

## **Chapter 4**

# **DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE**

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## CHAPTER-4

### DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE

#### 4.1: Marriage and Mating Pattern

##### 4.1.1: Endogamy:

Endogamy may be regarded as the basis of ethnic behaviour. It is the practice of marrying within a social group and rejecting others because of social membership. Traditionally Dhimals are endogamous group; the law of endogamy is strictly followed by them. However in recent time (as per table 4.1.1) 23.6% of the marriage supposed to break the law after marrying outside the group. Among them marriage with Rajbansi (11.24%) and Nepali communities (9.55%) predominate over other type of marriages (marriage with tribal groups viz. Tharu and Oraon; marriage with other Bengali communities viz. Mahishya and Namasudra). In respect of clan affiliation Ding infringe the law of endogamy more than others (61.9% of total infringe) followed by Aghnia (14.29% of total infringe), Later (11.9%), Donge (9.52%) and others.

**Table 4.1.1: Marriage by Alliance**

Type of Mating		Frequency	Percentage
Husband	Wife		
Dhimal	Dhimal	136	76.40
Dhimal	Rajbansi	20	11.24
Dhimal	Nepali	17	9.55
Dhimal	Tribe of West Bengal	3	1.69
Dhimal	Other Bengali Castes	2	1.12
Total		178	100.00

#### 4.1.2: Exogamy:

Clan is important to regulate marriages, as Clan (or Sub Clan) is strictly exogamous in nature. Marriage within same Clan or Sub Clan (when Clan divide into several Sub Clan, it follows Sub Clan exogamy instead of Clan exogamy) are prohibited. There are altogether eight clans with two sub clan each for three clans; these are Aghnia, Later (Bangmalia, Tangmalia) Donge (Simul Donge, Kesar Donge), Ding (Ding, Rajding), Muling, Rathum, and Nunia. However, another clan Talipa supposed to include in the list of female because of a single marriage with a Talipa women from Nepal (Table 4.1.2).

**Table 4.1.2: Number of Marriage between Clans**

♀ ♂	AGH	BNG	TNG	SML	KSR	DNG	RJD	MUL	RAT	NUN	TAL
<b>AGH</b>	-	3	2	2	0	2	0	0	0	0	0
<b>BNG</b>	2	-	0	2	1	5	3	1	0	0	0
<b>TNG</b>	0	0	-	3	0	4	3	0	2	0	0
<b>SML</b>	0	0	1	-	0	8	11	0	0	0	0
<b>KSR</b>	0	0	0	2	-	2	0	0	0	0	0
<b>DNG</b>	2	11	3	2	1	-	29	3	5	3	1
<b>RJD</b>	1	0	0	0	0	8	-	0	0	0	0
<b>MUL</b>	2	0	0	0	0	5	1	-	0	0	0
<b>RAT</b>	0	2	0	0	0	5	1		-	0	0
<b>NUN</b>	0	0	0	0	0	0	0	0	1	-	0

AGH= Aghnia, BNG= Bangmalia, TNG= Tangmalia, DON= Donge, SML= Simul Donge, KSR= Kesar Donge, DNG= Ding, RJD= Raj Ding, MUL= Muling, RAT= Rathum, NUN= Nunia, TAL= Talipa

#### 4.1.3: Age at Marriage:

The study of age at marriage is of great importance as it related to socio-economic and other achievement in general as well as mother and child health in particular. It is calculated from table 4.1.3A that the mean age marriage for women is 17.42 years compared to 22.18 years for their men counterpart. Therefore, the average age difference between spouses is 4.76 years. Table also shows that majority of the women (78.11%) marry within 18 years of age which could be classified as child

marriage; however for men it is 23 years (74.07%). The maximum age at 1<sup>st</sup> marriage for women is 25 years, whereas for men it is 34 years.

Table 4.1.3B is the combination of existing couples age at 1<sup>st</sup> marriage. It exhibit that the age at marriage for husbands is always higher compared to their wives except two cases, where husbands belong to 20-24 years age group and wives at 25-29 years. Table also shows that majority of the marriage took place between husband of 20-24 years with wife of 15-19 years (52%) followed by both belongs to 15-19 years (17.14%).

**Table 4.1.3A: Age at 1<sup>st</sup> Marriage (Married, Separated, Widow)**

Age at 1 <sup>st</sup> Marriage	No. of Women	No. of Men
14 years	12	0
15 years	27	0
16 years	45	3
17 years	37	4
18 years	36	16
19 years	15	18
20 years	10	36
21 years	8	15
22 years	5	28
23 years	2	20
25 years	2	7
25 years	2	10
26 years	0	6
27 years	0	6
28 years	0	6
29 years	0	4
30 years	0	4
31 years	0	1
32 years	0	2
33 years	0	2
34 years	0	1
Total	201	189

**Table 4.1.3B: Couples by age at 1<sup>st</sup> Marriage**

Wife Husband	10-14 years	15-19 years	20-24 years	25-29 years	Total
15-19 years	8	30	0	0	38
20-24 years	3	91	2	2	98
25-29 years	0	16	14	0	30
30-34 years	0	4	5	0	9
Total	11	141	21	0	175

#### 4.1.4: Marriage Distance:

Marriage field may be defined as the area from where individuals used to select their mate. Following is the table (4.1.4A) of marriage field for Dhimal (Indian) men, which suggests that about 30.73 percent of marriages have been contracted within same village, and 30.21 percent contracted outside village but within same district. However, another major portion of men (36.46%) used to marry a woman from Nepal.

Table 4.1.4B is a tabulation of data collected from families having recent history of marriage for women. Altogether 98 cases were recorded; among them 48.98% find their husband's house in Nepal, 15.31% within village and 31.63% from within district but outside their respective villages.

**Table 4.1.4A: Marriage Distance for men**

Marriage field for men	Number	Frequency
Same village	59	30.73
Outside village but Same district	58	30.21
Outside district but within State	3	1.56
Outside state but within India	2	1.04
Outside India (Nepal only)	70	36.46
Total	192	100.00

**Table 4.1.4B: Marriage Distance for women**

Marriage field for women	Number	Frequency
Same village	15	15.31
Outside village but Same district	31	31.63
Outside district but within State	2	2.04
Outside state but within India	2	2.04
Outside India (Nepal only)	48	48.98
Total	98	100.00

#### 4.2: Bio-Events:

There seems to be some biological events which directly or indirectly affect fertility, mortality and other variables of the population. Data on Bio-events were collected from ever married women through a schedule specially designed for the purpose. Altogether 201 ever married women interviewed for age and age at 1<sup>st</sup> marriage; among them 191 mothers were interviewed for their age at 1<sup>st</sup> birth. Data on

age at menopause were collected from women attained menopause. However, only 50 women had recall their age at menopause, compared to 95 for age at menarche.

**Table 4.2: Bio-events of ever married women (in years)**

Bio-event	No.	Range	Mean $\pm$ S.E.	S.D. $\pm$ S.E.
Age	201	16-74	35.94 $\pm$ 0.97	13.72 $\pm$ 0.68
Age at Menarche	95	11-15	13.39 $\pm$ 0.09	0.87 $\pm$ 0.06
Age at 1 <sup>st</sup> Marriage	201	14-25	17.42 $\pm$ 0.19	2.76 $\pm$ 0.14
Age at 1 <sup>st</sup> birth	191	15-27	19.31 $\pm$ 0.18	2.49 $\pm$ 0.13
Age at Menopause	50	41-48	45.26 $\pm$ 0.21	1.51 $\pm$ 0.15

Table 4.2 shows that mean age at menarche of the women is 13.39 years with an age range of 11 to 15 years. Whereas, mean age at 1<sup>st</sup> birth is calculated as 17.49 years with a range of 14 to 25 years. The mean age 1<sup>st</sup> birth of Dhimal women is 19.31 years with a range of 15 to 27 years. Table also shows that the age at menopause for Dhimal women varies between 41 to 48 years, and the mean menopausal age is 45.26 years.

**Table 4.2A: Age at Menarche**

Age at Menarche	No. of Women	Frequency
11	2	2.11
12	9	9.47
13	43	45.26
14	32	33.69
15	9	9.47
Total	95	100.00

**Table 4.2B: Age at Menopause**

Age at Menopause	No. of Women	Frequency
41	1	2.0
42	2	4.0
43	2	4.0
44	6	12.0
45	19	38.0
46	11	22.0
47	5	10.0
48	4	8.0
Total	50	100.00

**Table 4.2C: Age at 1<sup>st</sup> Birth**

<b>Age at 1<sup>st</sup> Birth</b>	<b>No. of Women</b>	<b>Frequency</b>
15 years	5	2.62
16	10	5.23
17	33	17.28
18	40	20.94
19	26	13.61
20	25	13.09
21	16	8.38
22	13	6.81
23	8	4.19
24	8	4.19
25	3	1.57
26	3	1.57
27	1	0.52
Total	191	100.00

Table 4.2 A, B and C shows the description of above noted data and classification of ever married women on the basis of their age at menarche, age at menopause and age at 1<sup>st</sup> birth. The classification of women on the basis of age at 1<sup>st</sup> marriage has already been tabulated on the 'Marriage and Mating Pattern' portion of this chapter (table 5.2.3A).

### **4.3: Fertility Pattern:**

Fertility, one of the three major demographic events which affect population size of an area or group, may be defined as actual reproductive performance of a woman or group of women. Women fertility, unlike men, usually start after menarche, attain its peak around the age 19 to 20 years, then declines and ended with menopause. However, human fertility is not only a biological phenomenon but numerous socio-economic factors including age at marriage, social customs, family planning measures etc affecting the fertility rate of the population.

Table 4.3 shows that in reference area among 201 ever married women, 191 have a total of 721 pregnancies including 692 live births (including 8 twin births), 13 still births and 24 cases of spontaneous abortions. No single case of induced abortion has been reported during field survey. Altogether 10 out of 201 ever married women have never been pregnant, and they all belong to newly married group. Infertility among

present Dhimal population (specially women) has not been reported during entire field survey.

**Table 4.3: Reproductive Events of Dhimal Women**

Total number of ever married women	201
Total number of mothers	191
Total number of pregnancies	721
Total number of live births	692
Total number of live births (alive)	618
Total number of live births (now dead)	74
Total number of Still birth	13
Total number of spontaneous abortions	24
Total number of twin births	8

Table 4.3A shows that the mean number of live birth per mother, as calculated from table 4.4.1, is 3.62. The Child Women Ratio (CWR), the number of children under five years per 1000 women aged 15-49 years, is another crude measure of fertility, is found to be 508.62. Crude Birth Rate (CBR), the most widely used measures of period fertility, defined as number of births during a year per 1000 population at mid-year; and calculated as 30.0. Another meaningful measure is General Fertility Rate (GFR) where mid-year female population aged 15-49 supposed to use as denominator instead of total population; and stands for 116.38 for Dhimals. Total Fertility Rate (TFR), the sum of Age Specific Fertility Rates, of the population found to be 3.0678.

Table 4.3B is the tabulation of Age Specific Fertility Rates (ASFR's) of the population, and used to calculate by dividing the number of live births in each age group by the total female population (in thousands) in each age group. The values of ASFR's of 15-19, 20-24, 25-29, 30-34 and 35-39 age groups (in years) are 117.65, 245.28, 129.03, 52.63 and 68.97 respectively. After that the fertility rate goes down to zero. Figure-4.2 stated that the ASFR of the population reaches its peak at the age of 20-24; after that it declines and reaches zero at the age of 40 years.

**Table 4.3A: Fertility Rates/ Ratios**

Rate/Ratio	Value
Mean no. of live birth per mother	3.62
Child Women Ratio	508.62
Crude Birth Rate	30
General Fertility Rate	116.38
Total Fertility Rate	3.0678



**Table 4.3B: Age Specific Fertility Rates**

<b>Rate/Ratio</b>	<b>Value</b>
ASFR 15-19	117.65
ASFR 20-24	245.28
ASFR 25-29	129.03
ASFR 30-34	52.63
ASFR 35-39	68.97
ASFR 40-44	0
ASFR 45-49	0

#### **4.4: Mortality Pattern:**

Mortality analysis is another important field of demography or population studies which deals with the death as a demographic event. The study of measures and causes of mortality is of great importance to reduce mortality. It is (death) again a biological phenomenon and can measure by different rates and ratios which are just measures of number of deaths in respect of size of the population in a given time. Following are the different death rates/ ratios of the reference population.

**Table 4.4: Mortality Rates/ Ratios**

<b>Rate/Ratio</b>	<b>Value</b>
CDR	7.78
IMR	74.07
NMR	0.00
PNMR	74.07
MMR	0.00

Due to limited number of population size and total number of death (seven only) registered during the year, it is difficult to exhibit the death pattern of the population. The study can't calculate Age Specific Death Rates (ASDR'S) for above said reasons. However, Crude Death Rate (CDR), a simple and direct measure of death, calculated as death in a year per 1000 population at mid-year, is found to be 7.78 for Indian Dhimal. As no death of babies less than 4 weeks old has been reported during 2003, he Neonatal Mortality Rate (NMR) of the population for the year stands for zero. Therefore, Post Neonatal Mortality Rate (PNMR) i.e. 74.07 also stands for Infant Mortality Rate of the population for the year 2003. For same reason of limited population size and no

registered case of maternal mortality due to puerperal causes, the Maternal Mortality Ratio (MMR) stands for zero for the year 2003.

However, for such limitation of mortality data, information has been collected from all the families regarding death registered and causes of death during last twenty years. A total of 125 deaths registered during the survey for last 20 years. Among them 40 cases (32%) were unexplained. Among rest (68%; properly explained or documented by them) majority of the cases are senility (18) followed by diarrhoea (13), perinatal conditions (9), respiratory infections (8), cardiovascular diseases (7), Ischemic heart disease (6), tuberculosis, cancer, fever (5 each) and so on (table 4.4A).

**Table 4.4A: Causes of death (last 20 years)**

Causes of death	Frequency	Percentage
Senility	18	14.4
Diarrhoea	13	10.4
Perinatal Condition	9	7.2
Respiratory infections	8	6.4
Cardiovascular disease	7	5.6
Ischemic Heart disease	6	4.8
Tuberculosis	5	4.0
Cancer	5	4.0
Fever	5	4.0
Puerperal	4	3.2
Accident	3	2.4
Measels	2	1.6
Disease not explained by them	40	32.0
Total	125	100.00

#### **4.5: Health and Nutrition:**

According to World Health Organization, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Therefore, aspects of health include both physical and mental health of the members of a society. Physical health is a product of biology, proper diet and nutrition, exercise, rest and so on which can easily measure by standard techniques. On the other hand, mental health includes a state of emotional and psychological well being of an individual, which can't measure readily because of cultural differences and subjectivity

behind the subject. Therefore, for present study, health is measured as per nutritional status of the population, which in turn is a byproduct of the entire health dimension.

The nutritional status of any population can be best assessed by Body Mass Index. Table 4.5A is the classification of Body Mass Index (of adults), as per WHO (1995) and BCIMS classification for Asians, which may be used as an indicator of chronic energy deficiency (CED) of the population. WHO classification suggests that about 40% of female and 16% male are Underweight, therefore, gender differences in health is prominent. However, as per BCIMS classification only 4% female and 2% male are underweight; whereas 16% female and 14% male are Overweight. Therefore, WHO classification exhibits more Underweight and more gender differences than BCIMS classification.

**Table 4.5A: Nutritional Status of adult population**

Classification		WHO (1995) classification					BCIMS classification for Asians				
		Range (Kg/m <sup>2</sup> )	M	%	F	%	Range (Kg/m <sup>2</sup> )	M	%	F	%
Under Weight	Severe Thinness	<16.00	0	0.0	4	4.0	<14.00	0	0.0	0	0.0
	Moderate Thinness	16.00-16.99	4	4.0	12	12.0	14.0-14.99	0	0.0	4	4.0
	Mild Thinness	17.0-18.49	12	12.0	28	28.0	15.0-16.49	2	2.0	4	4.0
Normal Range		18.5-24.9	82	82.0	52	52.0	16.5-22.99	84	84.0	76	76.0
Over Weight	Grade-1	25.0-29.99	2	2.0	4	4.0	23.0-27.99	14	14.0	14	14.0
	Grade-2	30.0-39.99	0	0.0	0	0.0	28.0-39.99	0	0.0	2	2.0

M= male, F= female

However, the BMI for children exhibit more chronic energy deficiency (CED) than adult population (table 4.5B). Almost all children (92.86% boys and 95.24% girls) are underweight; and 56.82% boys fall under severe thin group compared to 88.1% of their girl counterpart. The BCIMS classification also exhibits the same situation but with less severity, only 71.43% boys are underweight compared to 83.33% girls. Boys are more concentrated on mild thin group (50.0%), whereas, girls on moderate thin group (40.48%) followed by mild thin group (28.57%). Therefore, in both classifications chronic energy deficiency is marked, gender inequity in respect of CED

is also marked. however, WHO classification exhibit more severe situation than BCIMS classification for Asian population.

**Table 4.5B: Nutritional Status of Children (below 14 years)**

Classification		WHO (1995) classification					BCIMS classification for Asians				
		Range	Boys	%	Girls	%	Range	Boys	%	Girls	%
Under Weight	Severe Thinness	<16.00	25	56.82	37	88.1	<14.00	8	18.18	8	18.18
	Moderate Thinness	16.00-16.99	8	18.18	3	7.14	14.0-14.99	3	7.14	17	40.48
	Mild Thinness	17.0-18.49	8	18.18	2	4.76	15.0-16.49	21	50.0	12	28.57
Normal Range		18.5-24.9	3	7.14	2	4.76	16.5-22.99	12	28.57	7	16.67
Over Weight	Grade-1	25.0-29.99	0	0.0	0	0.0	23.0-27.99	0	0.0	0	0.0
	Grade-2	30.0-39.99	0	0.0	0	0.0	28.0-39.99	0	0.0	0	0.0

The protein energy malnutrition or acute malnutrition in the form of wasting can be assessed by weight-for-age and weight-for-height, after comparing the data with normalized reference values for age and sex. The same reference data can be used to understand chronic malnutrition in the form of stunting by comparing height-for-age data of the children.

Table 4.5C is tabulation of such figures compared with NCHS/WHO normalized reference values for age and sex. Children below -2SD is said to be malnourished (stunted and wasted), whereas, below -3SD referred as severe malnourished. Table identified more stunted and wasted for boy (47.73%, 43.18% and 15.91%) than their girl counterpart (34.09%, 22.27% and 11.36% respectively). Overall, population said to be more stunted than wasted. However, weight-for-height exhibit less proportion of children than weight-for-age or height-for-age; which suggests that when compared with age with NCHS/WHO parameter, they supposed to be less in height and weight as well (some of them may be because of ethnic affiliation), but when compared (weight) with their own height it is less severe than other categories and BMI as well.

**Table-4.5C: NCHS/WHO Normalized Reference Value**

Parameter	Percentile below -3SD		Percentile below -2SD	
	Boys (%)	Girls (%)	Boys (%)	Girls (%)
Height-for-Age	5 (11.36)	5 (11.36)	21 (47.73)	15 (34.09)
Weight-for-Age	4 (9.09)	3 (6.82%)	19 (43.18)	12 (27.27)
Weight-for-Height	3 (6.82)	3 (6.82)	7 (15.91)	5 (11.36)

#### **4.6: Migration Pattern:**

Migration, the third major factor for population change, is not a biological event like previous, but is influenced by different social, cultural, economic, political and demographic 'push' and 'pull' factors.

The total number of migrants (international) out of 900 souls are 115 (12.78%) among them 22 (19.13%) are male and 93 (80.87%) are female. The entire male folk have migrated from different parts of Nepal viz. Nakalbanda, Baragaon, Dhulabari, Birtamore, Budhbari, Ayabari, Dhajjan and Sanichari. Altogether 71 numbers of female folk have migrated from Nepal including 65 from their own community and remaining 6 from other communities including Nepali, Rajbansi and others. Of 22 migrated female from different parts of India (mainly from North Bengal) all belongs to other communities as stated above. The rate of In-Migration and Out-Migration in respect of Dhimals of India in the year 2003 are 3.33 and 4.44 respectively. Hence the Net Migration as per definition was calculated as -1.11(table 4.6).

All the in- or out migration of the population during 2003 are due to marriage and only confined to female folk only. Rural to Urban migration is less common; however labour migration is noticed in some cases and such migration may or may not poverty stricken. As stated in some cases (other than marriage) migration towards Nepal is also seen. In all cases economy is driven factor for such migration other than marriage alliance; and the forces behind such migration may be categorized under the heading of 'push factor' rather than 'pull factor'. On the other hand if history taken into

account, it narrate the migratory habit of Dhimal because of Jhum cultivation and a push migration after acquiring the land by British Government.

**Table 4.6.: Migration pattern of the population**

<b>Rate/ Ratio</b>	<b>Value</b>
Total numbers of Migrants	115 (12.78% of total Population)
(Male)	22 (19.13% of total Migrants)
(Female)	93 (80.87% of total Migrants)
Rate of In Migration (per 1000)	3.33
Rate of Out Migration (per 1000)	4.44
Net Migration Rate	-1.11

#### **4.7: Other Socio-Economic Attributes:**

##### **4.7.1: Family Types and Household Size:**

Family and household often uses interchangeably; however there seems to be a conceptual distinction between two. The family may be viewed as a level of integration of the kinship structure, whereas, household is a spatial unit and considered as one of the several levels of integration (Dasgupta, 1986). So, it may be stated that though the concept of family and household are closely related, theoretically they are distinct from each other.

As per nature of family (table 4.7.1A) majority (64.456%) are of Nuclear in nature, followed by Joint family (33.54%). A very few of them (1.9%) are non-familial in nature. Most of the nuclear families are complete nuclear (57.6%) i.e. comprised of parents with unmarried children, followed by incomplete nuclear i.e. a widowed/separated parents with unmarried children (2.53%), complete nuclear with accretion i.e. complete nuclear with one or more additional kins as accretion (1.9%), conjugal i.e. husband and wife (1.27%) and other categories. The dependent accretions are mainly kinsmen of secondary or tertiary in nature. Similarly majority of joint families are of patrilineal joint families in nature (31.64%), though three numbers (1.9%) of fraternal joint families may also have seen. The former is a combination of two or more patrilineally related nuclear families of same residence and commensal unit, whereas the later is of same condition of brother's family without parent.

As per types of marriage (table 4.7.1.B), almost all the families (98.1%) are of Monogamous in nature, though three families have identified during survey with more than one wife. In two cases both the wives cohabited in the same family with common hearth, whereas in third case it is different.

In demography, the term family size denotes total number of children a woman or a couple has borne at a point of time. Hence the concept of household size or total number of persons of a family is different from family size. Table 4.7.1C exhibits that majority (61.39%) of the Dhimal household are of medium in size having 4 to 6 person, followed by Large (23.42%) comprising of 7 to 9 person. The mean household size or persons per household has been calculated as 5.7 for the population.

**Table 4.7.1A: Family Types as per Structure**

Type	Frequency	Percentage
<b>Nuclear</b>	<b>102</b>	<b>64.56</b>
Complete Nuclear	91	57.60
Complete Nuclear with Accretion	3	1.90
Conjugal	2	1.27
Conjugal with Accretion	1	0.63
Incomplete Nuclear	4	2.53
Incomplete Nuclear with Accretion	1	0.63
<b>Joint</b>	<b>53</b>	<b>33.54</b>
Patrilineal Joint	50	31.64
Fraternal Joint	3	1.90
<b>Non-Familial</b>	<b>3</b>	<b>1.90</b>
Single Person	1	0.63
Two Persons	2	1.27
<b>Total</b>	<b>158</b>	<b>100.0</b>

**Table 4.7.1B: Family Types as per Marriage**

Type	Frequency	Percentage
Monogamous family	155	98.1
Polygamous family	3	1.9
<b>Total</b>	<b>158</b>	<b>100.0</b>

**Table 4.7.1C: Household Size**

Household Class	Size	Frequency	Percentage
Small	1-3	17	10.76
Medium	4-6	97	61.39
Large	7-9	37	23.42
Very Large	10 and more	7	4.43
<b>Total</b>		<b>158</b>	<b>100.0</b>

#### 4.7.2: Age-Sex Structure:

One of the finest tools that demographer and anthropologists frequently used to understand population is age-sex structure or population pyramid. It is a diagram consisting male on left side and female on right side as per age distribution of the population. Once the diagram constructed one can find out whether the population is growing, declining or experiencing no noticeable changes. It also narrates the proportion of male and female in all age groups and combined as a whole, which can help to understand the sex imbalance in each age group of the population. It can provides the distribution of population as per age, so that one can find out dependency ratio, young and old population, which supposed to affect key socio-economic issues including potential political issues.

The combined age and sex structure of Dhimals of North Bengal is tabulated in table 4.7.2 with its graphical representation as figure 4.1. Data on age, by convention, divided into fifteen classes with an interval of five years. The table and figure indicate a high proportion of children and low proportion of older people, hence the population may be regarded as 'Young population' (0-14 years: 37.78%, 15-64 years: 60%, 65 years and above: 2.22%). The Dependency ratio or number of dependent population (0-14 years and 65 years and above) per 100 working age group (aged 15-64 years) has been calculated as 66.67. The high Dependency ratio is because of high proportion of young age or children rather than old age people.

The Age-Sex composition of the Population also indicates an overall dominance of male in all age groups except 20-24 and 30-34 years, some of the figure may be attributed to in-migration of more female compared to out-migration because of marriage. The overall sex ratio of the population (108.33) is also gender biased favouring male (468 in number) than female (432 in number).

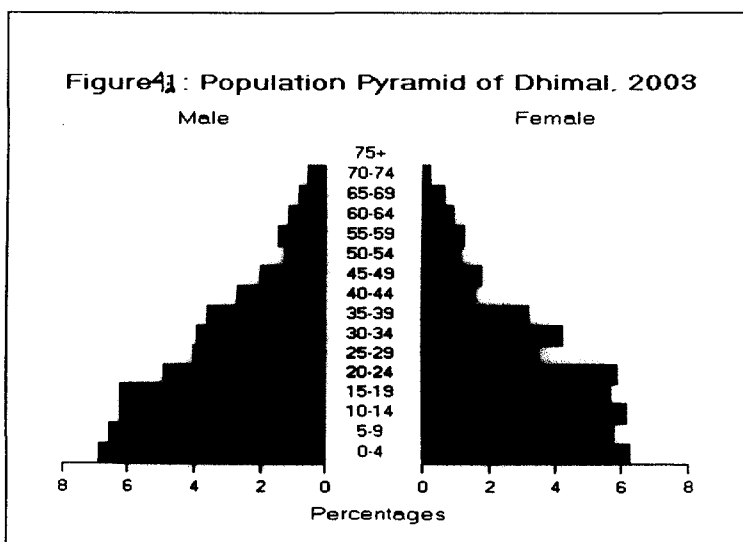
The broad base Population Pyramid with high proportion of children and low proportion of old population (figure-1) has identified a stage 2 expanding population of the Demographic transition because of high birth rate and fall of death rate in some extent. The figure of wide base population pyramid also exhibit a large number of children and a steady upward narrowing shows that the more people die at each higher



age group. Though more living in middle age group indicates fall in death rates compared to stage I expanding stage.

**Table 4.7.2: Age-Sex Structure**

Age Group	Male		Female		Total		Sex Ratio
	No.	%	No.	%	No.	%	
0 - 4	62	6.89	56	6.22	118	13.11	110.71
5 - 9	59	6.56	52	5.78	111	12.33	113.46
10 - 14	56	6.22	55	6.11	111	12.33	101.82
15 - 19	56	6.22	51	5.67	107	11.89	109.80
20 - 24	44	4.89	53	5.89	97	10.78	83.02
25 - 29	36	4.0	31	3.44	67	7.44	116.13
30 - 34	35	3.89	38	4.22	73	8.11	92.11
35 - 39	32	3.56	29	3.22	61	6.78	110.34
40 - 44	24	2.67	14	1.56	38	4.22	171.43
45 - 49	18	2.0	16	1.78	34	3.78	112.50
50 - 54	11	1.22	10	1.11	21	2.33	110.00
55 - 59	13	1.44	11	1.22	24	2.67	118.18
60 - 64	10	1.11	8	0.89	18	2.0	125.00
65 - 69	7	0.78	6	0.67	13	1.44	116.67
70 - 74	5	0.56	2	0.22	7	0.78	250.00
TOTAL	468	52.0	432	48.0	900	100.0	108.33



#### 4.7.3: Marital Status:

Marital status variable includes never married, married, widowed, separated and divorced. The study of marital status is important aspect to study population composition for the sake of demography, health as well as social and psychological support for the population.

**Table-4.7.3: Distribution of Population by Age, Sex and Marital status**

Age Group in years	Never Married			Married			Widow/ Widower			Separated			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0-4	62	56	118	0	0	0	0	0	0	0	0	0	62	56	118
5-9	59	52	111	0	0	0	0	0	0	0	0	0	59	52	111
10-14	56	55	111	0	0	0	0	0	0	0	0	0	56	55	111
15-19	56	37	93	0	13	13	0	0	0	0	1	1	56	51	107
20-24	24	15	39	19	38	57	0	0	0	1	0	1	44	53	97
25-29	7	7	14	28	23	51	1	0	1	0	1	1	36	31	67
30-34	9	3	12	26	33	59	0	0	0	0	2	2	35	38	73
35-39	4	5	9	26	24	50	0	0	0	2	0	2	32	29	61
40-44	1	0	1	23	12	35	0	2	2	0	0	0	24	14	38
45-49	0	1	1	15	12	27	2	2	4	1	1	2	18	16	34
50-54	0	0	0	10	6	16	1	4	5	0	0	0	11	10	21
55-59	1	0	1	11	9	20	1	2	3	0	0	0	13	11	24
60-64	0	0	0	8	6	14	2	2	4	0	0	0	10	8	18
65-69	0	0	0	6	2	8	0	4	4	1	0	1	7	6	13
70-74	0	0	0	3	0	3	2	2	4	0	0	0	5	2	7
Total (%)*	279 (59.62)	231 (53.47)	510 (56.67)	175 (37.39)	178 (41.20)	353 (39.22)	9 (1.92)	18 (4.17)	27 (3.0)	5 (1.07)	5 (1.11)	10 (1.11)	468 (52.0)	432 (48.0)	900 (100.0)

M= Male, F= Female, T= Total

\*Compared to total male, total female and combined population respectively.

More than half of total populations (56.67%) are never married population, compared to 39.22% married, 3% widow/ widower and 1.11% as separated. However majority of never married population are from young age group, though, some of the adult population may have found as never married group because of socio-economic and health reason. No one, either male or female has been reported as divorced. As

formal divorced by law is seldom practiced, rather they opt for informal separation, as well as remarriage after prolonged separation period.

Whenever sex is concerned, about 59.62% of male are unmarried compared to 53.47% of female; the higher proportion of male unmarried is because of more number male in almost all age groups specially below 19 years of age. Widow (18 in number) had reported as double than widower (9 in number), whereas, equal number of separated (5 for each) were identified during the study (Table 4.7.3).

#### **4.7.4: Educational Status:**

Educational status, a widely used indicator of socio-economic status, can be used for mortality and health studies in demography and varies with population and gender. It is observed that the educational status of the population is proportionately related with health and other positive life style indicators.

The literacy rate of the population (defined as the proportion of people aged seven years and above who are able to read and write in any language) is 60.38; though a sex bias may have been seen having 43.1 as female literacy rate compared to 76.44 for their male counterpart. Table 4.7.4 also exhibits an increasing tendency of illiteracy with increase of age for both sexes. In Dhimal population person with Higher Secondary or Graduates are very few; among them four are with Higher Secondary and another two having a graduate degree, and all of them are male. Therefore, among literates majority of them are with primary education (27.41% of total) followed by Middle school (20.89% of total).

Table 4.7.4: Educational Status

Age Group	Illiterate (%)		Literate without Standard (%)		Primary (%)		Middle (%)		Secondary (%)		Higher Secondary (%)		Graduate (%)	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M
7 to 9	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	31 (100)	35 (100)	-	-	-	-	-	-	-	-
10 to 14	5 (9.09)	2 (3.57)	1 (1.82)	0 (0.0)	27 (49.09)	22 (39.2)	22 (40.0)	31 (55.3)	0 (0.0)	1 (1.79)	-	-	-	-
15 to 19	21 (41.18)	4 (7.14)	3 (5.88)	1 (1.79)	17 (33.33)	18 (32.14)	7 (13.73)	21 (37.5)	3 (5.88)	11 (19.64)	0 (0.0)	1 (1.79)	-	-
20 to 24	36 (67.92)	10 (22.73)	4 (7.55)	5 (11.36)	4 (7.55)	5 (11.36)	5 (9.43)	19 (43.18)	4 (7.55)	3 (6.82)	0 (0.0)	1 (2.27)	0 (0.0)	1 (2.27)
25 to 29	23 (74.19)	9 (25.0)	5 (16.13)	3 (8.33)	0 (0.0)	8 (22.22)	3 (9.68)	13 (36.11)	0 (0.0)	3 (8.33)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
30 to 34	29 (76.32)	9 (25.71)	4 (10.53)	6 (17.14)	2 (5.26)	4 (11.43)	2 (5.26)	11 (31.43)	1 (2.63)	4 (11.43)	0 (0.0)	1 (2.86)	0 (0.0)	0 (0.0)
35 to 39	24 (82.76)	13 (40.63)	3 (10.34)	2 (6.25)	1 (3.45)	5 (15.63)	0 (0.0)	9 (28.13)	1 (3.45)	2 (6.25)	0 (0.0)	1 (3.13)	0 (0.0)	0 (0.0)
40 to 44	13 (92.86)	11 (45.83)	0 (0.0)	2 (8.33)	1 (7.14)	5 (20.83)	0 (0.0)	5 (20.83)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.17)
45 to 49	14 (87.5)	7 (38.89)	0 (0.0)	2 (11.11)	2 (12.5)	4 (22.22)	0 (0.0)	3 (16.67)	0 (0.0)	2 (11.11)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
50 to 54	10 (100)	5 (45.45)	0 (0.0)	0 (0.0)	0 (0.0)	3 (27.27)	0 (0.0)	3 (27.27)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
55 to 59	11 (100)	6 (46.15)	0 (0.0)	0 (0.0)	0 (0.0)	6 (46.15)	0 (0.0)	1 (7.69)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
60 to 64	8 (100)	5 (50.0)	0 (0.0)	3 (30.0)	0 (0.0)	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
65 to 69	6 (100)	6 (85.71)	0 (0.0)	0 (0.0)	0 (0.0)	1 (14.29)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
70 to 74	2 (100)	3 (60.0)	0 (0.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Total	202 (56.9)	90 (23.56)	20 (5.63)	26 (6.81)	85 (23.94)	117 (30.63)	39 (10.99)	116 (30.37)	9 (2.54)	27 (7.07)	0 (0.0)	4 (1.05)	0 (0.0)	2 (0.52)
Grand Total	292 (39.62)		46 (6.24)		202 (27.41)		154 (20.89)		36 (4.88)		4 (0.54)		2 (0.27)	

#### 4.7.5: Economic Activities:

Economic activities is another important component of socio-economic status and related to health, mortality and other life style indicators in one hand and prestige, power and other social status in other hand.

Table 4.7.5A shows that more than half of the household are cultivator (51.27%) followed by Agriculture Labour (15.82%) and Day Labour (16.46%). A very few of them are Tea Garden Labourer, Servicemen or engaged with small business activities. Women have to engage with household activities beside their activities as different type of Agricultural or Day Labourer, even in some cases as Tea Garden work also. The study also identify that boys and girls of Dhimal population have to engaged in manual labour as early as twelve years of age; on the other hand all person of old age group supposed to continue their work until severe disability. The service people consist of home guard, forest guard, peon and other such type of jobs except one who happened to be a school teacher of Panightha School.

Table 4.7.5B suggests that both sexes are mainly engaged to cultivate their own field (61.59%) followed by Day labour (17.28%) and Agriculture Labour (10.37%). However, female are more engaged in Tea Garden work (9.68% compared to 1.19% male), whereas, male supposed to dominate female on Day Labour group (20.36% over 13.36%) as well as engagement in other activities (7.64% over 2.76%) including Service and Business. The age distribution suggests that some of the children below 14 years of age and many of the old age people have to engage in different type of works (other than household work) including cultivating own land and labourer.

**Table 4.7.5A: Major Economic Activities of Dhimal Families**

Type	Frequency	Percentage
Cultivator	81	51.27
Agriculture Labour	25	15.82
Day Labour	26	16.46
Tea Garden Labour	10	6.33
Service	8	5.06
Business	5	3.16
Others	3	1.90
Total	158	100.0

**Table 4.7.5B: Occupation\* by Age and Sex**

Age Group (in years)	Cultivator (own land)			Agriculture Labourer			Day Labourer			Tea Garden Labourer			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0-14	2	7	9	0	0	0	4	2	6	0	0	0	1	0	1
15-34	80	75	155	13	21	34	43	16	59	3	18	21	13	3	16
35-59	66	49	115	15	0	15	8	11	19	2	3	5	5	3	8
60 +	15	9	24	2	0	2	1	0	1	0	0	0	2	0	2
Total	163	140	303	30	21	51	56	29	85	5	21	26	21	6	27

\*Other than house work

However, in respect of secondary occupation of the population, the range of choice is still less. A large number (43.94%) of populations (exclusively female, from a family of cultivator and primarily worked as house wife) might have engaged in agriculture as secondary economic activities. Another major portion of populations, irrespective of sex, are of labourer (28.08% as day labourer, 19.32% as agriculture labourer and 5.3% as tea garden labourer). Rests (3.41%) are small businesspersons engaged in the field of handicraft, tailoring, marketing of traditional liquor and so on. (Table-4.7.5C)

**Table 4.7.5C: Secondary Economic Activities of Dhimals**

Type	Frequency	Percentage
Agriculture	116	43.94
Agriculture Labour	51	19.32
Day Labour	74	28.03
Tea Garden Labour	14	5.30
Small Business	9	3.41
Total	264	100.0

Out of 492 persons, who are actively participated in different sphere of economic activities, 8 (1.63%) are settled outside the state (including Delhi, Haryana and Sikkim). Among others, 61 (12.4%) primarily worked outside the village (Naxalbari or different Tea Estate around the villages) but supposed to return home after completion of the work. Rest (79.79%) worked within or around the village.

#### 4.7.6: Annual Family Income:

Family income is another important socio-economic variable, which also related to health and other life style indicators as stated above; and considered as primary measures of nation's financial prosperity and attainment.

Table 4.7.6 suggests a wide distribution regarding Annual family Income. The mean family income of the population is Rs.22280.38, whereas, the median family income of the population calculated as Rs.18469.39. Study suggests that the difference of mean and median is due to disparities regarding annual family income of the population.

**Table 4.7.6: Annual Family Income**

<b>Income per Annum (in Rs.)</b>	<b>No. of Household</b>	<b>Percentage</b>
Below 4800	0	0.00
4800-6200	5	3.16
6200-8500	11	6.96
8500-11000	13	8.23
11000-15000	33	20.89
15000-25000	49	31.01
25000-40000	30	18.99
40000-50000	11	6.96
50000 and above	6	3.80
Total	158	100.00

#### 4.7.7: Landholding Pattern:

Landholding pattern of the population as tabulated in table 4.1.7, is combination of household and agricultural land (or in few cases pond as well). The distribution of landholding pattern is also widely distributed having more concentration (43.04%) on third group i.e. Family having land more than 1 Bigha but less than 5 Bigha. The mean landholding is 4.14 Bigha per family compared to 2.0 Bigha as median. The difference of mean and median is again due to disparities regarding landholding pattern which suggests extremely unequal distribution of land among the population.

**Table 4.7.7: Landholding pattern**

Landholding size (in Bigha)	Frequency	Percentage
Landless	5	3.16
Less than 1 Bigha	43	27.22
More than 1 Bigha but less than 5 Bigha	68	43.04
More than 5 Bigha but less than 10 Bigha	23	14.56
More than 10 Bigha but less than 15 Bigha	15	9.49
15 Bigha and above	4	2.53
Total	158	100.00

**4.7.8: Indebtedness:**

As per data collected (Table 4.7.8) from informants 32.29% of the families are indebted. The loan amount varies from Rs. 1000.00 to as many as Rs. 110000.00; and the purposes are of varied in nature, starting from purchasing Cow or Bullock, piggery, fishery to other type of business or even for a personal reason- to build a house. The mean loan amount per indebted family is Rs. 7560.78, whereas, the median is Rs. 5000.00 for 51 numbers of indebted family.

**Table 4.7.8: Indebtedness of the Population**

Loan amount (in Rs.)	No. of Family	Percentage
Up to 2000	3	1.90
2000-4000	16	10.13
4000-6000	21	13.29
6000-8000	6	3.80
8000-10000	2	1.27
10000-20000	2	1.27
20000 and above	1	0.63
Total	51	32.29

**4.8: Findings:**

Chapter summarizes that the families are of monogamous by marriage, medium in size comprising 4-6 members and nuclear in composition (mainly complete nuclear); though another portion are of patrilineal joint family in nature. The sex ratio of the population exhibits male dominance in almost all age groups, whereas, age structure



categorized them as young population. The broad base population pyramid narrates a stage 2 expanding population because of high birth rate and fall of death rate.

More than half of the populations are of never married group, with more male because of higher age at marriage in respect of female. No person is found to be divorced, though separation is common; which indicate lack of legal divorce among the society.

Literacy rate is 60.38 with a severe gender bias in all sphere of educational level. However an increasing tendency of literacy may found among both sexes of the population.

As per occupation, majority of them are cultivator followed by different types of labourer. However, there is a disparity of annual family income of the household with a median of Rs. 18469.39. Distribution of land among population is also extremely unequal in nature with a median of 2 Bigha per family. The same disparity may found in case indebtedness of the family with a median of Rs. 5000.00, but limited to 51 numbers of families.

Regarding marriage traditionally they are endogamous in respect of group and most of them follow the rule to marry within Dhimal population. However, about one fourth of the marriage suppose to breach the rule by marrying outside the group specially Rajbansi and different Nepali communities. On the other hand in respect of clan exogamy all of them follow the rule and never married within same clan.

Majority of women supposed to marry within 18 years (which is Child marriage by law), compared to 23 years for their men counterpart. In combination majority of marriage occur with husband of 20-24 years with wife of 15-19 years followed by both of 15-19 years of age. The marriage fields are mainly outside India (Nepal only) followed by same village and/ or district.

The mean age at menarche, 1<sup>st</sup> Marriage, 1<sup>st</sup> Birth and Menopause are 13.39 years, 17.42 years, 19.31 years and 45.26 years respectively with a wide range of variation in all cases.

Fertility rate is higher with 3.0678 as Total Fertility Rate, 30 as Crude Birth Rate and 116.38 as General Fertility Rate. The Age Specific Fertility Rate reaches its peak at the age of 20-24 years, then declines and reaches zero at the age of 40 years.

Regarding mortality pattern of the population, the Crude Death Rate and Infant Mortality Rate were calculated as 7.78 and 74.07 respectively. It is also documented that (excluding unexplained) majority of deaths are due to senility followed by diarrhea and other diseases.

As per WHO classification 40% of female and 16% male are underweight, hence gender differences are prominent. However, for children it is more severe but less gender differences; about 92.86% boys and 95.24% girls are of underweight in nature. Beside these, boys are more stunted, wasted or underweight (47.73%, 43.18% and 15.91%) than their girl counterpart (34.09%, 22.27% and 11.36% respectively) in respect of height-for-age, weight-for-age and weight-for-height. More number of stunting or wasting may be because of their ethnic affiliation (less height or weight of same age group compared to NCHS/ WHO references), however, when it is weight-for-height they exhibit less severe condition than previous.

Migration is a severe issue for Dhimal throughout the history but became less severe day by day except the migration because of marriage to and from Nepal. The other type of migration is because of push factor for which economy is one of the major driven forces.