

Chapter IV

Site description

This chapter addresses the existing situation of the six districts of the far Western Nepal and twenty vegetable production sites within these districts. There are nine districts in the region and only six districts, which have better potentiality for vegetable production and are accessible in terms of communication and transportation, were selected for study. The first part of the chapter covers general overview of the six districts (area) and second part describes the main features of the selected sites.

4.1 Overview of the study area

4.1.1 Location

The study area is located at the Western end of the country. The area is recognized as far Western region in political map of the country. The study area covers six district of the region namely Kanchanpur and Kailali Dadeldhura, Baitadi, Doti and Darchula. These districts are vertically aligned and harbor a wide range of climatic condition from tropical to temperate alpine. The landscape varies from flat alluvial plains, river basins to extreme mountain slopes. Out of six districts Kailali and kanchanpur are Terai districts, Dadeldhura, Baitadi and Doti are midhill districts and Darchula is high mountainous district. The twenty vegetable production sites were selected from these six districts for the study purpose.

4.1.2 The climate and geography

The geography of Nepal can be divided in five ecological zones stretching from east to west and the study area follows the similar national ecological pattern. These ecological zones comprise Terai, Shiwalik, Middle Mountains, High Mountains and Himalayas aligned from south to north (Carson, 1992). These five ecological

zones can be summarized in three main ecological zones Terai, Mid Hill (hill) and High Mountain (mountain) to understand the agriculture systems and socio economic characteristics of the region. The study area includes two Terai districts Kailali and Kanchanpur which are considered as “grain bowl” of the region. The land in these districts is flat and fertile. The cool, foggy winter with sporadic rainfall, followed by dry hot summer and humid hot rainy season are basic climatic characteristics of Terai. The geography of mid hill zone is composed of river basins and mountain slopes with diverse microclimatic niches developed from slope and aspect interactions. Cold winter, dry hot to warm summer and warm humid rainy season are the dominant climatic characteristics of this zone. The high mountain zone has extreme slopes with fewer river basins and scarce flat land for human settlement. The dry warm summer, pleasant humid rainy season and chilly winter are the major climatic characteristics of this zone.

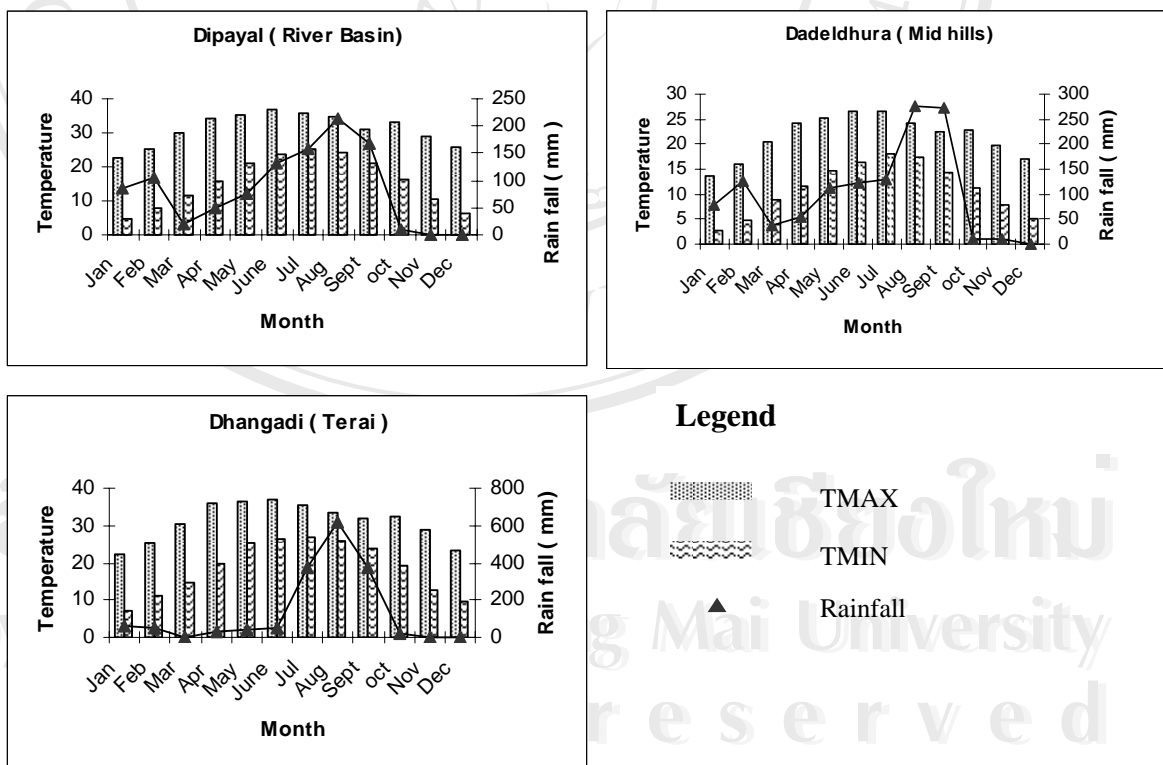


Figure 4.1 Temperature and rainfall in three sites of the study area

Source: MoAC, 2003

The temperature and rainfall pattern of Terai and hills is similar. However the degree of fluctuation in temperature and rainfall is high in different season (Figure 4.1). These three sites represent Terai and mid hill zone of the study area. In Nepal, rainfall pattern varies from east to west but similar in case of south to north.

4.1.3 Road and market networks

The transportation network in the region is poor and large area of countryside mostly in hills and mountains is out of road networks. Out of the six districts in the study area, four districts except Darchula and Baitadi are linked with blacktopped road networks up to the head quarters. The east-west highway passes through two Terai districts and Mahakali highway vertically links all the districts where study sites are located (Figure 4.2).

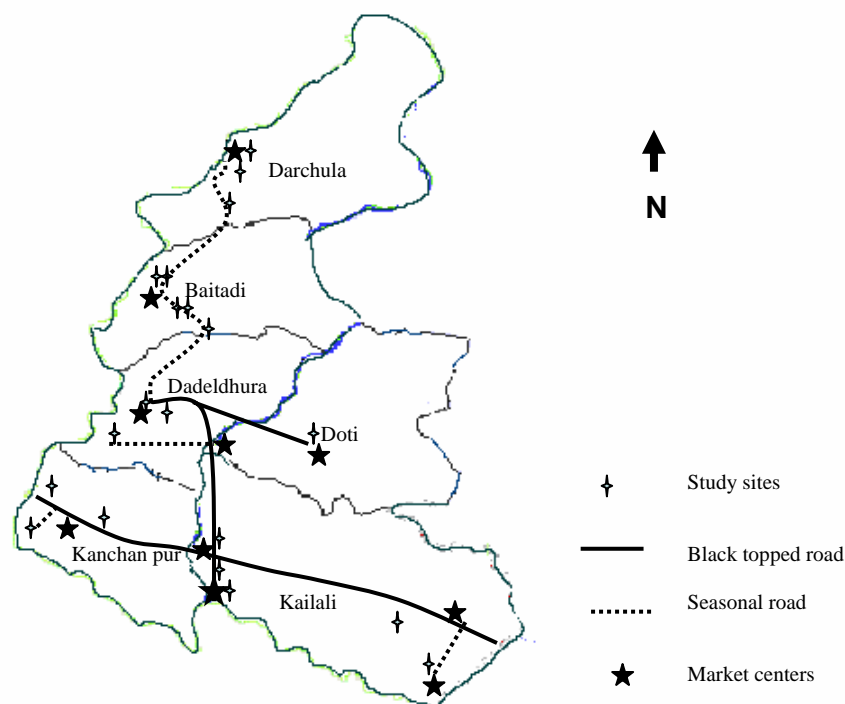


Figure 4.2 Road and market networks in the study area

The markets are small and poorly developed in hills and mountains, only Terai districts have moderately developed townships. The marketing system for food grains

is well developed through private sector investment in collection, storage, processing and distribution in the region, which is lacking in case of vegetable crops. The marketing network of vegetables is very poor due to small scale of production, insufficient investment from private and public sector in the development of production and marketing system. There are no marketing centers and facilities for collecting, grading and packaging of vegetables in these districts. Basically farmer's networks to local traders and local trader's link to outer markets are not well established.

4.1.4 Land use

The land use practices in the study districts vary depending on the potentiality of the land, microclimatic condition and accessibility to market and transportation infrastructures. The proportion of cultivated land is highest (35.7%) in Baitadi and lowest (18.1%) in Dadeldhura district (Table 4.1).

Table 4.1 Percentage land area under different land use in districts of the study area

Land use type	Darchula	Baitadi	Dadeldhura	Doti	Kailali	Kanchanpur
Forest area	31	43.2	75.6	46	65	56
Shrub land	3	7.5	1.8	0	0	0
Pasture land	11	13.6	3.3	6	2	0
Cultivated land	26	35.7	18.1	25	28	40
Rivers and others	29	0	1.2	23	5	4
Total	100	100	100	100	100	100

Source: Compiled from annual reports of concerned district agriculture development offices, 2004

The Dadeldhura has difficult geography and low population in comparison to Baitadi district. The proportion of the forestland is of main importance due to high dependency of farming systems in forest resources. In the hills and mountains, the arable land is scarce and nearly saturated to expand. The proportion of cultivated land to total physical area is low in case of Darchula where suitability of land for cultivation is low. Dadeldhura district has highest proportion of forest cover and

lowest area under cultivation. The Terai districts (Kailai and Kanchanpur) also have large area under forest cover but the percentage area under cultivation is also larger in comparison to other districts (Table 4.1). Within the cultivated land, large area is occupied by cereal crops i.e. paddy, wheat and maize followed by some other cash crops such as mustard, sugarcane and lentil.

4.1.5 Irrigation

There is limited irrigation facility available in the districts. Terai districts have comparatively higher percentage of irrigated area than hill and mountain districts. The irrigated area sharply declines in all districts during winter and summer which are dry seasons and critical for irrigation requirement (Figure 4.3). This decline is very high in case of Dadeldhura, Baitadi, Darchula and Doti districts. In summer the irrigated area is insignificant in these districts. In Kailali and Kanchanpur district there such decline in irrigated area is lesser due to availability of ground water and permanent sources of surface irrigation.

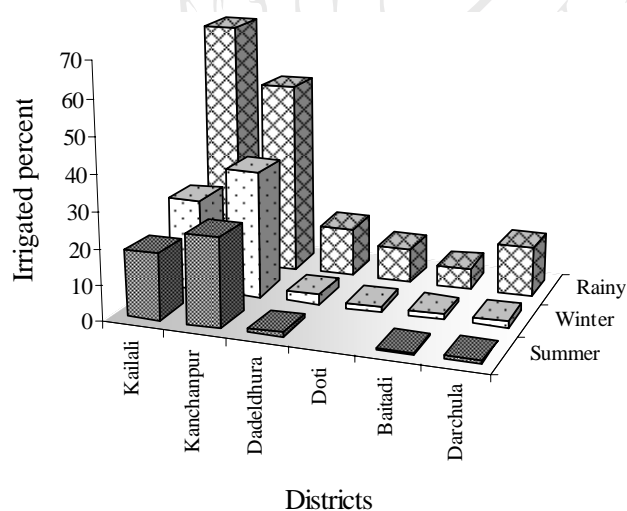


Figure 4.3 Season wise percentage irrigated area in study districts

Source: Calculated from CDD, 1998

The adoption of vegetable based farming system is only possible after availability of irrigation. Irrigation is one major constraint for the promotion of

vegetable farming in different districts where marketing and transportation facilities are available.

4.1.6 Cropping system

Agriculture is the main stay of the population in the districts and it is dominated by the subsistence crops (Table 4.2). Rice, wheat and maize which are staple crops occupy 86.5 percent of the area under cultivation. The rice crop occupy large share in Kailali (70.5%) and Kanchanpur (63.1%) district but in hill and mountain district wheat and maize occupies larger share of the cultivated area. Only in the areas nearby the market centers and road heads cash crops are being grown in hills and mountains. In Kailali and Kanchanpur sugarcane, pulses, and mustards are grown as cash crops since long time, fruits and vegetables are newly introduced cash crops in these districts. In hills and mountains soybean, citrus and vegetable crops are emerging cash crops mostly in the areas where transportation is accessible.

Table 4.2 Percentage area under different crops in the study districts

Crops	Darchula	Baitadi	Dadeldhura	Doti	Kanchanpur	Kailali	Total
Paddy	14.4	20.7	37.4	14.0	70.5	63.1	45.4
Maize	27.9	32.7	21.7	5.1	10.4	14.6	15.1
Millet	5.3	3.3	2.5	3.8	0.5	0.2	1.8
Wheat	31.6	35.4	33.8	18.8	34.2	18.7	26.0
Potato	4.1	2.4	1.2	1.6	2.3	2.4	2.3
Vegetables	1.4	2.9	3.1	1.0	5.9	2.2	2.9

Source: Computed from MoAC, 2003

Note: Percentage area is percentage of total cultivated area

The three distinct crop seasons rainy, winter, and summer or spring are found in the area. Normally, rainy season crops are planted during June-July and harvested in September-October. For winter season crops, planting is carried out in October-November and harvested in March-April. Similarly, summer or spring crops are planted in February-March and harvested in May-June but the actual planting and harvesting time varies depending on the local micro climatic condition.

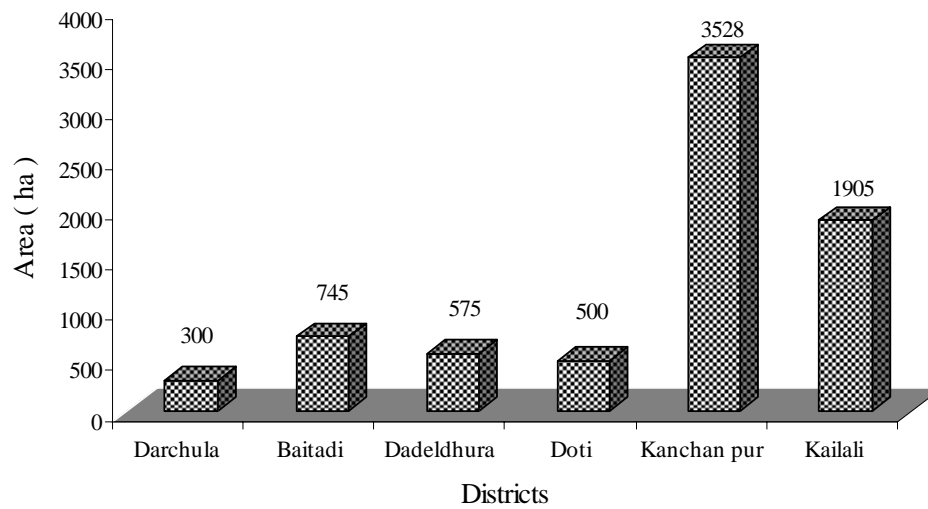


Figure 4.4 Area under vegetable crops in study districts

Source: MoAC, 2003

Vegetable farming, which has potential for income generation and import substitution, is still initial stage of commercialization. The area under vegetable crops is very low in all districts however Kailali and Kanchanpur are ahead than other hill and mountain districts (Figure 4.4)

4.1.7 Socio economic characteristics

4.1.7.1 Population characteristics

The total population of the six districts is 1.7 million comprising nearly equal proportion of male and female (Table 4.3). The average family size is not so different among the districts ranging from lowest 5.7 to highest 6.2 members per family. The economically active population is more than fifty percent in five districts except Darchula where it is only 46 percent (Table 4.3). The population density and population growth rate is higher in Terai districts (i.e.Kanchanpur and Kailali) due to migration from outside. The per capita income is higher in these two districts due to availability of better income opportunities, higher agriculture production and market accessibility. The per capita annual income is highest in Kailali (6,824

NRs/person/year) district and lowest in Darchula (4,876 NRs/person/year). The per capita income is lesser in mountain and hill districts in comparison to Terai districts.

Table 4.3 Population parameters of the study districts

Population parameters	Darchula	Baittadi	Dadeldhura	Doti	Kailali	Kanchanpur
Male population	62,119	121,418	65,616	104,170	30,6830	18,902
Female population	59,794	113,713	61,057	104,784	312,301	192,889
Total population	121,913	235,131	126,673	208,954	619,131	380,791
Male literacy rate (%)	73.24	55.3	69.74	48.46	60	70.53
Female literacy rate (%)	50.7	23.0	35.42	20.08	36	44.19
Total literacy rate (%)	61.75	37	53.13	28.52	48	57.67
Average family size (person/household)	5.8	6.5	5.7	5.7	6.5	6.2
Population density (person/sqkm)	53	158	84	103	191	237
Economically active population (%)	46	59.6	61.1	50	50.1	50.2
Population growth Rate (%)	1.81	1.58	1.91	2.23	3.93	3.9
Per capita income (NRs/head/year)	4,876	5,609	5,881	4,959	6,824	6,388

Source: PDDP, Dadeldhura (DDC Regional network forum, Far Western, 2003)

The literacy rate is highest in Darchula (61.75%) and lowest in Doti (28.52%) district (Table 4.3). In all districts male literacy rate is higher than female literacy rate. The female literacy rate is less than 50 percent in all districts except Darchula.

4.1.7.2 Social caste and ethnicity

The overall society is stratified under the Hindu caste system since ancient time. However there are new emerging dimensions of stratification based on profession and economic status. Mainly society is divided into four caste categories *Bhramin*, *Chettri*, *Baisaya* and *Sudra* based on occupational specification in the ancient Hindu ideology. However the occupations at present are not limited within religious boundary. Further each caste is subdivided into many sub caste titles. The other caste category residing in the Kailali and Kanchanpur district is *Tharu* ethnic

tribe. The largest population in the study districts is of *Baisaya* followed by *Bhramin* and disadvantaged category (professional caste and ethnic tribes) and *Chettris* are lowest in population (Figure 4.5).

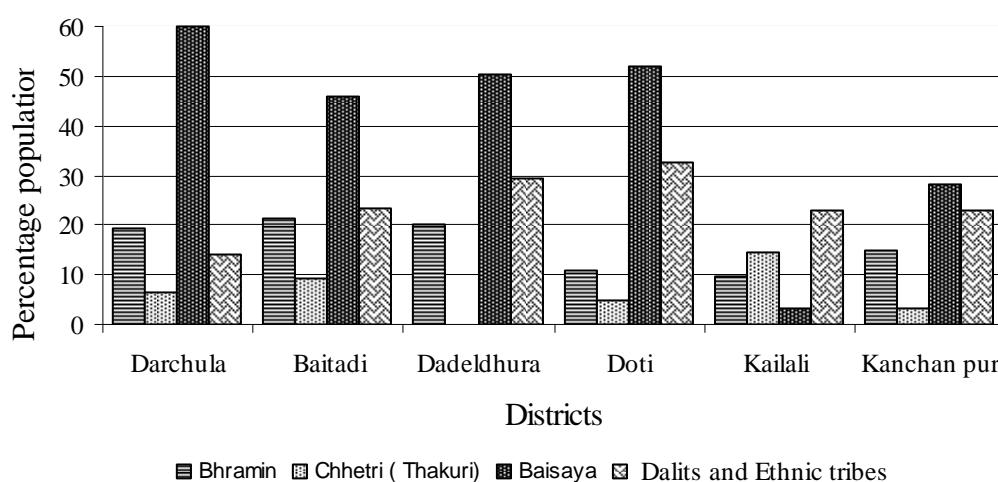


Figure 4.5 Population of different caste categories in study districts

Source: CBS, 2002

The settlements in the mountains and hills are small hamlets scattered over hill slopes and river basins, dominated by single caste category or titles due to continuous growth of population and division of family clans within limited geographical boundaries. The communities in mid hills and high mountains are more uniform than in low land districts where there is large number of migrants from different origin reside in the settlements.

4.1.7.3 Food security

The food security is important issue among farming population and has different level of food security status with respect to their own farm production. Mid hill and mountain districts are under chronic food shortage and depend on outside food supply. The food shortage is acute in mountain areas where the land holding size is small with poor productivity. The food security is fundamental household priority in mountains and hills, which is one strong motivation to grow cereal crops.

On average, Kailali and Kanchanpur districts are food self-sufficient however still there are food deficit households in those particular districts. In these districts there is better physical accessibility to food grains as there is good facility of marketing and transportation. These two districts are the supply source of food grains to hill and mountain districts. Mishra, 2005 studying the determinants of food security in Kailali district found severity of food insecurity was highest on Sudra, and to less extent on Tharu than that of Brahmin and Chhetri however food security is threatening issues for all caste categories.

4.2 Description of the study sites

4.2.1 The geographical distribution

The twenty vegetable production sites selected for the study purpose are scattered over the above mentioned six districts with varying geography, ecological zone, microclimatic condition and accessibility to market and transportation facilities. In general sites located in Terai have better facilities like market, transportation and suitable land for vegetable farming in comparison to sites in hills and mountains (Table 4.4, Figure 4.2).

Table 4.4 Road, transportation and market accessibility in study sites

Name of the site	Road access	Local market size	Distance to local market	Transportation to local market/road head	Accessibility to distant market
Mountain					
Khalanga	No	Enough	Proximity	On foot	Accessible
Bhagwati	No	Not enough	Distant	On foot	Difficult
Chapari	No	Enough	Proximity	On foot	Accessible
Mid hill					
Dipayal	Good	Enough	Proximity	On foot	Difficult
Ghurukhola	Fair	Not enough	Distant	On foot	Difficult
Dehimandu	Fair	Not enough	Distant	On foot	Accessible
Siddhaswer	Fair	Not enough	Distant	On foot	Accessible
Dasrath Chand Municipality	Fair	Enough	Proximity	On foot	Difficult
Kumali Dewal Hat	Fair	Enough	Proximity	On foot	Difficult

Amargadi	Good	Enough	Proximity	On foot	Accessible
Jogbuda	Poor	Not enough	Proximity	On foot	Difficult
Bhatkanda	Good	Not enough	Proximity	On foot	Accessible
Terai					
Dodahara	Good	Enough	Proximity	Cart, bicycle	Accessible
Tilachaud	Good	Enough	Proximity	Truck, bicycle	Accessible
Suda	Good	Enough	Proximity	Truck, bicycle	Accessible
Geta	Good	Enough	Proximity	Truck, bicycle	Accessible
Malakheti	Good	Enough	Proximity	Truck, bicycle	Accessible
Dhangadi	Good	Enough	Proximity	Truck, bicycle	Accessible
Tikapur	Good	Enough	Proximity	Cart, bicycle	Accessible
Pratappur	Fair	Not enough	Distant	Cart, bicycle	Difficult

Source: Field Survey, 2005

4.2.2 Population

The Village Development Committee/Municipality population parameters in which the sites are located are the best representative for the site. The highest percentage (90.20%) of economically active population is found in Chapari of Darchula districts and lowest (49.64%) in Pratappur of Kailai district (Table 4.5). The total literacy rate in the program sites ranges from lowest 39 percent for Pratappur to highest 71 percent for Khalanga and male are more literate than females (Table 4.5). The observed general tendency shows educated people in most of the cases are less interested in farming and out-migrate for off farm employment.

Table 4.5 Population parameters in study sites

Sites	Total	Total		Economically active population			Literacy rate %		
		Male	Female	Total	Male	Female	Total	Male	Female
Mountain									
Bhagwati	2,269	46.80	53.20	70.03	31.34	38.70	54	68	41
Chapari	2101	46.64	53.36	90.20	40.79	49.41	49	67	31
Khalanga	4138	52.97	47.03	65.56	26.95	26.95	71	89	52
Mid hill									
Dehimandu	2767	46.77	53.23	75.86	41.06	41.06	60	85	37
Gurukhola	2806	48.08	51.92	58.41	28.97	28.97	49	72	30
Dasrath Chand Municipality+ Kumali Dewal Hat	13787	46.13	53.87	69.86	38.73	38.73	60	79	43

Siddhaswer Amargadi Municipality	1603	48.41	51.59	63.94	36.31	36.31	58	75	43
Bhatkanda	2431	45.99	54.01	73.63	43.60	43.60	52	75	31
Jogbuda	13121	49.12	50.88	74.61	36.96	36.96	42	57	27
Dipayal	3427	49.43	50.57	66.41	31.63	31.63	49	67	31
Terai									
Suda	13488	51.42	48.58	63.36	28.44	28.44	53	66	39
Tilachaud	60960	50.72	49.28	61.52	27.39	27.39	65	77	52
Dodhara	13697	51.72	48.28	59.03	23.52	23.52	56	68	42
Geta	8659	51.32	48.68	70.90	31.78	31.78	56	66	46
Malakheti	11350	50.02	49.99	56.85	24.18	24.18	46	55	36
Tikapur	28093	49.63	50.37	60.05	25.84	25.84	56	67	45
Dhangadi Municipality	50123	52.29	47.71	57.98	23.40	23.40	59	70	47
Pratappur	9007	48.08	51.92	49.64	18.50	18.50	39	54	26

Source: CBS, 2002

Note: The above parameters are of Village Development Committees/ Municipality in which the sites are located.

4.2.3 Household characteristics

The society in studied sites is patriarchal and predominantly (82 %) households are male headed. The average size of the family is found 6.41 persons. The largest family size is found for ethnic tribes (8.23) followed by Chettri (6.47), Baisaya (6.42), Bhramin (5.75) and Sudra (4.64) (Table 4.6).

The household structure is composite residing 3 to 4 generations together, which is more common in ethnic tribes making the family size large. The 44 percent of the households have 4 to 6 members in the family. The 80 percent of farm families in the sites residing since ancestor's time and only 19 percent are outside migrants. This shows the migration in very less mostly in the hills where land is scarce and off farm employment opportunities are limited for outsiders. The average schooling year of household head is found 6.56 in the study sites while looking the distribution of education attainment found that 43 percent are having less than 3 years of schooling and 41 percent are having schooling years between 6 to 10 years (Appendix 4.2).

Table 4.6 Caste wise family size, literacy rate, household income and land holding size in study sites

Caste category	Literacy rate	Family size	Annual total household income NRs	Total off farm income	Land holding (ha)	
					Total	Irrigated
Bhramin	0.72	5.75	55,972.97	24,810.81	0.63	0.36
Chettri	0.80	6.47	79,857.14	30,095.23	1.20	0.61
Baisaya	0.72	6.42	44,214.06	13,667.18	1.19	0.63
Sudra	0.61	4.64	30,071.42	92,85.71	0.36	0.10
Ethnic group	0.77	8.23	87,375.00	16,288.46	1.49	1.09
Total	0.73	6.41	57,225.00	18,383.95	1.04	0.59

Source: Field survey, 2005

4.2.4 Employment and income

The 67 percent of the population in the study sites is engaged in farming. On an average four people in an average family size of six are employed in agriculture. The average number of person employed in agriculture per household is higher (4) in Terai sites than sites in hills (3) and mountains (3). The lowest figure (1 person/household) for employment in agriculture is found for Dasrath Chand Municipality site of Baitadi and highest (7 person/household) for Tilachaud of Kanchanpur district (Appendix 4.1).

On an average off farm employment is very less (1 person per two household) even though the selected sites are accessible to transportation and market facilities. The size of market and opportunities for off farm employment varies from site to site. The off farm employment among different sites varies from one person per household to one person out of eight households (Appendix 4.1). Looking for the ecological zones, mountains and hills have higher off farm employment (0.80 and 0.56 person per household) due to seasonal migration to meet family needs in comparison to Terai (0.53 person per household).

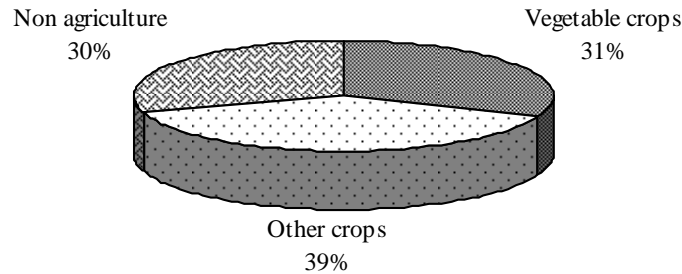


Figure 4.6 Sources of income and their share in household income

Source: Field survey, 2005

The average annual gross income per household from all sources is found to be NRs 57,225 .0 (818.0\$) and 61 percent of which is contributed by agriculture. The lowest gross annual household income NRs 14,875.0 is found in Dipayal site and highest NRs 109,375.0 for the Geta site. The highest gross annual income vegetable crop is highest (NRs 50,000.0/household) for Geta site and lowest in Dehimandu (NRs 4,000.0/household) (Appendix 4.1). The contribution of agriculture in gross annual household income is 20 percent in Dasrath Chand Municipality and highest 89 percent in Dipayal site. The contribution of vegetable farming in annual household income ranges from highest 49 percent in Amargadi site to lowest 10 percent in Jogbuda site. Within income from agriculture vegetable farming contributes highest 96 percent in Chapari site to lowest 26 percent in Jogbuda site. On an average the share of income from vegetable farming is 30 percent to total annual income and 50 percent to income from farming (Figure 4.6). This indicates the vegetable production is most important source of cash income for the farm households in the study sites.

While looking at the distribution of household income the 41 and 57 percent of the households have annual income less than NRs 25,000.0 and NRs 50,000.0 (Figure 4.7). Thus most of the households in study sites are under low-income category.

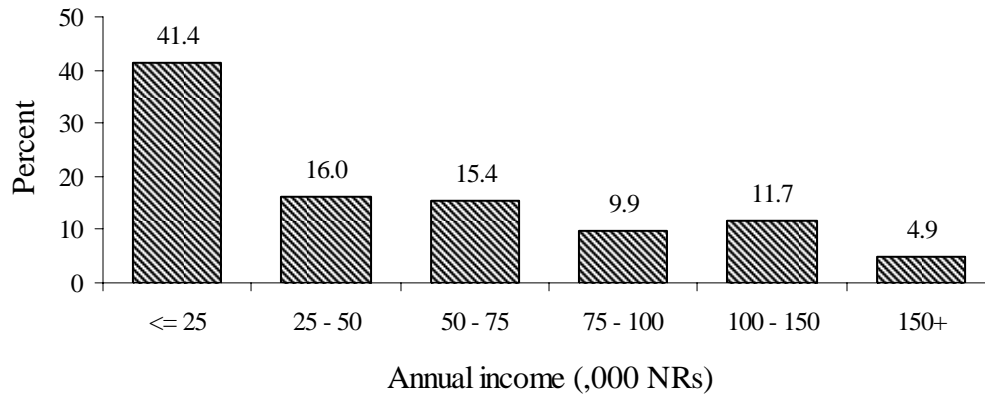


Figure 4.7 Percentage of households under different income category in study sites

Source: Field survey, 2005

4.2.5 Land holding

Average landholding size is 1.04ha per household, which is positively skewed indicating that large numbers of households in the study sites are small holders. The 38 percent households have less than 0.5ha of land and 68 percent households have land less than 1 ha (Table 4.7).

Table 4.7 Percentage of households under different land holding size category

Land holding category (ha)	Frequency	Percent	Cumulative percent
<= 0.25	22	13.6	13.6
0.26 -0.50	40	24.7	38.3
0.51 - 1.00	48	29.6	67.9
1.01 - 1.50	16	9.9	77.8
1.51+	36	22.2	100.0

Source: Field survey, 2005

The average land holding size is smaller in hill and mountain sites where the arable land availability is limited, in comparison Terai sites. The average irrigated land holding size is 0.59 ha which is larger in Terai and smallest in mountain sites (Figure 4.8).

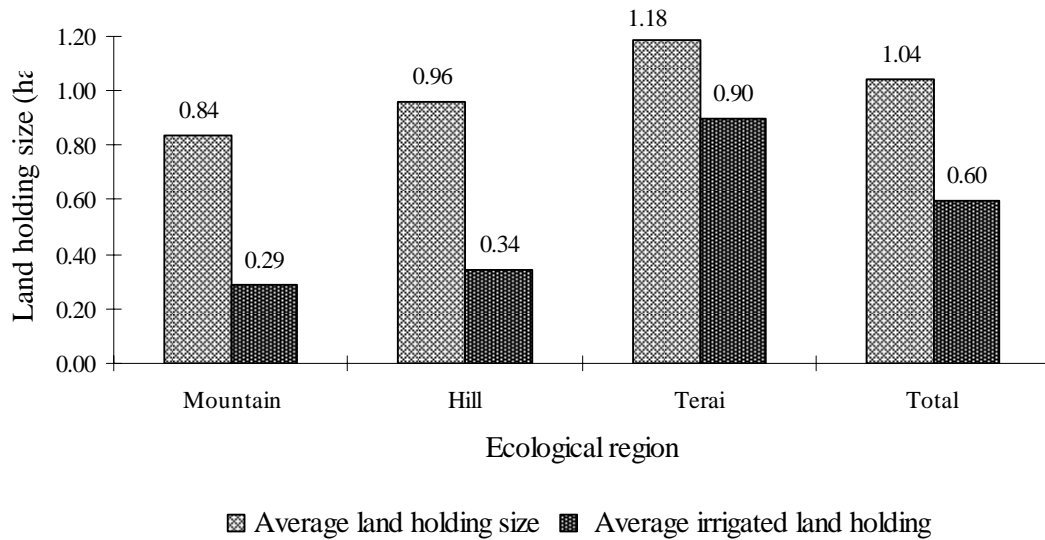


Figure 4.8 Land holding size in study sites grouped by ecological regions

Source: Filed survey, 2005

Small-irrigated land holding size and scattered parcel of land is one major constraint for the vegetable production in hills and mountains. Among the twenty production sites the lowest land holding size per household (0.31 ha per household) is found for Dipayal and highest in Malakheti (1.71ha per household). The availability of potential land suitable for vegetable cultivation is important for adoption of vegetable farming as cash generating enterprise by the household. The smallest size of potential land for vegetable farming is found in Dehimandu (0.10 ha per household) and highest for Bhagwati (0.89 ha per household) (Appendix 4.2). Among different caste categories, on an average ethnic tribes have large landholding size (1.49ha per household) followed by *Baisaya* (1.19ha per household), *Chettri* (1.20ha per household), *Bhramin* (0.63ha per household) and *Sudra* (0.36ha per household) (Table 4.6). The ethnic tribes are the traditional inhabitant of Terai where abundant land was available for cultivation in the past so they have larger landholding size and *Sudra* is the disadvantaged professional caste category and have smallest land holding size.

4.2.6 Major cropping patterns in the sites

The dominant cropping patterns in selected sites are still cereal crop based. However these sites are focused for the production of vegetable crops by the government. The winter and rainy seasons are two main crop production seasons but in Terai and sites located in river basins have three cropping seasons. Rice, maize and wheat based cropping patterns are dominants and vegetable and other crops are grown in small scale to fetch the cash need of the family. The third cropping season is summer, which is hot and dry. Summer provides opportunity to grow one more crop in such areas provided with irrigation facility. Due to lack of irrigation facility summer crops are not popular among the farmers (Table 4.8).

Table 4.8 Dominant cropping patterns in study sites

Name of the site	Rainy season	Winter season	Summer/ Spring season
Mountain			
Khalanga	Paddy/maize	Wheat/fallow	No summer gap
Chappari	Paddy/maize	Wheat/fallow	No summer gap
Bhagwati	Maize	Wheat/fallow	No summer gap
Hills			
Dipayal	Paddy/millet	Wheat	Fallow
Siddhaswor	Maize/potato	Wheat	No summer gap
Gurukhola	Paddy/maize	Wheat	No summer gap
Jogbuda	Paddy	Wheat	Fallow
Amargadi	Paddy/maize	Wheat	No summer gap
Bhatkanda	Potato	Fallow	No summer gap
Dehimandu	Paddy	Potato	No summer gap
Kumali Deval Hat	Maize	Wheat	No summer gap
Dasrath Chand Municipality	Maize/paddy	Wheat	No summer gap
Terai			
Pratappur	Paddy	Mustard + lentil	Fallow
Malakheti	Paddy	Wheat/mustard	Fallow/sun flower
Suda	Paddy	Wheat	Fallow/sun flower
Tikapur	Paddy	Wheat	Fallow/maize
Geta	Paddy	Wheat/Lentil	Fallow
Tilachaud	Paddy	Wheat	Fallow
Dhangadi	Paddy	Wheat/vegetable	Fallow/maize
Dodhara	Paddy	Wheat	Fallow/pointed guard

Source: Field survey, 2005

4.2.7 Food security

The food security is main priority of farm households for sites located in hills and mountains where outside supply of food grain is limited. Farm households set priority for staple crops (due to food security reason) even though they have potentiality to grow cash crops for better income. In general 73 percent of the households in the study sites do not have enough food supply from their own production. In the mountains only 23 percent households have enough production to sustain their family food need and in hills this size is 22 percent very close to mountains. In Terai the situation is better 84 percent households are food self-sufficient (Table 4.9). Among the twenty sites Dasrath Chand Municipality and Kumali Devel Hat are poorest in food self sufficiency status as the farm production is only just enough up to six month to cater the family food requirement (Appendix 4.3). Here poor food self sufficiency status does not mean households are food insecure but it indicates their own farm production is not enough to feed their family.

In farming communities main traditional strategy to cope with food shortage is bartering with non food items, borrowing and purchasing from the neighboring households and relatives. In recent years the development of transportation and market networks has changed the trends and food deficit households can purchase food grains from the market.

Table 4.9 Percentage of households under different food security regimes in study sites grouped by eco zones

Sites under eco zone	Food sufficiency status (% household in category)			
	Enough and sell	Just enough	Enough for nine month	Enough for six month
Mountain	6.45	16.13	19.35	58.06
Hills	5.56	14.81	29.63	50.00
Terai	50.65	33.77	5.19	10.39
Average	27.2	24.1	16	32.7

Source: Field survey, 2005