

CHAPTER- I

1. Introduction:

Nepal is a multi-cultural, multi-linguist, multi-religious and multi-ethnic country. Rajbansi is also a kind of indigenous people of Nepal, and is one of the Janajati groups of people. This Rajbansi cast lives in the eastern terai region of Nepal and are specially from Jhapa, Morang and Sunsari districts. They have their own culture, religion and mother tongue. The population of Rajbansi according to the census of 1991 and 2001 are 82,177 and 95,812 respectively which constitution about 0.4 percent of the national population (CBS, 2003:117).

1.1 General Background

Fertility is one of the most important factors of population change. 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 in communities such as economic, social, cultural and others. High fertility is associated with developing countries and low fertility is associated with developed countries. It directly affects the structure and growth rate of population.

Human fertility as one of the major components of population growth which becomes an interesting topic in population studies only after Malthus. However, even until the Second World 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 neighbouring 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 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 2.3 percent. The census also revealed that the sex ratio as male per 100 females was 99.8. In other words 50.0 percent was male, while the females comprised of 50.1 percent of the total population (MoPE, 2004: 1-18).

Juropani, the study area is in the eastern part of Nepal, 26 km far from the Mahendra highway, Damak. The road is not pitched at the time of study. The study area is less developed in comparison with the other VDCs near the Mahendra highway though electricity and telephone are accessible. There are five schools; out of them four are secondary. People are highly conscious for the education as a result two out of four secondary schools are private. The studied population of this study are 2, 3, 5 and 8 wards of the VDC.

1.2 Statement of the Problem

Population of Nepal has been increasing rapidly since the last few years due to high fertility and declining mortality. Mortality rate has declined in Nepal due to improved health facilities and technological diffusion. 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).

It has been estimated that population of Nepal will reach around 36.1 million by the year 2025 (PRB, 2005). Such increase in population may bring challenge for sustainable economic development of a nation. For a small land locked country like Nepal with low economic development, challenges of high population growth seem to be even more serious. Moreover 17 percent of land in Terai is cultivable and land is converted rapidly into residential area mainly because of high population pressure created by high fertility and migration from hilly region.

On the other hand, 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. Also high economic value of the children is also playing a big roll for not accepting family planning service. Many other factors which might be playing even stronger role in encouraging the fertility of the people in a backward community like Rajbansi are to be investigated. They are busy in making their living by farming, wage labour and working in low paid job. Illiteracy, low age at marriage and poverty are common characteristics of such community. So, it is necessary to find out key socio-economic and demographic characteristics as well as factors affecting differential in fertility which is measured by children ever born in this study.

There are many studies about socio-economic and demographic differentials of fertility for different communities. But no study has been conducted to examine the socio-economic and demographic differentials of fertility of Rajbansi community. So this study occupies a special importance. In fact, this study basically focuses on following research questions.

1. What are the socio-economic and demographic characteristics of Rajbansi community in the study area?

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

1.3 Objective of the Study

The general objective of this study is to assess the socio-economic and demographic characteristics of Rajbansi women in Juropani VDC of Jhapa district and to find their differentials in fertility. However, the main objectives of the study are as follows.

1. To examine the socio-economic characteristics of Rajbansi community in Juropani VDC.
2. To examine the demographic characteristics of Rajbansi community in Juropani VDC.
3. To examine the CEB differentials by some socio-economic and demographic variables.

1.4 Significance of the Study

Present study is concentrated in determining some key socio-economic and demographic factors of Rajbansi community as well as their fertility differentials in Juropani Village Development Committee. No such study has been conducted in this community so far. So, this study has a significant value for uncovering something new about the relationship between socio-economic and demographic variables and fertility. Moreover, this type of study itself may be useful in raising the awareness in community members and local bodies by encouraging them to share their efforts for the development of the nation.

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 solely 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 in such communities, no

doubt, play a very important role. Certainly, the findings will be very useful in providing the guidelines to NGO's, INGO's and over to the government in making population policies and implementing programmes for the community like Rajbansi.

1.5 Limitation of the Study

This study is carried out on Rajbansi Community of Juropani VDC. Hence, this study cannot be generalized for the whole Rajbansi Community of Nepal. Moreover, only few selected demographic and socio-economic variables are considered under the constraints of limited time and resources.

1.6 Organization of the Study

This study is organized in seven major chapters. The first chapter describes about introduction, general background of the fertility and fertility situation, 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 both theoretical and Empirical.

Chapter three is about methodology where selection of the study area, research design, sampling procedure, sources of data, conceptual frame work, 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 cross tabulation and the last, seventh chapter deals with summary, conclusion, policy recommendations and possibility of further research.

Chapter II

2. Literature Review

Of the three components fertility, mortality and migration of population dynamics, fertility is attributed to one of the most important elements in changing total population. In this study, an attempt has been made to review various literatures based on theoretical as well as empirical studies on fertility behaviour. This helps to identify the immediate and ultimate factors explaining the changes in levels of fertility and there by to formulate conceptual framework in order to ascertain the determinants of fertility in the 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).

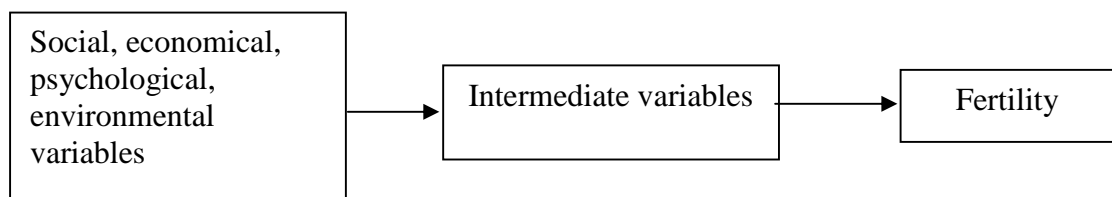
Davis and Blake (1956) proposed eleven variables which they defined as "Intermediate Variables". Six among them are affecting sexual intercourse, three affecting conception and remaining two affecting gestation and parturition. They concluded that any social or cultural factor which affects fertility 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 fecundibility, menopause or permanent celibacy. They also raised the age at marriage and marital disruption postpartum, infeundability, contraception and induced abortion affects fertility directly.

The following simple diagram summarizes the relationships 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

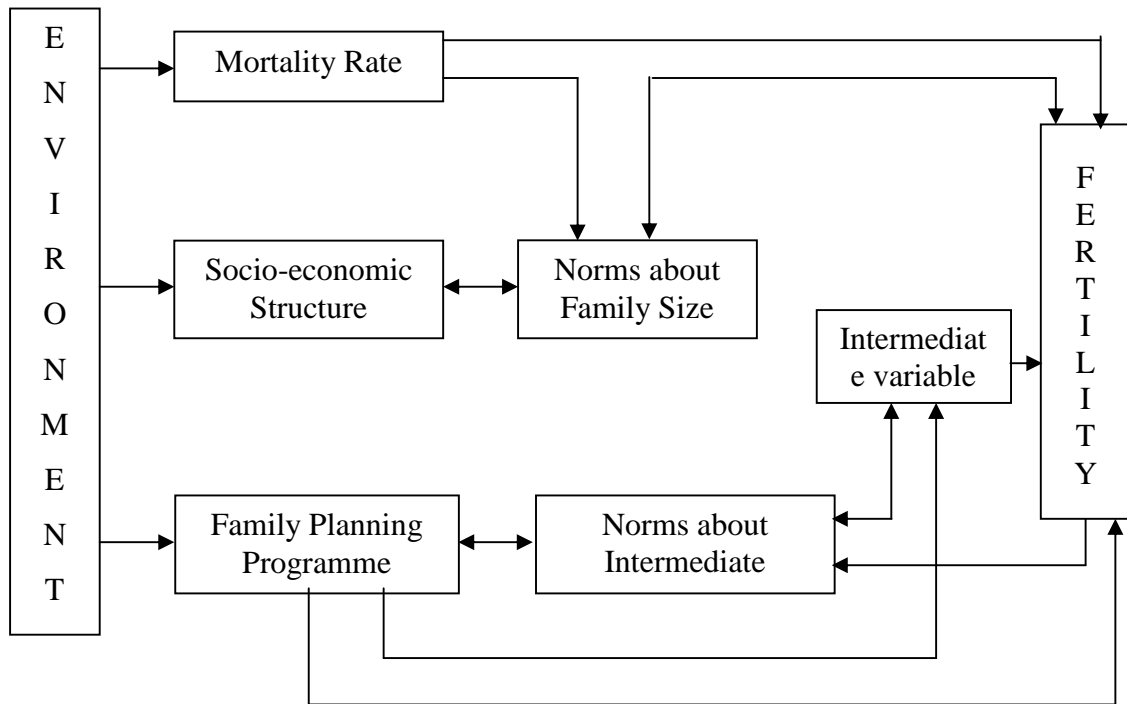
household would want to have i -th children, as the utility of the i -th children (U_i) is greater than the utility cost of children (UC_i) (Leibenstein, 1975: 6).

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 the 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 environmental 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 some way women with primary education have TFR 3.8 per woman (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 (Risal 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 percent 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 Nepal are 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 percent 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 have a fewer children than women with other traditional 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 is 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 found that women of low and poor group tend to have more children because of two reasons: firstly, more infant die, so these women have shorter lactation and non-ovulation period before becoming fecund again. Secondly, they want more children to replace the loss; 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 found 43.1 percent of the rural population and 41.4 percent at the national level fall below the poverty line. More over, this survey shows that the range of family size of Nepalese poor people is 6.3 to 7.1 and household monthly income ranges from Rs 497 to Rs 1131. The economic gains for reducing fertility have been positive which has been proved by various studies. Most poor people prefer more children to secure the high productivity and income (NRB, 1989).

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 (NFHS, 1996) found that fertility is declining over the past five years from TFR 5.1 in 1991 to 4.6 in 1996. This decrease in fertility rate is due to increase in age at marriage and rising contraceptive use over the past 25 years (MoH, 1996:52).

The age at marriage in developing countries is normally ' \cap ' shaped. It is lower in the early age groups, 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 woman'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 at first marriage often implies early age at child bearing and higher fertility in a society (NDHS, 2001: 10).

2.2.5 Age at First Birth and Fertility

Age at the onset of child bearing is an important demographic indicator since early child bearing adversely affects the health of mother and child. The proportion of women who become mother before age 20 is a measure of the magnitude of adolescent fertility which is a major health and social concern in many countries. Further more, in many countries, postponement of first births along with an increase in age at marriage have made a larger contribution to overall fertility decline (NDHS, 2001: 63).

2.2.6 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 percent of which 28.5 percent is met and 31.4 is not met with 14.3 percent unmet for spacing and 17.1 percent unmet need for limiting. Therefore, 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 of contraception has increased from 4 percent of currently married women in 1976 to 27 percent 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 percent 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 percent 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).

2.2.7 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 baby desire 2.07 mean number of children (Bhandari, 2000: 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).

CHAPTER III

3. Methodology of the Study

3.1 Study Area

The study was conducted at Juropani VDC of Jhapa district. The target population is Rajbansi community of Juropani VDC which is one of the rural areas is surrounded by Baigundura in the east, Cohobara in the west, Maharani and Gauradaha in the North and Khajurgachhi and Gauriganj VDC in the south.

According to 2001 census, the total population of Juropani VDC is 27,762. Among them male are 14,219 and female are 13,543. Various caste and ethnic group of people live in this VDC, mainly Brahman, Chhetri, Rai, Limbu, Gurung, Rajbansi, Satar etc. The study is strictly concentrated to Rajbansi community of this VDC.

3.2 Selection of VDC, HHS and Respondents

This study was carried out in Juropani VDC. The Rajbansi community live only in 2, 3, 5 and 8 wards. There are 78 households in those wards. Data were collected from all the 78 households. Eligible women are ever married women aged 15-49 years residing in these households. Seventy eligible 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. The distribution of number of respondents by households and the corresponding population in these households are shown below.

Respondent	Number of households	Population
0	10	53
1	66	346
2	2	21
Total	78	420

3.3 Source of Data

Primary as well as secondary data have been used in this study. Primary data was collected from field survey and secondary taken from previous studies, published and unpublished documents like CBS, 2003, NHDS, 2001 etc.

3.4 Research Tools

The questionnaires are main tools to collect information from the field. The questionnaire mainly consists of two schedules.

i) Household questionnaire

The household questionnaire is asked to the head of household to collect information on size, age-sex structure, educational status, occupational status and other information of the family.

ii) Individual questionnaire

The 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, age at first birth and knowledge and use of Family planning methods.

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, birth history of women and age at first birth. 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 Pre Test of Questionnaire

Before collecting information from the field, some (10 percent) questionnaires were pre-tested in similar type of situation. Cohabara VDC was selected for pre-testing the questionnaire which is near by Juropani VDC. After pre-test of the questionnaire, some questions were modified and final touch was done.

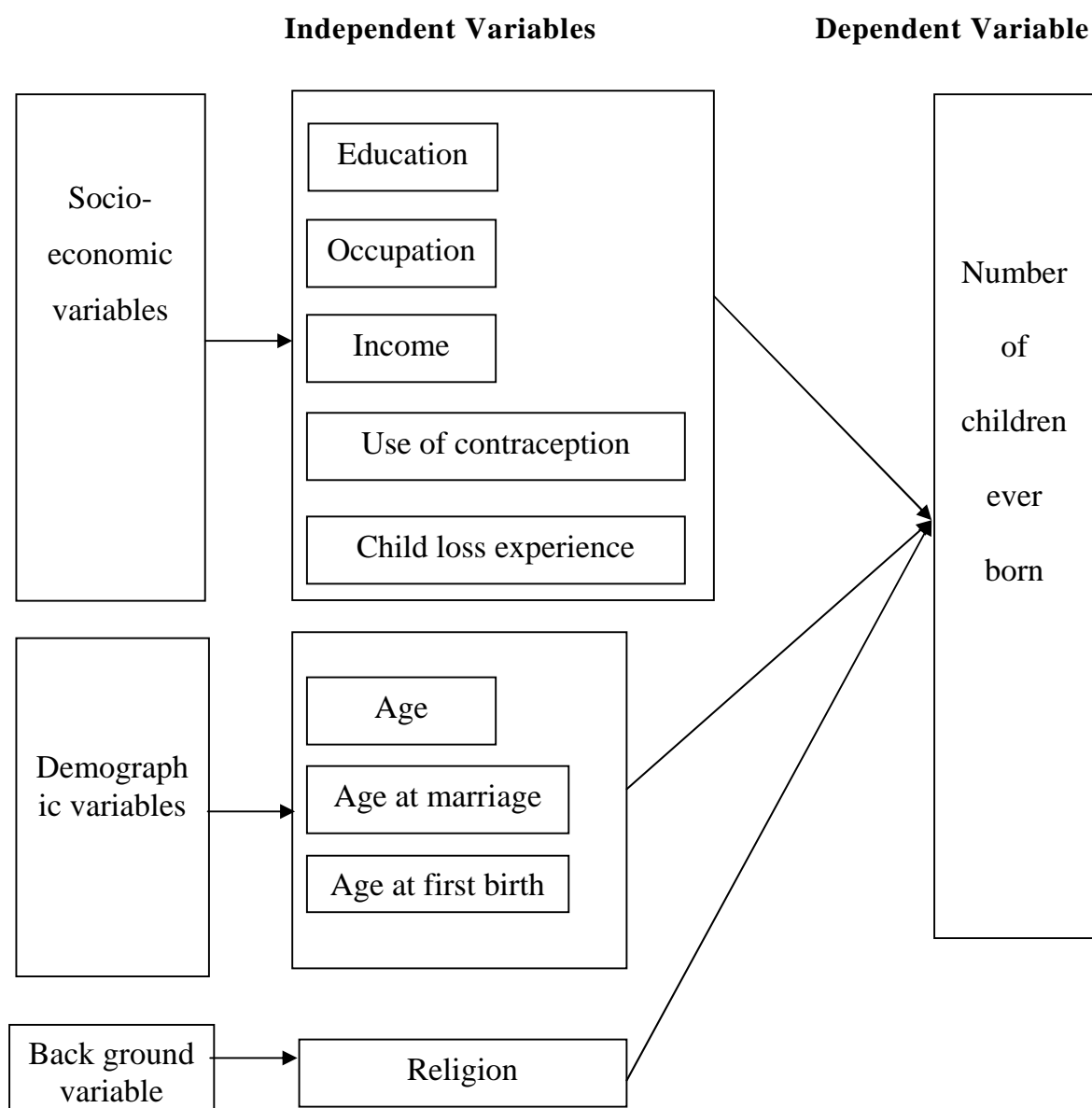
3.7 Method of Data Collection

This study is based on primary data collected from Rajbansi community of Juropani VDC. These data are collected from the field survey by interview using structured questionnaire.

3.8 Conceptual Frame Work

The following conceptual framework is used in this study. This frame work 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 frame work. Independent variables are categorised 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.



3.9 Data Processing and Analysis

A major sheet is prepared through the completed 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, different data sheets have been prepared for different things. The analyzing process of data includes frequency tables, cross tabulation, and bar chart. Mean and percentages are calculated from the tables wherever possible.

CHAPTER- IV

4. Socio-Economic and Demographic Characteristics of Study Population

This chapter deals with general socio-economic and demographic characteristics of the study population which affect fertility.

4.1 Age-Sex Structure

Age and sex are 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 situations of population but also give the basis for the study of past as well as future demographic situations of the population. Age, sex and migration play very important roles in the study of population dynamics.

Table 4.1
Distribution of Study Population by Age and Sex

Age group	Male		Female		Total		Total Percent CBS,* 2001
	Number	Percent	Number	Percent	Number	Percent	
0-4	17	8.2	18	8.5	35	8.3	12.1
5-9	22	10.6	24	11.3	46	11.0	14.1
10-14	21	10.1	25	11.7	46	11.0	13.1
15-19	19	9.2	20	9.4	39	9.3	10.5
20-24	24	11.6	23	10.8	47	11.2	8.9
25-29	22	10.6	20	9.4	42	10.0	7.6
30-34	21	10.1	19	8.9	40	9.5	6.6
35-39	14	6.8	8	3.6	22	5.2	5.8
40-44	11	5.1	14	6.6	25	6.0	4.8
45-49	12	5.8	19	8.9	31	7.4	4.1
50-54	8	3.9	7	3.4	15	3.6	3.4
55-59	3	1.4	4	1.9	7	1.7	2.7
60-67	7	3.4	5	2.3	12	2.9	2.3
65 +	6	2.9	7	3.3	13	3.1	4.2
Total	207	100	213	100	420	100	100

Source: * CBS, 2001: 3

The proportion of population is found highest (11 percent) in the age groups 5-9, 10-14 and 20-24 years. The lowest proportion of population (1.7 percent) is observed in the age group 55-59 years. The declining proportion of population from the age group 50-54 onwards may be because of the high old

age mortality. The percentage of male population is highest in the age group 20-24 and lowest in the age group 55-59 years representing 11.6 and 1.4 percent respectively. Similarly the percentage of female population is highest in the age group 10-14 and lowest in the age group 55-59 years representing 11.7 and 1.9 percent respectively of the total population of study area. The population of age groups 35-39, 50-54 and 60-64 is found similar to the national figure 2001 but the population of other age groups are found much different (table 4.1).

4.2 Sex Ratio

The sex composition of a population is expressed by sex ratio. It is calculated by dividing the total number of males to that of females multiplied by 100. It shows the number of males 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 up females in a population at any point of time. Simply by looking the sex ratio one can have the clear picture of the composition of population.

Table 4.2
Sex Ratio of Study Population by Age Group

Age group	Sex Ratio	
	Field Survey	Census 2001*
0-4	94.4	103
5-9	91.7	103
10-14	84.0	106
15-19	95.0	99
20-24	104.3	88
25-29	110.0	91
30-34	110.5	95
35-39	175.0	99
40-44	78.6	99
45-49	63.2	104
50-54	114.3	105
55-59	75.0	112
60 +	108.3	101
Total	97.3	99.8

Source: *CBS, 2003:60

Table 4.2 represents the sex ratio by five-year age interval, which shows highest for the age group 35-39 and lowest for age group 45-49 years 175 and

63.2 respectively compared to corresponding sex ratios of 99 and 104 according to 2001 census. The overall sex ratio of the study population is found 97.3 while the sex ratio of the where nation is 99.8 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

This is another measure of the study on the structure of population. The number of dependents per 100 workers is computed on the basis of three broad age groups, below 15 years, between 15-59 years and 60 years and above. The population in the age group 15-59 years is considered as the working population, population below 15 years as the young dependent group and population 60 years above is considered to be old dependents. The ratio of the young dependents to working population (15-59 years) multiplied by 100 gives the young dependency ratio and the ratio of the old dependents to the working age population (15-49 years) gives old dependency ratio whereas, the sum of these two ratios gives the total dependency ratio.

Table 4.3

Dependency Ratio of the Study Population

Dependency	Field Survey, 2006	Census 2001*
Young age (0-14)	47.4	71.9
Old age 60 years and above	9.3	11.1
Total	56.7	83.0

Source: * CBS, 2003: 31-38

Table 4.3 shows that young dependency ratio as 47.4 in the study population. It is found to be lower compared to the national data according to 2001 census. Old dependency ratio is 9.3 in the study population which is lower compared to national figure from census 2001. Total dependency ratio is 56.7 in the study population which is lower (83.0) compared to the national figure of 2001 census.

4.4 Crude Birth Rate and Crude Death Rate

The crude birth rate is the ratio of the total live births in the specified year in a particular area to the total mid-year population of that area multiplied by 1000. It is computed using the following general formulae.

$$\text{CBR} = \frac{B}{P} \times K$$

Where, B is total number of live birth during a year

P is total population in the mid year

K is a constant equals to 1000.

Similarly crude death rate is the simplest and commonest measure of mortality and defined as the told number of death in a year per 1000 mid year population.

$$\text{CDR} = \frac{D}{P} \times K$$

Where, D is total number of death during a year

Table 4.4
CBR and CDR of the study area

Birth & Death Rate	Study Area	Census 2001*
CBR	31.0	32.6
CDR	9.5	10.0

Source: *CBS, 2001: 1

Table 4.4 shows CBR and CDR of the study area. CDR of the study area is nearly same as that of national census 2001. CBR of the study area is lower (31.0) than 2001 census.

4.5 Educational Status of the Study Area

Education is one of the most important variables which plays a vital role in the all developing society and indirectly affects variables like fertility, mortality, health condition, income, occupation, living standard and so many others. Thus, it is necessary to know the situation of education in the study area. The distribution of educational status of study population with age six years and above is shown below.

Table 4.5

Distribution of the Study Population Aged Six Years and above by Literacy

Educational status of the study population		
	Number	Percent
Illiterate	120	32
Literate	255	68
Total	375	100

School Attainment Level of Literate Group		
	Number	Percent
General	36	14.1
Primary level	84	32.9
Lower secondary	62	24.3
S.L.C.	60	23.5
C.L.	8	3.1
D.L.	5	2.0
Total	255	100

Table 4.5 shows the study population with 32 percent illiterate against 68 percent literate. These figures seem to be quite different from national figures 53.7 percent for literate and 46.3 percent illiterate according to 2001 census. The overall literacy rate in the study area is higher than the corresponding national figure.

Among the literate study population attaining primary level education accounts for 32.9 percent, followed by lower secondary level 24.3 percent. Similarly 14.1 percent have general education. In the same way 23.5 percent are in from S.L.C. pass group and 3.1 percent from certificate level likewise 2 percent are seen attaining diploma level 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 was asked to the population who were at the age of ten years and above.

Table 4.6
Distribution of the Study Population Aged 10 Years and above by Occupation

Occupation	Number	Percent
Agriculture	152	44.8
Business	1	0.3
Service	14	4.1
Wage earner	70	20.6
Student	94	27.7
House worker	8	2.4
Total	339	100

Table 4.6 shows that of the total 339 population age ten years and above, 44.8 percent population have their main occupation as agriculture sector. In the same way 27.7 percent 10 years and above populations are engaged in study. As student also 20.6 percent are involved in wage earner. Similarly the lowest percentages of people in the study area are found engaged in business (0.3 percent).

4.7 Marital Status

The study of nuptiality deals with the frequency of marriages, 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 dissolutions of such unions.

Proportion marriage is one of the four main proximate determinants of fertility, the other three being contraception, abortion and breastfeeding. Since the birth outside the wed lock 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- 4.7
Distribution of Marital Status of the Study Population by Aged above 10 years

Marital status	Number	Percent
Married	173	51.0
Unmarried	152	44.8
Widow/widower	9	2.7
Divorced	3	0.9
Separated	2	0.6
Total	339	100

Table 4.7 represents the marital status of the study population. Out of the total population aged above 10 years, 51.0 percent are married where as 44.8 percent are found unmarried. About 2.7 percent are found widow/widower and 0.6 percent separated. Finally 0.9 percent cases are found divorced at the time of survey.

4.8 Land Holding Status of Households

Land holding status also indicates the socio economic status of the household. As has been seen above, 44.8 percent of population in this community are found engaged in agriculture (table 4.6) but a significant percentage of 30.8 percent are landless household.

Table 4.8

Distribution of Household of the Study Population by Land Ownership

Land in katha and bigha	Number of household	Percent
Landless	24	30.8
Less than 10 katha	7	9.0
10 katha to 1 bigha	10	12.8
More than 1 to 2 bigha	8	10.3
More than 2 to 3 bigha	2	2.6
More than 3 to 4 bigha	13	16.7
More than 4 bigha	14	17.9
Total	78	100

From this study 17.9 percent households have more than 4 bigha land followed by 16.7 percent households having more than 3 to 4 bigha. Where as 12.8 percent households have 10 katha to 1 bigha, 10.3 percent households have more than 1 to 2 bigha. Similarly 9.0 percent have less than 10 katha and 2.6 percent have more than 2 to 3 bigha.

CHAPTER V

5. Socio-Economic and Demographic Characteristics of Respondent

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	-	-	10.8
20-24	4	5.7	19.0
25-29	13	18.6	19.1
30-34	13	18.6	16.4
35-39	7	10.0	13.4
40-44	15	21.4	11.8
45-49	18	25.7	9.6
Total	70	100.0	100

Source: *NDHS, 2001: 24

A total of 70 women were contacted during the study for interview. Data show that maximum numbers of women (25.7 percent) are found in 45-49 age group in comparison to 9.6 percent according to NDHS, 2001. This is followed by age group 40-44 (21.4 percent) and 25-29, 30-34 age groups the same 18.6 percent. Lowest number of women are seen in 20-24 age group which is 5.7 percent of total women. Not a single respondent's from 15-19 age group are found in the study area. The table 5.1 shows that out of the total respondents, 42.9 percent fall in the peak of their reproductive life, 20-34 years of age. The percentage of respondents in age groups 25-29, 30-34 and 35-39 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 for 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 Educational Status

Educational status	Number of respondent	Percent
Literate	25	35.7
Illiterate	45	64.3
Total	70	100.0
Educational attainment level of women		
	Number of respondent	Percent
General	3	12.0
Primary	11	44.0
Lower secondary	5	20.0
Secondary	4	16.0
S.L.C.	2	8.0
Total	25	100.0

Table 5.2 shows the educational status of the respondents where out of 70 women with age 15-49 years, 45 respondents are found illiterate and only 25 respondents literate representing 64.3 and 35.7 percent respectively. In the study area, majority of respondents are unable to read and write. This factor may also have contributed to high fertility. Moreover 44 percent women have attended primary and 20 percent women have attended lower secondary level of education. Similarly 16 percent women have attended secondary, 12 percent have attended informal education and 8 percent women have attended SLC level of education.

5.3 Respondent Women by Occupational Status

Occupational status is another determinant of fertility; thus it is necessary to know the distribution of occupation of eligible women. It is shown in Table 5.3.

Table 5.3

Distribution of Respondent Women (15-49 years) by Occupational Status

Occupation	Number of respondent	Percent
Agriculture	37	52.9
Service	2	2.9
Wage worker	25	35.7
Domestic work	6	8.6
Total	70	100.0

Table 5.3 shows the occupational status of the respondents. Out of the total, 37 women (52.9 percent) are employed in agricultural work representing highest percent, 2 women (2.9 percent) are employed in service, 25 women (35.7 percent) are employed as wage workers and 5 women (8.6 percents) do domestic work. But most of the wage workers also are engaged in agriculture.

5.4 Respondent Women by Annual Income

Family and individual income in a household play 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 Women (15-49 years) by Annual Income in Rs.

Annual income in Rs.	Number of respondent	Percent
Have no income	6	8.6
< 5,000	9	12.9
5,000 to 7,000	15	21.4
7,001 to 10,000	18	25.7
10,001 to 13,000	8	11.4
13,001 to 16,000	4	5.7
> 16,000	10	14.3
Total	70	100.0

Table 5.4 shows that the majority of women i.e. 18 women (25.7 percent) in the study area earn Rs. 7,001 to 10,000 followed by 15 women (21.4 percent) earn Rs. 5,000 to 7,000. The table also indicates that 6 women (8.6 percent) don't have income, 10 women (14.3 percent) earn above Rs. 16,000. Likewise 9 women (12.9 percent) earn below 5,000, 8 women (11.4 percent) and 4 women (5.7 percent) earn 10,001 to 13,000 and 13,001 to 16,000 respectively.

5.5 Respondent Women by Age at Marriage

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 5.5

Distribution of Respondent Women (15-49 years) by Age at Marriage

Age at marriage	Number of respondent	Percent
10-14	5	7.1
15-19	36	51.4
20-24	25	35.7
25-29	4	5.7
Total	70	100.0

Above table shows that 51.4 percent women marry between the age group 15-19 years and followed by 35.7 percent who are married between the age group 20-24 years. Similarly 7.1 percent are married below 15 years. Only 5.7 percent are married in the age group 25-29 and above years and finally 58.5 percent are married before 20 years in the study area.

5.6 Respondent Women by Age at First Birth

It is assumed that women who are involved in farm give birth at early ages compared to those who are involved in service, business, study and other non agricultural activities. Table 5.6 shows age at first birth of respondents.

Table 5.6

Distribution of Respondent Women (15-49 years) by Age at First Birth

Age at first birth	Number of respondent	Percent
10-14	1	1.5
15-19	25	38.5
20-24	28	43.1
25-29	9	13.8
30-34	2	3.1
Total	65	100.0

Note: 5 respondent women have not given any birth.

From table 5.6, it is found that majority of respondents 43.1 percent have given first birth in the age group 20-24 years followed by 38.5 percent who have given first birth in the age group 15-19 years. Likewise, 13.8 percent, 3.1 and 1.5 percent women have given first birth in age groups 25-29, 30-34 and 10-14 years respectively.

5.7 Respondent Women by Children Ever Born

Number of children ever born play a vital role to increase population in the world and is shows as measure of fertility. Child loss experience of the women have higher CEB than others.

Table 5.7

Distribution of Respondent Women (15-49 years) by Children Ever Born

CEB	Number of respondent	Percent
0	5	7.1
1	7	10.0
2	13	18.6
3	16	22.8
4	6	8.6
5	11	15.7
6	6	8.6
7 and above	6	8.6
Total	70	100.0

Table 5.7 shows that 22.8 percent have 3 CEB followed by 18.6 percent have 2 CEB. Likewise 15.7 percent have 5 CEB, 10 percent have 1 CEB. Similarly 8.6 percent have 4,6 and 7 and above CEB but 7.1 percent have no CEB.

5.8 Source of Knowledge and Media of Family Planning Methods

Knowledge of family planning method is an essential factor in promoting family planning services. The prevalence of family planning methods is associated negatively with fertility. Media is one of the most important factors for determining use or non use of family planning methods. It is presented below.

Table 5.8

Distribution of Respondents Women (15-49 years) by Knowledge and Media of Family Planning Method

Knowledge of FP method	Number of respondent	Percent
Yes	63	90
No	7	10
Total	70	100.0
Media from where FP method was know		
	Number of respondent	Percent
Radio	20	31.7
Television	6	9.5
Friends	17	27.0
Family members	11	17.5
Health workers	9	14.3
Total	63	100.0

Table 5.8 presents the knowledge and media of family planning method. Out of 70 respondents, 90 percent of the respondents are found to have knowledge about family planning methods and only 10 percent of respondents are found not to have knowledge about family planning methods. Out of 63 women, 31.7 percent are found to have knowledge about family planning methods from radio followed by 27.0 percent from friends. Likewise 17.5 percent, 14.3 percent and 9.5 percent women are found to have knowledge about family planning methods from family member, health workers and television respectively.

5.9 Respondent Women by Usage and Type of F.P. Method

Rajbansi community do not like to use family planning methods. They believe that family planning methods are against their religion and cultural faiths. But they have started now to use family planning methods. Use of family planning method plays a vital role to control fertility. The use of family planning method is associated negatively with fertility. The usage and types of F.P. methods are presented below.

Table 5.9**Distribution of Respondent Women (15-49 years) by Current Use and Type of F.P. Methods**

Family planning method	Number of respondent	Percent
Non-user	36	51.4
User	34	48.6
Total	70	100
Type of FP methods		
Male sterilization	2	5.9
Female sterilization	24	70.6
Condom	1	2.9
Depo-Provera	6	17.6
Oral pills	1	2.9
Total	34	100.0

Table 5.9 presents information on usage of family planning methods among interviewed women having knowledge about FP methods. Table 5.9 shows that 48.6 percent women are using family planning methods. Table 5.9 shows that among 34 user women, 70.6 percent have used female sterilization, 17.6 percent respondents are using Depo-Provera, 5.9 percent male used male sterilization. Condom and oral pills users are found negligible as 2.9 percent.

5.10 Reasons for Using and Non Using of Family Planning Methods

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

Table 5.10**Distribution of Respondent Women (15-49 years) by Reason for Using and Non Using of Family Planning Methods**

Reason of use	Number of respondent	Percent
Due to spacing birth	5	14.7
Delay the first birth	1	2.9
Control birth	28	82.4
Total	34	100.0
Reason of non use		
Due to health problem	9	25
Desire of sons	3	8.3
Disagree of husband	4	11.1
Desire of daughter	1	2.8
No necessity	12	33.3
No knowledge about FP method	7	19.4
Total	36	100.0

Above table 5.10 shows that majority of respondents use F.P methods to control birth (82.4 percent) followed by spacing birth (14.7 percent) and delay the first birth (2.9 percent). Similarly, majority of women don't use F.P methods as it is not necessary (33.3 percent) followed by reason of health problem (25 percent). 19.4 percent not using FP methods due to lack of knowledge about FP method. Likewise, 11.1 percent and 8.3 percent reported that their husband disagree and desire of sons respectively. Finally, 2.8 percent don't use FP methods due to desire of daughter.

CHAPTER VI

6. Fertility by Socio-Economic and Demographic Variables

This chapter presents 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 years. The number of CEB is one of the reliable indicators for fertility.

6.1 Mean CEB and Age of Respondents

Age of the woman reproductive is one of the demographic factors influencing fertility. It is expected that as the age of married women increase, the mean number of children ever born also increase. The results of the survey are presented in Table 6.1.

Table 6.1

Mean Number of CEB of the Study Population by Age of the Respondents

Age group	Cases	Number of children ever born	Mean CEB	
			Study area	NDHS 2001*
15-19	-	-	-	0.2
20-24	4	2	0.5	1.3
25-29	13	26	2.0	2.7
30-34	13	37	2.8	3.7
35-39	8	28	3.5	4.5
40-44	14	60	4.3	5.2
45-49	18	93	5.2	5.1
Total	70	246	3.5	2.7

Source: *NDHS, 2001:61

Note: The following procedure is applied to calculate CEB

$$CEB = \frac{Ba}{Wa}$$

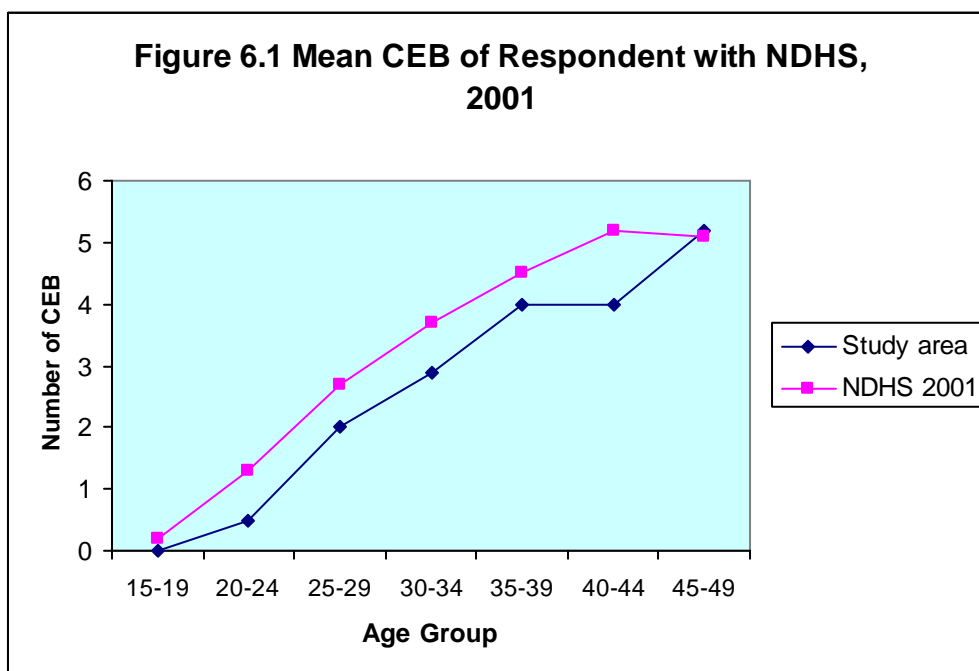
where, Ba = Total number of CEB by women in age group a.

Wa = 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 ever born varies by age of women. The highest CEB of 5.2 reported by women of the age group 45-49 years. The lowest CEB of 0.5 as reported by women of age group 20-24. The average number of children ever born in the study area is found to be 3.5 compared to 2.7 for Nepal reported by NDHS, 2001. The women of age group 45-49 are found to have about the same mean children ever born as reported by NDHS 2001.

In fact, the completed family size is 5.2 according to this study compared to 5.1 according to NDHS, 2001 which indicates that the study population has a higher CEB than the corresponding national figure but in reverse pattern for all other age group.



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 born	Mean CEB
10-14	5	32	6.4
15-19	36	138	3.8
20-24	25	64	2.6
25+	4	12	3.0
Total	70	246	3.5

Table 6.2 shows the mean number of children ever born by age at marriage. The above table shows that higher the age at marriage, lower the mean number of children ever born. The highest mean number of children ever born 6.4 is observed for women who were married between 10-14 age group followed by 15-19 years (3.8). The mean number of children ever born 2.6 is observed for women who were married at the age of 20-24 years. The children ever born is 3.0 observed for the age 25 years at marriage and above followed by mean age at marriage as 20 years in the study area.

6.3 Mean CEB and Education

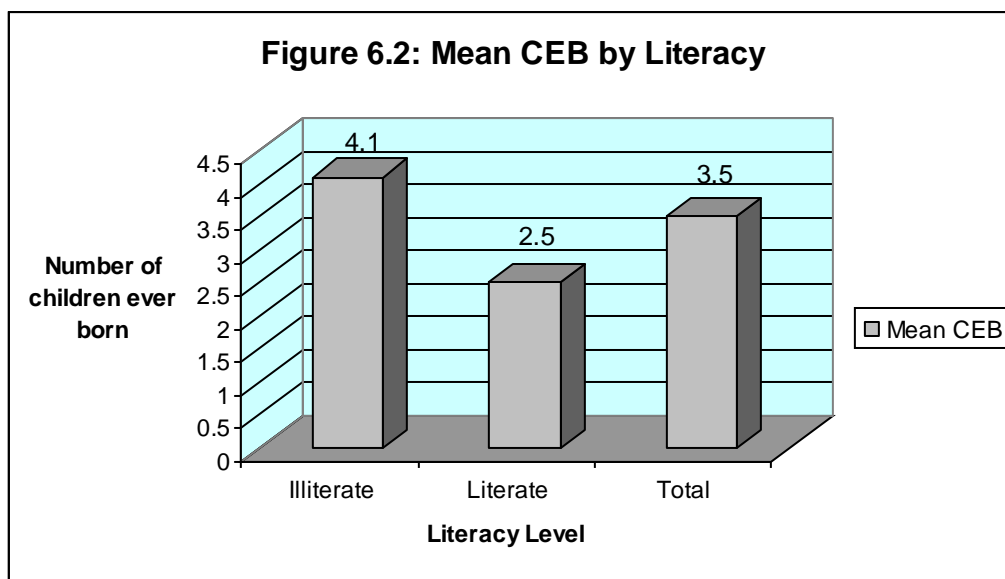
Education of women is one of the main instrument for reducing fertility. Literatures have shows that educated women are more aware of the issue of their quality of children than non-educated. Education has indirect impact upon fertility which indirectly reduces the level of fertility.

Table 6.3

Mean CEB of the Study Population by Education

Education	Cases	Number of children ever born	Mean CEB
Illiterate	45	184	4.1
Literate	25	62	2.5
Total	70	246	3.5

Table 6.3 shows the 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 (4.1) is observed among women with no education and the lower mean CEB (2.5) is observed among women who are educated.



6.4 Mean CEB and Occupation

Occupational status of women is one of the major indicators 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	37	126	3.4
Service	2	5	2.5
Wage worker	25	87	3.5
House worker	6	28	4.7
Total	70	246	3.5

Table 6.4 shows the occupational status of the respondents by children ever born. The highest mean CEB (4.7) is observed among women who are engaged in only household activities followed by wage worker (3.5). The lowest mean CEB (2.5) is observed among women who are engaged in service and mean CEB 3.4 is observed among women who are engaged in agriculture activities.

6.5 Mean CEB and Child Loss Experience

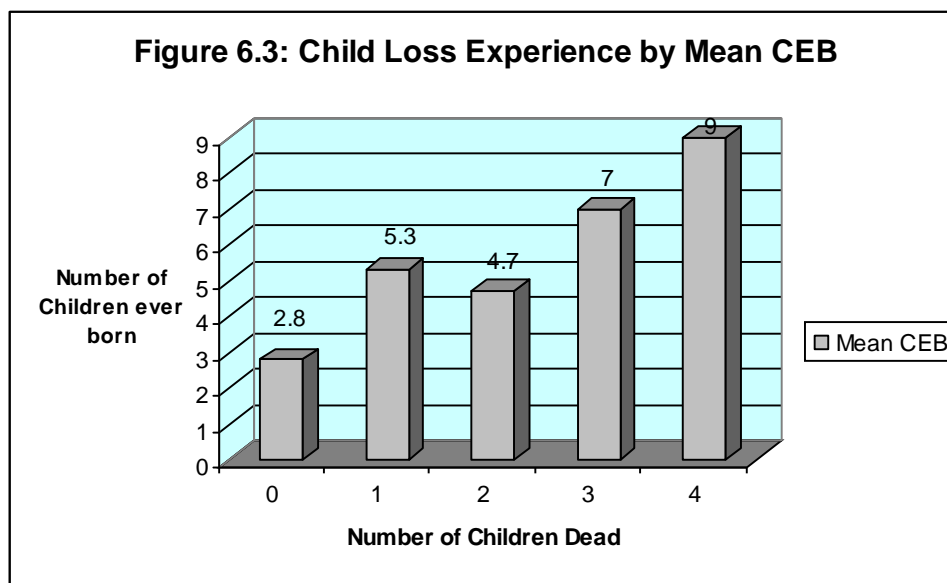
Child loss (Infant/ child) is also an important factor which affecting fertility in developing countries. People want to replace the dead child by giving the next birth. So, women with higher child loss experiences have higher CEB. Many studies indicate that there is a positive relationship between child 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	51	142	2.8
1	9	48	5.3
2	7	33	4.7
3	2	14	7.0
4	1	9	9.0
Total	70	246	3.5

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 5.3 for those with one child loss experience, 4.7 for those with two child loss experience and 7.0 for those with three child loss experience. Finally, the highest CEB of 9.0 is found for those who have experience of four child loss. Thus, as expected higher the child loss experience, higher the number of CEB is observed.



6.6 Mean CEB and Age at First Birth

Age at first birth plays a vital role in affecting fertility. It is true that higher the age at first birth, lower distribution of CEB by age is shown in table 6.6.

Table 6.6

Mean CEB of the Study Population by Age at First Birth

Age at first birth	Cases	Number of children ever born	Mean CEB	Mean age at first birth
Below 15	1	6	6	
15-19	25	99	4.0	
20-24	28	111	4.0	
25-29	9	21	2.3	
30-34	2	9	4.5	
Total	65	246	3.8	21.5

Note: It is to be noted that 5 respondents do not have any births.

Table 6.6 shows age at first birth of the respondents and their children ever born. The mean age at first birth is 21.5 years. Highest mean CEB (6) is observed for women who have given first birth at age below 15 years followed by 4.5 at age group 30-34 years. The mean CEB (4.0) is found who have given first births at age 15-19 and 20-24 years. Lowest mean CEB (2.3) is observed for women who have given first birth at age group 25-29 years. The highest number of CEB for the age group 30-34 is exceptional. It might be due to the low sample size in this group.

6.7 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 in table 6.7.

Table 6.7

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	6	28	4.7
< 5,000	9	34	3.8
5,000-7,000	15	57	3.8
7,001-10,000	18	64	3.6
10,001-13,000	8	29	3.6
13,001-16,000	4	16	4.0
> 16,000	10	18	1.8
Total	70	246	3.5

The above table 6.7 shows that mean CEB is highest (4.7) for women who have no income. Similarly, mean CEB is lowest (1.8) for women who have highest income. Mean CEB is the same (3.8) for women who have below Rs. 5,000 and 5,000-7000 income. Mean CEB is also the same (3.6) for women who have Rs. 7,001-10,000 and 10,001-13,000 income. Mean CEB is 4 for women who have Rs. 13,001-16,000 income.

6.8 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 family planning methods and a complementary question was also asked about the use of contraception. Table 6.8 shows the relationship between knowledge and CEB to the eligible women.

Table 6.8

Mean CEB of the Study Population by Knowledge of Contraception

Knowledge of contraception	Cases	Number of children ever born	Mean CEB
Yes	63	211	3.3
No	7	35	5.0
Total	70	246	3.5

Table 6.8 shows that the mean numbers of CEB lower for women who have knowledge of contraception than those who do not have knowledge of contraception. From the above table 6.8, the mean number of CEB for women

with contraception knowledge is 3.3 which is lower than that for those without knowledge (5.0). There is 1.7 children much difference between them and mean CEB of 3.5 is found for all respondents from the present study.

6.9 Mean CEB and Use and Non-Use of Contraception

Contraception is one of the most important factors to control the fertility. Inverse relationship between contraception and fertility is seen in the study area (Table 6.9).

Table 6.9

Mean Number of CEB of the Study Population by Current Use of Contraception

Use of Contraception	Cases	Number of Children Ever Born	Mean CEB
Non user	36	140	3.9
User	34	106	3.1
Total	70	246	3.5

Table 6.9 shows mean children ever born between users and non-users. The highest number of children ever born 3.9 is found for women who have not used contraception. Children ever born is found 3.1 for women who have used contraceptive method.

6.10 Mean CEB and Religion

As all the respondents follow Hindu religion, the distribution of mean number of CEB by religion is 3.5.

CHAPTER VII

7. Summary, Conclusion and Recommendation

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

7.1 Summary of the Findings

This study covers 78 households. There are 420 people in the study area. The study is conducted in Juropani VDC of Rajbansi Community and is focused on ever married women of reproductive age 15-49 years. This study has examined the socio-economic and demographic characteristic of the 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 households.

The findings of the study are summarized as follows:

- Among 78 households, there are 420 persons; out of them (49.3 percent) are males and (50.7 percent) are females. The sex ratio of the study population is found to be 97.3 which is less than the national figure of 99.8 according to 2001 census (Table 4.1 and 4.2).
- The total dependency ratio is 56.7 while it is 47.4 for child dependency ratio and 9.3 for old dependency ratio. The total dependency ratio of 56.7 is less than the national figure 83.0 from 2001 census (Table 4.3).
- CBR and CDR are 31.0 and 9.5 respectively which are about the same as national figures 32.6 and 10.0 respectively from 2001 census (Table 4.4).
- Out of total population aged 6 years and above, 32.0 percent are illiterate and more than fifty percent (68.0 percent) are literate (Table 4.5)
- Out of total population aged 10 years and above, 44.8 percent are engaged in agriculture sector, followed by 27.7 percent student and 2.4 percent domestic work (Table 4.6).

- Out of the total population aged 10 years and above, 51.0 percent are married 44.8 percent are unmarried and 2.7 percent are widow/ widower. In the same way 0.9 and 0.6 percent are from divorced and separated category respectively (Table 4.7).
- Out of 78 households, 30.8 percent are land less and 69.2 percent households are land holders (Table 4.8).
- Out of 70 respondents in different age groups, the majority of respondents (25.7 percent) are in the age a group 45-49 years and the lowest proportion of respondents (0 percent) is in the age group 15-19 years. It shows the age at marriage is higher in the study area (Table 5.1).
- Out of 70 respondents, 64.3 percent are illiterate and only 35.7 percent are literate (Table 5.2).
- Out of 70 respondents, 52.9 percent are engaged in agriculture sector, while only 2.9 percent reported their occupation as service (Table 5.3).
- Majority of respondents (25.7 percent) in the study area earn Rs. 8,000 to 10,000 annually. Only 5.7 percent earn Rs 13,001 to 16,000 annually (Table5.4).
- Most of the respondents (51.4 percent) are married in the age group 15-19 years, 7.1 percent of respondents are married in the age group 10-14 years (Table 5.5).
- Out of the 70 respondents, 43.1 percent have given first birth in the age group 20-24 years and 1.5 percent have given first birth in the age group 10-14 years (Table 5.6).
- Out of the 70 respondent, 22.8 percent have 3 CEB but 7.1 percent have no CEB (Table 5.7).
- Out of the 70 respondents, 90 percent have knowledge about FP methods but 10 percent do not have knowledge. Among 90 percent respondents, 31.7 percent have heard about F.P methods from radio and 9.5 percent from television (Table 5.8).

- Out of 70 respondents, 48.6 percent have used FP methods, but 51.4 percent have not used FP methods. Again, out of 48.6 percent respondents 70.6 percent have used female sterilization but 2.9 percent have used condom and oral pills (Table 5.9).
- Out of 34 respondents, 82.4 percent respondents have using FP methods to control birth and 2.9 percent have used FP methods to delay the first birth. Similarly out of 36 respondents, 33.3 percent have not used FP methods because it was not necessary (Table 5.10).
- The mean CEB of 5.2 is highest for women whose age group is 45-49 years at the time of field survey. Similarly the mean CEB of 0.5 is found in the age group 20-24 years (Table 6.1).
- The highest mean number of CEB 6.4 is found for women who were married at age 10-14 years and lowest CEB 2.6 for those who were married at age 20-24 years (Table 6.2).
- The mean CEB is higher with illiterate respondents than that of literate respondents. The figures are 4.1 for illiterate respondents and 2.5 for literate respondent (Table 6.3).
- The mean CEB is found highest (4.7) for women who are engaged in domestic work and the mean CEB is found lowest (2.5) for women who have reported their occupation as service (Table 6.4).
- The highest CEB (9.0) is found for those respondents who have the experience of at least 4 children dead. In contrast, the CEB is lowest (2.8) for those who have no child loss experience (Table 6.5).
- The highest CEB (6) is found among respondents who have given first birth at age below 14 years and mean CEB is lowest (2.3) for those who have given first birth at age 25-29 years (Table 6.6).
- The mean CEB is found highest (4.7) in no income group but the mean CEB is found lowest (1.8) who have annual income more than Rs 16,000 (Table 6.7).

- The highest CEB (5) is found among those respondents who have no knowledge about contraception and the lowest CEB 3.3 is found among those who have knowledge about contraception (Table 6.8).
- The highest CEB (3.9) is found for those respondents who have not used contraception and the lowest CEB (3.1) is found for those who have used contraception (Table 6.9).

7.2 Conclusion

The longer 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 6.2).

- The education of women seems playing an important role in decreasing the mean number of CEB, in the study area of Rajbansi women 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 is 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 (9.0) than those who have no experience of child loss, CEB (2.8) (Table 5.6).
- Age at first birth is another reason for the increase in fertility. Higher the age at first birth lower the CEB and lower the age at first birth higher the CEB is. Similarly, income is also an important cause to increase fertility. Higher the level of income, lower the CEB (1.8) is found in the study area (Table 6.6 and 6.7).
- Knowledge and use of FP methods especially female method are found high but use of family planning methods before first birth is very insignificant. There is high level of contraceptive use only after the first birth. This

indicates that couple tend to give first birth soon after marriage; this may be because of making the marriage life strong (Table 5.9 and 5.10).

7.3 Recommendations

7.3.1 Policy Recommendation

Based on the findings and conclusion made in this study, following recommendations 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 (Table 6.2).
- To reduce the fertility, informal education and family planning related awareness creation programme should be given for married women (Table 5.2 and 5.8).
- Rajbansi women have low income levels which increases the fertility. Hence programme should be lunched to improve the economic status of those women (Table 6.7).
- Most of the Rajbansi people are farmers, some of them are landless and shift of occupation agriculture to non agriculture activity will be more effective to decline fertility (Table 5.3 and 4.8).
- Awareness programmes related to child and maternal health should be lunched to reduce infant and child mortality. Besides this programme, mass immunization, nutrition child and maternal health care facilities, cheap medical facilities may help to reduce infant and child mortality (Table 6.5).
- Since level of women's education seems effective in rising female age at marriage, emphasis should be given on improving educational level of women by educating all girls of school going ages. For this, education for all girls should be made free and compulsory and they should be encouraged to improve the length of school years (Table 6.2).
- To reduce fertility, there should be IEC service and availability of contraceptive methods in order to increase prevalence of contraceptive use (Table 6.9).

- To reduce fertility, information about the family planning methods such as permanent and temporary, their effective and their impact on the mother health should be provided (Table 6.8).

7.3.2 Recommendation for Future Research

This study examined the relationship by using limited socio-economic and demographic variable (i.e. education, occupation, age of women, age at first birth, level of income, age at marriage, child mortality and knowledge of FP etc and analyzed the fertility in term of mean CEB. 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 have 70 ever married women from 78 households. Hence, further investigation needed in this area.

REFERENCES

- Acharya, B, 2000. "Female age at marriage in Nepal", in Bal Kumar KC (ed.) *Nepal Population Journal* vol. 9 (Kathmandu: Population Association of Nepal): 31.
- Adhikari K.P, 1996, "Child loss experience as a Response to High Fertility Observation from Nepal," in Bal Kumar KC (ed.) *Population and Development in Nepal* vol. 4 (Kathmandu: CDPS, T.U.): 1-18.
- Aryal, R.H, 1997, "Theoretical Experience of Fertility Change" in Bal Kumar KC (ed.) *Nepal population Journal*: vol. 5 (Kathmandu: Population Association of Nepal): 26.
- Bhandari, K. P, 2000. *Fertility Behaviour of Dhimal Community* in Damak Municipality of Jhapa district unpublished M.D. dissertation (Kathmandu: CDPs): 15-16.
- Bhende A. and T. Kanitkar, 2002, *Principle of Population Studies*, Fourteenth Edition (Mumbai: Himalayas Publishing House): 232, 1-26, 260.
- Bongaarts, J. and R. Potter, 1985, *Fertility, Biology and Behaviours: An Analysis of the proximate Determinants* (London Academic Press).
- CBS, 1995, *Population Monograph of Nepal* (Kathmandu: Central Bureau of Statistics):78.
- CBS, 2001, *National Population Census 2001* (Kathmandu: Central Bureau of Statistics): 1, 3.
- CBS, 2003, *Population Monograph Of Nepal*, Vol. 1 (Kathmandu: Central Bureau of Statistics) 38, 227, 232.
- CBS, 2003, *Nepal Census Indicators 2001 and Trends* (Kathmandu: Central Bureau of Statistics): 31-38.
- Chhetry, R.K, 1993, "Age at marriage and Fertility in Nepal", *Tarnyanka Gatibidhi* (Kathmandu: CBS): 58-62.
- Dahal, D. R, 1992, "Determinants of Fertility in Nepal", in Bal Kumar KC (ed.) *Population and Development in Nepal* vol. 1 (Kathmandu: CDPS): 1-16.

- Davis, K. and J. Blake, 1956, "Social Structure and Fertility- An Analytical Framework", *Economic Development and Social Change*, 211-235.
- Easterlin, R, 1976, "The Economics and Sociology of Fertility: A synthesis", in Charles Tilly (ed.) *Historical Studies of Changing Fertility* (Princeton University Press): 112.
- Kourtsoyianic, A, 1979, "Theory of Demand", *Modern Mirco-Economics* (OntatrioL University of Ottawa): 25-32.
- Leibenstein, H, 1975, "The Economic theory of Fertility Decline", *Quarterly Journal of Economics*: 1-31.
- MoH, 1987, *Nepal Fertility and Family Planning Survey*, 1986 (Kathmandu: Ministry of Health).
- MoH, 1996, *Nepal Family Health Survey (NFHS) Report* (Kathmandu: Ministry of Health).
- MoH, 1996, *Nepal Family Health Survey 1996* (Kathmandu: Family Health Division): 52.
- MoH, 2001 *Demographic and Health Survey of Nepal* (Kathmandu: Ministry of Health).
- MoPE, 2004, *Nepal Population Report* (Kathmandu: Ministry of Population and Environment): 3
- Nepal Rastra Bank, 1989, "Multipurpose Household Budget Survey", *A Study on Income Distribution, Employment and consumption pattern in Nepal* (Kathmandu: NRB).
- New Era, 2001. *Nepal Demographic Health Survey (NDHS)* (Kathmandu: New Era): 10, 24, 61, 63.
- NPC, 2002, *Tenth Plan (2002-2007)* (National Planning Commission, Nepal).
- Panth, R.D. and S. Acharya, 1988, *Population and Development in Nepal* (Kathmandu: National Commission on Population): 58-64, 56.
- Pathak, R.S, 2002, "Contraceptive Prevalence and Fertility trends in Nepal," in Bal Kumar K.C. (ed.). *Population and Development in Nepal*, vol. 10 (Kathmandu: CDPs, T.U.) 127-136.

- PRB, 2005, *World Population Data Sheet* (Washington DC, population Reference Bureau).
- Risal, R.P. and A. Shrestha, 1989, "Fertility and its proximate Determinants", *South Asian Studies of population policies and programmes in Nepal* (Kathmandu: UNFPA): 22-70.
- Subedi, G, 1996, "Contraceptive Dynamics in Nepal", in Bal Kumar KC (ed.) *Population and Development in Nepal*. Vol. 4 (Kathmandu: CDPS, T.U.): 48.
- Tuladhar, J.M, 1989, *The Persistence of High Fertility in Nepal* (New Delhi: Inter India Publication): 26.
- UN, 1973, *"The Determinants and Consequences of Population on Trend"* (New York: United Nations): 65.

Appendix- A: Questionnaire

An Analysis of Socio-Economic and Demographic Differentials on Fertility A case study of Rajbansi Community in Juropani V.D.C., Jhapa Field Survey Questionnaire

District V.D.C. Ward no. Village/Tole

House No.

Household No.

Household Questionnaire

Information of those family members who are sharing a single kitchen

S.N.	Name of Family Member	Relati on of H.H.	Sex	Age	Only 6 years above		Marital status	occ upa tion
					Literacy	Grade Complete		
	QN1	2	3	4	5	6	7	8
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

Q.No. 2

1. Household head
2. Husband/ Wife of H.H.
3. Son/Daughter
4. Daughter in law
Earner
5. Grandson/Daughter
6. Father/Mother of H.H.
7. Brother/Sister of H.H.
8. Other

Q.No. 5

1. Yes
2. No.

Q.No. 6

1. General
2. P.L.
3. L.S.
4. S.L.C.
5. C.L.
6. D.L.
7. M.L.
8. Other

Q.No. 7

1. Unmarried
2. Married
3. Widower
4. Divorced
5. Separated

Q.No. 8

1. Agriculture
2. Business
3. Services
4. Wage
5. Student
6. Household

9. How much land is owned by your household?

- Bigha () - Katha () - Landless ()

10. Can you maintain the household income at per annual? Yes.....1

No.....2

11. Was there any deaths in this household during the past year? Yes.....1

No.....2

Individual Information

Only for ever married women age (15-49) years.

Questionnaire on education, occupation and income

1) Name of women:

S.No.	Questions	Response category	Code	Skip
1.	What is your completed age?		
2.	At what month and year were you born?	Month:..... Year:.....		
3.	What is your religious?		
4.	Can you read and write simple letters?	Yes:..... No:.....	1. 2.	Q.No.7
5.	Have you ever attained school?	Yes:..... No:.....	1. 2.	
6.	What is the highest grade you completed?	Grade:.....		
7.	What is your occupation?	Agriculture:..... Service:..... Foreign employment:.... Wage worker:..... House worker:..... Student:.....	1 2 3 4 5 6	
8.	Have you worked during the past 12 months?	Yes:..... No:.....	1 2	
9.	If you worked how many months?		
10.	How much income did you get?	Rs.....		

**Questionnaire on age at marriage, age at first birth, child-loss experience and
contraception use.**

Q No.	Questions	Response category	Code	Skip
1.	What was your age at the time of first marriage? year Don't know	9	
2.	Have you given birth?	Yes:..... No:.....	1. 2. →	Q.No.10
3.	Have you had any births during the past year?	Yes:..... No:.....		
4.	What is your completed age when you given first birth? year		
5.	How many children have you ever born?		
6.	How many sons and daughters do you have alive now?	Sons..... Daughters.....		
7.	Were any children died?	Yes..... No.....	1 2	
8.	How many sons and daughters have died?	Sons Daughters.....		
9.	What was their age when they died?	Sons year Daughters ... year		
10.	Have you heard or know about family planning?	Yes..... No.....	1 2 →	End of Question
11.	What is the source of information about FP method?	Radio..... Television..... Newspaper..... Friends Family members... Others.....	1 2 3 4 5 6	

12.	Have you ever used any type of FP method?	Yes..... No..... If yes Before first birth After first birth In both time	1 2 1 2 3	
13.	What type of family planning method you have use?	i) Permanent Male sterilization Female sterilization ii) Temporary Condom Depo-Provera Oral Pills Foaming tablets Others.....	1 2 3 4 5 6 7	
14.	What was the main reason to use that method?	Due to specing birth Delay the first birth Control birth	1 2 3	
15.	If no, why?	Due to health problem Desire of sons Due to social problem Disagree of husband Desire of daughter Others.....	1 2 3 4 5 6	