile groups spend about 6.0 percent in medical expenditure and 16.9 percent in education.

Table 2.4 Average per capita food consumption distribution by category (Rs.)

	Grains & Cereals	Meat & Fish	Egg & Milk	Oil & Ghee	Fruits	Vegetables	Sugar & Sweets	Spices	Tea/ Coffee	Non-alcoholic beverages	Alcoholic beverages	Tobacco & related products	Restaurant Meals & Other	Total
Urban/Rural														
Urban	9,412	6,067	3,983	2,272	2,183	4,733	1,115	1,533	326	449	3,551	1,401	657	37,683
Rural	10,021	5,310	2,799	2,407	1,213	4,029	1,036	1,369	245	290	1,843	1,714	752	33,029
Consumption Quintile														
Poorest	7,586	2,110	820	1,445	320	2,560	508	949	112	46	594	594	438	18,083
Second	8,973	3,929	1,942	1,832	690	3,464	778	1,250	186	101	1,121	1,063	617	25,949
Third	10,129	5,575	2,885	2,379	1,101	4,275	1,030	1,405	249	188	1,754	1,700	794	33,462
Fourth	10,743	6,925	4,203	2,803	2,137	4,922	1,305	1,636	358	412	2,706	1,724	897	40,772
Richest	11,404	9,603	6,627	3,295	3,851	6,401	1,726	1,950	490	1,037	6,620	2,837	817	56,658
Consumption Decile														
Poorest	6,848	1,782	548	1,282	192	2,249	401	883	88	13	423	408	388	15,507
Second	8,326	2,438	1,092	1,609	449	2,871	616	1,014	135	79	766	780	488	20,664
Third	8,695	3,721	1,562	1,683	534	3,251	722	1,144	167	67	1,031	862	600	24,038
Fourth	9,251	4,137	2,323	1,981	846	3,677	834	1,357	206	136	1,212	1,264	634	27,857
Fifth	9,647	4,916	2,573	2,288	942	4,130	942	1,322	236	149	1,486	1,558	841	31,030
Sixth	10,610	6,231	3,197	2,469	1,259	4,419	1,117	1,486	262	226	2,021	1,841	747	35,886
Seventh	10,799	7,076	3,770	2,685	1,780	4,550	1,253	1,534	325	336	2,241	1,706	1,010	39,064
Eighth	10,686	6,775	4,636	2,921	2,494	5,294	1,357	1,737	392	488	3,170	1,742	785	42,476
Ninth	11,130	8,920	5,870	3,205	3,079	5,674	1,591	1,817	401	708	4,509	2,220	822	49,945
Richest	11,678	10,287	7,385	3,384	4,624	7,128	1,860	2,083	580	1,366	8,731	3,454	812	63,371
Nepal 2016/17 (Rs.)	**9,766**	**5,627**	**3,295**	**2,351**	**1,619**	**4,324**	**1,069**	**1,438**	**279**	**357**	**2,559**	**1,583**	**713**	**34,978**
Nepal 2016/17 (%)	**27.9**	**16.1**	**9.4**	**6.7**	**4.6**	**12.4**	**3.1**	**4.1**	**0.8**	**1.0**	**7.3**	**4.5**	**2.0**	**100**

Table 2.5 Average per-capita nonfood consumption distribution by category (Rs.)

	Medical Expenses	Educational Expenses	Jewelry & Watches	Social Security	Insurance	Administration Charges	Cultural & Others	Meals Abroad	Banking Services Charges	Nonfood (others)	Total
Urban/Rural											
Urban	3,241	6,443	892	253	548	196	2,772	25	181	19,238	33,789
Rural	2,634	2,471	832	219	344	123	2,101	14	118	12,974	21,831
Consumption Quintile											
Poorest	1,643	654	112	39	45	15	549	0	14	4,292	7,363
Second	2,061	1,326	236	77	65	80	1,024	17	40	6,934	11,861
Third	2,361	2,055	598	129	162	111	1,838	1	45	9,746	17,047
Fourth	3,230	4,338	987	292	391	114	3,218	14	134	14,774	27,492
Richest	5,149	12,305	2,352	631	1,485	447	5,285	63	490	42,258	70,463
Consumption Decile											
Poorest	1,424	444	59	31	16	7	440	0	26	3,411	5,860
Second	1,861	864	165	46	73	24	659	0	2	5,175	8,869
Third	1,578	1,156	312	63	47	37	1,012	0	7	6,492	10,705
Fourth	2,543	1,497	160	90	84	124	1,036	33	72	7,375	13,014
Fifth	2,419	1,856	529	111	147	70	1,503	1	15	9,158	15,809
Sixth	2,303	2,253	668	148	178	151	2,172	0	76	10,333	18,281
Seventh	2,838	3,487	638	225	231	103	3,059	1	90	12,994	23,666
Eighth	3,622	5,186	1,336	359	552	125	3,377	27	179	16,550	31,312
Ninth	4,312	7,658	1,049	363	723	196	3,378	37	258	22,631	40,605
Richest	5,986	16,951	3,654	898	2,246	698	7,192	90	722	61,883	100,319
Nepal 2016/17 (Rs.)	**2,888.3**	**4,134.3**	**856.8**	**233.3**	**429.5**	**153.4**	**2,382.2**	**19.0**	**144.6**	**15,597.1**	**26,838.7**
Nepal 2016/17 (%)	**10.8**	**15.4**	**3.2**	**0.9**	**1.6**	**0.6**	**8.9**	**0.1**	**0.5**	**58.1**	**100.0**

2.3 Food consumption by average quantity

The average per capita food consumption is measured by consumption of basic staple foods by kg per year. In 2016/17, by annual average per capita consumption of the basic food components 336.9 kg was consumed in Nepal with similar consumption for urban and rural (Table 1.6). However, some major consumed food in kg are coarse rice 68.9, fine rice 43.0, Potato 29.9, Wheat 21.2, and Banana 3.9. There is also some variation found over quintile groups. The poorest 20 percent consume 249.8 kg of food whereas the richest 20 percent consume 420.9 kg. The per capita consumption of fine rice by all over Nepal was 38.5 kg and coarse rice was 92.8 kg in 2015/16, which are found increased for fine rice and decreased for coarse rice this year.

By quantile groups, the consumption of Fine rice is increasing from first to fifth consumption group the consumption group the consumption of Corse rice is found to decline suddenly in the fifth quintile. The first quintile group consumes 18.6 kg of Fine rice and the fifth quantile group consumes 75.7 kg. The first quantile group consumes 86.9 kg of Coarse rice while the forth quantile group consumes 62.2 kg and the fifth quantile group consumes 29.8 kg.

Table 2.6 Average per-capita food consumption (kg/year)

	Urban	Rural	Poorest	Second	Third	Fourth	Richest	Total
Fine rice	51.4	37.0	18.6	28.3	37.3	55.5	75.4	**43.0**
Coarse rice	57.6	77.1	86.9	86.4	79.5	62.2	29.8	**68.9**
Beaten/flattened rice	5.9	5.8	4.5	4.9	5.6	6.8	7.5	**5.9**
Maize	2.5	11.8	3.7	4.7	6.2	4.6	20.3	**7.9**
Maize flour	5.3	12.9	9.6	14.0	13.5	7.2	4.0	**9.7**
Wheat/Wheat flour	19.5	22.4	20.7	24.1	20.5	20.3	20.5	**21.2**
Millet	1.8	4.7	3.8	4.2	4.6	3.4	1.4	**3.5**
Buckwheat	0.0	0.1	0.0	0.1	0.1	0.1	0.1	**0.1**
Barley	0.0	0.2	0.0	0.2	0.1	0.1	0.1	**0.1**
Black Gram (Maas)	2.4	2.1	0.6	1.4	2.6	3.1	3.5	**2.2**
Lentil (Musuro)	5.3	5.7	5.0	5.1	5.2	6.0	6.2	**5.5**
Red Gram (Rahar)	1.8	1.4	1.0	1.4	1.2	1.5	2.6	**1.5**
Horse Gram (Chana)	0.4	0.3	0.2	0.3	0.4	0.4	0.6	**0.4**
Beans	0.7	1.7	0.9	1.4	1.7	1.6	0.9	**1.3**
Soybean	0.8	1.2	0.8	1.0	1.1	1.1	1.1	**1.0**
Mutton (Goat)	2.8	2.7	0.4	1.6	2.6	3.6	5.4	**2.7**
Mutton (Sheep)	0.1	0.1	0.0	0.1	0.0	0.0	0.1	**0.1**
Buffalo meat	1.7	2.1	0.4	1.7	2.1	2.8	2.6	**1.9**
Chicken	8.6	6.8	3.4	5.5	7.4	9.1	12.3	**7.5**
Pork	0.8	0.9	0.4	0.9	1.2	0.9	1.0	**0.9**
Fish	2.1	2.2	2.1	2.5	2.4	2.1	1.6	**2.2**
Egg	2.0	0.9	0.2	0.4	0.8	1.5	3.9	**1.4**
Milk	45.1	35.4	12.3	25.8	38.3	50.1	71.0	**39.5**
Condensed milk	0.0	0.0	0.0	0.0	0.0	0.0	0.1	**0.0**
Baby/Powder milk	0.0	0.0	0.0	0.0	0.0	0.1	0.0	**0.0**

	Urban	Rural	Poorest	Second	Third	Fourth	Richest	Total
Curd	0.0	0.0	0.0	0.0	0.0	0.1	0.0	**0.0**
Paneer	0.1	0.0	0.0	0.0	0.0	0.0	0.2	**0.0**
Ghee	0.6	0.7	0.2	0.4	0.7	1.0	1.1	**0.7**
Vegetable Ghee/Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Mustard oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Sunflower oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Soybean oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Banana	5.0	3.2	1.2	2.1	2.8	5.1	8.6	**3.9**
Citrus fruits	5.7	3.0	0.7	2.2	3.8	6.0	8.2	**4.2**
Mango	2.3	2.1	1.2	1.7	1.3	2.5	4.2	**2.2**
Apple	4.5	2.4	0.5	1.2	1.9	4.4	8.4	**3.3**
Pineapple	0.1	0.1	0.0	0.0	0.1	0.1	0.1	**0.1**
Papaya	0.9	0.6	0.5	0.5	0.8	0.7	1.3	**0.8**
Grape	1.2	0.6	0.1	0.3	0.6	1.1	2.1	**0.8**
Potato	29.3	30.4	25.1	30.2	31.3	31.7	31.2	**29.9**
Cauliflower/Cabbage	13.0	9.2	9.1	9.7	10.0	11.3	13.8	**10.8**
Tomato	11.1	8.4	5.9	7.3	9.2	10.9	14.1	**9.5**
Green beans	4.0	3.7	2.3	3.0	3.9	4.5	5.3	**3.8**
Cucumber	2.2	2.3	0.9	1.3	2.1	2.5	4.5	**2.2**
Bottle gourd/Pumpkin	5.4	5.5	5.0	5.7	5.3	5.4	5.6	**5.4**
Radish/Turnip/Carrot	6.2	4.0	3.1	4.7	4.6	5.6	6.8	**4.9**
Onion	9.6	8.5	6.2	8.1	8.8	9.9	11.9	**9.0**
Colocasia/Yam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Brinjal	1.9	1.6	2.4	1.9	1.7	1.6	1.2	**1.8**
Chayote/Christophine	1.3	2.8	1.4	2.3	2.9	2.2	2.0	**2.2**
Lady's finger	1.4	1.8	1.5	1.4	1.5	1.7	2.1	**1.6**
Bitter guard	1.5	1.0	0.9	0.9	1.1	1.2	1.8	**1.2**
Pea pod	1.2	0.4	0.4	0.6	0.5	0.8	1.5	**0.8**
Pointed gourd	0.6	1.2	1.4	1.0	0.8	0.8	0.7	**1.0**
Mushroom	0.4	0.1	0.0	0.1	0.2	0.3	0.8	**0.2**
Sugar	8.1	7.9	4.2	6.4	8.3	10.0	11.1	**8.0**
Organic sugar (Sakhar)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	**0.1**
Honey	0.1	0.1	0.0	0.0	0.1	0.1	0.2	**0.1**
Nepal	**336.4**	**337.2**	**249.8**	**309.2**	**338.8**	**365.7**	**420.9**	**336.9**

Chapter III: Literacy and Educational Attainment

3.1 Literacy rate

3.1.1 Literacy rate of 5 years and above

According to the survey, in 2016/17 the literacy rate of the population of age 5 years and above stands at 68.3 percent (Table 2.1). There is still big gap in the literacy between sexes in Nepal. The male literacy rate is 76.2 percent and the female literacy rate is 60.5 percent. Also, the urban rural gap is found substantially wider with the literacy rate of 73.0 percent in urban and 64.3 percent in rural area. The rate is found highest for the age group of 15-19 years which is 94.1 percent and lowest for the age group 60 years and above. The rate is found continuously declining after the age group of 15-19 years. The '5 years and above' literacy rate in 2015/16 was 65.9 percent for Nepal and for male it was 74.2 percent and that for female it was58.2 percent.

Table 3.1 Literacy rates of 5 years and above population by age group and urban rural (percent)

	Urban			Rural			Nepal		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
05-09 years	56.5	55.4	56.0	48.7	46.9	47.8	51.7	50.1	51.0
10-14 years	94.1	92.3	93.2	92.3	88.9	90.7	93.0	90.2	91.6
15-19 years	97.0	95.7	96.3	96.0	89.2	92.6	96.4	91.8	94.1
20-24 years	94.4	91.7	92.8	93.7	84.1	88.2	94.0	87.6	90.3
25-29 years	94.1	83.4	88.0	87.8	68.4	76.5	90.8	75.4	81.9
30-34 years	93.0	73.0	82.5	84.6	56.6	67.9	88.8	63.5	74.5
35-39 years	90.0	67.8	76.7	76.1	39.9	56.6	81.9	53.2	65.6
40-44 years	79.9	54.8	66.7	69.7	41.9	54.0	74.5	47.4	59.6
45-49 years	84.0	41.7	62.4	65.1	25.2	44.4	73.3	32.3	52.2
50-54 years	67.2	30.9	49.4	60.3	20.5	41.0	63.1	24.8	44.5
55-59 years	61.7	31.6	48.2	51.7	17.6	35.0	55.7	22.6	40.0
60 years & over	48.4	10.1	29.3	39.0	5.6	22.5	42.9	7.5	25.3
Nepal	**81.1**	**67.1**	**73.8**	**73.8**	**55.6**	**64.3**	**76.8**	**60.5**	**68.3**

By consumption group the poorest 20 percent are 58.2 percent literate compared to the richest 20 percent whose literacy rate is 84.8 percent (Table 3.2). The variation of literacy rate among quantile groups is seen more prominent among female than among male. While there is a difference of 61.5 percentage point between the poorest and richest male; this difference is 50.6 percentage point for female.

Table 3.2 Literacy rates of 5 year and above by consumption quintile

	Male	Female	Total
Urban/Rural			
Urban	81.1	67.1	73.8
Rural	73.8	55.6	64.3
Consumption Quintile			
Poorest	56.5	39.4	47.7
Second	71.4	55.4	63.0
Third	76.9	59.6	67.7
Fourth	85.5	68.7	76.6
Richest	91.9	77.9	84.8
Nepal	**76.8**	**60.5**	**68.3**

3.1.2 Literacy rate of 6 years and above

Literacy rate for the population of 6 years and above is estimated to be 69.3 percent (Table 3.3), which is slightly higher than the rate for the population of age 5 years and above. For 6 year and above population the literacy rates for urban and rural are 74.7 percent and 65.4 percent respectively. The rates increase with the higher quintiles. Among the population of the first quintile, 48.9 percent are found to be literate which is 85.4 percent for the fifth quintile. For the 6 year and above population the male literacy rate is 78.3 and the female literacy rate is 61.2.

3.1.3 Literacy rate of 15 years and above (Adult literacy rate)

The overall adult literacy rate of 15 years and above population is 66.8 percent (Table 3.3) which is higher than the rate found in 2015/16 when it was 64.0 percent. The adult literacy rates for urban and rural areas are 73.1 percent and 61.9 percent respectively. Gender variation exists in the adult literacy rate too. The rates for adult males and females are found 77.8 percent and 57.8 percent respectively.

Table 3.3 Literacy status of 6 year and above and 15 year and above (percent)

	6 year and above			15 year and above		
	Male	Female	Total	Male	Female	Total
Urban/Rural						
Urban	82.4	67.7	74.7	82.5	64.9	73.1
Rural	75.3	56.3	65.4	74.2	51.3	61.9
Consumption Quintile						
Poorest	58.4	40.1	48.9	55.1	31.9	42.7
Second	72.9	56.0	64.0	69.7	49.7	59.0
Third	78.0	60.3	68.5	76.5	55.0	64.9
Fourth	86.7	69.3	77.5	87.0	65.6	75.4
Richest	93.0	78.1	85.4	93.6	76.6	84.7
Nepal	**78.3**	**61.2**	**69.3**	**77.8**	**57.2**	**66.8**

3.2 School attendance

According to the survey, 31.9 percent of the populations are reported to be currently attending school, 39.7 percent have attended school in the past and 26.6 percent had never attended school and 1.7 percent have attended only non- formal education (Table 3.4). By urban-rural, there are 30.2 percent form rural who have never attended schools compared to 21.8 percent from urban. By consumption quantile 43.9 percent of the poorest group have reported never attended school compared to 13.2 percent of the richest group. The rate of never attended school is high in 2015/16 which was 28.2 percent (Table 3.5).

When we look at the attendance status by age survey shows that 28.0 percent children of age 5 years never attended school which is very large proportion. It is interesting to note that of the age 24 and above 41.8 percent reported never attended school (Table 3.4).

Table 3.4 Status of school attendance by age group

	Never Attended school	Attended school in the past	Currently in school	Attending non-formal education	Total
5 years	28.0	1.4	70.5	0.0	100
6-10 years	8.3	2.4	89.2	0.1	100
11-13 years	3.5	3.2	93.2	0.1	100
14-15 years	6.7	9.3	84.0	0.0	100
16-17 years	4.1	21.9	74.0	0.0	100
18-23 years	7.4	58.5	33.8	0.3	100
24 years & over	41.8	53.4	1.8	2.9	100
Nepal	**26.6**	**39.7**	**31.9**	**1.7**	**100**

Notable variation is observed in population of 'never attended school' and 'currently in school'. Especially gender gap is quite distinctly seen in this population. In total male population there is only 18.1 percent who never attended school compared to 34.5 percent female whereas there is 34.7 percent male who reported to be currently in school compared to 29.4 percent female (Table 3.5). It is also interesting to find that 20.9 percent male in rural have not attended school 14.2 percent male of urban whereas 38.7 percent female of rural have not attended school compared to 28.7 percent female in urban. This shows the gap between urban rural is more prominent for female compared to male. By consumption quantile, 43.9 percent of the poorest 20 percent never attended school whereas only 13.2 percent of the richest 20 percent never attended school. A sharp decline is observed in the never attending school population from first to second quantile, as in the first quantile such population is 43.9 percent that has declined to 31.4 percent in the second quantile.

Table 3.5 Status of school attendance by sex, urban/rural consumption quintile

	Never Attended school	Attended school in the past	Currently in school	Attending non-formal education	Total
		Male Nepal			
Urban/Rural					
Urban	14.2	50.2	34.5	1.2	100
Rural	20.9	43.2	34.9	1.0	100
Consumption Quintile					
Poorest	34.7	30.7	34.2	0.4	100
Second	22.9	41.4	35.2	0.6	100
Third	17.9	46.0	34.0	2.1	100
Fourth	10.5	54.3	34.0	1.2	100
Richest	6.1	56.8	36.0	1.1	100
Male Nepal Total	**18.1**	**46.1**	**34.7**	**1.1**	**100**
		Female Nepal			
Urban/Rural					
Urban	28.7	39.1	29.8	2.4	100
Rural	38.7	30.0	29.1	2.1	100
Consumption Quintile					
Poorest	52.4	18.0	28.7	1.0	100
Second	39.1	28.2	30.9	1.8	100
Third	34.4	31.2	31.1	3.4	100
Fourth	27.6	39.6	30.3	2.5	100
Richest	20.3	51.2	25.9	2.5	100
Female Nepal Total	**34.5**	**33.8**	**29.4**	**2.3**	**100**
		Total Nepal			
Urban/Rural					
Urban	21.8	44.3	32.0	1.8	100
Rural	30.2	36.3	31.9	1.6	100
Consumption Quintile					
Poorest	43.9	24.1	31.4	0.7	100
Second	31.4	34.5	32.9	1.2	100
Third	26.7	38.1	32.4	2.8	100
Fourth	19.5	46.5	32.1	1.9	100
Richest	13.2	54.0	30.9	1.8	100
Nepal	**26.6**	**39.7**	**31.9**	**1.7**	**100**

3.3 Gross enrolment ratio

According to the survey, the overall GER of primary, lower secondary and secondary level of schooling are 118.5, 93.4 and 85.9 respectively (Table 3.6). The rates vary across gender and urban-rural areas. GER of male is higher than that of female in primary and secondary levels. But the female GER is little higher then male for lower secondary level. GER of the primary

level for urban is 120.4 and for rural it is 117.4. In all three levels of schools (primary, lower secondary and secondary) GER for the first quintile are lower than that of the upper quintiles which indicate late enrollment in schools and high drop outs in the first quintile (Table 3.6).

Comparing the GER with previous surveys we find decline over time for all the levels. In 2015/16 GER at the primary level was 120.5 for lower secondary it was 90.9 and for secondary it was 86.2.

Table 3.6 Gross enrolment ratios by level of schooling

	Primary	Lower Secondary	Secondary
Sex			
Male	123.3	94.3	85.5
Female	113.4	92.4	86.2
Urban/Rural			
Urban	120.4	90.5	89.9
Rural	117.4	95.3	83.3
Consumption Quintile			
Poorest	108.5	86.3	58.1
Second	121.8	93.7	96.9
Third	119.3	106.2	90.0
Fourth	122.7	90.8	91.7
Richest	128.3	89.1	98.5
Nepal	**118.5**	**93.4**	**85.9**

Chapter IV: Housing and Household Facilities

4.1 Occupancy status

According to the survey in 2016/17, 85.6 percent of the households live in their own houses. This own house holding proportion has decreased in this survey from 2015/16 when it was 86.5 percent. The percentage of households residing in their own houses in 2016/17 account for 93.8 percent in rural and 75.3 percent in urban areas. There are currently 12.5 percent of the households reside in rented houses, which is 22.4 percent in urban and 4.6 percent in rural areas. Around 1.5 percent of the households reside in the houses provided free of cost, and also a small number of 0.2 percent live as squatters. It is interesting to observe that 98.4 percent households of the poorest quintile live in own house whereas 30.1 percent of the richest quintile group live in rented house (Table 4.1). In 2015/16 in the poorest quantile, 98.4 percent were living in their own house and 28.7 percent of the richest quantile group were living in rented house.

Table 4.1 Percentage distribution of households by occupancy status

	Own	Rented	Rent-free	Squatting	Other	Total
Urban/Rural						
Urban	75.3	22.4	1.8	0.3	0.2	100
Rural	93.8	4.6	1.2	0.1	0.2	100
Consumption Quintile						
Poorest	98.4	0.8	0.4	0.3	0.0	100
Second	96.2	2.5	0.5	0.4	0.5	100
Third	95.2	3.5	1.1	0.1	0.1	100
Fourth	81.4	16.2	1.9	0.4	0.2	100
Richest	66.9	30.1	2.8	0.0	0.2	100
Nepal	**85.6**	**12.5**	**1.5**	**0.2**	**0.2**	**100**

4.2 Average number of rooms

The average number of rooms per household possess is 4.5 which is all most same for urban and rural (Table 4.2). The poorest 20 percent has 3.8 rooms and the richest 20 percent has 5.0 room. When looking at the percentage distribution of households having different number of rooms, it is found that 17.2 percent has 1-2 rooms, 38.7 percent has 3-4 rooms, 28.7 percent has 5-6 rooms, 11.4 percent has 7-8 rooms, and 4 percent has 9 or more rooms. This distribution of room number was nearly the same in 2015/16.

Table 4.2 Percentage distribution of household by occupancy status

	Percentage distribution by room number						Average No. of rooms
	1-2	3-4	5-6	7-8	9 and above	Total	
Urban/Rural							
Urban	19.2	36.1	29.6	11.3	3.8	100	4.4
Rural	15.5	40.8	28.0	11.6	4.1	100	4.5
Consumption	**Quintile**						
Poorest	23.5	46.3	22.4	6.7	1.1	100	3.8
Second	16.3	44.7	29.9	7.8	1.4	100	4.2
Third	14.5	41.3	29.2	11.8	3.2	100	4.5
Fourth	16.7	37.4	29.7	12.4	3.9	100	4.5
Richest	16.4	29.3	30.4	15.6	8.2	100	5.0
Nepal	**17.2**	**38.7**	**28.7**	**11.4**	**4.0**	**100**	**4.5**

4.3 Housing construction materials

It is interesting to find that the percent of outer wall of cement bonded brick/stone houses has increased from 36.6 percent in 2015/16 to 38.3 percent in 2016/17. A little a smaller number of houses have outer walls that is mud bonded bricks/stone, 34.2 percent (Table 4.3). The outer wall is of wood of 5.6 percent houses, of bamboo/leaves of 16.4 percent houses, unbacked bricks of 1.1 percent houses and of other materials of 4.3 percent houses.

Urban houses are mostly having cement bonded brick/stone walls (55.7 percent in urban) whereas rural houses are mostly mud bonded brick/stone (41.9 percent). (Table 4.3)

Table 4.3 Percentage distribution of households by construction material of outer walls

	Cement bonded bricks/ stones	Mud bonded bricks/ stones	Wood	Bamboo/ leaves	Unbaked bricks	Other material	Total
Urban/Rural							
Urban	55.7	24.5	5.5	11.1	0.8	2.5	100
Rural	24.6	41.9	5.6	20.7	1.4	5.8	100
Consumption	**Quintile**						
Poorest	8.7	36.7	6.2	44.1	1.0	3.4	100
Second	15.5	44.2	8.0	25.6	1.8	4.8	100
Third	22.0	45.5	8.0	16.0	2.0	6.6	100
Fourth	46.0	33.8	5.1	7.9	0.9	6.3	100
Richest	77.7	17.4	2.0	1.4	0.3	1.1	100
Nepal	**38.3**	**34.2**	**5.6**	**16.4**	**1.1**	**4.3**	**100**

Majority of the houses of Nepal are constructed with mud bonded foundation (36.6 percent) which is more a rural feature (44.9 percent) as well as poorer household feature (43.5 percent of the poorest 20 percent) (Table 4.4). Only 26.2 percent households' houses have pillar bounded foundation and 13.6 percent has cement bonded foundation. If we combine the pillar

bonded and cement bonded foundation as they are the strongest foundation, about 78.6 percent of the houses of top 20 percent (richest quintile) are made of such strong foundation while only about 11.1 percent of the lowest quintile live in such houses.

Table 4.4 Percentage distribution of households by foundation of the dwelling

	Pillar bonded	Cement bonded	Mod bonded	Wooden pillar	Other	Total
Urban/Rural						
Urban	41.4	16.4	26.1	13.3	2.9	100
Rural	14.2	11.4	44.9	25.6	4.0	100
Consumption	**Quintile**					
Poorest	2.8	8.2	43.5	38.9	6.5	100
Second	7.9	10.1	47.3	28.1	6.5	100
Third	11.9	11.9	47.7	24.8	3.6	100
Fourth	28.6	17.8	36.3	15.0	2.4	100
Richest	61.7	16.9	16.8	4.2	0.4	100
Nepal	**26.2**	**13.6**	**36.6**	**20.1**	**3.5**	**100**

By construction material of the roof, more than one third (37.5 percent) house in Nepal have galvanized/corrugated iron sheets roofs, and more than one forth (28.4 percent) are having concrete roofing (Table 4.5). Concrete roofing is the stronger and safer type of roofing than other types of roof is found almost three times in urban (44.4 percent) than in rural (15.7 percent). Interesting to note that the user of concrete/cement roof has increased and also the poorest group are having more such from last year. In 2015/16, nearly, the same 228.8 percent house were having concrete roof, only 15.2 percent in rural and 10.7 percent of the poorest quantile were having such. At the national level in 2016/17, households also have tiles/slate roofs (21.9 percent) and roofs of straw/thatch (9.1 percent) wood plank (0.7 percent) earth mud (0.9 percent) and other materials (1.6 percent) (Table 4.5).

Table 4.5 Percentage distribution of households by construction material of roof

	Concrete / cement	Galvanized iron	Wood/ planks	Tiles/ slate	Straw/ thatch	Earth /mud	Other	Total
Urban/Rural								
Urban	44.4	31.5	0.5	18.9	4.1	0.0	0.5	100
Rural	15.7	42.1	0.8	24.3	13.0	1.5	2.4	100
Consumption	**Quintile**							
Poorest	5.3	26.9	0.8	41.7	20.9	2.3	2.1	100
Second	10.6	37.0	0.9	32.5	14.2	1.4	3.3	100
Third	13.3	45.3	0.5	26.5	12.0	0.7	1.6	100
Fourth	29.9	49.5	1.0	14.5	3.7	0.3	1.1	100
Richest	64.8	27.4	0.4	5.8	0.8	0.2	0.5	100
Nepal	**28.4**	**37.5**	**0.7**	**21.9**	**9.1**	**0.9**	**1.6**	**100**

4.4 Household facilities

Besides housing, information about household facilities such as access to drinking water facility, toilet facility, sewage facility, sources of lighting, fuel used for cooking and other facilities of household are collected. Similarly, data on monthly household expenditure on these facilities that are important to capture total household consumption expenditure were also collected.

4.4.1 Access to drinking water supply

Access to safe drinking water supply is an important indicator of quality of life. In 2016/17, all most half of the household uses piped water supply (49.6 percent) (Table 6). In urban 51.7 percent are using piped water supply compared to 48 percent in rural. More than double households of the richest quintile are using piped water than the household of the poorest quintile (66.9 percent richest and 29.9 percent poorest). More than one third (38.0 percent) are using hand pump/tube well that declines with increasing quintiles. Spring water is used by 5.3 percent, open well by 3 percent, covered well by 2.1 percent and other sources by 1.4 percent as a source of drinking water.

Table 4.6 Percentage distribution of households by source of drinking water

	Piped water	Covered well	Hand pump/ Tubewell	Open well	Spring water	River	Other source	Total
Urban/Rural								
Urban	51.7	2.4	36.5	2.5	3.1	0.8	3.1	100
Rural	48.0	1.9	39.1	3.4	7.1	0.3	0.1	100
Consumption Quintile								
Poorest	29.9	0.6	60.8	2.5	5.8	0.3	0.0	100
Second	37.5	1.0	48.9	3.4	8.1	0.6	0.5	100
Third	45.4	2.2	40.8	3.7	6.4	1.3	0.3	100
Fourth	56.7	3.3	29.3	3.8	5.6	0.3	0.9	100
Richest	66.9	2.8	22.1	1.8	2.1	0.2	4.2	100
Nepal	**49.6**	**2.1**	**38.0**	**3.0**	**5.3**	**0.5**	**1.4**	**100**

4.4.2 Toilet facility

More than half of the sample households (50.9 percent) are reported using flush toilets with connection to septic tank (Table 7). When the country is heading towards *'Open Defecation Free (ODF)'* it is observed that 11.5 percent household still have no toilet. In urban 7.4 percent and in rural 14.8 percent have no toilet. The variation of household having no toilet is quite distinct among consumption quintiles. Of the poorest group 33.1 percent have no toilet facility, 18.9 percent of the second, 10.3 percent of the third, 4.5 percent of the forth and 0.5 percent of the richest quintile have no toilet. It indicates that there is strong association of prosperity with available toilet facility. However, the proportion of no toilet household has significantly declined from 2015/16 when it was 18.7 percent.

Table 4.7 Percentage distribution of households by type of toilet facility

	Flush (public drainage)	Flush (septic tank)	Ordinary toilet	Communal toilet	No toilet	Total
Urban/Rural						
Urban	14.5	51.8	25.6	0.8	7.4	100
Rural	1.2	50.2	30	0.8	14.8	100
Consumption Quintile						
Poorest	0.7	29.8	35.5	0.9	31	100
Second	0.6	44.5	35.1	0.8	18.9	100
Third	0.9	51.1	37.0	0.7	10.3	100
Fourth	7.1	57.3	30.1	1.1	4.5	100
Richest	20.0	62.3	16.7	0.5	0.5	100
Nepal	**7.0**	**50.9**	**29.7**	**0.8**	**11.5**	**100**

4.4.3 Sewage facility

More than two third households (69.6 percent) reported to have no access to sewage facilities (Table 3.8). Such households are dominantly in **rural** and poorest quantile group. In urban 54.8 percent have no sewage facilities and in rural 80.4 percent. Among quantile groups, 88.4 percent of the poorest have no such facility compared to 40 percent of the richest. The proportion of households with access to underground drainage facility is only about 12.2 percent. About 13.8 percent have open drain. In 2015/16, 66.6 percent had no sewage facility, 10.6 percent had underground drain, 12.7 percent had open drain, and 10.1 percent had soak pit.

Table 4.8 Percentage distribution of households by Sanitation management facility

	Underground drain	Open drain	Soak pit	No facility	Total
Urban/Rural					
Urban	24.0	15.1	6.1	54.8	100
Rural	2.8	12.8	3.9	80.4	100
Consumption Quintile					
Poorest	0.1	9.9	1.6	88.4	100
Second	0.5	15.4	2.5	81.6	100
Third	1.5	15.0	2.9	80.6	100
Fourth	11.1	14.0	5.8	69.1	100
Richest	36.6	14.1	9.4	40.0	100
Nepal	**12.2**	**13.8**	**4.9**	**69.1**	**100**

4.4.4 Lighting

Electricity has become the prime source of lighting for Nepalese households as 85.2 percent of the households reported electricity as the main source of lighting (Table 9). The percentage of households using electricity as main source of lighting are 91.3 percent in urban and 80.4 percent in rural. Solar energy is also gaining some popularity as in 2015/16 only 13.4 percent were using it which is now used by 9.6 percent. However, solar power is observed more

popular in lower quintiles and rural households which should be due to the governmental subsidies to these cohort. Solar is used by 13.1 percent rural and 5.2 percent urban, and is used by 13.1 percent of the poorest quantile. Kerosene and other lightening sources are still used by about 3.3 percent household mostly of the poorest quintiles and of the rural. Kerosene is used by more than 11.2 percent poorest quintile households. Biogas is used by 0.1 percent and other sources by 1.8 percent household for lightening.

Table 4.9 Percentage distribution of households by main source of lighting

	Electricity	Solar	Kerosene	Other	Total
Urban/Rural					
Urban	91.3	5.2	2.3	1.2	100
Rural	80.4	13.1	4.1	2.4	100
Consumption Quintile				0.0	
Poorest	70.6	13.1	11.2	5.1	100
Second	79.3	15.2	3.0	2.5	100
Third	79.8	13.8	4.2	2.2	100
Fourth	91.2	6.9	1.0	1.0	100
Richest	97.0	2.6	0.2	0.2	100
Nepal	**85.2**	**9.6**	**3.3**	**1.9**	**100**

4.4.5 Fuel

Fire wood is still a major source of fuel in Nepal for cooking as more than half (52.4 percent) are using it (Table 3.10). By quintile groups firewood is highly used for cooking by first second and third quantile whose dependency proportion is 67.2 percent, 71.7 percent and 69.3 percent respectively. Firewood is used by 65.8 percent rural and 35.4 percent urban households. Use of LPG gas is the second most used cooking source in Nepal (33.1 percent). In urban 54.1 percent and in rural 16.5 household are using LPG gas. It is also found that 8.5 percent use cow dung, 2.7 percent leaves, 3.1 percent biogas, and 0.2 percent other source for cooking.

Table 4.10 Percentage distribution of households by main fuel used for cooking

	Firewood	Cow dung	Leaves/ straw/ thatch	Cylinder gas	Bio-gas	Other	Total
Urban/Rural							
Urban	35.4	4.6	1.7	54.1	3.8	0.4	100
Rural	65.8	11.7	3.4	16.5	2.5	0.2	100
Consumption Quintile						0.0	
Poorest	67.2	20.7	8.3	2.2	1.1	0.4	100
Second	71.7	12.6	5.2	7.7	2.8	0.0	100
Third	69.3	8.1	1.9	16.6	3.8	0.4	100
Fourth	49.3	4.8	0.4	41.4	3.7	0.3	100
Richest	19.8	2.0	0.0	74.5	3.3	0.4	100
Nepal	**52.4**	**8.5**	**2.7**	**33.1**	**3.1**	**0.3**	**100**

4.4.6 Other household facilities

Questions related to some communication facilities used by the households were used in the survey. A remarkable progress has been reported on the use of mobile (cell) phones as 88.4 percent of the household currently have at least one cell phone in their household (Table 11). Most of the urban households (92 percent) as well as rural households (85.7 percent) possess mobile phones. Line telephones are less used. Line telephone is used by 7.8 percent, cable TV by 44.8 percent and email/internet by 12.7 percent. In urban, email/internet is used by 19 percent and in rural by 7.8 percent. Cable TV is used by 59.8 percent urban and 33 percent rural. Among the decile group, cable TV is used by only 13.1 percent of the poorest whereas 79.6 percent of the richest use cable TV.

Table 4.11 Percentage distribution of households by various access to facilities

	Telephone	Mobile phone	Cable TV	Email/Internet
Urban/Rural				
Urban	11.1	92.0	59.8	19.0
Rural	5.3	85.7	33.0	7.8
Consumption Quintile				
Poorest	2.4	74.0	13.1	3.2
Second	2.9	82.9	20.4	4.2
Third	3.4	89.1	33.7	6.6
Fourth	5.0	92.3	55.8	12.3
Richest	20.4	97.0	79.6	29.5
Nepal	**7.8**	**88.4**	**44.8**	**12.7**

Chapter V: Demographic Characteristics

5.1 Background

Demographic characteristics are interlinked with other socio-economic characteristics like household consumption, literacy status, and household facilities. In some sense demographic characteristics are the measuring scale for other characteristics, indicators and information. Hence, this chapter of the survey findings could help to compare and correlate tables of other chapters. That is why the reference categories in all tables of all chapters are mostly demographic characters like sex, urban rural and age structure.

The sample proportion of the 2016/17 household survey gives us the weightage factor for our analysis of different tables. The sample household distribution is 50 percent urban and 50 percent rural (Table 5.1). Similarly, the household distribution over the five consumption quantiles are 14.2 percent, 16.8 percent, 19.1 percent, 22.4 percent, and 27.5 percent respectively.

Table 5.1 Percent distribution of sample households by category

	Percent of sample	Percent of households	Total households
Urban/Rural			
Urban	50.0	44.1	2,470,841
Rural	50.0	55.9	3,135,393
Consumption Quintile			
Poorest	14.2	15.2	851,383
Second	16.8	17.5	979,487
Third	19.1	19.8	1,110,793
Fourth	22.4	22.1	1,240,074
Richest	27.5	25.4	1,424,497
Nepal	**100**	**100**	**5,606,235**

5.2 Household size

The average household size in the survey is 4.5 in Nepal which is 4.3 in urban and 4.7 in rural areas (Table 5.2). The household size in the poorest consumption group is 5.9 and that of the richest is 3.5. The size of household has slightly decreased from 2015/16 when it was 4.6, however the distribution by urban rural and by quantiles remains almost the same.

When analyzing the data by number of persons per household the proportion of nuclear household with 1 -2 person is still lower in Nepal (17.1 percent) (Table 5.2). The model household size is observed at 3-4 persons (39.5 percent) and about 29.1 percent household have 5-6 family size, 9.7 percent have 7-8 person and 4.8 percent have 9 or more family. In all family size category urban household shows smaller family size with and rural larger family size. By consumption groups larger family size is observed for first quantile and smaller in fifth. Nine or more family size is shown by 11.5 percent of the first group whereas one or two is shown by 30.5 percent of the fifth group.

Table 5.2 Size of household

	Percentage distribution						Average household size
	1-2 persons	3-4 persons	5-6 persons	7-8 persons	9 or more persons	Total	
Urban/Rural							
Urban	18.7	43.0	26.7	7.9	3.7	100	4.3
Rural	15.4	36.8	31.0	11.1	5.6	100	4.7
Consumption	**Quintile**						
Poorest	4.6	22.2	40.3	21.3	11.5	100	5.9
Second	9.3	32.4	36.5	13.9	7.9	100	5.1
Third	12.8	41.7	33.3	8.1	4.1	100	4.5
Fourth	19.2	46.6	25.8	6.0	2.4	100	4.1
Richest	30.5	46.9	16.9	4.4	1.3	100	3.5
Nepal	**16.9**	**39.5**	**29.1**	**9.7**	**4.8**	**100**	**4.5**

5.3 Age and sex of the head of household

For the survey purpose, a household head is considered to be a person who looks after and usually, make decision in household affairs. Nearly, half (47.1 percent) of the household heads in 2016/17 are in the age group 30 to 49 years and this pattern is seen unaltered for urban or rural households (Table 5.3). Looking at the age distribution of head of the household, 1.2 percent are less than 20 years, 13.3 percent are within 20-29 years, 22.7 percent are within 30-39 years, 24.4 percent are within 40-49 years, 18.4 percent are within 50-59 years, and 20 percent are 60 and above.

Younger household heads are found more in urban than in rural. In urban, 40 percent are less than 40 years old whereas 35.4 percent are more than 50 years old. Meantime, in rural, 35.1 percent head are younger than 40 years compared to 40.7 percent are older than 50 years (Table 5.3). By consumption quintiles, the poorer quintiles show more ripen age family heads than in the richer quintiles. For example, in the first quintile only 11.5 percent household is headed by 20-29 age group which is 15.4 percent in the fifth quintile whereas 21.7 percent household is headed by older than 60 years age in the first which is 17.2 percent in the fifth quintile. This indicates a ripen age household head trends in the poorer quintiles.

Table 5.3 Age of household head (years)

	Percentage distribution by age group						
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60 & over**	**Total**
Urban/Rural							
Urban	1.5	15.0	23.5	24.6	16.5	18.9	100
Rural	1.0	12.0	22.1	24.2	19.9	20.8	100
Consumption Quintile							
Poorest	0.7	11.5	25.0	22.3	18.8	21.7	100
Second	0.9	11.1	21.2	27.2	19.6	20.0	100
Third	1.5	13.6	20.1	25.0	18.7	21.1	100
Fourth	1.1	13.6	23.3	24.4	16.7	20.9	100
Richest	1.7	15.4	23.9	23.1	18.7	17.2	100
Nepal	**1.2**	**13.3**	**22.7**	**24.4**	**18.4**	**20.0**	**100**

Different surveys of the past shows that more and more households are headed by female. The trend must be an aftermath of migration trend most of whom are male and family heads. Currently, in 2016/17, 24.8 percent of the households in the survey are headed by female members (Table 5.4). The female household heads are found higher in urban (28.6 percent) than in rural (21.8 percent). Upper quintiles have more female heads than in the lower quintiles. In fifth quantile 30.3 percent are female headed household whereas in the first quantile there are only 19.4 percent. The female headed household in 2015/16 was 25.9 percent at the national level and in urban it was 30.9 percent whereas in rural it was 22.5 percent.

Table 5.4 Percentage of female headed households

	Percent
Urban/Rural	
Urban	28.6
Rural	21.8
Consumption Quintile	
Poorest	19.4
Second	21.0
Third	22.1
Fourth	27.5
Richest	30.3
Nepal	**24.8**

5.4 Population composition

5.4.1 Age distribution

According the survey, in 2016/17 the population of Nepal is comprised of 48.4 percent males and 51.6 percent females (Table 5.5). A 47.3 percent population belongs to the productive age group of 15-44 years. There are 18.5 percent population below 10 years and 9.2 percent population above 60 years. At the national level the modal age exists at 10-14 age group where

11.8 percent population is observed. The urban rural variation is quite distinct at all age groups but is especially so in lower age groups.

Table 5.5 Percentage distribution of population by age groups and sex

	Urban			Rural			Nepal		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
00-04 years	4.5	3.8	8.3	4.9	4.4	9.3	4.7	4.1	8.9
05-09 years	4.8	4.0	8.8	5.4	4.8	10.1	5.1	4.5	9.6
10-14 years	5.4	5.4	10.8	6.6	6.0	12.6	6.1	5.7	11.8
15-19 years	5.0	5.3	10.3	5.5	5.5	11.0	5.3	5.4	10.7
20-24 years	4.4	6.1	10.5	3.9	5.3	9.2	4.1	5.6	9.7
25-29 years	3.8	5.1	8.9	3.0	4.2	7.2	3.4	4.6	8.0
30-34 years	3.4	3.8	7.3	2.6	3.8	6.3	2.9	3.8	6.7
35-39 years	2.7	4.0	6.7	2.8	3.2	6.0	2.7	3.6	6.3
40-44 years	2.9	3.3	6.2	2.4	3.1	5.6	2.6	3.2	5.8
45-49 years	2.8	2.9	5.7	2.6	2.8	5.5	2.7	2.9	5.6
50-54 years	2.2	2.1	4.3	2.3	2.2	4.5	2.3	2.2	4.4
55-59 years	1.6	1.3	2.9	1.8	1.7	3.5	1.7	1.5	3.2
60 years & over	4.5	4.5	9.1	4.7	4.6	9.2	4.6	4.6	9.2
Nepal	**48.2**	**51.8**	**100**	**48.5**	**51.5**	**100**	**48.4**	**51.6**	**100**

By broad age groups of 0-14 years, 15-59 years and 60 years and above, the population is distributed approximately in the ratio of 3:6:1. There are 30.3 percent in 0-14 years group, 60.5 percent in 15-59 age group and 9.2 percent in 60 and above age group (Table 5.6 and Table 5.7). The distribution is more symmetric and evenly distributed for female than for male.

Table 5.6 Percentage distribution of population by broad age groups (years)

	Age group			
	0-14	**15-59**	**60 and over**	**Total**
		Male		
Urban	30.5	60.1	9.4	100
Rural	35.0	55.4	9.6	100
Nepal	**33.1**	**57.4**	**9.5**	**100**
		Female		
Urban	25.5	65.7	8.8	100
Rural	29.3	61.8	8.9	100
Nepal	**27.7**	**63.5**	**8.8**	**100**
		Total		
Urban	27.9	63.0	9.1	100
Rural	32.0	58.7	9.2	100
Nepal	**30.3**	**60.5**	**9.2**	**100**

Table 5.7 Percentage distribution of population by sex

	Male	Female	Total
Urban/Rural			
Urban	20.2	21.7	41.9
Rural	28.2	29.9	58.1
Age Group			
00-04 years	4.7	4.1	8.9
05-09 years	5.1	4.5	9.6
10-14 years	6.1	5.7	11.8
15-19 years	5.3	5.4	10.7
20-24 years	4.1	5.6	9.7
25-29 years	3.4	4.6	8.0
30-34 years	2.9	3.8	6.7
35-39 years	2.7	3.6	6.3
40-44 years	2.6	3.2	5.8
45-49 years	2.7	2.9	5.6
50-54 years	2.3	2.2	4.4
55-59 years	1.7	1.5	3.2
60 years & over	4.6	4.6	9.2
Nepal	**48.4**	**51.6**	**100**

5.4.2 Sex ratio

Sex ratio, in the last decade has gone down drastically in Nepal, outnumbering males by females. In 2016/17 the sex ratio of the country stands at 94 that indicates 94 males per 100 females (Table 5.8). The sex ratios for urban is 93 and for rural it is 94. The sex ratio shows declining trend from 115 for the age group 0-4 years until it reaches 77 in the age group 35-39 years and then again shows an inclining trend to reach 101 at the age 60 years and above. This trend is more or less same in urban as well as in rural (Table 5.8).

Table 5.8 Sex ratio by urban-rural

Age group	Urban	Rural	Total
00-04 years	118	112	115
05-09 years	119	113	115
10-14 years	101	112	107
15-19 years	95	100	98
20-24 years	71	74	73
25-29 years	75	72	73
30-34 years	90	68	77
35-39 years	67	86	77
40-44 years	90	76	82
45-49 years	96	92	94
50-54 years	104	106	105
55-59 years	123	104	111
60 years & over	100	102	101
Nepal	**93**	**94**	**94**

By broad age group, the sex ratio of the households of different consumption quintiles indicates the changing socio-economic conditions of Nepalese population. In the broad age group sex ratio varies significantly by age categories 0-14 years, 15-49 year and 60 years and above in both urban and rural as well across the consumption quintiles. By consumption group it is seen highest for the fifth group at the rate 100. The ratio of children or under 15 years of age is 112. Sex ratios of the children under 15 years in all quintile are above 100. Interestingly, the sex ratio for age 15-59 for all consumption group is below 100. The national sex ratio for 0-14 years stands at 112, for 15-49 year at 85, and for 60 years and above at 101.

5.4.3 Dependency ratio

Overall dependency ratio of Nepal in 2016/17 stands at 65 which indicates that there are about 65 persons who depends upon the population of the productive age (Table 5.9). The ratio is lower in urban (59) than in rural (70). The ratio varies substantially by consumption quintiles. The ratio in the first to fifth quintile is 100, 76, 63, 55, and 43 respectively. It indicates higher dependency among poor groups compared to the richest group. The dependency ratio in 2015/16 was almost 70 which is higher than the current rate.

Table 5.9 Sex ratio by broad age group and dependency ratio

	Sex ratio				Dependency ratio
	0-14 years	15-59 years	60 years & over	Total	
Urban/Rural					
Urban	111	85	100	93	59
Rural	112	84	102	94	70
Consumption Quintile					
Poorest	107	84	107	95	100
Second	109	84	108	94	76
Third	103	82	102	89	63
Fourth	114	83	99	91	55
Richest	142	91	91	100	43
Nepal	**112**	**85**	**101**	**94**	**65**

Chapter VI: Food Security

6.1 Household food security

The annual household survey conducted in the fiscal year 2016/17 updates the status of food security situation and analyzes key food security indicators, such as food consumption score (FCS) and dietary diversity score (DDS). The findings show that the average food consumption score of Nepali households is 71.6, with 15 percent of households having inadequate food consumption and 5.3 percent of households having poor dietary diversity. The urban/rural divide related to the household food consumption persists, with 11.7 percent of households having inadequate food consumption in urban areas, as compared to 19.2 percent of households in rural areas.

The findings show a strong association between household's economic well-being measured by per capita consumption quintiles and deciles and household food security, indicating that households in top quintiles and deciles have higher, adequate consumption of nutritious food.

Overall, there is marginal decline in the proportion of household with inadequate food consumption from AHS IV to AHS V with a significant decline in households with poor dietary diversity.

Food security at the household level in AHS V (2016/2017), as periodic monitoring for the national food security situation, focuses on the access dimension of household food security through two key measures: the adequacy of food consumption and diversity of the diet consumed by the household based on a seven-day reference period.

Adequacy of food consumption is measured by the Food Consumption Score (FCS), which combines the elements of the quantity and quality of the food consumed by the household members. The FCS measures food diversity (the types of food consumed), food frequency (the number of days each food group is consumed over a reference period of seven days), and the relative nutritional importance of different food groups by assigning weights to each food group[1]. The higher the FCS, the better the food consumption status of the household.

The FCS uses standardized and calibrated thresholds that divide households into three groups: poor food consumption, borderline food consumption, and acceptable food consumption. The poor and borderline food consumption groups are combined and categorized as 'inadequate food consumption'.

Diversity of diet consumed is captured by the Dietary Diversity Score (DDS) that takes into account the number of food groups (out of a total of eight food groups) that a household consumes over a reference period of seven days. A diverse diet helps to ensure that household members are eating food with adequate macronutrients and micronutrients[2].

[1] WFP, 2008. "Food Consumption Analysis" WFP VAM Technical Guidance Sheet, World Food Programme, Rome. http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf

[2] Swindale, A. and Bilinsky, P. 2006. Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide, Ver.2, Food and Nutrition Technical Assistance, USAID. http://www.fantaproject.org/sites/default/files/resources/HDDS_v2_Sep06_0.pdf

Household food security exists when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life (World Food Summit Declaration, 1996)[3]. This definition is based on the three core concepts of food security, which are physical supply (availability), the ability to acquire food (access) and the capacity to transform food into the desired nutritional outcome (utilization).

6.2 Adequacy of food consumption

The mean food consumption score (FCS) of Nepali households is 71.6. Households in urban areas have a significantly higher FCS (76.5) than households in rural areas (66.7). Overall, the FCS has increased as compared to the AHS III (65.2) and IV (66.5) (Table 6.1).

Table 6.1 Mean Food Consumption Score (FCS) in the AHS V, AHS IV, AHS III and NLSS III Surveys

	FCS (AHS V, 2016/17)	FCS (AHS IV, 2015/16)	FCS (AHS III, 2014/15)	FCS (NLSS III, 2010/11)
Urban	76.5	71.6	74.1	73.8
Rural	66.7	60.7	62.8	59.9
Nepal	**71.6**	**65.2**	**66.5**	**62.8**

Based on the FCS, the proportion of Nepali households with inadequate food consumption is 14.9 percent. As with the FCS, this proportion has slightly decreased from AHS IV (16.0 percent) and AHS III (15.5 percent). There is a disparity in the adequacy of food consumption between urban and rural households, which is evident from the fact that 19.2 percent of rural households have inadequate consumption compared to 10.7 percent of urban households. In addition, compared to the AHS IV survey, there is a marginal increase in the proportion of households with inadequate food consumption, of 0.6 percentage points in urban areas, and of 0.9 percentage points in rural areas (Table 6.2).

Table 6.2 Percent of households with poor, borderline, inadequate and acceptable food consumption in the AHS V, AHS IV, AHS III and NLSS III surveys

	AHS V, 2016/17	AHS IV, 2015/16	AHS III, 2014/15	NLSS III, 2010/11
		Poor food consumption		
Urban	3.5	2.4	1.5	4
Rural	7.1	5.7	6.1	10
Nepal	**5.3**	**4.4**	**4.6**	**8**
		Borderline food consumption		
Urban	8.7	7.7	6.2	6
Rural	14.9	14.4	13.3	13
Nepal	**11.8**	**11.6**	**10.9**	**12**

[3] Monitoring Progress since World Food Summit. http://www.fao.org/WFS/

		Acceptable food consumption		
Urban	89.3	89.9	92.3	90
Rural	80.8	79.9	80.6	77
Nepal	**85**	**84**	**84.5**	**80**
		Inadequate food consumption (poor and borderline)		
Urban	10.7	10.1	7.7	10
Rural	19.2	20.1	19.4	23
Nepal	**14.9**	**16**	**15.5**	**20**

Also compared to the NLSS III (2010/11) findings, there is an improvement in the FCS and the proportion of households with inadequate consumption (see Tables 6.1 and 6.2).

Over the period of seven days preceding the survey, households, on average, have consumed staple foods, such as cereals, tubers or root crops, all seven days. Likewise, pulses are consumed 5.9 days, meat/fish/eggs 2.3 days, and milk and other dairy products 4.0 days, whereas fruits and vegetables are consumed 2.2 and 6.8 days, respectively (Table 6.3).

Table 6.3 Mean number of days the 8 food groups were consumed over the last 7 days preceding the survey

	Cereals, tubers & roots	**Pulses**	**Vege tables**	**Meat, fish & eggs**	**Fruits**	**Milk & dairy products**	**Ghee, oil & butter**	**Sugar, honey & sweets**
Urban/Rural								
Urban	7.0	6.0	6.8	2.8	2.7	4.3	6.9	6.0
Rural	7.0	5.7	6.7	1.9	1.6	3.6	6.9	5.8
Adequacy of food consumption								
Adequate consumption households	7.0	6.3	6.9	2.5	2.6	4.7	6.9	6.3
Inadequate consumption households	7.0	3.7	6.0	1.2	0.2	0.1	6.6	4.0
Nepal	**7.0**	**5.9**	**6.8**	**2.3**	**2.2**	**4.0**	**6.9**	**5.9**

6.3 Diversity of diet consumed by households

The Dietary Diversity Score (DDS) is a measure of the number of food groups (out of a total of eight) that are consumed by the households in the past seven days preceding the survey. The DDS of the Nepali households from the AHS V survey is 6.9, a slight increase from 6.4 percent in the AHS IV survey. Urban households have a higher average DDS (7.1) compared to rural households (6.7) indicating the consumption of relatively more diverse foods by urban households. Significant differences are observed in the DDS between households having

adequate and inadequate food consumption. The DDS for households with inadequate food consumption is 5.4 compared to 7.1 for households with adequate food consumption (Table 6.4).

Table 6.4 Mean dietary diversity score (DDS) in the AHS V, AHS IV, AHS III and NLSS III

Household characteristics	DDS (AHS V, 2016/17)	DDS (AHS IV, 2015/16)	DDS (AHS III, 2014/15)	DDS (NLSS III, 2010/11)
Urban/Rural				
Urban	7.1	6.8	6.8	7.0
Rural	6.7	6.1	6.1	6.3
Adequacy of food consumption				
Adequate food consumption	7.1	6.7	6.7	6.8
Inadequate food consumption	5.4	4.5	4.4	5.0
Nepal	**6.9**	**6.4**	**6.4**	**6.5**

Based on the DDS, 5.3 percent of households have poor dietary diversity: this disaggregates into 7.1 percent of rural households and 3.5 percent of urban households with poor dietary diversity (Table 6.5). Households with poor diet diversity are generally consuming fewer nutritious food such as pulses, meat, fish, eggs, fruits, and milk and dairy products. The consumption of the main staple foods (e.g., rice, maize, wheat, and tubers) as well as vegetables, oils and sugar, however, are relatively the same between households with poor dietary diversity (four or fewer food groups consumed) and acceptable dietary diversity groups (five or more food groups consumed) (Table 6.6).

Table 6.5 Percent of households with poor dietary diversity based on DDS in AHS V, AHS IV, AHS III and NLSS III

Household characteristics	AHS IV, 2016/17	AHS IV, 2015/16	AHS III, 2014/15	NLSS III, 2010/11
Urban/Rural				
Urban	3.5	5.5	4.7	5.0
Rural	7.1	12.7	13.5	10.0
Nepal	**5.3**	**9.7**	**10.5**	**9.0**

Table 6.6 Mean number of days the 8 food groups were consumed over the last 7 days preceding the survey by the DDS, AHS V

Household characteristics	Cereals, tubers & roots	Pulses	Vegetables	Meat, fish & eggs	Fruits	Milk & dairy products	Ghee, oil & butter	Sugar, honey & sweets
Dietary diversity								
Acceptable dietary diversity	7.0	6.0	6.9	2.4	2.3	4.2	6.9	6.1
Poor dietary diversity	7.0	2.7	4.7	0.7	0.2	0.1	5.9	3.2
Nepal	**7.0**	**5.9**	**6.7**	**2.3**	**2.2**	**4.0**	**6.9**	**5.9**

Overall, the results show an improvement in the consumption of diversified foods as compared to the AHS III and IV. This could be due to increased access to roads and markets, together with a shift from subsistence to commercial and more diverse farming which often increases the intake of diversified foods either from household production or market purchase.

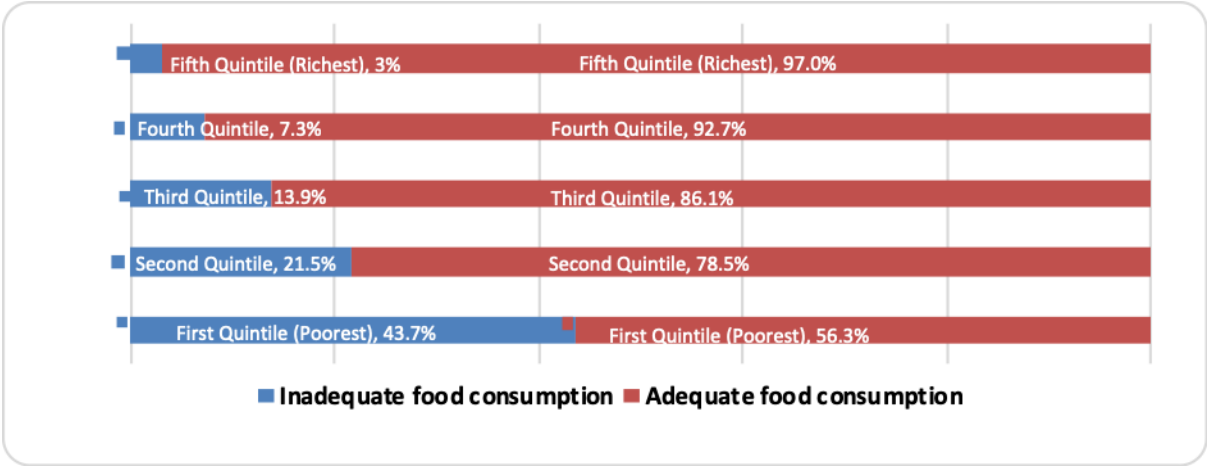
6.4 Food consumption by quintile and decile

The findings show significant differences between the FCS and DDS when measured against consumption quintile groups. The households in the poorest and the richest quintiles had a FCS difference of 45.7 points, and a dietary diversity score by 2.5 points (Table 6.7). Similar differences are observed in the FCS between households in the consumption decile groups. The households in the tenth decile (richest) group have a high FCS of 91.1 whereas it is 48.5 for the households in the first decile (poorest) group. This shows a strong association between households' economic well-being and the ability of the households to acquire food in adequate quantity and quality.

Table 6.7: Mean Food Consumption Score (FCS) and Dietary Diversity Score (DDS) by consumption groups in the AHS V and AHS IV Surveys

	AHS V, 2016/17		AHS IV, 2015/16	
	FCS	**DDS**	**FCS**	**DDS**
Consumption Quintile				
Poorest	51.9	5.9	46.2	5.1
Second	61.1	6.5	55.5	5.9
Third	67.7	6.8	62.1	6.4
Fourth	75.6	7.1	70.0	6.8
Richest	97.6	7.5	80.5	7.2
Consumption Decile				
Poorest	48.5	5.7	42.4	4.7
Second	54.9	6.1	49.8	5.5
Third	59.3	6.4	54.1	5.7
Fourth	62.8	6.6	57.0	6.0
Fifth	65.1	6.7	59.8	6.2
Sixth	70.1	6.9	64.3	6.5
Seventh	72.8	7.0	67.3	6.7
Eighth	78.2	7.2	72.4	6.8
Ninth	83.7	7.5	76.3	7.0
Richest	91.1	7.6	84.4	7.3
Nepal	**71.6**	**6.9**	**65.2**	**6.4**

Figure 1: Households with adequate and inadequate consumption by per capita consumption quintile groups (percent)



As presented in Figure 1, 43.7 percent of households in the poorest consumption quintiles have inadequate food consumption owing to their lack of purchasing power, whereas this proportion is significantly smaller (3.0 percent) for households in the richest consumption quintile group. Households in the poorest quintile group are 14 times more likely to consume an inadequate diet compared to households in the richest quintile group.