

CHAPTER I

1. INTRODUCTION

1.1 General Background

Fertility is one of the most important factors of population which affects to the status of women. It is biologically restricted to the women who are 15-49 years of age. Fertility differs from one group of women to another. There are many factors for affecting the level of fertility such as economic, social, cultural and others. High fertility is associated with developing countries and the low with developed ones. It directly affects the structure and growth rate of the population.

Human fertility is one of the major components of population growth which becomes an interesting topic in population studies only after Malthus. However, even until the second war, the approach to the study of human fertility was mainly mathematically oriented. The social, psychological, cultural, economic and political factors as determinants of the levels and differential of fertility were not accorded a proper importance.

It is only after the second World War when North America experienced a "baby bomb" human fertility has been occupying a central position in population studies for several reasons. Human fertility is responsible for biological replacement and for the maintenance of the human society. The growth of the population of the world depends entirely on human fertility (Bhende and Kanitkar, 2003: 241-288).

Nepal population reached 23.1 million with an annual average growth rate of 2.3 percent during the last decade 1991-2001 (CBS, 2003:38). Fertility has declined over the last decade from 5.1 children per woman in 1991 to 4.6 children per woman in 1996 and further to 4.1 in 2001 (Pathak, 2002: 136). But it is still very high as compared to some of the neighboring countries in Asia such as Bangladesh (3.0), India (3.0), China (1.6), Japan (1.3) and Srilanka (2.0) (PRB, 2005).

Nepal is predominantly agricultural country situated in south Asian region with 26.22 to 30.24 north latitude and 80.4 to 88.12 east longitude as a land locked Himalayan country. It is also an agricultural society, where people are encouraged to have more children to meet the demand of labour force for agricultural activities which, ultimately results high fertility (Pant and Acharya, 1988 58-64).

According to the latest census of 2001, the population of Nepal was 2,31,51,423 as of June 2001. The average annual growth rate of population during the last decade (1991-2001) was 2.25 percent. The census has revealed that the sex ratio as male per 100 females was 99.9. In other words, 50.0 percent was male while the females comprised of 50.1 percent of the total population (MOPE, 2004, 1-18).

1.2 Statement of the Problem

Population of Nepal has been increasing rapidly since last few years because of continuous and steady decline in mortality rates due to the impact of new technology and devices as well as

medicine from developed world on one hand and almost constant and high fertility rates on the other hand.

Fertility rate has remained high due to low level of education, occupation, income, low rate of contraception, universal marriage, early age at marriage and child loss experience etc. Unless the social economic factors responsible for demand for children are targeted but it is hard to reduce the prevailing fertility rate. Substantive decline in fertility level of Nepalese society has not been observed despite the government's efforts to reduce it through the implementation of family planning programme since the national third five year plan in 1965 (NPC, 2002).

Likewise a number of fertility encouraging factors are operating in different social sector of the country. Among these the most noted are low socio-economic status, low status of women and various social and religious norms.

Fertility rate in Nepal is one of the highest in Asia. In many developing countries high fertility is associated with the level of income education, child survival and cultural and religious factors. In addition family planning in general has an important role to play in reducing marital fertility (UNFPA 1989:73).

The TFR of Nepal was 5.6 in 1991 (CBS 1995:68) and 4.1 in 2001 (CBS, 2003 Vol.ii). This decline in TFR could be attributed to the rising of education and contraceptive prevalence. However population Bureau 2005 has mentioned the 3.7 TFR of Nepal but it is comparatively still higher than other some neighbouring countries in Asia, as India 3.1 Bangladesh 3.0, China 1.7, Sri Lanka 2.0 and Japan 1.3 (PRB, 2005). If we compared the TFR of

Nepal with the countries of Europe and North America the TFR of Nepal is seen much higher.

There are many studies about socio-economic and demographic differentials of fertility for different place. But no study has been conducted to examine the social-economic and demographic differentials of fertility of Machchhegaon VDC. So this study occupies a special importance. In fact, this study basically focused on following research questions:

1. What are the socio-economic and demographic characteristics in the study area?
2. How are fertility differentials due to various socio-economic and demographic characteristic in the study area.
3. What are the knowledge and use of FP methods among the selected respondents in the study area.

1.3 Objective of the Study

The general objective of the study is to examine the status of women and it's impact on their fertility in rural area like Machchhegaon VDC. The immediate objectives are as follows;

1. To examine the socio-economic characteristics of population.
2. To determine the socio-economic characteristics of respondents in the study area.
3. To examine the relationship between socio-economic characteristics of reproductive ages (15-49 years) and CEB.

1.4 Significance of the Study

The main purpose of the study is to find out the various socio-economic and demographic aspects of fertility prevailing in Machchhegaon VDC. It is obvious that better understanding of fertility regulating behaviors is necessary in order to have control upon the fertility which will lead to improve the status of socio-economic conditions.

In Nepal, very few studies have been carried out which attempts to study the socio-economic and demographic variables and their effects on fertility especially in economically backward communities. The prosperity of a country depends upon the development of each setting within it. This fact becomes even more important in a country like Nepal which is inhabited mostly by such communities. So studies encompassing various socio-economic and demographic factors and their relation on fertility and status of women also in such communities with the findings will be very useful in providing the guidelines to NGO's, ING's and over to the government in making population policies and implementing for the Machchhegaon VDC.

1.5 Limitation of the Study

This study is based only on women of Machchhegaon VDC Kathmandu district, so it may be representative of similar rural areas of Nepal only. It is limited to women of reproductive ages (15-49) and takes into account only ever married women of that age group. This study particularly seeks to study socio-economic status of women including few selected demographic and socio-

economic variables under the constraints of limited time and resources.

1.6 Organization of Study

This study is organized in seven major chapter. The first chapter describes about introduction, background of women status and fertility, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of study. Chapter two describes about literature review which concludes theoretical literature, empirical literature and conceptual framework.

Chapter three about Methodology where selection of the study area, sampling procedure, sources of data, research tool, questionnaire design, data collection, and technique of data analysis and selection of the study variables are explained.

Chapter four describes and introduces the socio-economic and demographic characteristics of the study population and chapter fifth describes and introduces socio-economic and demographic characteristics of respondents. The sixth chapter analyses fertility with the help of selected socio-economic and demographic variables by frequency, mean and the last seventh chapter deals with summary, conclusion, policy recommendations and possibilities of future research.

CHAPTER II

2. LITERATURE REVIEW

Fertility is the child bearing capacity of individual, couples or group of population. It is one of the demographic processes which determine the structure, distribution and growth of any population. Fertility is one of the major components of population change particularly in especially developing countries. If the world is not able to manage for the fertility, it might be the great problem for the world because productivity can't increase as the increment of population and at that time people will be distressed with starvation and misery. They have done many studies and trying and socio-economic and other variables which directly or indirectly affects on fertility, various literatures based on theoretical as well as empirical studies on fertility, have been reviewed which help to formulate a conceptual framework of fertility of population under study.

2.1 Theoretical Literature

Demographers and social scientists are, even today, busy in search of a systematic theory which would provide explanations of changes in fertility levels and differentials in fertility which would also serve as a basis for predicting future fertility trends. This gap in the knowledge of demographic phenomena continues despite the efforts made by several social scientists to propound various theories of fertility (Bhende and Kanitkar, 2002:1-26).

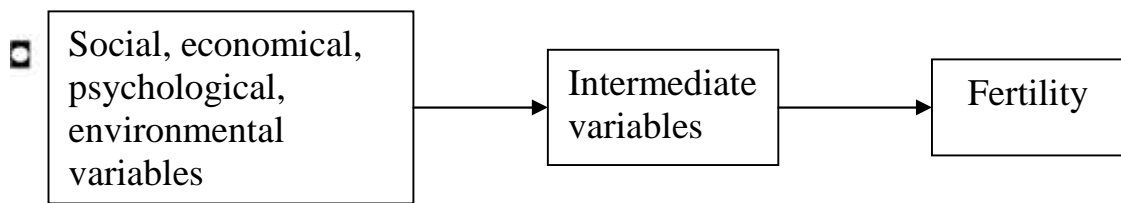
According to demographic transition theory, fertility and mortality transition, from high to low, in the countries of Europe, North America and Australia occurred when the use of contraception became wide spread under the influence of such factors as growing individualism and rising level of aspiration developed in urban industrial living that emerged with process of socio-economic development of the country (UN, 1973:65).

Davis and Blake (1956) proposed eleven variables which they defined as "Intermediate variables". Six among them are affecting sexual intercourse, three affecting conception and remaining two affecting gestation and parturition. They concluded that any social or cultural factor which affects fertility must do so through and only through one or more of these intermediate variables (Davis and Blake, 1956:211-235).

John Bongaarts and Robert potter (1985) designated the intermediate variables proposed by Davis and Blake as proximate determinant of fertility consisting seven variables, marriage and marital disruption use and effectiveness of contraception, induced abortion, postpartum amenohorea, spontaneous intrauterine mortality, frequency of inter course of fecundability, menopause or permanent celibacy. They also raised the age at marriage and marital disruption post partum, infecundability, contraception and induced abortion affects fertility directly.

The following simple diagram summarizes the relationship among the determinants of fertility

Figure: 2.1 Proximate determinants framework for the study of fertility



(Source: Bongaarts and Potter, 1985: 180)

Easterlin (1976) developed a generalized model regarding determinants of fertility and concluded that fertility decisions are made by women in the society, which are affected by three variables viz. (i) Income to the extent that children increase household income (ii) Price of child-bearing and rearing, and (iii) Cost of regulation (Easterlin, 1976:112)

Demand theory is also an important factor for determining the fertility. According to this theory, fertility is determined by current family size, the spouse's desired family size and cost of living. If the cost of additional children rises and income and wealth remain constant, then the number of children desired declines. Similarly, if the cost of additional children remains constant and income increases, then the desired number of children increases (Kuortsayiannic, 1979:25-32).

Leibenstein (1975) criticized Backer's theory primarily on social, cultural and economic groups. According to him, it is also necessary to take account of the socio-cultural process and influences which are, the consequences of consumption based on social status considerations that are critical to the explanation of

the utility cost of children. He has argued that the household would want to have i -th child, as the utility of the i -th child is greater than the utility cost of that child (Leibenstein, 1975:6).

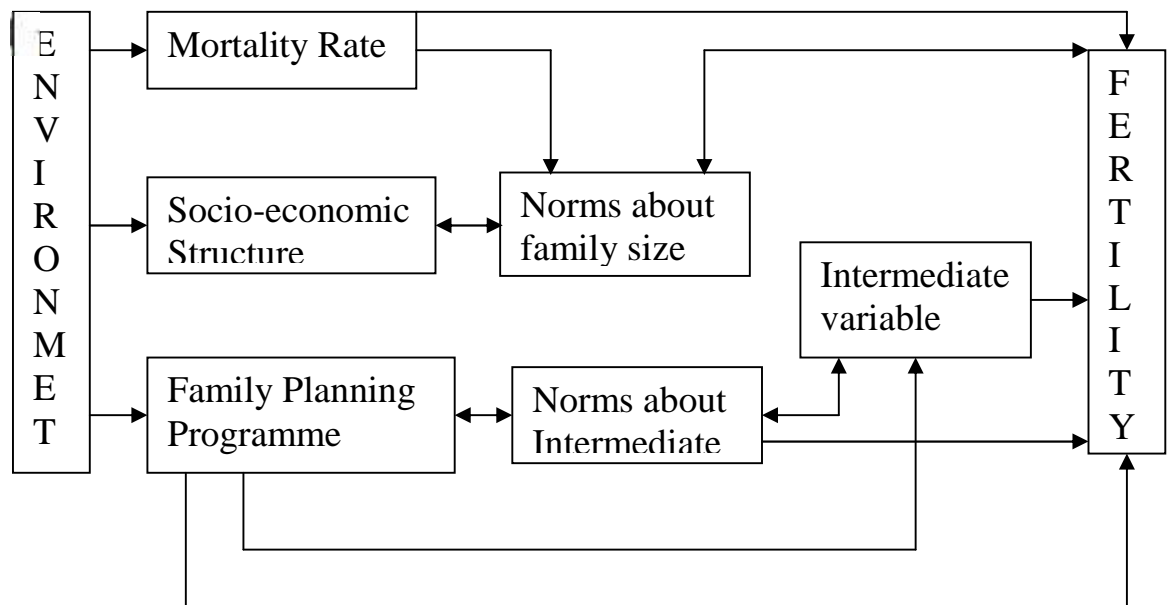
Tuladhar (1989) examined the persistence of high fertility in Nepal using data from Nepal Fertility Survey, 1976. He observed that higher mortality level, specially that of infants, joint family system, early and universal marriage system, low education attainment, working status especially that of women are the main contributing factors of high fertility in Nepal (Tuladhar, 1989:26).

We have no single theory of fertility determination. Socio-cultural, economic and demographic characteristics of the people affect the fertility level of country according to different explanation of fertility decline. So, we should understand the importance of casual links between the socio-economic and demographic variables and their relationship with fertility (Aryal 1997:26).

The theory of diffusion or cultural lag explains how the concept of birth control spread all over the world. According to this theory, in countries where fertility has been declining attitudes and practices conducive to diminishing fertility have been adopted first by better education, wealth and high social status groups of the city population and transferred in duration of time to intermediate and lower status groups and to the rural areas. Once again, cultural lag theory has been referred to very recently by John Knodel who, after examining the age patterns of fertility in Asia, arrives at the conclusion that the modern fertility transition

appears to have resulted from innovation as well as adjustment. The framework of fertility presented by (Freedman, 1975) is presented below (Bhende and Kanitkar, 2002:260).

Figure 2.2: Sociological Framework for Study of Fertility



In Nepalese society, high economic and social values of children, low nutritional food intake inaccessibility to quality family planning and its unmet demands are the determining factors of high fertility. Fertility is affected by some proximate determinants such as age at marriage, post partum amenorrhoea, contraceptive use and induced abortion. Moreover these proximate determinants are also affected by social, economic, psychological and environment variables. Demeny (1972) has summarized it very succinctly "In traditional societies both the fertility and mortality are high and in modern society both the fertility and mortality are low. In between there is a demographic transition" (MOPE, 2004:3).

2.2 Empirical Literature

Many empirical investigations have been conducted to examine the relationship between fertility and socio-economic variables in Nepal. A brief summary of the findings of some of the selected studies are presented below.

2.2.1 Education and Fertility

Education is one of the most important determinants of fertility. There is inverse relationship between fertility and education especially among women. Literature shows that higher the level of female literacy, the lower the fertility rate and vice-versa. Women with literate husbands also have fewer mean numbers of children ever-born CEB 3.0 as compared to illiterate husbands with CEB 3.5, with regard to the level of education, women with no education are observed to have mean CEB of 3.3 compared to 2.2 among those with some education. Moreover women whose husbands have no education have mean CEB of 3.6 as compared to 2.3 among those whose husbands have some education (Nepal FP/MCH project, 1977) (cited in Pant and Acharya, 1988:56).

The negative relationship between women's education and fertility have also been established by the NFHS 1991 survey confirming the relationship that the total marital fertility rate (TMFR) among women with secondary level of education is lower (4.0) than among women with no education (6.2). A difference of 2 children indicates that there exists a significant differential in fertility and education (NFHS, 1991:58) (cited in CBS, 1995:78).

Nepal Family Health Survey 1996 showed a strong relationship between education and fertility. Women with at least secondary education have total fertility rate (TFR) of 2.5 which is less than half the rate among the women with no education with TFR of 5. In the same way women with primary education have TFR 3.8 per women (MOH, 1996). Education is considered as a catalytic agent to reduce fertility in Nepal. Educated women are found more aware of the issue of quality of children than uneducated (Risa) and Shrestha, 1989:22-70).

Literacy level of Nepal has increased significantly, particularly during the last two decades. Male literacy among 6 and above age group has reached 65 percent in 2001, from 34 %, in 1981. Similarly, female literacy rate among the same age group has more than trebled from 12.0 percent in 1981 to 42.5 percent in 2001. Nevertheless in literacy and education, gender disparities are decreasing slowly (CBS, 2003:227).

2.2.2 Occupation and Fertility

The country Nepal consists predominantly of farmers who are supposed to be economically active, population. Almost 95 percent are actively involved in agriculture and agriculture related works (CBS, 1995-78). The proportion of females engaged in agriculture occupation is higher than that of males. In the remaining category of occupation, however, the proportion of males is higher than that of female (Tuladhar, 1989:26).

Women's education and employment are confined within the domestic sphere of Nepalese society. The relationship between the working women and fertility is little known. The working women

residing in rural Nepalese often poorer and less educated than non-working women. Working in rural Nepal is done either on their farmer or work as labours (Dahal, 1992:1-16)

Birth rate in Italy came down to 50 % when its economic structure transformed to industrialize from an agricultural one. UN in 1985 analyzed world fertility survey results from 38 developing countries on the relationship between women's employment and fertility. They found women in traditional occupation having the larger number of children ever born; women who have not worked at all since marriage tend to have a higher average number of CEB. Women who were engaged in modern occupation. The average number of CEB among women engaged in modern occupation is found to be 2.3 and women who have not worked at all since marriage tend to have a higher average number of children ever born 4.1. The difference in the mean number of CEB between women in traditional occupation and those who have not worked since marriage is also great. Women in traditional and mixed occupation have approximately 0.4 more children than women who have not worked since marriage. The average number of CEB among women in Nepal for modern occupation is 2.39, 3.2 for traditional occupation and 3.8 for those who have not worked since marriage (Adhikari, 1996:1-18).

According to 2001 census results, women constitute more than 43 percent in the labour force, 73 percent in agriculture and 27 percent in non agriculture sectors. Women's proportion has increased almost in all occupations to some extent. But their greater concentration in agriculture is also visible. A positive trend in visible in their empowerment as reflected in the increasing

proportion among female professionals, technicians, administration and management (CBS, 2003:223).

2.2.3 Income and Fertility

It is shown that women of lower and poorer groups tend to bear more children because of two reasons, firstly, more children die in infancy and so these women have shorter lactation and non-ovulation periods before becoming pregnant again and secondly, they need more children to replace the losses, so they continue to bear children up to late age. In the context of Nepal; the multipurpose household budget survey (MPHBS) conducted in 1988-89 and found 43.1 percent of the rural population and 41.4 percent at the national level fell below the poverty line. Moreover, this survey shows that the range of family size of Nepalese poor people were 6.33 to 7.14 and household monthly income Rs. 497 to Rs. 1131 (Expressed in 1988-1989) (NRB, 1989).

The economic gains for reducing fertility, has been positive way that has been proved by various studies. Most of the poorest people prefer more children to secure the high productivity and income.

2.2.4 Age at Marriage and Fertility

Marriage usually takes place at very early ages in Nepal. Some studies have demonstrated that an increase in female age at marriage contributes to a reduction in fertility. This is also true in the case of Nepal where the inverse relationship between age at marriage and fertility has been observed (Chhetry, 1993:58-62).

The report from Nepal Family Health Survey (NHFS: 1996) found that fertility seemed to be declining over the past five years in fertility rate is due to increase in age at marriage and rising contraceptive use over the past 25 years (MOH, 1996).

The age at marriage in developing countries is normally '∩' shaped. It is lower in the early age group, which is obvious and increase slightly up to age 25-29 or around 30, and starts declining gradually. Married women in younger age naturally represent lower age at marriage (Acharya, 2000:31).

Marriage marks the starting point in a women's life at which child bearing becomes socially acceptable. Women who marry early on average, have a longer exposure to the risk of becoming pregnant and therefore, early age of first marriage often implies early age at child bearing and higher fertility in a society (NDHS, 2001:10).

2.2.5 Use of Contraception and Fertility

Contraceptive use is often associated with urbanization and modernization. According to a study contraceptive prevalence rate was more than two times in urban than in rural areas (48.2 vs. 23.3). The contraceptive prevalence rate for modern spacing method in rural Nepal is almost 3 times lower than that of urban area in Nepal (Subedi, 1996:48).

Current knowledge of family planning method is increasing in Nepal. The levels of fertility also have come down. The total demand of family planning is 60 % of which 28.5 % is met and 31.4 % is not met with 14.3 percent unmet for spacing and 17.1 %

unmet need for limiting. Thus, there are two distinct challenges of satisfying the couples with unmet need for family planning and reducing the proportion of couples who do not need family planning services through right information and message (MOH, 1987).

There has been a steady increase in the level of ever use of modern family planning methods over the past 20 years. The level of ever use for contraception has increased from 4 % of currently married women in 1976 to 27 % in 1991 (MOH, 1993) which reached 35 percent in 1996 (MOH, 1996:52). Female age at marriage and use of contraception are directly related to fertility. In Nepal, only 39 % currently married spouse use any method of the modern contraception (MOH, 2001).

The level of modern contraceptive use in Nepal has increased gradually in the last decade (MOPE, 2004:3). Overall 39 % of currently married has ever used any family planning method. There exists a strong negative relationship between contraceptive use and fertility (Pathak, 2002:127-136).

Unfortunately, the family planning is not much successful in developing countries. The proportions of women using contraception are Pakistan (28 %), India (48 %), Maldives (42 %) and Nepal (39 %) in 2005 (PRB, 2005).

2.2.6 Child Loss Experience and Fertility

The close relationship between infant mortality and number of CEB has been observed. The study concluded the existence of strong child replacement effect on CEB in Nepal (New Era,

1986:90). The mean number of CEB for all ages is 3.2 and the mean number of surviving children for all age is 2.5 experiencing a loss of about 0.7 children. Various studies conclude that child loss experience motivates women to give more births. The women who have no experience of dead children desire 2.03 mean number of children while the number who experience the death of one or more body desire 2.07 mean number of children (Bhandari, 2005:15-16).

Women with higher child loss experience have higher CEB. Women with no child loss have 2.5, those with one child loss have 4.3 and those with two or more children dead have CEB of 6.5 (Acharya, 2000:27). Nearly 99 percent of infant deaths worldwide occur in less developed countries. Death per every second is 1.3 in less developed countries compared to 0.4 in more developed countries (PRB, 2002).

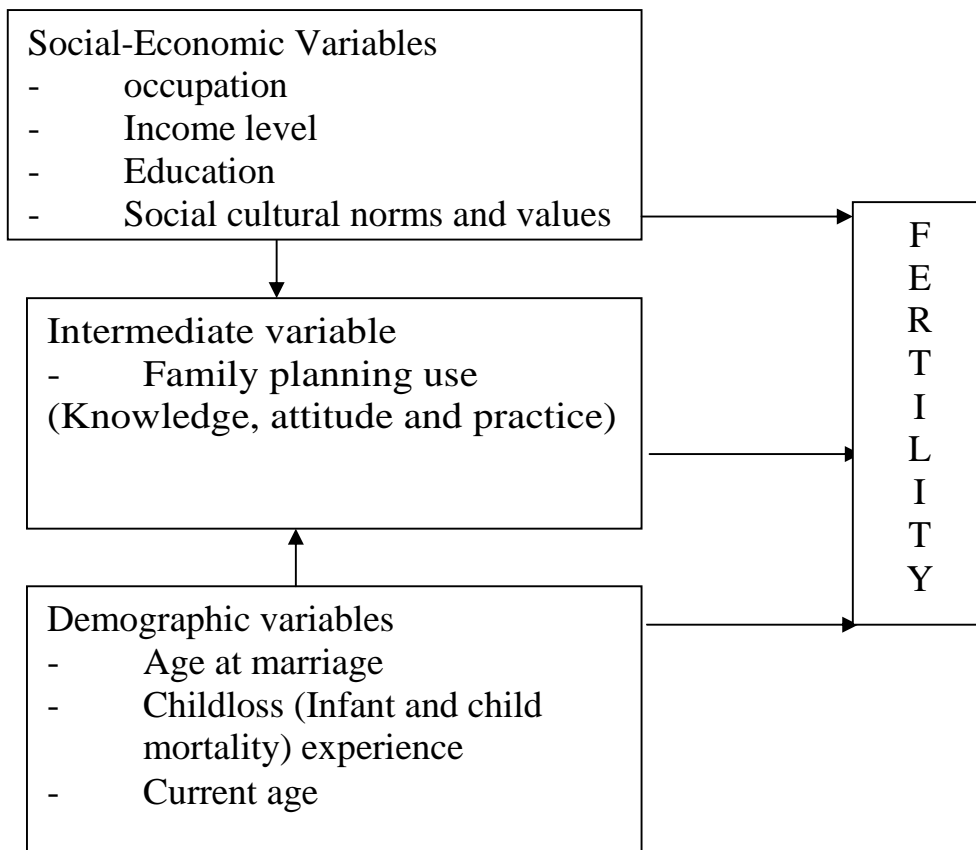
2.3 Conceptual Framework

The following conceptual framework is used in this study. This framework suggests that socio-economic, demographic and background variables are independent variables which affect dependent variable, the number of children ever born.

Dependent and independent variables are shown in the conceptual framework. Independent variables are categorized as socio-economic variables demographic variables and background variable. There are five variables in socio-economic variables such as education, occupation, income, use of contraception and child loss experience. Also in demographic variables, three variables

such as, age, age at marriage and age at first birth and in background variable, religion are considered.

Figure 2.3 Conceptual Framework for the Relationship between Variables and Fertility



CHAPTER III

3. METHODOLOGY OF THE STUDY

This chapter deals about the methodology and ideas which are adopted in this study. Fertility is influenced by several factors which affects the status of women also. It depends upon the socio-economic and demographic condition of the inhabitant.

3.1 Study Area

This study was conducted at Machchhegaon VDC of Kathmandu district. The target population of Machchhegaon which is one of the rural areas is surrounded by Panga Kirtipur Nagar Palika 7 and 8 in east, Tinthana VDC in south. It is situated in the lap of Chandragiri Mountain which is long in shape.

Because of the geographical nature of the land of this VDC, various types of clamatic condition occurs there, The height of the land ranges about 2100 feet from the sea level (according to profile of MG youth club).

According to 2001 census, the total population of Machchhegoan VDC is 2871. Among them 1427 are males and 1444 are females. Various caste and ethnic group of people lie in this VDC, mainly Brahmin, Newar, Chhetri, Rai, Limbu, Gurung etc.

3.2 Selection of VDC HHS and Respondents

This study was carried out Machchhegon VDC. There are 547 households in all those wards. Data were collected from 120

households. Eligible women are ever married women aged 15-49 years residing in these households. One hundred and twenty women are interviewed to receive information on their socio-economic and demographic characteristics. Respondents are either HH heads or senior members of the households to get information on socio-economic and demographic characteristics of households.

3.3 Source of Data

The main source of data of this study is primary source that is governed by using the qualitative technique but for the analytical study, the data form secondary sources has been also used from different sources like published and unpublished documents.

3.4 Research Tools

The designation of questionnaire for this study is based on socio-economic and demographic factors which directly or indirectly affected to fertility and the status of women. The questionnaires are main tools to collect information from the field. The questionnaire mainly consists of two schedules.

Household Questionnaire

- (i) The household questionnaire is asked to the head of household to collect information on size, age structure educational status, occupational status and other information of the family.
- (ii) Individual questionnaire is asked to eligible women aged 15 to 49 years to collect information on age at marriage, number

of CEB, number of children dead, income, knowledge an use of family planning methods etc.

3.5 Questionnaire Design

The household questionnaire is designed to get information about household. The questionnaire is designed to collect information on family size, age, religion, marital status, age at marriage, Women's literacy status, educational attainment occupation, annual income, knowledge and use of contraception etc from ever married women aged 15-49 years.

3.6 Method of Data Collection

The research is based on primary source of data, primary information was collected from field survey of Machchegoan VDC by directly interview using structured questionnaire.

3.7 Data Processing and Analysis

Data processing has been done using the questionnaire incorporating different socio-economic and demographic characteristics such as education, occupation marital status, land holding etc. to make the analysis more reliable and easier. The analysis process of data includes frequency tables, cross tabulation and other appropriate statistical tools. Mean and percentage are calculated from the tales wherever possible.

CHAPTER IV

4. SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF STUDY POPULATION

This chapter deals with general background as well as demographic and socio-economic characteristics of the population of the study area.

4.1 Age-Sex Structure

Age and sex structure are those factors which indicate not only demographic but also socio-economic status of the people. Age and sex basic characteristics or the biological attributes of any population which affects fertility, mortality and migration behaviour. Age and sex structure not only reflect the present demographic situation of population but also given the basis for the study of past as well as future demographic situations of that population dynamics.

Table 4.1
Distribution of the Study Population by Age and Sex

Age group	Male		Female		Total		Total percent CBS* 2001
	Number	Percent	Number	Percent	Number	Percent	
0-4	11	5.2	17	6.0	28	5.7	8.4
5-9	19	9.1	20	7.1	39	8.0	11.4
10-14	18	8.6	24	8.7	42	8.6	12.1
15-19	14	6.8	20	7.1	34	6.9	13.0
20-24	20	9.7	23	8.2	43	8.9	8.910.6
25-29	22	10.5	20	7.1	42	8.6	8.1
30-34	21	10.0	21	7.5	42	8.6	7.2
35-39	22	10.5	29	10.3	51	10.4	6.3
40-44	12	5.8	22	7.9	34	6.9	4.5
45-49	16	7.7	23	8.2	39	8.0	3.7
50-54	8	3.9	15	5.4	23	4.7	3.5
55-59	5	2.4	7	2.5	12	2.5	2.8
60-64	3	1.4	13	4.6	16	3.3	2.1
65-69	7	3.3	12	4.3	19	3.9	2.3
70-74	6	2.9	9	3.2	15	3.0	1.3
75+	4	2.0	4	1.4	8	1.6	2.0
Total	208	100	279	100	487	100	100

Source: *CBS, 2001: 3.

The proportion of population is found highest (10.4 percent) in the age group 35-39 years. The lowest proportion of population (1.6 percent) is observed in the population from the age group 70 above. The declining proportion of population from the age group

50-54 on wards may be because of the high old age mortality. The percentage of male population is highest at the age group 25-29 and 35-39 years and lowest at the age group 60-64 years representing 10.5 and 1.4 percent respectively. Similarly, the percentage of female population is the highest at the age group 35-39 years and lowest at the age group above 75 years representing 10.3 and 1.4 percent respectively. The population age group 55-59, 60-64 and above 75 years is found about similar to national figure 2001 but population of other age groups are found much different.

4.2 Sex Ratio

The sex composition of a population is indicated by sex ratio. It is calculated as a rate of total number of males to that females multiplied by 100. Thus, it shows the number of male per 100 females. According to this definition, the sex ratio above 100 indicates an excess of males and the ratio below 100 indicates an excess of females in population at any point of time.

Table 4.2
Sex Ratio of Study Population by Age Group

Age Group	Sex Ratio	
	Field Survey	Census 2001*
0-4	64.7	122.0
5-9	95.0	116.4
10-14	75.0	100.0
15-19	70.0	85.1
20-24	86.9	102
25-29	110.0	87.2
30-34	100	111.2
35-39	75.9	90.5
40-44	54.5	88.4
45-49	69.5	81.3
50-54	53.3	96.2
55-59	71.4	131.4
60-64	23.0	80.0
65-69	58.3	103.0
70-74	66.6	80.9
75+	100	81.8
Total	74.5	98.8

Source: *CBS, 2003.

Table 4.2 represents the sex ratio by five year age interval, which shows highest for the age group 25-29 and lowest for age group 60-64 years 110 and 23.0 respectively compared to corresponding sex ratios of 87.2 and 80.0 according to 2001 census.

The overall sex ratio to the study population is found 74.5 while sex ratio of the nation is 98.8 according to 2001 census. The difference in sex ratio by age may be because of the selection and distribution of population in a particular VDC during the field survey.

4.3 Dependency Ratio

Dependency ratio is the ratio of the economically dependent parts of the population to the productive parts. This measures indicates the no of dependents per 100 workers and may be computed on the basis of three broad age groups. The age groups are below 15 years, between 15 to 59 years is consider as working or active population which either unemployed or underemployed. The population of below 15 years is called young dependents and the 60 years an above is called old dependents. As the same ways, the number of young dependents per 100 working population is called young dependency ratio and the no of old dependents per 100 working population is called old dependency ratio whereas the sum of these two ratio gives the total dependency ratio

Table 4.3

Dependency Ratio of the Study Population

Dependency	Field Survey 2006	Census 2001*
Young age (0-14)	34.0	53.4
Old age 60 years and above	18.1	13.2
Total	52.1	66.6

Source: *CBS, 2003.

Table 4.3 shows that young dependency ratio as 34.0 in the study population. It is found to be lower compared to the national data according to 2001 census. Old dependency ratio is 18.1 in the study population which is lower compared to national figure from census 2001. Total dependency ratio is 52.1 in the study population which is lower (66.6) compared to the national figure of 2001 census.

4.4 Educational Status of Study Area.

Education is one of the most important variable which plays a vital role in the all round development of a society and it indirectly affects variables like fertility, mortality, health condition, income occupation etc. Thus, it is necessary to know the situation of education in the study area. The distribution of educational status of study population aged six years and above is shown below,

Table 4.4
Distribution of the Population Aged six years and
above by Literacy

Education Status of the Study Population Percent		
	Number	Percent
Illiterate	203	47.5
Literate	224	52.4
Total	427	100.0

School Attainment level of literate Group		
	Number	Percent
General (1/2 - class)	31	13.8
Primary (1 - 5 class)	73	32.5
Lower Secondary (5-8 class)	53	23.7
S.L.C	29	12.9
Certificate	19	.3
Diploma	12	5.3
Master	7	3.1
Total	224	100

Table 4.4 shows the study population with 47.5 percent illiterate against 52.4 percent literate. These figures seem to be quite different from national percent for literated and 46.3 percent illiterate according to 2001 census. The overall rate in the study are is above same in corresponding national figure.

Among the literate study population who attained primary level-education accounts for 32.6 percent followed by lower secondary (23.7 present), SLC (12.9 percent), Diploma (5.3 percent). Only 3.1 percent only boys attained master level education.

4.5 Marital Status

The study of nuptiality deals with the frequency of marriages such as union between of opposite sexes which involves rights and obligations fixed by law and custom, with the characteristics for

person united in marriage and with the dissolution's of such unions.

Proportion marriage is one of the four main proximate determinants of fertility, the other three being contraception, abortion and breast feeding. since the birth outside the wedlock is quite uncommon in Nepal. Marital status has important role for determining the levels of fertility. It directly affects fertility. The marital status of the total population aged above 10 years is given below.

Table 4.5
Distribution of Marital Status of the Study Population
by Aged above 10 years.

Marital Status	Number	Percent
Married	208	49.5
Unmarried	182	43.3
Widow/Widower	17	4.0
Divorced	9	2.1
Separated	4	0.9
Total	420	100

Table 4.5 represents the marital status of the study population. Out of the total population aged above 10 years 49.5 percent respondents where as 43.3 percent are found unmarried. About 4.0 percent found widow/widower, 2.1 percent are divorced and 0.9 percent cases are found to be separated in the study area.

4.6 Occupational Status

Occupation indicates the socio-economic status of a person. Labour in agricultural sector is the main occupation in the study area. The question about the occupation were asked to the population who were at the age of ten years and above.

Table 4.6
Distribution of Population aged 10 Years and
Above by Occupation

Occupation	Number	Percent
Agriculture	179	42.6
Business	23	5.4
Services	37	8.8
Wage earner	78	18.5
Student	94	22.3
House Worker	9	2.1
Total	420	100.0

Table 4.6 shows that the total 420 population age ten years and above, 42.6 percent population have their main occupation as agriculture sector. In the same way 22.3 percent (10 years and above) respondents are engaged in study. As running students of campus level also 18.5 percent are involved in wage earner. Similarly, the lowest percentages of people in the study area are found in house worker (2.1 percent).

4.7 Land Holding Status of Households

The land of household also indicates the socio-economic status of the household. It has seen above 42.6 percent of population in this community found engaged in agriculture (table 4.6) but a significant percentage of 31.6 percent are landless household.

Table 4.7
Distribution of Household of the Study Population by
Land Ownership

Land in Ropani	Number of Household	Percent
Landless	38	31.6
Below 1 Ropani	39	32.5
1-2 Ropani	19	15.8
2-3 Ropani	13	10.8
More than 4 Ropani	11	9.1
Total	120	100.0

From this study, 9.1 percent households have more than 4 Ropani Land. Where as 15.8 percent have 1-2 Ropani and 32.5 percent have below 1 Ropani.

CHAPTER V

5. SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENT

This chapter presents the backgrounds characteristics of the study population (women of reproductive 15-49 years), which shows the women's status also.

5.1 Respondent Women by Age Group

Age is a very important factor in determining fertility which is directly related to reproductive age of women. Table 5.1 shows total respondents age classified by five year age group.

Table 5.1
Distribution of Respondent Women (15-49 years) by
Five Year Age Groups

Age Group	Number of Respondent	Percent	NDHS, 2001*
15-19	7	5.8	10.8
20-24	18	15.0	19.0
25-29	19	15.8	19.1
30-34	17	14.1	16.4
35-39	24	20.0	13.4
40-44	16	13.3	11.8
45-49	19	15.8	9.6
Total	120	100.0	100.0

Source: NDHS, 2001:24.

A total of 120 women were contacted during the study for interview. From the data, maximum numbers of women (20.0 percent) are found in 35-39 age group in comparison to 13.4 percent according to NDHS, 2001. Likewise the minimum number of women (5.8 percent) are found in age group 15-19 which comparison to 10.8 percent according to NDHS, 2001. The percentage of respondents in age-groups 25-29, 40-44 are found about the same as corresponding national figures of 2001; but the respondent of other age groups are found much different.

5.2 Respondent Women by Educational Status

Educational status is one of the most important factors determining fertility level. It also depicts the socio-economic background of the respondent. It is essential to know the literacy status of the study population in order to examine the factors determining fertility in any community.

Table 5.2
Distribution of Respondent Women (15-49 years)
by Education Status

Educational Status	Number of Respondent	Percent
Literate	46	38.4
Illiterate	74	61.6
Total	120	100.0
Educational attainment level of women		
Primary	26	56.5
Secondary	12	26.0
SLC and above	8	17.3
Total	46	100

Table 5.2 presents the educational status of respondent. Out of 120 women aged 15-49 years, 74 respondents have been found illiterate and only 46 respondent literate representing 61.6 and 38.4 percent respectively. In study area, majority of respondent are unable to read and write. This factor may also have contributed to high fertility. 56.5 percent women have attended primary education.

5.3 Respondent Women by Occupational Status

Occupational Status plays the crucial role to determine the level of fertility, like any other socio-economic factors. Many study have shown the higher the fertility in those persons who involve in agricultural than non-agricultural persons. Thus it is essential to know the occupational status of eligible women. Table 5.3 presents the occupational status of the respondents in the study area.

Table 5.3

Distribution of Respondent Women by Occupational Status

Occupation	Number of Respondent	Percent
Agriculture	79	65.8
Service	10	8.3
Wage Worker	27	22.5
House Worker	4	3.3
Total	120	100.0

Table 5.3 shows the occupational status of the respondents. Out of the total, 79 women (65.8 percent) are employed in agricultural work representing highest percent, and 4 women (3.3 percent) are employed in house workers. Likewise, (27 women (22.5 percent) involved in wage worker). From the table we can see that respondent most of the are engaged in agriculture.

5.4 Respondent Women by Annual Income

Family and individual income in a household an important role in fulfilling the needs of the individual and family. Quality of life also depends upon the income of the people.

Table 5.4
Distribution of Respondent (15-49 years) by
Annual Income in Rs.

Annual Income in Rs.	Number of Respondent	Percent
Have no income	7	5.8
<80,000	72	60.0
80,000-1,00,000	23	19.1
1,00,001-2,00,000	11	9.1
2,00,001-3,00,000	5	4.1
>3,00,000	2	1.6
Total	120	100.0

Table 5.4 shows that the majority of women i.e. 72 women (60.0 percent) in the study area earn <80,000 Rs in a year.

Likewise only 2 women (1.6 percent) women earn > 3,00,000 Rs. and 5 women (4.1 percent) earn 2,00,000-3,00,000 Rs. in a year.

5.5 Respondent women by Age at Marriage

Marriage usually takes place at early ages and is almost universal in Nepal. This tendency is also see in the study area due to socio-cultural and religious belief which ultimately results high level of fertility. Age at marriage is classified into four major groups which are given below.

Table 5.5

Distribution of Respondent women by Age at First Marriage

Age at marriage	Number of respondent	Percent
10-14	29	24.1
15-19	55	45.8
20-24	20	13.3
25-29	16	13.3
Total	120	100

Above table shows that 45.8 percent women married between 15-19 years age group and only 13.3 percent women married between 25-29 years age group. Likewise 24.1 percent women married between 10-14 years in study area.

5.6 Respondent Women by Children Ever Born

No. of children ever born play vital role to increase population in the world. It is a measure of fertility. Child loss experience women have higher CEB than others.

Table 5.6

Distribution of Respondent Women by Children Ever Born

CEB	No. of Respondents	Percent
0	21	17.5
1	15	12.5
2	30	25.0
3	18	15.0
4	16	13.3
5	11	9.1
6	9	7.5
Total	120	100

Table 5.6 shows that 25 percent have two CEB and 7.5 percent have six CEB. Similarly 13.3 percent have four CEB and 9.1 percent have five CEB.

5.7 Knowledge of Family Planning

Knowledge of family planing method is an essential factor in promoting family planning services. The prevalence of family planning methods is associated negatively with fertility.

Table 5.7

Distribution of Respondent Women (15-49 years) by Knowledge

Knowledge of FP Method	Number of Respondent	Percent
Yes	92	76.6
No	28	23.3
Total	120	100

Table 5.7 presents the knowledge of family planning method. Out of 120 respondents, 76.6 percent of the respondents are found to have knowledge about family planning method and only 23.3 percent of respondents are found not to have knowledge about family planning methods.

5.8 Respondent women by Usage and Type of FP Method

The respondent, of Machchhegaon VDC did not use family planning method cause of lack of the facilities of family planning method. But they have started now to use family planning methods. Use of family planning method plays a vital role to control fertility.

Table 5.8
Distribution of Respondent women (15-49 Years) by current use and Type of F.P.

Family planning method	Number of Respondent	Percent
Non-User	64	53.3
User	56	6.6
Total	120	100
Types of F.P. method		
Pill	8	14.2
Injection	12	21.4
Norplant	9	16.0
Condom	11	19.6
Male sterilization	4	7.1
Female sterilization	12	21.4
Total	56	100

Table 5.8 presents information on usage of family planning methods among interviewed women having knowledge about FP

methods. Table 5.8 shows that 46.6 percent women are using family planning methods. It shows that among 56 user women, 21.4 percent have used injection and female sterilization, 19.6 percent have used condom and only 7.1 percent have male sterilization.

5.9 Reasons for Not-using of Family Planning Methods

Reasons for not using family planning methods are against their religion and cultural faiths also. The percentage distribution of reasons for non using of family planning methods are show below.

Table 5.9
Distribution of Respondent Women by Reason for Non Using of Family Planning Methods

Reason of non use	Number of respondent	Percent
Want more children	10	15.6
Husband more opposed	6	9.3
Due to health problem	13	20.3
Fear of side effects	14	21.8
Lack of source	13	20.3
too far to go to	8	12.5
Sources		
Total	64	100

Above table 5.9 shows that majority of respondents non use of family planning because of lack of sources which is 20.3 percent. Likewise only 12.5 percent respondent did not use FP because of far to go to sources and 9.3 percent did not use family planning method cause of husband opposed.

CHAPTER VI

6. FERTILITY BY SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES

This chapter explains the effect of different socio-economic and demographic factors on fertility which is measured by mean number of children ever born to women of reproductive age 15-49 variable indicates for fertility.

6.1 Mean CEB and age of Respondent

The women of reproductive age is one of the demography factors influencing fertility. It is expected that the age of married women increase the mean number of children ever born also increase. The results of the survey are presented in the following table.

Table 6.1
Mean number of CEB of the study population by Age of the Respondents

Age group	Cases	Number of child even born	Mean study area	CEB NDHS 2001*
15-19	7	9	1.3	0.2
20-24	18	21	1.2	1.3
25-29	19	44	2.3	2.7
30-34	17	56	3.3	3.7
35-39	24	67	2.8	4.5
40-44	16	83	5.1	5.2
45-49	19	91	4.8	5.1
Total	120	371	3.0	2.7

*NDHS, 2001, 61

Note : The following procedure is applied to calculate CEB

$$CEB = \frac{B_a}{W_a}$$

Where, B_a = Total number of CEB by women in age group a

W_a = Total number of women in age group a.

CEB = Children Ever Born

Table 6.1 shows that higher the age of respondents higher the number of children ever born. It also shows that the mean number of children even born varies by age of women. The highest CEB for 5.1 reported by women of the age group 40-44 years. The lowest CEB of 1.2 reported by women of the age group 20-24 years. The average number of children ever born in the study area is found to be 2.8 compared to 4.5 for Nepal reported by NDHS, 2001.

In fact, the completed family size is 5.1 according to this study of age group 40-44 compared to 5.2 according to NDHS, 2001 which indicates that the study population has about same CEB by the corresponding national figure.

6.2 Age at Marriage and CEB

Age at marriage plays a vital role in affecting fertility. Higher age at marriage is associated negatively with the mean number of CEB among the women. Lower age at marriage is associated positively with the mean number of CEB among the women. The age at marriage is shown in the table below.

Table 6.2

Mean CEB of the Study Population by Age at Marriage

Age at marriage	Cases	Number of children ever	Mean CEB
10-14	29	71	2.4
15-19	55	179	3.2
20-24	20	62	3.1
25-29	16	59	3.6
Total	120	371	3.0

Table 6.2 shows the mean number of children ever born by age at marriage. The above table also figures out that higher the age at marriage, lower the mean number of children ever born. The highest mean number of children ever born 3.6 found for women who were married between 25-29 age group followed by 10-14 years (2.4). The lowest mean number of children ever born 2.4 found from also women who were married between 25-29 age group.

6.3 Mean CEB and Education

Education of women is one of the main instrument for reduction fertility. Literatures have shows that educated women are more aware of the issue of their quality of children than non-education. Education has indirect impact upon fertility which indirectly reduces the level of fertility.

Table 6.3
Mean CEB of the Study Population by Education

Education	Cases	Number children ever born	Mean CEB
Illiterate	74	232	3.1
Literate	46	139	3.0
Total	120	371	3.0

Table 6.3 shows table effect of educational status of respondents according to mean children ever born. The above table 6.3 shows that literate women have lower mean number of CEB than illiterate women. The higher mean CEB (3.1) is observed among women with no education and the lower mean CEB (3.0) is observed among women who are educated.

6.4 Mean CEB and Occupation

Occupation status of women is one of the major indicator of fertility differentials. Occupation of women differ from one to another due to various social and economic reasons. The result of this study survey is presented below.

Table 6.4
Mean CEB of the Study Population by Occupation

Occupation	Cases	Number of children ever born	Mean CEB
Agriculture	79	237	3.0
Service	10	32	3.2
Wage Worker	27	86	3.1
House Worker	4	16	4.0
Total	120	371	3.0

Table 6.4 shows that occupational status of respondent by children ever born. The highest mean CEB (4.0) is observed among women who are engaged in only household activities, followed by wage worker (3.1). The lowest mean CEB (3.0) is observed among women who are engaged in agriculture.

6.5 Mean CEB and Child Loss Experience

Child loss (infant/child) is also an important factor in affecting fertility in developing countries. People want to replace that dead child by giving the next birth. So, women with higher child loss experiences have higher CEB. Many studies indicate that there is a positive relationship between child mortality and fertility. In study area also, the same relationship is found.

Table 6.5

Mean CEB of the Study Population by Child Loss Experience

Child mortality	Cases	Number of children ever born	Mean CEB
0	21	63	3.0
1	15	50	3.3
2	30	96	3.2
3	18	55	3.0
4	16	47	2.9
5	11	34	3.1
6	9	26	2.8
Total	120	371	3.0

Table 6.5 shows that higher the child loss experience, higher the mean number of children ever born. Women who have not

experienced child loss reported lowest mean children ever born of 2.8. CEB is 2.9 for those with 4 child loss experience, 3.1 for those with 5 child loss experience. Thus, as expected higher the child loss experience, 3.1 for those with 5 child loss experience. Thus, as expected higher the child loss experience, higher the number of CEB is observed.

6.6 Mean CEB and Annual Income

Income is another importance factor in differential. It is found that higher the level of income, lower the CEB which is shown below.

Table 6.6

Mean CEB of the Study Population by Annual Income in Rs.

Level of income	Cases	Number of children ever born	Mean CEB
Have no income	7	29	4.1
< 80,000	72	223	3.1
80,000-1,00,000	23	69	3.0
1,00,001-2,00,000	11	34	3.1
2,00,001-3,00,000	5	12	2.4
>3,00,000	2	4	2.0
Total	120	371	3.0

The above table 6.6 shows that mean CEB is highest (4.1) for women who have 40 income. Similarly, mean CEB is lowest (2.0) for women who have > Rs.3,00,000 income. Mean CEB (3.1) for women who have Rs.1,00,001-2,00,000 income.

6.7 Mean CEB and Knowledge of Contraception

In this study, the knowledge of contraception was tested by asking the question to eligible women by asking whether they have ever heard about the family planning methods and a complementary question was also asked about the use of contraception. Table 6.7 shows the relationship between knowledge and CEB to the eligible women.

Table 6.7
Mean CEB of the Study Population by Knowledge of Contraception

Knowledge of contraception	Cases	Number of children ever born	Mean CEB
Yes	92	259	2.8
No	28	112	4.0
Total	120	371	3.0

Table 6.7 shows that mean number of CEB lower for women who have knowledge of contraception than those who do not have knowledge of contraception. The above table 6.7, shows that the mean number of CEB for women with contraception knowledge is 2.8 which is lower than that for those without knowledge (4.0). The mean CEB 3.0 is found for all respondents from the present study.

6.8 Mean CEB and Use and Non-use of Contraception

Contraception is one of the most important factors to control the fertility. There is inverse relationship between contraception and fertility which is presented below.

Table 6.8
Mean CEB of the Study Population by Current Use of
Contraception

Use of contraception	Cases	Number of children ever born	Mean CEB
Non-user	64	213	3.3
Users	56	158	2.8
Total	120	371	3.0

Table 6.8 shows mean children ever born between users and non-users. The highest number of children ever born 3.3 is found for women who have not used contraception. Children ever born is found 2.8 for women who have used contraceptive method.

CHAPTER VII

7. SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter attempts to summarize the entire study and to draw some conclusion as well as recommendations for policy implication and research issues.

7.1 Summary of the Findings

This study covers 130 households. There are 487 people in the study area. The study is conducted in Machchhegoan VDC and focused on ever married women of reproductive age 15-49 years. This study has examined the socio-economic and demographic characteristic of VDC and analyzed the relationship between fertility (CEB) and socio-economic, demographic variables. The present study is based on primary data collected from two types of questionnaires (household and individual). Household questionnaires are used for the head of households. Individual question are asked to all 15-49 years ever married women from the household.

The findings of the study are summarized as follows:

- Among 130 households, there are 487 persons, out of them (42.7 percent) are males and (57.2 percent) are females. The sex ratio of the study population is found to be 74.5 which is less than the national figure of 98.8 according to 2001 census (Table 4.1 and 4.2).

- The total dependency ratio is 52.1 while it is 34.0 for child dependency ratio and 18.1 for old dependency ratio. The total dependency ratio of 52.1 is less than the national figure 66.6 from 2001 census (Table 4.3).
- Out of total population aged 6 years above 47.5 percent are illiterate and 52.4 percent are literate (Table 4.4).
- Out of the total population aged 10 years and above, 43.3 percent are unmarried and 49.5 percent are married, 4.0 percent are widower, 2.1 divorced and 0.9 separated category respectively (Table 4.5).
- Out of total population aged 10 years and above 42.6 percent are engaged in agriculture sector, followed by 22.3 percent are student and 2.1 percent are house worker. (Table 4.6)
- Out of 120 households, 29.2 percent are land less and 70.7 percent households are landholders. (Table 4.7)
- Out of 120 respondents in different age groups, the majority of respondents (20.0 percent) are in the age group 35.39 years and the lowest proportion of respondents (5.8 percent) is in age group 15-19 years. It shows the age at marriage is higher in study area. (Table 5.1)
- Out of 120 respondents, 38.4 percent are literate and 61.6 percent are illiterate. (Table 5.2)

- Out of 120 respondents, 65.8 percent are engaged in agriculture sector, while only 3.3 percent are reported house worker (Table 5.3).
- Majority of respondents (19.1 percent) in the study area earn Rs.80,000-1,00,000 annually. Only 1.6 percent earn 7,3,00,000 annually. (Table 5.4)
- Most of the respondents (45.8 percent) are married in the age group 15-19 years, 24.1 percent of respondents are married in the age group 10-14 years. (Table 5.5)
- Out of 120 respondents, 25.0 percent have 3 CEB but 7.5 percent have 6 CEB and 17.5 percent have no CEB. (Table 5.6)
- Out of the 130 households, 76.6 percent have knowledge about family planning method but 23.3 percent do not have. (Table 5.7)
- Out of the 120 respondent, 53.3 percent are non-user of family planning and only 46.6 percent are user. (Table 5.8).
- Out of the 56 respondent, 21.4 percent did not use family planning method because of fear of side effects, 10.7 percent did not use because far to go to take family planning (Table 5.9).

- The mean CEB of 5.2 is highest for women whose age group is 40-44 years at the time of field survey. Similarly, the mean CEB 1.3 is found in the age group 15-19 years. (Table 6.1)
- The highest mean number of CEB 3.6 is found for women who were married at age 25-29 years and lowest CEB 2.4 is found for women who were married at age 10-14 years. (Table 6.2)
- The mean CEB is higher with illiterate respondents than that of literate respondents. The figures are 3.1 for illiterate respondents and 3.0 for literate respondent. (Table 6.3)
- The mean CEB is found highest (4.0) for women who are engaged in house work and the mean CEB is found lowest (3.0) for women who have reported their occupation as service (Table 6.4)
- The highest CEB (3.3) is found for those respondents who have the experience of at less + 1 children dead. In contrast, the CEB is lowest (2.8) for those who have 6 children died (Table 6.5).
- The mean CEB is found highest (4.1) in no income group but the mean CEB is found lowest (2.0) who have annual income Rs. > 3,00,000. (Table 6.6)
- The highest CEB (4.0) is found among those respondent who have no knowledge about contraception and the lowest CEB

2.8 is found among those who have knowledge about contraception (Table 6.7).

- The highest CEB (3.3) is found for those respondents who have not used contraception and the lowest CEB (2.8) is found for those who have used contraception (Table 6.8).

7.2 Conclusions

The larger duration of marriage is seen playing a significant role in increasing the number of CEB. From the present study, it is observed that low age at marriage result high CEB, also the higher the age at marriage lower the fertility is observed (Table 4.2).

The education of women seems playing an important role in decreasing the mean number of CEB, in the study area of Machchhegoan's woman showing illiterate women having high CEB. Occupations have also in seen playing an important role for the reduction of fertility. Most of the women are engaged in agriculture in the present study and wage earner. So, they are found to have more children which mean higher fertility (Table 6.3 and 6.4).

- Child loss in an important indicator for the increase in the fertility. Women bearing more children is seen to loss more child. Women who have more child loss experience have high mean CEB (3.3) than those who have lowest experience of child loss, CEB (2.8) (Table 5.6).

- The higher income lower the CEB and lower the income higher the fertility. The lower income of the community was found as a great factor to increase the fertility. (Table 6.6)
- Knowledge and use of family planning methods especially female method are found very high but the use of the FP method before the first birth is not applied in the community. There is high level of contraception not use. (Table 6.8)

7.3 Recommendations

7.3.1 Policy Recommendation

Based on the findings and conclusion in this study, following recommendation may be fruitful for the advancement in the respective issue.

- To reduce the fertility, early age at marriage of female should be discouraged. Incentive and disincentive programme should be lunched to change in the attitude of society for decreasing age at marriage.
- To reduce the fertility, informal education and family planning related awareness creation programme should be given for married women.
- The women of study area have low income levels which increases the fertility. Hence programme should be lunched to improve the economic status of those women.
- Programmes related to child and maternal health should be introduced to reduce infant and child mortality. Besides this, programmes such as mass immunization, nutrition, child and

maternal health care facilities, cheap medical facilities may help to reduce infant and child mortality.

- Emphasis should be given to improve the educational level of women by education all girls of school going ages since the level of women's education is found effective. For this, the education should be free and compulsory for all girls.
- To reduce fertility, there should be IEC service and availability of contraceptive methods in order to increase prevalence.

7.3.2 Recommendations for Future Research

This study examined the relationship by using some selected demographic and socio-economic variables (i.e. education, occupation, age of women, level of income, age at marriage, child mortality and knowledge of FP etc.). Other socio-economic variables like cultural norms, value of children, religious belief and sex preference etc. could also be used to examine the relationship in future research.

Other demographic variable ecological, biological and psychological variable can be taken into consideration as future researcher issues.

It is strange to 120 ever married women from 120 households. Hence, further investigation needed in this area.

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APPENDIX - A

QUESTIONNAIRE

District.....VDC.....Ward No.....

Village/Tole.....House No..... Household No.....

Household Questionnaire

S.N.	Name of H.H. (1)	Relation to the H.H. (2)	Sex (3)	Age (4)	Literacy (5)	Grade complete (6)	Marital status (7)	Occupation (8)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Q. No. 2

1. Household head
2. Husband/wife
3. Son/Daughter
4. Daughter in law
5. Grand son/daughter
6. Brother/Sister

Q. No. 5

1. Yes
2. No

Q. No. 6

1. General
2. Primary
3. Lower Secondary
4. SLC
5. Certificate
6. Diploma
7. Master

Q. No. 7

1. Unmarried
2. Married
3. Widow/widower
4. Divorce
5. Separated

Q. No. 8

- | | |
|----------------|----------------|
| 1. Agriculture | 4. Wage earner |
| 2. Business | 5. Student |

3. Services

6. House worker.

Q. No. 9. How much land does this H.H. have ?

Q. No. 10. Is your income from land enough to maintain your H.H. for a year ?

Q. No. 11. Does this H.H. have other income rather than from agriculture ?

Q. No. 11.1 If yes, what is the other resources of income ?
.....

Q. No. 12. How much incomes does this H.H. have in a year ?

10. Have you given birth ?
 (a) Yes [] (b) No []
11. Have you had any births during the past year ?
 (a) Yes [] (b) No []
12. How many children have you ever born ? []
13. How many sons and daughters do you have alive now ?
 (a) Sons [] (b) Daughter []
14. How many sons and daughters have died ?
 (a) Sons [] (b) Daughter []
15. Have you heard or know about family planning ?
 (a) Yes [] (b) No []
16. Have you ever used any type of FP method ?
 (a) Yes [] (b) No []
17. If yes, what type of family planning method you have used ?
 (a) Pill [] (b) Male sterilization []
 (c) Injection [] (d) Female sterilization []
 (e) Condom []
18. If no, why did not use family planning method ?
 (a) Want more children [] (b) Lack of sources []
 (c) Husband opposed [] (d) Too far go to []
 (e) Fear of side effects [] (f) Sources