CHAPTER-I
INTRODUCTION

Nepal is a country of multi-lingual, multi-religious, multi-cultural and multi-ethnic society. Rais' communities are living in Mahadevsthan VDC of Kothang district in majority. Rai is one of the Mongolian group which known as indigenous people of Nepal. Especially, this caste lives in eastern hill region of Nepal such as Khotang, Bhojpur, Sankhunwashava, Ilam, Dhankuta and Solukhumbu. They have their own culture, religion and mother tongue. The total population of the Rai according to the 2001 census is 2.8 percent of the national population.

1.1. General Background

Fertility is one of the major components of population change. Others being mortality and migration. It is the process of child bearing performance of individual's, couples, groups, or any population. It is a biological phenomenon of the women 15-49 years of age (within reproductive period). There are various socio-economic and demographic variables determined the fertility in any communities. The levels of income, education, and child survival, socio-economic, cultural and religious factors affects to fertility.

There are several determinants of fertility. Among them, cultural, social and economic factors seem to exert their influence in regulating fertility (CBS, 1995:76), marriage usually takes a place at very early age, in Nepal. As the literacy rate in Nepal is low, age at marriage makes a real difference in governing fertility; same studies have demonstrated that an increase in female age at marriage in female age at marriage contributes to a reduction in fertility. This is also true in the case of Nepal, where an inverse relationship between age at marriage and fertility has been observed (Chhetry, 1993). Since data on

age at marriage had not been collected in the census, use has been made of an indirect estimate known as singulate mean age at marriage (SMAM) which was 16.8, 17.2, 18.1 and 19.5 on 1971, 1981, 1991 and 2001 respectively. The 1981 census concluded that by the age of 20 half of them are married and 86 percent of them are married by ages 25 (Pant and Acharya, 1988: 58)

Fertility is the consequences of the interaction between socio-economic, demographic, and psychological variables in society. However, fertility is generally defined as to indicate the actual reproduction performance of women. (Hans Raj,1998:29). It creates imbalance in resource utilization, and other developmental activities. High fertility is associated with developing countries and low fertility associated with developed countries.

Agricultural is the major occupation of all people. Many of the Gurung's Tamang's and Rai's are found in defense services within or, outside the country (Acharya, Bidhan 1994: 13). In addition to this significant proportion of Rai ethnic people are involved foreign employment, especially know as British/Gorkha Army in the World.

A major improvement in the understanding of fertility has come from the many fertility models developed by mathematical demographer, especially from model of the PROXIMATE DETERMINANT OF FERTILITY. Whatever the structure of Ruder and Westoff attempts to place fertility in its social, economic and cultural setting abound. (Jones, G.W.,1982:279-286, cited in Dictionary of Demography 1985:82).

The theory of demographic transition states that fertility is high in poor, traditional societies because of high mortality, lack of opportunities for individuals, less advancement and higher economic values of children. Those all change with modernization or, industrialization. (Caldwell 1977:118).

1.2. Statement of the Problem

The reviewing past decade the population of Nepal has been increasing rapidly since last few decades due to high fertility and declining mortality. The high fertility rate in Nepal is almost due to low age at marriage, demand for children in economic, socio and cultural. Almost child marriage is universal in Nepal, low rate of contraceptives uses, unmeet need of contraceptives etc. Other hand mortality rate has been decreasing in Nepal due to improve the modern medicine, health facilities and modern technologies etc.

The population of Nepal was 15,022,839; 18,491,097 and 23,151, 423 in 1981, 1991 and 2001 respectively and growth rate was 2.62, 2.01 and 2.25 in 1981, 1991 and 2001. This will be doubled in 26, 33 and 31years respectively. (CBS, 2003, Vol. I : 38). That's why if we don’t care it in its management, it might be problematic in coming future. Hence, population should be managed. There are so many studies that have been completed about socio-economic and demographic impact on fertility for different communities.

There are not any formal studies conducted to examine the fertility behavior in the Rai community of Mahadevsthan VDC of Khotang district. Some socio-economic and demographic factor might be playing vital role for encouraging of the people in Rai community. Majority of Rai people are involving in farming as well as foreign employment and other occupations. There is no sufficient health facility, educational institutions, industries and so on to the people of the study area. There is no adequate studies have been conducted yet to examine the above mentioned facility in that area. Therefore, the problem is arises to analyze the socio-economic and demographic impact on fertility in the Rai community of that area. This study basically focused on socio-economic and demographic variables which are directly or indirectly affected on fertility in Rai community. Therefore, it is necessary to find out the key socio-economic and demographic factors and its impact on fertility in Rai community.

1.3 Objectives of the Study

The general objective of this study is to assess the socio-economic and demographic determinant of fertility of Rai community. However, the main objectives are as follows:-

- To examine the socio-economic, demographic characteristics (such as literacy, age, sex, occupation, knowledge and use of FP) of Rai community.
- To examine the impact of socio-economic and demographic variables on fertility.
- To identify the level of knowledge and use of contraceptives among married women of reproductive aged 15-49 years.

1.4 Significance of the Study

In Nepal, very few studies have been occurred about socio-economic and demographic variables which enhancing the fertility especially in back ward ethnic groups and locality. A country is prosperity depends upon the development of each social setting and every unit within countries. So, studies should be conducted in each every social groups and in each every part of the country for the all round development of the nation. Hence this face becomes even more important in a country like Nepal where different groups of people are inhabited with respect to level of education, economic status, ethnicity and so on. So, this study has significance to examine the various socio-economic and demographic impacts on fertility. Similarly those people who want to know about the socio-economic and demographic characteristics of Mahadresthan VDC, they will easily know about from this study. No such study has yet been conducted in this community. Moreover, this type of study itself may be useful in raising the awareness in community member as well as local bodies.

The main significance of the study area is as follows:-

- The study is important to find out the socio-economic and demographic status of Rai community of Mahadevsthan VDC of Khotang district.
- The findings of the study will be useful for further researcher, planners, and policy makers on the behalf of government as well as NGOs and INGOs.
- It may be very useful for social activities and related organizations who are engaged to improve life style of backwardness or, disadvantages community like Rai community.

1.5 Limitation of the Study

The level of fertility of any social settings is determined by the various socio-economic and demographic as well as many other factors such as psychological, biological, geographical and political factors. So, the importance each of three factors in the study of fertility in a society can not be denied. However, due to the lack of time and source of monetary fund, the study is limited to some of the socio-economic and demographic factors.

- This study is limited to only the Rai community of Mahadevsthan VDC of Khotang district.
- Only selected socio-economic and demographic variables (age, education, occupation, age at marriage) are considered in this study.
- Psychological, geographical and political factors which directly or in directly affect on fertility, is not included in this study.
- Information taken from only few sample size of this study area, which will not representative whole of that community or, national population.

1.6 Organization of the Study

This study is divided in to seven chapters with different topics. The chapter one deals with five sub topics i.e. general background, statement of problems, objectives of the study, significance of study and limitation of study. Similarly, chapter two describe of theoretical and empirical literature review. As the same way, chapter three deals about research methodology. Chapter four deals with the socio-economic and demographic characteristics of the household.

The chapter five deals with fertility behavior of respondents. Chapter six presents the impact on fertility by selected socio-economic and demographic variables. And finally, chapter seven deals summary, recommendations and conclusions.

CHAPTER-II
LITERATURE REVIEW

There are three components (fertility, mortality and migration) of population change. Among them fertility is one of the major components of population change especially in developing countries. Fertility is the childbearing capacity of any individual or, couples or, group of population. If the world is facing high fertility continuously, there might be great problems for the world because productivity can not increase as the increment of population and at that time people will be distressed with starvation and misery many studies trying to examine the relationship between fertility and socio-economic and other variables which directly or, indirectly affect 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 Review

Human fertility indicates the actual reproduction performance of women or group of women. It is a complex process, which is responsible for biological maintenance of society. But there are several social, cultural, psychological, economic and political factors to determine of fertility of the process of fertility. These factors are responsible to determine level and differentials of fertility.(UN, 1973:64).

Fertility has two phenomenon while it operates one is its attitudes and another is behavior. Couples make up their mind first by determining the tentative size of family they would like to have called attitudes then; they give birth of children called behavior, on the basis of their attitudes. (Chalise, 1998:1)

Bongarrt has mentioned principally four proximate determinants of fertility, such as (i) proportion of married women, (ii) lactation infecundability, (iii) induced abortion and (iv) prevalence of contraceptives use. The principle roles played by the first two proximate determinants of fertility transition in a traditional society are characterized by controlled or regulated fertility. Hence other two factors, contraception and induced abortion come into play consequently; these two proximate determinants have the greatest fertility inhabiting effect in non-traditional sectors. (Bongaart and Potter,1983).

There are different theories of fertility determinations. 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 causal links between socio-economic and demographic variables, and there relationship with fertility. (Aryal, R.H. 1997)

Fertility in a country may greatly influence the pattern of social and economic development. The rapid increase in population as a result of high fertility and declining mortality can do much to aggregate the development process. The control of fertility is thus recognized as one of the main factors in accelerating socio-economic development. Age at marriage, place of residence, education, and ecological zones are associated with this persistently high fertility in Nepal. (NPC, 1988)

Caldwell (1976) advanced the wealth flow theory of fertility decline. He argued that societies could be classified according to their productions system that traditional family based production with high fertility. In any society, the fertility is high if children are economically beneficial to the parents. Whether the children are economically beneficial to parents or not is determine by socio condition, mainly the direction of intergenerational flow of wealth (in terms of goods services), children in such society are economic assets to their parents and naturally more children more wealth leading to a higher fertility.(Caldwell,1976).

Blacker (1960) put forward his economic theory of fertility. This theory is applied to the micro consumption theory of fertility, which explains that fertility behavior is the result or, household choice. He argued that the household choice of fertility is made in the same manner as in the case of purchases of the durable goods. A couple's decision to have and additional child depends on the balance of its preferences, the constraints of its income and the cost of children. It is advocated that if knowledge of birth control is wide spread, fertility would be directly related to the income of the parents. (Blacker, 1960:209-231).

Liebenstein (1975) has presented a new explanation of the decline in fertility accompanied by economic development. He suggested that direct and indirect costs of children are not sufficiently explains the entire decision process which determines the observed inverse relation between family size and income level. (Tuladhar, 1989:45).

The distributive justice hypothesis advocates for a redistribution of income and opportunities to bring down the fertility. Fertility could be successfully reduced through increased welfare, through a more equitable distribution of goods and services and opportunity is the major argument of this hypothesis labor intensiveness in industry land reform, widely spread paramedical health services, access to education, all combines, according to the hypothesis to create the condition for fertility decline (Iichman, 1975:231-239).

According to different diffusion theory in countries where fertility has been declining, attitudes and practices contraceptives to dimensioning fertility have been adopted first by the better educated, wealthier and high social status groups of city population and transferred in duration of time to intermediated and lower status groups and to the lower areas. (Bhende and Kanitkar, 1994:271-273).

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

Davis and Blake (1956) proposed eleven variables which they called "Intermediate Variables". Among them six variables are affect sexual intercourse, three affects conception and remaining two variables affects gestation and parturition. They concluded that any socio or cultural factor which affects fertility most do, so through and only one or more of these intermediate variables (Davis and Blake:1956).

Frank W. Notestein presented the theory of demographic transition 1945 and explained that all societies move from a traditional agrarian based economic system with quite high level of mortality and fertility to an industrialized modern society with quote low level of fertility (UN 1973:59).

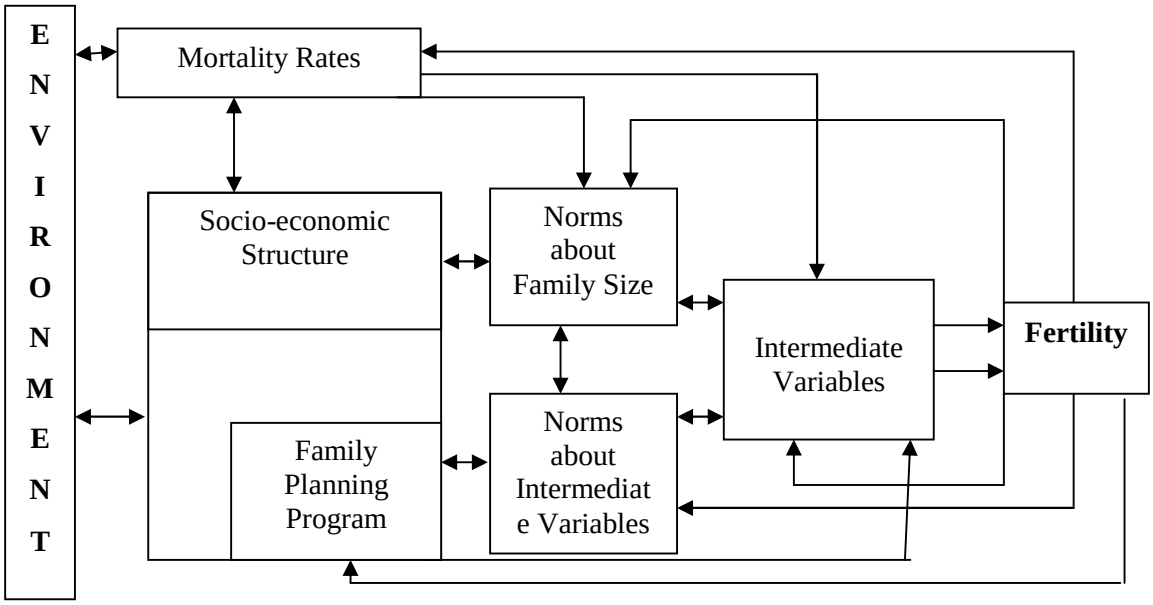
Ronald Freedman (1982) developed a model for the sociological framework of fertility. He introduced two types of norms about fertility, which are norms about family size and norms about intermediate variables. Family planning program in considered as one of the social program that has a goal to reduce fertility that may influence the norms about fertility size and norms about intermediate variables, which in turn affect fertility behavior (Tuladhar, 1982: 43-44).

Backer's theory is based in conventional economic theory of consumer behavior. According to this theory, parents compare the utility of children with that derived from other goods; if knowledge of birth control method were universal fertility would be positively associated with income. Because according to him, higher income group can afford more children, i.e. the income groups who could afford more children very frequently have fewer

children because higher income families want higher quality children who, in turn, are more expensive (Leibenstein 1979: 88).

In a framework for the study of fertility presented by Freedman (1975), he argued that the intermediate variables propose by Davis and Blakes are not always used to limit fertility and often their effect on fertility is an unintended result of cultural of cultural patterns. Freedman introduced two types of norms in his model namely, norms about family size and norms about intermediate variables. Varying life style related to position n a status hierarchy influence norms about family size. Status indicators such as wealth, power, prestige, past and general class indicators may influence the desired number of children differences in life style may influence norms about intermediate variables directly or, through norms about family size. Social organization such as family planning program that has a goal to reduce fertility may influence the norms about intermediate variables which in turn, affect fertility behavior.

Figure 1 Sociological Framework for Fertility Study



Source: Freedman, 1982:275

Figure shows the influences of environmental factors, social and economic structure on fertility via, a series of intermediate variables (Tulladhar 1989:43-44).

2.2. Empirical Literature Review

Many empirical researches have been conducted to examine the relationship fertility and socio-economic and demographic variables in Nepal.

The fertility in a country can be greatly influences by the pattern of social and economic development. The rapid increase in population as a result of high fertility and declining mortality can do much to exaggerate the development process. The control of fertility is the recognized as one of the main factors in the acceleration of socio-economic development age at marriage, education, place of residence (Terai, Hill and Mountain) are associated with this persistently high fertility in Nepal.(Panta and Acharya, 1988:53).

2.2.1. Age at Marriage and Fertility

Marriage is almost universal in Nepal. It plays a great role reduce or increase fertility in any population. Age at marriage also affects by place of residence in any society. In all regions women from urban areas and women with schooling tend to marry later than women in rural areas and women who have not been to school.

Nepalese society doesn't allow to sexual union of unmarried people. Therefore, marriage is the most essential event. Conception out side marriage is not accepted by the society. Family formulation process starts after the marriage. It plays vital role determinant the fertility level. Higher age at marriage is directly related to fertility of an individual as well as society. (Acharya, 1973:74-79).

The increased age at marriage is found as one of the determinants of CEB. Women marrying at the age of 14 or, earlier were found giving live birth to almost 3.7 children, where as women marrying at the age of 18 years and above had only 2.9 children. The difference of 0.8 or almost 1 child shows that

if those women marrying at the age of 14 or earlier would be encouraged to marry at 18 or later. They will help reduce Nepalese fertility by almost one fourth. There was no difference at all between age at marriage and age at union regarding CEB. When they were grouped in three categories, age of less than 14, within 15-17 and 18 and above years of age. They may be due to increasing trends of age at marriage in Nepal. However, women who had started cohabitation at age of 14 year and earlier had 3.7 children, where as the women cohabited in 15-17 years had 3.2 and 18 years and later had 2.1 CEB. An effort to increase union at 14 or, less to 18 or over may bring CEB down by almost one child. (Acharya, 2000: 24-25).

The Total Fertility Rate (TFR) for Nepalese women 15-49 is 4.1 births per women. There is a large difference in fertility by urban rural residence; the TFR among urban women (2.1) is 2.3 Children less then that among rural women (4.4). The age pattern of fertility indicates that Nepalese women have high fertility in the early part of the child bearing period. At the current ASFRS, a woman in Nepal will have given birth to about three children by age 30. The ASFRS in both urban and rural areas peak at age 20-24. In urban areas, fertility rates decline rapidly after age 24, whereas in rural areas the fertility decline by age is more gradual. The ASFRS are consistently lower in urban areas then in rural areas, and women in urban areas of Nepal seem to almost stop having children after age 40. (NDHS, 2001:56)

2.2.2. Education and Fertility

Education plays vital role to reduce fertility. There is inverse relationship between educational status and fertility, especially women education. Higher the level of female literacy in a community, lower will be the fertility. This also implies that the level of fertility should be lower for the literacy females compiled to illiterate females. (G C, R K, 1995:77).

Nepal Fertility Survey, (NFS, 1996) has shown that the mean number of children ever born CEB among literate women was lower 2.3 by almost one child compiled to that among illiterate women was 3.3 children for women, women with literate husband were also having forever mean number of children ever born CEB than those of illiterate husband.(MOH, 1996).

The total fertility rate (TFR) has been decreasing with the increasing of literacy rate in Nepal The total literacy rate was raised 23.3,39.6 and 54.1 percentage in 1981,1991, and 2001 respectively (CBS,2003,Vol I :249).. But TFR was decreased such as 6.3 in 1981, 5.6 in 1991 (G.C, R.K.,1995:68) and 4.1 in 2001(Karki,Y.B,2003:43)

Literacy levels of Nepal have increased significantly, particularly during the last two decades. Male literacy among 6 and above age group has reached 65.5 percent in 2001 from 34.0 percent in 1981. Similarly female literacy rate among this group has more then trebled, from 12.0 percent in 1981 to 42.8 percent in 2001. Nevertheless in literacy and education gender disparities are decreasing only slowly. (CBS, 2003:227)

Women having no education had obviously highest CEB (3.5) than women with primary education (2.4) and secondary and over (2.1). It is natural that women are relatively younger ages have similar fertility performance and when the age increases the differences in fertility by educational status becomes more evident. Indeed, the difference in fertility by education at the age of 45-49 on the end of child bearing period indicates the prevailing effect of education. A difference of 1.3 children in total, between non educated women and women with secondary and higher level of education was observed by the birth, death and contraception Survey,. Such a difference is evident even from the age group 25-29. This situation suggested the need for women education in Nepal. It is showed that women's education is more important than husband education, but husband education is also one of the important factors of fertility determination. (Acharya, 2000: 30).

Education of husband was found to be more effective in explaining the fertility performance of women than the occupation of husband themselves but it is slightly weaker then the education of women. The highest CEB (3.6) was observed for women with their not educated husbands followed by primary (3.1) and secondary and covers (2.7). In total, the difference of almost one (0.9) child in CEB of women for 'none' and 'secondary and over' educational group of husbands was observed. Such a difference is persistent in a gradual increasing fashion. Undoubtedly, women's education is more important then husband's education is also one of the important factors of fertility determination. (KC, 2000:30).

2.2.3. Occupation and Fertility

The occupational status is an impotent determinant of fertility level. There is inverse relationship between the working status of women and fertility. The educated and job engaged women can be found small family desire. High fertility has been associated with agriculture and mining, lower rate of fertility has been associated with professional classes in urban industrial countries.(UN,1973:100)

Agriculture is known as major occupation in Nepal. More then 81 percentage of the Nepali people are engaged in agriculture activities (CBS,1995).In Nepali women are participate to a high degree in the household production system. Women are contributed 65 percent of the labor time to household production and 35 percent by man. The women whose husbands were engaged in farm occupation had higher fertility with 3.27 mean CEB then that of non farmers with 3.19 mean CEB for women (Pradhan,1989:115).

Birth rate in Italy come down to 50 percent when its economic structure transformed to industrialized from agricultural sector (Raj, 1988). UN (1985) analyzed worked fertility Survey, results for 38 developing countries on the relationship between women's employment and fertility. They found women in

traditional occupation women have the larger number of children ever born, women who have not worked at all since marriage tend t have a higher over age number of CBS. Modern occupation women have the fewer children then women other traditional occupations. The average number of CEB among the women in modern occupation was found to be 2.33 and for those who had not worked since marriage women have not worked at all since marriage tend to have a higher average number of children ever born than women was 4.05. The difference in the mean number of CEB between women in traditional occupation and those who have not worked since marriage was also greatest, women who had not worked since marriage. The average number of CEB among women in Nepal for modern occupation was 2.39, 3.16 for traditional, 3.79 had not worked since marriage (Adhikari, 1996).

According to 2001 census results, women constitute more then 43 percent of the labor 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 is also visible in their improvement as reflected in their increasing proportion among the professionals and technicians as also in administration and management. (CBS, 2003: 223)

2.2.4. Family Planning and Fertility

Contraception is one of the most important factors of control the fertility. There are negative relationship between contraception and fertility. Similarly, contraceptives use was considered as one of four most important proximate determinants of aggregate level of fertility. (Bongaart and Potter, 1983).

According to census 2001, there was only 14.2 percent of urban areas and 85.8 percent was rural areas. As per the residential area there is widely gap

between rural and urban areas contraceptives prevalence. The currently unmet need is 27.8 percent and contraceptive prevalence rate is only 39 percent of Nepal. (NDHS, 2001). In Nepal, poor level of family planning program effort in the rural areas of the country. (Pathak, 1998:49).

According to the MEBDC Survey 1996, total current users of contraceptives were reported as 32.3 percent. It also reported that among the currently married women, only 9.3 percent in age group 15-19 and 1.5 percent in age group 20-24 have used any methods of contraception in 1996. (K.C., ed. al., 1997:70-73).

Women who had not used any kind of contraceptives had expected in relatively lower age groups. Because, the knowledge and the use of contraceptives are sought by women only after completion of the desired family size. But, women with higher CEB in older age groups are expected to have slightly less CEB then that of non-users, which is not true for case of Nepal. In total, women not using any method had a case of 3.0. Whereas women using temporary method had 3.4 permanent method had 4.1 CEB. A keen observation in age groups after 35-39 reveals that the women using permanent method had slightly fewer children then the women not using any method and using temporary method. Through there might have been a number of hurdles and obstacles, relatively small proportion of worries with contraception in age groups 15-19 and 20-24, and women with temporary methods had highest CEB in age group 30-34 and 49-49 is a city in Nepal's family planning management. (Acharya, 2000: 26-27)

Current knowledge of family planning method has been increasing in Nepal. The level of fertility has also come down. The total demand of family planning is 60 percent of which 28.5 percent is met i.e. currently using and 31.4 is not met with 14.3 percent is met i.e., currently using and 31.4 is not met 14.3 percent unmet need for spacing and 17.1 percent is not met (14.3 percent unmet

for spacing and 17.1 percent unmet need for limiting) which means only 47.6 percent of demand for family planning is satisfied. Therefore, there are two distinct challenges of reaching and satisfying the couples with unmet need for family planning and furthermore reducing the proportion of who did not extremely need for family planning through right information and mass age. (MOH, 1998).

2.2.5. Socio-cultural Norms and Values Impact on Fertility

Karki (1988) examined that the sex preference and the specific values of sons and daughter to parents in Nepal using urban and rural data 1979. Among all respondents the ideal family size was average 3 children with two sons and one daughter. It was reported by 30 percent of respondent. Among them who reported they were currently using contraceptives, the living sons were higher than the mean number of living daughter for all respondents. The findings indicated that the economic motive for having both sons and daughters may be waking in Nepal; the preference for sons does exist. (Karki, 1988).

Dahal (1990) argued that if a woman gives births to daughters only it is likely that husband may marry another women to be get a male issue. In other words, if a woman when produced children particular sons she accepted fully by member of the family. (Mabuhang, 1994:43).

2.2.6. Child Loss Experience and Fertility

Infant and child mortality is one of the most important factors to determine the fertility. So there is close relationship between infant mortality and fertility and number of child ever born (CEB). The study concluded the experience of story child replacement effect in Nepal. (New Era, 1986:90).

Infant mortality is higher in most developing countries such as; Afghanistan (154), Bangladesh (66), India (66), Bhutan (61), Pakistan (91), and Nepal (77) where total fertility rate (TFR) was 6.0, 3.6, 4.7, 3.1, 4.8, and 4.5 per thousand respectively, which indicate the high TFR and infant mortality rate. (PRB, 2003).

Infant and child mortality is one of the most important factor to determine the fertility, having, high infant and child mortality leading to the high fertility. In Nepalese perspective, therefore, poor level of socio-economic development is the most catalyzing factors for high level of infant mortality and high fertility. Poor health facilities/services, lack of knowledge on the personal health/hygiene and sanitation of the reproductive aged women and deficiencies of calories intake, protein diet and micro nutrients severely impairs the personal health of mothers and children in Nepal. Such factors may lead to early death of a newly born baby especially during post natal and child hood period as infected by environmental contamination factors and malnutrition (Adhikari, 1996:1).

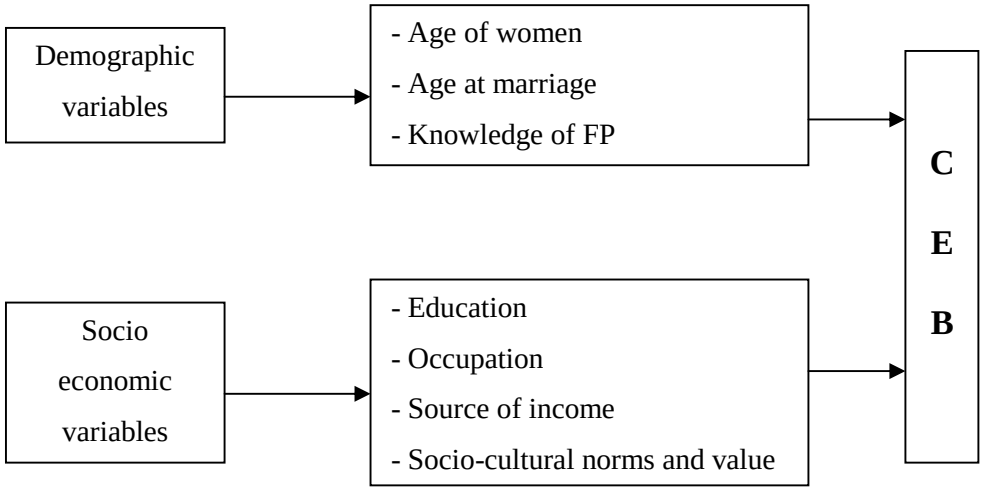
According to NFFS 1986, the mean number of CEB for all ages was 3.2 and the mean number of surviving children for all ages was 2.5, experience a loss of about 0.7 children, the various study concluded that child loss experience motivates women to give more births. The women who had no experience of dead children desired 2.03 mean number or children while the number who experienced the death of one or more baby were found with 2.07 mean number of desired children (Bhandari, 2000: 15-16).

2.3 Proposed conceptual Framework

The study of socio economic and demographic impact on fertility is very complex phenomenon which is justified by the preceding discussion of various literatures. However, this study has been trying to find out the effects of

independent variables (socio economic and demographic variables) on dependent variables (mean CEB) which are shown in the following figure:

Figure 2 Proposed conceptual Framework



This conceptual framework deals with different socio-economic and demographic variables relating with fertility in Rai community of the study area.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Study Area

Khotang district lies in the eastern part of Nepal. The administrative boundary of this district, Bhojpur and Okhaldhunga district lies in east and west. Similarly, Solukhumbu and Udaypur district lies in North and South of the Khotang. This district is situated at $26^0$50' to $27^0$28' of north latitude and $86^0$26' to $86^0$59' of east longitude. The total area of this district covers 1591 sq. km. There are 76 VDC of Khotang district. According to census 2001 the total population of this district was 231, 385. Among them male were 112, 821 and female were 118, 564. Various caste and ethnic groups of people are living in Khotang district with the dominance by all Rai.

3.2 Source of Data

This study has based on primary data and these data were collected from the field Survey, by interview method. This was done were through direct interview with the respondents using a structured questionnaire. All the collected data were taken from sampling households of the Rai community.

3.3 Sample Size/Design

Sample was designed for homogeneous Rai community of study area. The total 120 household (HH) were taken from six wards (i.e. 2,3,6,7,8,9). At the first, the total households were listed from the selected wards. Secondly, 120 households were selected by simple random sampling with lottery system. Equal households were selected from each ward. If there were two or more than two eligible women in one household, only one eligible women would selected by lottery system.

3.4 Questionnaire Design

The questionnaires were designated for this study based on socio-economic and demographic impact on fertility. Two types of questionnaire were designated based on objectives of this study.

- Household Questionnaire
- Individual questionnaire

The household (HH) questionnaire was designated to collect the information of family members' age, sex, marital status, education and other socio-economic and demographic characteristics of the household whether the individual questionnaire was designed for all eligible ever married women aged 15-49 years from the household under the study.

3.5 Method of Data Collection

Data were collected from sample household in the selected ward of Mahadevsthan VDC. Researcher himself is involved in the data collection with help of other noticeable persons. Information were collected from each respondents of households and requested to them reply the answer asking questions.

3.6 Data Analysis and Interpretation

The collected data were entered into computer data base programme, require tables were generated by SPSS software programme. Entire questionnaire were manually edited before entering the computer. For the analyzing of the collected data, frequency table and cross tabulation are used.

CHAPTER IV
SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLD

This chapter deals with socio economic and demographic characteristics of the population which represent their socio-economic and demographic status and its effects on fertility.

A. SOCIO CULTURAL AND DEMOGRAPHIC CHARACTERISTICS

A.4.1 Age Sex Structure

Age and sex are basic characteristics of any population. The composition of age sex structure of the study, the total household (HH) served was 120 and the total population was recorded 687, among them 349 were male and 338 were female which is presented in the tables.

Table A. 4.1 Distribution of Total Population by Age- Sex structure

	Male		Female		Total	
Age group	No.	Percent	No.	Percent	No.	Percent
0-4	28	8.0	23	6.8	51	7.4
5-9	37	10.6	40	11.8	77	11.2
10-14	46	13.2	40	11.8	86	12.5
15-19	51	14.6	48	14.2	99	14.4
20-24	40	11.5	42	12.4	82	11.9
25-29	23	6.6	25	7.4	48	7.0
30-34	19	5.4	17	5.0	36	5.2
35-39	19	5.4	24	7.1	43	6.3
40-44	22	6.3	16	4.7	38	5.5
45-49	22	6.3	24	7.1	46	6.7
50-54	12	3.4	5	1.5	17	2.5
55-59	9	2.6	14	4.1	23	3.4
60+	21	6.0	20	5.9	41	6.0
Total	349	100.0	338	100.0	687	100.0

Source: Field Survey, 2007

The table A. 4.1 show that percentage of population is found highest 14.4 percent in the age groups 15-19 followed by 10-14 and 20-24 year. The lowest percentage of respondent was found 2.5 percent in the age group 50-54 year.

Similarly, the percentage of male population is highest in the age group 15-19 year and lowest in age group 55-59 year which represent 14.6 and 2.6 percent respectively. The percent of female population is highest in the age group 15-19 year and lowest population is 50-54 year which, represent 14.2 and 1.5 percent respectively.

A.4.2 Sex Ratio:

The sex composition of a population is expressed by sex ratio. It is defined as males per females and it is obtained by dividing total number total number of male by total number of females and multiplying by hundred. The sex ratio of population presented in following table.

Table A. 4.2 Distribution of Population by Sex Ratio

Age group	Sex Ratio	Census 2001
0-4	121.7	103.0
5-9	92.2	103.0
10-14	115.0	106.0
15-19	106.3	99.0
20-24	95.2	88.0
25-29	92.0	91.0
30-34	111.8	95.0
35-39	79.2	99.0
40-44	137.5	99.0
45-49	91.7	104.0
50-54	240.0	105.0
55-59	64.3	112.0
60+	105.0	101.0
Total	103.3	98.8

Source: Field Survey, 2007 and CBS 2003

The table A. 4.2 shows the distribution of population by sex ratio. The highest sex ratio was found 240 in age group 50-54 years which leads to vital role, due to the small size of population in this age group for determining the sex ratio. Similarly, lowest sex ratio 64.3 was found in age group 55-59 years. According to census 2001 the highest sex ratio 106.5 was found in age group 55-59 and lowest sex ratio 90.9 was found age group 25-29 years. Comparing overall sex ratio of the study population and census 2001 it was found 103.3 and 99.8 respectively. The sex ratio above 100 indicates an excess of males and the ratio below 100 indicates an excess of females.

A.4.3 Family Size of Households

Family size of household is one of the better indicators of demographic characteristics. In this study average HH family size is found 5.8. So, it can be considered as large family size. The family size of household is given in the following table 4.3

Table: A. 4.3 Distributions of Households by their Family Size.

Family size	Number	Percent
1-4	32	26.7
5-6	48	40.0
7-12	40	33.3
Total	120	100.0

Source: Field Survey, 2007

Table A. 4.3 shows the highest number of household reported that their family size is (5-6) members with 40.0 percent of total followed by greater than 7 members of family size.

A.4.4 Religion of the Study Area Population

The religion of the overall households has been categorized into various types such as: Hindu, Buddhist, Kirati, Christian etc. This situation is presented in the following table.

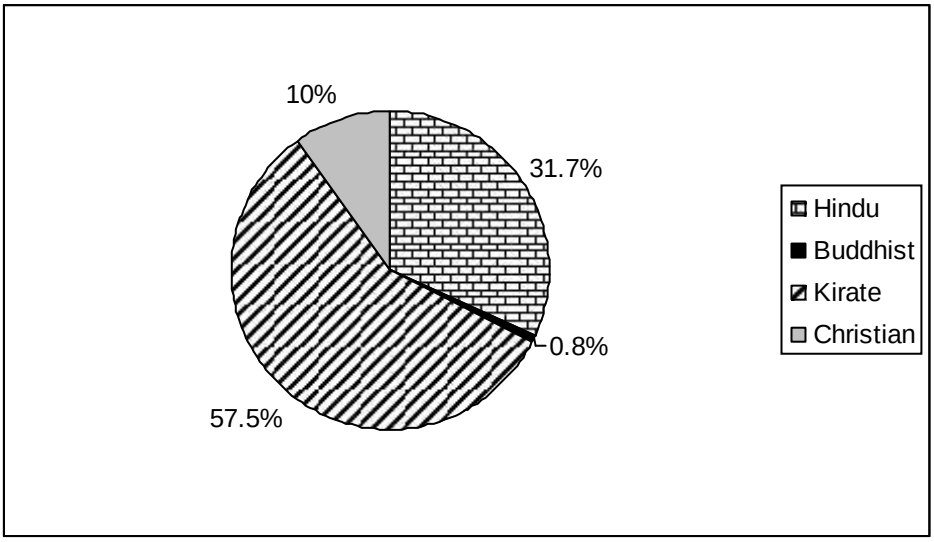
Table A. 4.4 Distribution of Household by Religion

Religion	Number	Percent
Hindu	38	31.7
Buddhist	1	0.8
Kirant	69	57.5
Christian	12	10.0
Total	120	100.0

Source: Field Survey, 2007

According to the table A.4.4, there was overwhelming of 'Kirant religion with 57.5 percent followed by Hindu with 31.7 percent of total. And the least number of household reported that Buddhist religion with 0.8 percent.

Figure 3. Distribution of Household by Religion



A.4.5 Educational Status of the Study Area Population

Education is one of the most important factors which plays vital role in all society. It is indirectly affects variables like fertility, mortality, health condition, income, occupation, living standard and so on. Thus, it is necessary to know situation of education in any society or community.

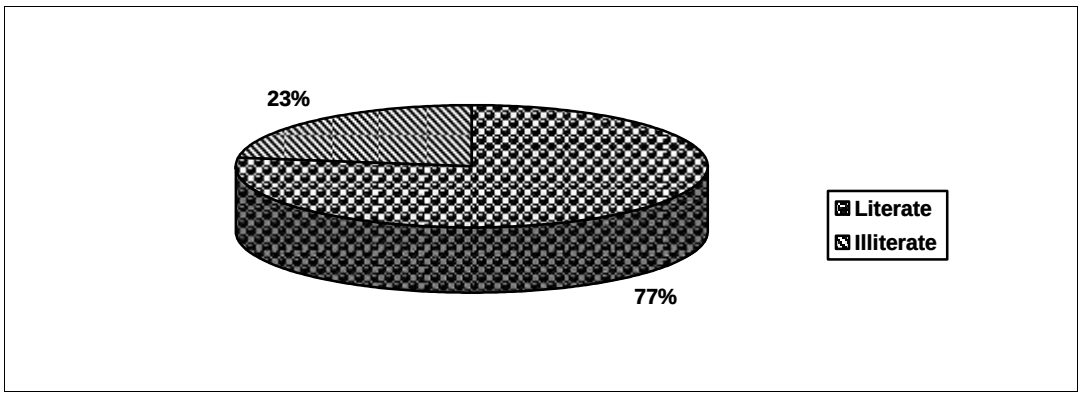
Table A. 4.5 Distribution of Educational Status of the Study Area Population Aged 5 Years and Above.

Educational Status	Number	Percent
Literate	491	77.2
Illiterate	145	22.8
Total	636	100.0
Level of Education		
Non formal education	31	6.3
Primary	186	37.9
Lower Secondary	61	12.4
Secondary	65	13.9
SLC	118	24.0
Intermediate and above	30	6.1
Total	491	100.0

Source: Field Survey, 2007

Table A. 4.5 shows educational status of study population. Out of the total population 491 are literate which represent 77.2 percent. Remaining 22.8 percent are found illiterate. As the above table the highest 37.2 percent are found with primary education followed by 24.0 percent SLC. The lowest 6.1 percent are found intermediate and above followed by 6.3 percent with non-formal education.

Figure:4 Distribution of Educational Status of the Study Area Population Aged 5 Years and Above.



A. 4.6 Marital Status of the Study Area Population Aged 10 years and Above

The study of nuptiality deals with the frequency of marriage, where union between persons of opposite sexes involves rights and obligations fixed by law and custom, with the characteristics of persons united in marriage and with the dissolution of such unions. The marriage is the primary events in process of family formation. The marital status of the study area population presented in Table 4.7.

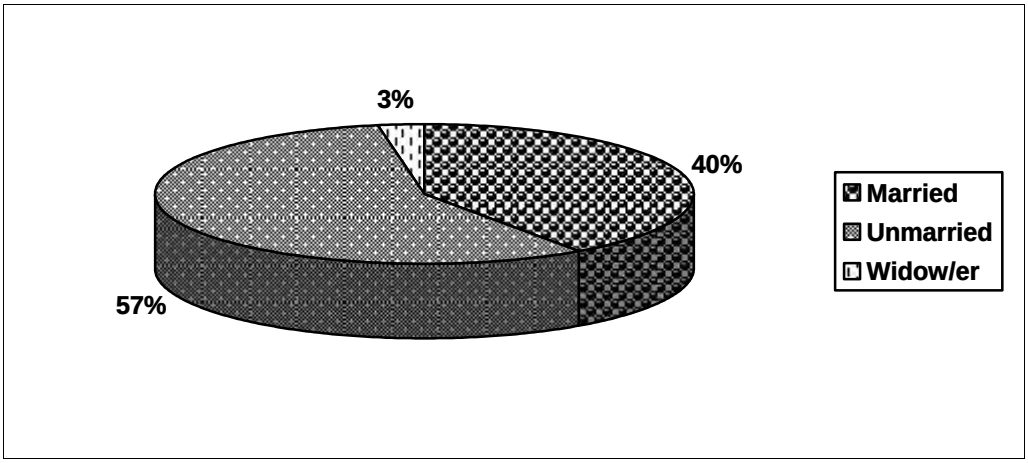
Table 4.6 Distribution of Marital Status of the Study Area Population Aged 10 years and Above

Marital Status	Number	Percent
Married	225	40.3
Unmarried	313	57.1
Widow/er	15	2.7
Total	553	100.0

Source: Field Survey, 2007

Table 4.6 shows majority 57.1 percent are found still unmarried against 40.3 percent married and followed by 2.7 percent widow/er.

Figure: 5 Distribution of Marital Status of the Study Area Population Aged 10 years and Above



A. 4.7 Language and Mother Tongue of the Households

In study area, it has been found that after taking interview with all respondents they can speak Nepali language. According to their mother tongue only 2 households reported that their mother tongue is Nepali while remaining all household population reported that as Rai language. It is given below.

Table A. 4.7 Distribution of Language and Mother Tongue of the Households Population

Language	Number	Percent
Nepali	120	100.0
Mother tongue		
Nepali	2	1.7
Rai	118	98.3
Total	120	100.0

Source: Field Survey, 2007

Table A.4.7 shows that all of the population in study area is speak Nepali language. Table also shows out of the total population more than 98 percent are speak Rai language as their mother tongue followed by only about 2 percent are speaks Nepali language as the mother tongue.

B. Economic and Household Facilities

B.4.1 Households Income of the Study Area Population.

Source of income is one of the better indicators of socio-economic status of the population. Quality of life depends upon the income source. There is inverse relationship between source of income and fertility. There are different types of income source of population which is presented in the following table.

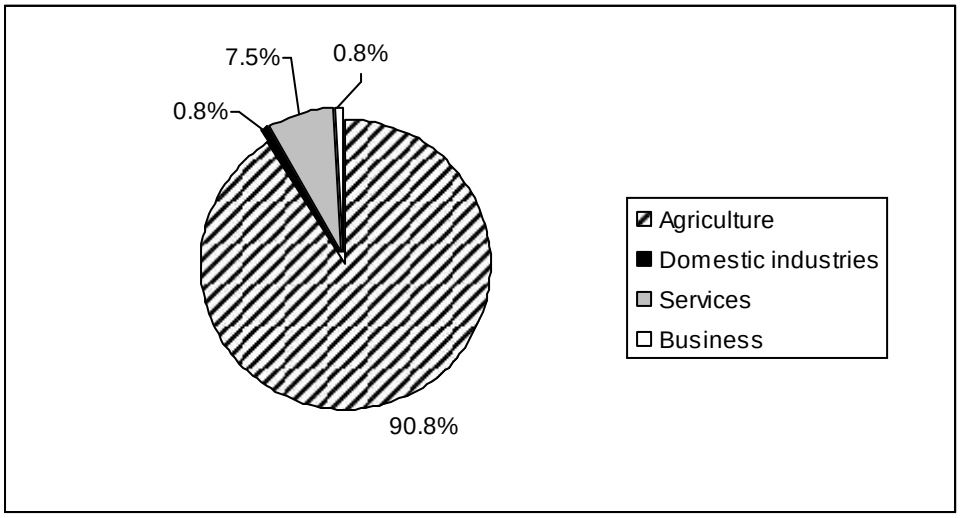
Table B.4.1 Distributions Income Source of Study Population.

Source of Income of the Households	Number	Percentage
Agriculture	109	90.8
Domestic industries	1	0.8
Services	9	7.5
Business	1	0.8
Total	120	100.0

Source: Field Survey, 2007

By the table B. 4.1 the main source of family is agriculture with 90.8 percent of the total household followed by 7.5 percent services and non accountable 0.8 percent involved in business and domestic industries respectively.

Figure:6 Distributions Source of Income of Study Population.



B.4.2 Land Access of Household.

Access of land holding also indicates the socio-economic status of the households. The following table further clarifies the access of land of the study area population.

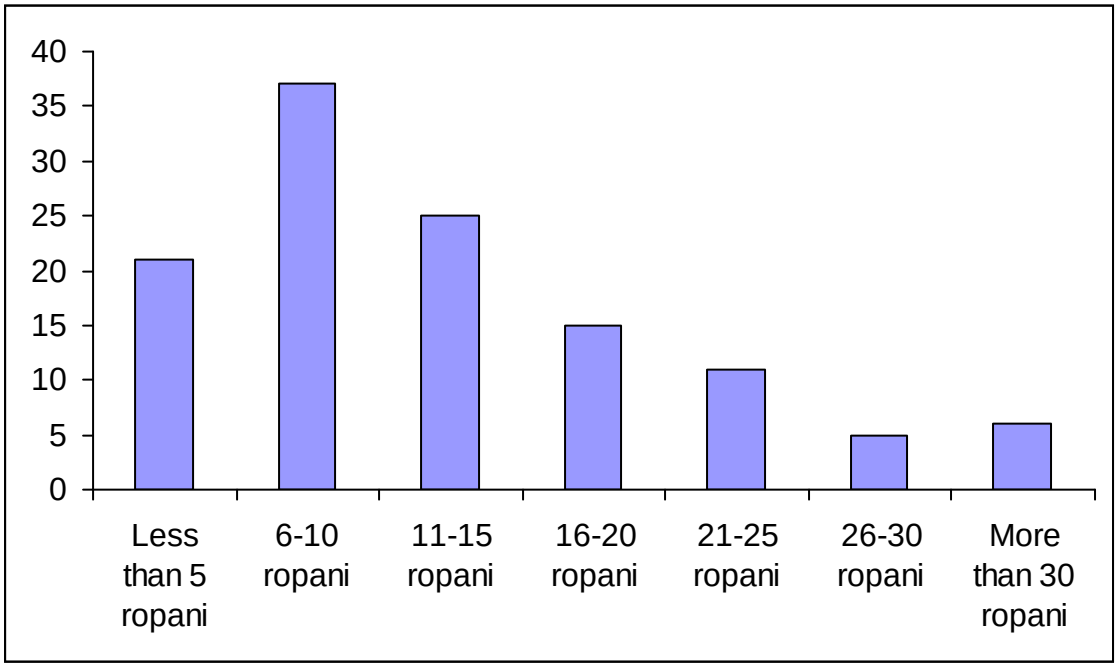
Table B.4.2 Distribution of Household by Land Holdings

Land holdings	Number	Percent
Less than 5 Ropani	21	17.5
6-10 Ropani	37	30.8
11-15 Ropani	25	20.8
16-20 Ropani	15	12.5
21-25 Ropani	11	9.2
26-30 Ropani	5	4.2
More than 30 Ropani	6	5.0
Total	120	100.0

Source: Field Survey, 2007

Table B.4.2 shows that 30.8 percent households reported that they have (6-10) Ropani land followed by 17.5 percent households less than 5 Ropani. Similarly, the lowest 4.2 percent households are found having 26-30 Ropani land followed by 5.0 percent households having more than 30 Ropani land.

Figure:7 Distribution of Household by Land Holdings



B.4.3 Occupational Status of the Population

Occupation indicates the socio-economic status of a household in any society or community. It is playing a vital role to determine fertility. There are different types of occupation of the study population which is presented in the following table.

Table B. 4.3 Distribution of Population by Occupation Aged 10 years and Above

Occupational Status	Number	Percent
Agriculture	299	53.5
Home industries	9	1.6
Services	26	4.7
Business	12	2.1
Household work	2	0.4
Students	190	34.0
Others	21	3.8
Total	559	100.0

Source: Field Survey, 2007

Table B. 4.3 shows the occupational status of study area population. Majority of the population was found involving in agriculture with 53.5 percent followed by 34.0 percent students. The lowest 0.4 percent population is found who involved in household work followed by 1.6 home industries.

B.4.4 Source of Drinking Water of the Households

Source of water is one the better indicators of socio-economic status of the households. There is not equal access of drinking water all part of the country although Nepal has known as the second riches country in water resources in the world. There are different types of water source in the study area which is presented in following table.

Table B.4.4 Distribution of Households by Source of Drinking Water

Water resources	Number	Percent
Tap	111	92.5
Pond (Kuwa)	9	7.5
Total	120	100.0

Source: Field Survey, 2007

Table B.4.4 shows that 92.5 percent households get the access of tap water drinking source against 7.5 percent still depends upon the nearby pond (Kuwa).

B.4.5 Access of Radio and T.V. of household

Radio and Television determine the households' facilities. Radio and Television are such kind of instruments which from we can gain different knowledge. It is essential for our daily life in this modern age.

Table: B.4.5 Distribution of Households According to the Availability of Radio and T.V. Facility

Number	Facility	Percent
	Radio	
Yes	88	73.3
No	32	56.7
Total	120	100.0
	Television	
Yes	13	10.8
No.	107	89.2
Total	120	89.2

Source: Field Survey, 2007.

According to table B.4.5, there are 88 household with 73.3 percent which have radio facility against 13 households with 0.8 percent have T.V. facility and 19 households with 25.9 percent neither have radio nor T.V. in the house.

B.4.6 Toilet Facility of Household

Toilet is another indicator of the household facility. It is related to health so that it is important to human life. Selected households were asked "Do you have toilet facility?" and on the basis of reporting they have been categorized, which is given below:

Table B.4.6 Distribution of Household by Availability of Toilet

Facility	Number	Percent
Yes	85	70.8
No	35	29.2
Total	120	100.0

Source: Field Survey, 2007.

Table B.4.6 shows that eighty five households reported that they have own toilet facility and the remaining 35 households reported no with 70.8 percent and 29.2 percent respectively.

B.4.7 Types of Household

The types of house also indicate the economic status of a household. The study area types of houses are presented in table below.

Table B.4.7: Distribution of Household by Types of House

Type of Household	Number	Percent
Cement/Bricks	1	0.8
Stone and mud	119	99.2
Total	120	100

Source: Field Survey, 2007.

The table B.4.6 shows the distribution of household by type of house. Because of the selected study are lies in hilly region, most of the houses (99.2%) are made by stone and mud. So, it is over-whelming in this study area.

CHAPTER-V
SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

This chapter deals with the socio-economic and demographic characteristics of Rai women (15-49 years) only living in the study area.

5.1. Age of Respondents

Age of women is one of the demographic factors which influences on fertility. The general age pattern of women of fertility is that the level of fertility is increased with the increment of age of women. Table 5.1 shows the respondents' age classified by five years age group.

Table 5.1 Distribution of Respondents by Five Years of Age Group

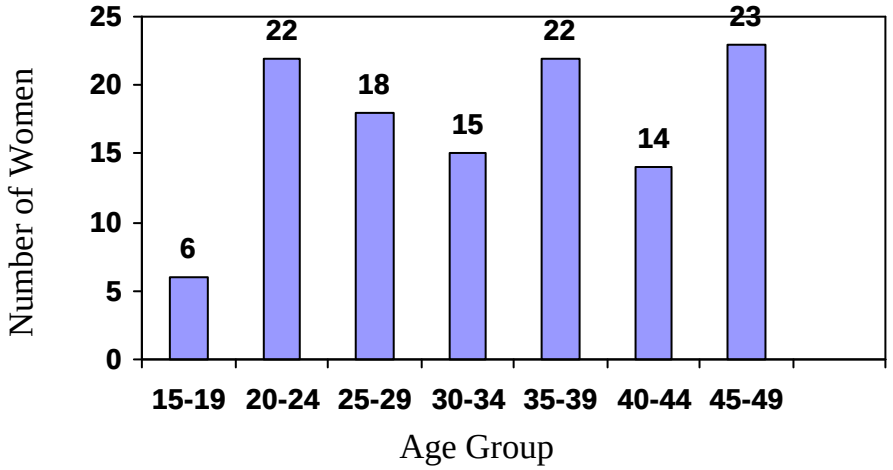
Age group	Number	Percent	NDHS 2006
15-19	6	5.0	22.6
20-24	22	18.3	18.5
25-29	18	15.0	16.4
30-34	15	12.5	12.4
35-39	22	18.3	11.3
40-44	14	11.7	10.4
45-49	23	19.2	8.4
Total	120	100.0	100.0

Source: Field Survey, 2007 and NDHS 2006

The table 5.1 shows the distribution of respondents by five years age group. The total 120 women were contacted during the study for interview. Data shows that maximum number of women 19.2 percent are found in 45-49 years of age group comparing to the 8.4 percent according to NDHS 2006. This is followed by 18.3 percent in age group 20-24 as well as 35-39 age groups. Lowest numbers of women are in 15-19, and 40-44 which are respectively 5.0 percent and 11.7 percent of total women. Table 5.1 shows that the out of the

total respondents, 45.8 percent fall in the peak of their reproductive life, 20-34 years of age. The percentage of respondents in age group 20-24 and 30-34 years are found same as comparing to the national figure of 2006, but respondents of other age group are found much different.

Figure:8 Distribution of Respondents by Five Years of Age Group



5.2 Age of Marriage of Respondents

Age at first marriage is the one of the most important factor for changing the fertility rate of the spouse. If the people do early marriage then their fertile periods remains long and there is the probability of high fertility. On the contrary getting marriage in matured and appropriate age helps in producing required and few children.

Marriage usually takes place at early age and is almost universal in Nepal. This tendency is also seen 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 5.2.

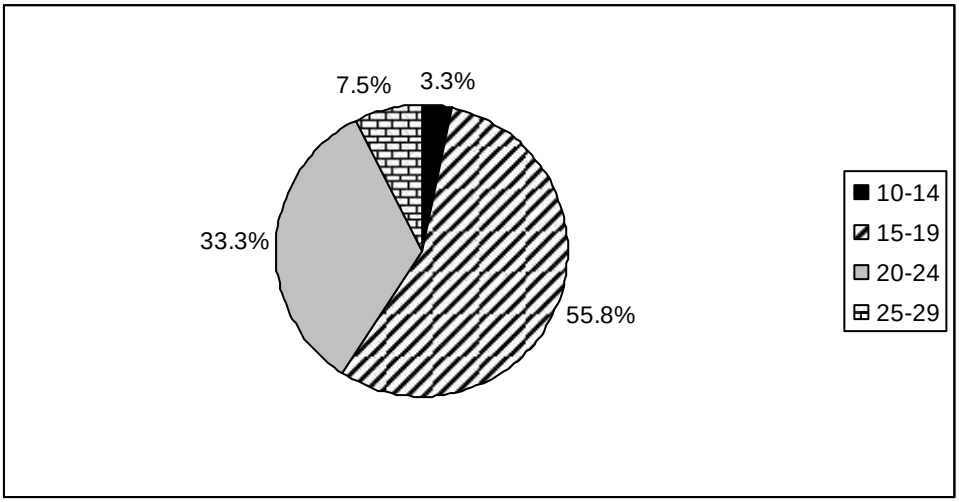
Table 5.2 Distribution of Respondents by Marriage Age Group

Age group	Number	Percent
10-14	4	3.3
15-19	67	55.8
20-24	40	33.3
25-29	9	7.5
Total	120	100.0

Source: Field Survey, 2007.

From the table 5.2, the highest marriage person's are in 15-49 years age group with 55.8 percent followed by 33.3 percent in age group 20-24 years of age in total respondents. Similarly only 4 respondents of total reported they get marriage in age group 10-14 years.

Figure:9 Distribution of Respondents by Marriage Age Group



5.3 Educational Status of the Respondents

Educational status is one of the most important factors for determining fertility level. It also depicts the socio-economic background of the respondents. It is essential to know the literacy status of the study population in order to examine the factors determining fertility in any community. Educated women understand the consequences of population growth and they use the means of family planning and do not give the preference for son.

Table 5:3 Distributions of Respondents by Literacy and Level of Education.

Educational status	Number	Percent
Illiterate	59	49.2
Literate	61	50.8
Total	120	100.0
Level of Education		
Non formal education	16	26.2
Primary level	16	26.2
Lower Secondary level	7	11.5
Secondary level	22	36.1
Total	61	100.0

Source: Field Survey, 2007

Table 5:3 shows the educational status of the respondents where out of 120 women with age 15- 49 years 49.2 percent respondents are found illiterate and 50.8 percent respondents are literate. In the study area majority of the respondents are found able to read and write. Similarly 36.1 percent women have attained in secondary level followed by 26.2 percent women have attended in lower secondary level and non-formal education. No one respondents of the study are having passed the SLC level.

5.4 Occupation Status of the Respondents

Occupational status is another determinant of fertility. It has also very close relation with fertility; thus it is necessary to know the distributions of occupation of eligible women. It is shown in Table 5.4.

Table 5.4 Distributions of Respondents (15-49 years) by Occupational Status

Occupational Status	Number	Percent
Agriculture	114	95.0
HH work	6	5.0
Total	120	100.0

Source: Field Survey, 2007

Table 5.4 shows the occupational status of the respondents. Out of the total, 95.0 percent respondents are employed in agricultural work representing highest percent, followed by 5.0 percent in household work.

5.5 Husband's Education of Respondents

Husband education also plays vital role to determinant of fertility. When the husband educational level is high fertility will be low. Educated people are more conscious their optimum family. It is given the table number 5.5.

Table. 5.5 Distribution of Respondents by Husband's Education

Education Status	Number	Percent
Literate	108	90.0
Illiterate	12	10.0
Total	120	100.0
Level of Education		
Non Formal Education	12	11.1
Primary	46	42.5
Lower Secondary	13	12.0
Secondary	31	28.7
SLC and Above	6	5.5
Total	108	100.0

Source: Field Survey, 2007

Table 5.5 shows the educational status of the husband. Out of the total 108 respondents husbands were literate, which represent 90.0 percent against 12 with 10 percent. Among them 46 were primary with 42.7 percent followed by 31 were secondary which is 28.7 percent. And SLC and above 6 which is 5.5 percent.

5.6 Husband Occupation of Respondents

Occupational status of husband is another fertility determining factor. Thus, it is essential t know the husband occupation. It is presented in Table 5.6.

Table 5.6 Distribution of Respondents by their Husband Occupation

Occupational Status	Number	Percent
Agriculture	102	85.0
Domestic Industry	2	1.7
Service	12	10.0
Business	4	3.3
Total	120	100.0

Source: Field Survey, 2007

Table 5.6 shows the occupational status of the respondents' husband. Out of 120, 102 were engaged in agriculture, 12 involved in service, 4 in business and 2 were in domestic industries with the percent 85.0, 10.0, 3.3 and 1.7 respectively.

5.7 Knowledge and Ever Use of FP Method of Respondents

Knowledge of FP method s an essential factor in promoting FP services. The prevalence of FP method is associated negatively with fertility. Temporary FP methods and used for spacing on the other hand permanent FP methods to control the fertility. Every use of FP methods in the study area is given in Table 5.7.

Table 5.7 Distribution of Respondent by Knowledge and Ever Used of FP Methods

Knowledge of FP	Number	Percent
Yes	33	27.5
No	87	72.5
Total	120	100.0
Ever Used of FP		
Condom	7	21.2
Pills	4	12.1
Injectables	14	42.5
Foam tablets	1	3.0
Norplant	3	9.1
Male Sterilization	3	9.1
Female Sterilization	1	3.0
Total	33	100.0

Source: Field Survey, 2007

Table 5.7 shows the respondents knowledge and ever used of FP methods. Out of the total respondents, 27.5 percent respondents know about FP method and 72.5 percent unknown about the FP method. Among them 42.5 percent respondents are used the injectables FP methods followed by 21.2 percent respondent condom FP methods. The lowest 3.0 percent respondents use the female sterilization as well as foam tablets.

5.8 Currently Use of FP Method of Respondents

Currently use of FP method plays a vital role to reduce fertility. There is inverse relationship between current use of FP method and fertility. Current use of FP method in study area respondents are given in Table 5.8.

Table 5.8 Distribution of Respondent by Currently Use of FP Method

Knowledge of FP	Number	Percent
Yes	30	25.0
No	90	75.0
Total	120	100.0
Currently Used of FP		
Condom	9	30.0
Pills	2	6.7
Injectables	11	36.7
Foam tablets	1	3.3
Norplant	2	6.7
Male Sterilization	5	16.7
Total	30	100.0

Source: Field Survey, 2007

Table 5.8 shows the respondents knowledge and current use of FP method. Out of the total respondents, 25.0 percent known about FP method and 75.0 are not known about any FP method. Among them 36.7 percent used injectables, followed by 30.0 percent used condom, 16.7 percent used male sterilization, and 6.7 percent used pills as well as Norplant. Only 3.3 percent respondents are found currently using foam tablets. The injectables method is seen more favourable among respondents.

5.9 Desire of Ideal Number of Children of Respondents

Desire of ideal number of children plays a significance role to reduce or, increase the fertility. If they desire too many children fertility will be high and against the few desire of children fertility will be decrease automatically.

Various factor influences to determinant to ideal number of children. It is presented in the following table.

Table 5.9 Distribution of Respondent by Desire of Ideal Number of Children

Ideal number of children	Number	Percent
2	35	29.2
3	28	23.3
4	40	33.3
5	9	7.5
6	5	4.2
7	3	2.5
Total	120	100.0

Source: Field Survey, 2007

Table 5.9 shows the respondents desire of ideal number of children. Out of total respondents 40 numbers of women want 4 children followed by 35 women 2 children on one hand and 3 women want at least 7 children followed by 5 women want 6 children in their life.

5.10 Desire of Sons Preference by Respondents

Desire of son has also plays a great role in determining fertility as well as family size. Where the preference of son is high fertility will be high. It is given in the following table.

Table 5.10 Distribution of Respondents by Sons Preference

Desire to give birth	Number	Percent
Yes	56	46.7
No	64	53.3
Total	120	100.0
Preference to Son		
0	14	25.0
1	32	57.1
2	10	17.9
Total	56	100.0

Source: Field Survey, 2007

Table 5.10 shows the respondents preference to give birth and son. Out of the total respondents, 56 respondents with 46.7 percent want to give birth and among them 17.9 percent give the high preference (2 sons) to son followed by 57.1 percent give the preference to at least 1 son and 25.0 percent not give the preference to son.

5.11 Desire of Daughters Preference by Respondents

Desire of daughter preference plays a great role to determining fertility. There is inverse relationship between desires of daughter preference and fertility. The desire of daughter in study is presented in Table 5.11.

Table 5.11 Distribution of Respondents by Daughters Preference

Desire to give birth	Number	Percent
Yes	56	46.7
No	64	53.3
Total	120	100.0
Preference to Daughter		
0	146	28.6
1	36	64.3
2	4	7.1
Total	56	100.0

Source: Field Survey, 2007

Table 5.11 shows the respondents desire to give birth and preference to daughter. Out of the total respondents, 56 respondents with 46.7 percent want to give birth and among them 7.1 percent give the high preference (2 daughters) two daughters followed by 64.3 percent give the preference to at least 1daughter and 25.0 percent not give the preference to daughter.

CHAPTER VI

FERTILITY BEHAVIOURS OF THE RESPONDENTS

This chapter presents the relationship between fertility and socio-economic and demographic variables which is measured in terms of mean number of children even born (CEB) to women by different variables.

6.1. Mean CEB and Age of Respondent

Age of women is one of the determining factors of fertility levels. If the low age of marriage, increase the mean number of children ever born (CEB). The result of the survey is presented in table 6.1.

Table 6.1. Mean Number of CEB by Age of the Respondents

Age group	Mean CEB*	Live Births	Number
15-19	1.3	8	6
20-24	1.2	27	22
25-29	1.9	34	18
30-34	3.5	53	15
35-39	4.0	88	22
40-44	3.9	55	14
45-59	3.8	87	23
Total	2.9	352	120

Source: Field Survey, 2007.

*CEB: $\frac{Number\ of\ Live\ Birds\ in\ Particular\ Age\ Group\ of\ Mother}{Total\ Mothers\ in\ that\ Age\ Group}$

The table 6.1 shows that the mean number of children ever born varies by age of mother. If the age of respondents increases, mean number or children ever born (CEB) also increases. The highest mean number of children ever born 4.0 was reported for women of age 35-39. The lowest mean number of children ever born (CEB) 1.2 was reported for women of age group 20-24. Similarly, the average number of children ever born in the study area was found to be 2.9.

6.2 Mean CEB and Respondent Education

Education is the fundamental determinant factor of fertility. There is negatively associated with mean number of CEB. Educated women are more aware of the issue of their quality of children than non-educated. The results of the survey are presented in Table 6.2.

Table 6.2: Mean number of CEB by educational status of the respondents

Educational Status	Mean CEB	Live Births	Number
Literate	2.5	153	61
Illiterate	3.4	199	59
Total	2.9	352	120
Level of Education			
Non formal education	3.4	55	16
Primary	3.4	55	16
Lower secondary	1.7	12	7
Secondary	1.4	31	22
Total	2.5	153	61

Source: Field Survey, 2007.

Table 6.2 shows the literate respondents mean number of child ever born (CEB) was 2.5. But illiterate respondents mean number of child ever born (CEB) was 3.4. It means there is varies between literate and illiterate respondents of CEB. The table 6.2 also shows the highest mean child ever born (CEB) 3.4 was observed for women with non formal education and primary level. Similarly, the lowest mean child ever born (CEB) 1.4 was observed for women having secondary level and followed by mean child ever born (CEB) 1.7 who had completed the lower secondary.

6.3 Mean CEB and Respondent Occupation

Occupational status of women is one of the most important determinants of fertility. There are different occupations of women from one group to

another due to various social and economic reasons. The results of the Survey, are presented in table 6.3.

Table 6.3: Mean CEB by occupation of respondents

Occupation	Mean CEB	Live Births	No. of respondents
Service	1.8	11	6
Agriculture	3.0	341	114
Total	2.9	352	120

Sources of Income	Mean CEB	Live Births	No. of respondents
Agriculture	3.0	327	109
Domestic Industries	5.0	5	1
Services	1.9	17	9
Business	3.0	3	1
Total	2.9	352	120

Source: Field Survey, 2007.

The table 6.3 shows respondent occupation, and mean number of children ever born (CEB) is different. The respondents whose occupation was service their mean number of CEB was 1.8 and whose occupation was agriculture their mean CEB is found 2.9.

Similarly, a source of income varies with mean number of Children Ever Born (CEB). The above table shows the respondents whose income was Domestic industries their mean number of Children Ever Born (CEB) was 5.0 followed by agriculture and business mean number of Children Ever Born (CEB) was 3.0 and the respondents whose income source was service their mean number of CEB is found only 1.9.

6.4 Mean CEB and Age at Marriage of Respondents

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 6.4 Mean number of CEB by age at marriage of the respondents

Age at marriage	Mean CEB	Live Births	Number
10-14	4.8	19	4
15-19	3.0	198	67
20-24	2.8	110	40
25-29	2.8	25	9
Total	2.9	352	120

Source: Field Survey, 2007

Table 6.4 shows the mean number of children ever born by age at marriage. There is variation between mean number of children ever born (CEB) and age at marriage of respondents.

The high age at marriage shows lower mean number of Children Ever Born (CEB) where, highest mean number of children ever born (CEB) 4.8 is observed for women who were married between 10-14 age group. Similarly, mean number of children ever born (CEB) 3.0 followed by 15-19 age groups of women. The lowest mean number of children ever born (CEB) 2.8 is found observed for women who are married at age of 20-24 groups.

6.5 Mean CEB and Ever Used and Non-use of Contraception

Use and non-use of contraceptives plays a vital role to determinant of fertility. There is inverse relation between use and non-use of contraceptives and mean number of children ever born (CEB). Use and non-use of contraceptive is presented in table below:

Table 6.5 Mean CEB by Ever Used and Non-use of Contraception

Family Planning methods	Mean CEB	Live Births	Number
Users	2.8	92	33

Non-users	3.0	260	87
Total	2.9	352	120

Source: Field Survey, 2007

Table 6.5 shows mean children ever born (CEB) between users and non-users of contraceptive. The highest number of children ever born (CEB) 3.0 is found for women who had not used family planning method. Similarly, mean number of children ever born (CEB) 2.8 was found who had used family planning method.

6.6 Mean CEB and Currently Use and Non-use of Contraception

A woman's desire and ability to manage her fertility and her choice of contraceptive methods are in part of affected by her status, self image and sense of empowerment. Contraceptive methods are used to lower fertility.

Table 6.6 Mean CEB and Currently Use of Contraception by Respondent

Currently Used of Contraception	Mean CEB	Live Births	Number
Yes	3.0	90	30
No	2.9	262	90
Total	2.9	352	120

Source: Field Survey, 2007

Table 6.6 shows that higher mean CEB 3.0 among the currently users of contraceptive method than non-users 2.9. Because of their completion to desire more children before using the contraception, data are exist in higher than the non users among users.

6.7 Mean CEB and Ideal Number of Children

There is close relationship between ideal number of children and fertility. Higher ideal number of children leads to higher number of children.

Table 6.7 Mean CEB and Ideal Number of Children

Ideal number of Children	Mean CEB	Live Births	Number
2	1.7	59	35
3	2.0	57	28
4	3.5	139	40
5	5.1	46	9
6	6.0	30	5
7	7.0	21	3
Total	2.9	352	120

Source: Field Survey, 2007

Table 6.7 shows that the higher ideal number of children indicates the higher the mean number of CEB. It also proves the some women reporting more than 7 children have reported 7.0 mean CEB whereas women reported only 2 children has 1.7 mean number of CEB.

6.8 Mean CEB and Husbands Education

Husband education is also plays the vital role in child bearing process. If husband education is high the mean CEB found in low status against the low education of husband high.

Table 6.8 CEB and Husbands Education

Educational Status	Mean CEB	Live Births	Number
Illiterate	2.9	35	12
Non formal	3.4	41	12
Primary	3.5	159	46
Lower Secondary	2.8	36	13
Secondary	2.2	68	31
SLC and above	2.2	13	6
Total	2.9	352	120

Source: Field Survey, 2007

Table 6.8 shows the mean CEB and respondent's husband education. By the above table we can see that whose husband has the higher education (SLC) their mean CEB is low 2.2 and whose low education or illiterate their mean

CEB is found high 2.9. Because literate women denied giving actual number of birth so the CEB is seen fluctuation among the respondents.

CHAPTER VII

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Summary of the Findings

This chapter attempts to summarize the whole study draws the conclusion. On the basis of conclusions it recommends for the policy implication.

This study covers the 120 households which are selected from six wards of Mahadevsthan V.D.C. of Khotang district. Because of the majority of Rai community, all respondents are from Rai caste. Data was collected in this area between April and May, 2007 by using two types of questions they are households and individual by including carious important variables.

Major findings of the study:-

- The highest 14.4 percent population is found in age group 15-19 years and lowest 2.5 percent population is found in age group 50-54 years (Table A.4.1).
- The sex ratio of the total population in the study area is found 103.3 (Table A.4.2).
- Out of the 120 households, 48 household found with 5-6 family size (Table A.4.3).
- Out of 120 households, 69 households population are found as Kirant religion (A.4.4).
- Out of the total population, 77.4 percent are found literate (Table A.4.5).
- Out of the total population aged 10 years and above, 57.1 percent are found unmarried (Table A.4.6).

- Out of the 120 households, 118 households reported their mother tongue as Rai (Table A.4.7).
- 90.1 percent population reported their households' income is agriculture (Table B.4.1).
- Out of 120 households, 37 households have 6-10 Ropani land (Table B.4.2).
- Out of the total population above age 10 years 53.5 percent are involved in agriculture (Table B.4.3).
- Out 120 households, 111 households reported their source of drinking water is tap (Table B.4.4).
- 73.3 percent population has access of Radio and 10.8 percent have access the Television (Table B.4.5).
- Out of total households, 55 households have the access of Toilet facility (Table B.4.6).
- Out of the total respondents, 19.2 percent respondents found in age group 45-49 (Table 5.1).
- Out of the total respondents, 67 respondents married in age 15-19 years (Table 5.2).
- Out of the total respondents, 50.8 percent respondents are found literate (Table 5.3).
- Out of the total respondents, 90.0 percent respondents husbands are found literate (Table 5.5).
- 27.5 percent respondents are found ever use of FP method (Table 5.7).
- 25.0 Percent respondents are found currently use of FP method (Table 5.8).
- 33.3 percent respondents reported 4 ideal numbers of children (Table 5.9).

7.2 Recommendations

On the basis of findings of this study the following recommendations may be worthy for the advancement of the existing issue.

- There is an important role of IEC in reducing high level of fertility. So it is necessary to give emphasis on Information, Education and Communication (IEC) in reducing the existing high level of fertility by the government.
- It should be accessibility of family planning methods that directly helps in reducing fertility.
- Government should provide study area population because there is low level of land access.
- Awareness programs should be launched to reduce high mortality. Besides, programs such as mass immunization, sanitation, nutrition, and child and maternal health care facilities, affordable medical facilities, mobile medical facilities may help to reduce high fertility.
- Means of family planning should be provided in the study area so that high fertility level will be reduced.
- Not only accesses of contraceptives methods reduce fertility, but also it should be practice.

7.3 Conclusions

The main conclusions are extracted form cross table analysis, which are as follows.

- Low age at marriage leads higher CEB than who marry at elder ages.
- From the age group perspective (period), CEB varies among various age groups.
- Education is an important variable which has played a great role in fertility so, literate women have lower CEB than illiterate women with mean number of CEB.
- Occupation is another important factor in determining the level of fertility. In this case, this field survey has concluded that mother's occupation type is the most one. Mothers, who have involved in services sector, have simply lower CEB than who involved in other occupation such as, agriculture, domestic industries etc.
- There is inverse relationship between age at marriage and mean number of CEB.
- Use and non-use of contraceptives has also played a vital role in determining the level of fertility (mean number of CEB) but in this study there is not vast difference in CEB between user and non-users of contraceptive methods.
- There is varies between ideal number of children and mean CEB.

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