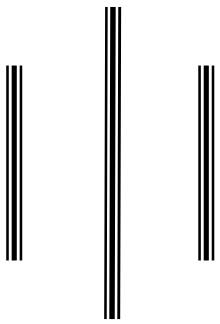
SOCIO-ECONOMIC AND DEMOGRAPHIC DETERMINANTS OF FERTIFLITY AMONG THE CHEPANG COMMUNITY

(A Case Study of Siddhi VDC of Chepang Community in Chitwan District, Nepal)



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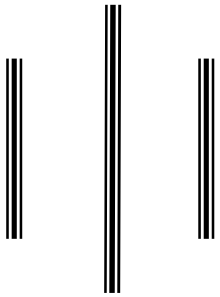

BY

Yubaraj Singh Parajuli

Tribhuvan University

Kirtipur, Kathmandu

Nepal

July, 2007

Tribhuvan University
Faculty of Humanities and Social Sciences
Central Department of Population Studies
(CDPS)
Kirtipur, Kathmandu
Nepal

Letter of Recommendation

The dissertation work entitled ***"Socio-economic and Demographic Determinants of Fertility Among the Chepang Community" (A Case Study of Siddhi VDC of Chepang Community in Chitwan District)*** has completed by **Mr. Yubaraj Singh Parajuli** under my guidance and supervision. I, therefore recommend the Dissertation Committee for the evaluation of this dissertation.

Date:- July 2007

……

Mr. Bal Krishna Mabuhang
Lecturer
Central Department of Population Studies
(CDPS)
Tribhuvan University
Kirtipur, Kathmandu

APPROVAL-SHEET

This dissertation entitled ***" Socio-economic and Demographic Determinants of Fertility Among the Chepang Community" (A Case Study of Siddhi VDC of Chepang Community in Chitwan District)*** by **Yubaraj Singh Parajuli** has been accepted as partial fulfillment of the requirements for the Master's Degree in Population Studies.

Dissertation Committee

……..
Dr. Bal Kumar K.C.
(Professor and Head)
CDPS, TU

……..
Mrs. Bidhya Shrestha
(External Examiner)

……..
Mr. Bal Krishna Mabuhang
(Supervisor)

Tribhuvan University
Kirtipur, Kathmandu
Nepal
July 2007

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ABREVIATION AND ACRONYMS

BDCS	-	Birth, Death and Contraceptive Survey
CBS	-	Central Bureau of Statistics
CDPS	-	Central Department of Population Studies
CEB	-	Children Ever Born
FP	-	Family Planning
GO	-	Governmental Organization
HH	-	Household
ICPD	-	International Conference on Population and Development
IEC	_	Information, Education and Communication
MEBDC	-	Migration, Employment, Birth, Death and Contraceptive
MOH	-	Ministry of Health
MOPE	-	Ministry of Population and Environment
NDHS	-	Nepal Demographic Health Survey
NFHS	-	Nepal Fertility and Health Survey
NGO	-	Non-governmental Organization
PP	-	Pages
SAARC	-	South Asia Association of Regional Co-operation
SPSS	-	Statistical Package for Social Sciences
TU	-	Tribhuvan University
UN	-	United Nation
UNFPA	-	United Nations Population Fund
VDA	-	Village Development Area
VDC	-	Village Development Committee

ABSTRACT

This study deals with the *" Socio-economic and Demographic Determinants of Fertility Among the Chepang Community"* (A Case Study of Siddhi VDC of The Chepang Community in Chitwan District) in Siddhi VDC of Chitwan District. The primary data as well as secondary data are collected from the study of community of Siddhi VDC. The analysis and interpretation of data is carried out by using frequency tables, cross tabulation and mean CEB with selected dependent and independent variables.

This study is based on the consideration that fertility is determined by different socio-economic and demographic variables. Only 110 respondents of Siddhi VDC area are sampled to show the relation of fertility with socio-economic and demographic variables.

The objective of this study are: to identify the socio-economic characteristics of the Chepang community, to identify the demographic variables of the Chepang community and to examine the relationship between socio-economic and demographic characteristics of the Chepang community in the study area.

Among the total sample population (697) 6 years and above, 64.8 percent of both sexes are found to be literate and remaining 35.2 percent are illiterate. Similarly, among the total population aged 10 years and above 50.8 percent people are involved in agriculture in both sexes. Similarly, 63.9 percent of the population aged 10 years and above are found unmarried followed by 31.7 percent are in married group.

The mean number of CEB of respondent is 3.38 in the Chepang community. The age of women and duration of marriage is found negatively associated with fertility. Similarly, child loss experience is positively associated with fertility. Education status, occupational status and use of contraception are found negatively associated with fertility.

CHAPTER - I

INTRODUCTION

1.1 Background

The proximate determinants of fertility are the biological and behavioural factors through which social, economic and environmental variables affect fertility. It is possible to study fertility differentials among a period of time by studying the variations in one or more of the proximate variables. (Bongaarts, 1987)

Most of the developing countries, including Nepal, have been experiencing a problem of high fertility, which contributes high population growth. Total fertility rate was high in the past. It declined from 5.6 by 1991 (CBS, 1993) to 4.1 by 2001 (CBS, 2003). Even though the fertility has been declining since last three decades, it is still very high compared to other south Asian countries. If the population continues to grow at its current rate of 2.1 percent per year, it will be doubled in about 27 years. High economic value of children, high infant mortality rate (64.4 per 1000 live birth, CBS, 2003), value of son, low socio economic status of women in the society, low age of marriage, low literacy rate are some of the significant factors contributing higher level of fertility in Nepal (Adhikari, 1994).

In Nepal, it has been observed that the high and nearly constant fertility in combination with rapidly decline mortality has resulted in rapid population growth. Fertility is determined by various economic, social, cultural demographic and other variables in societies. A large number of children are considered as a symbol of well being. In Nepalese society, the son must perform the parent's funeral rituals pyres and continue their family tradition (Pradhan, 1989).

Health, family planning and educational institutions are regulated as mediator fertility and mortality behaviour. Hence, the relationship between fertility and mortality behaviour are seen in the wider context in which main

societal factors are taken into account at both the individual and social levels, which have an impact on child survival and fertility relationship (UN, 1994).

Female education has become an important factor for determining the fertility. The national fertility and family planning survey (MOH, 1991), National fertility survey (MOH, 1996), and BDCS survey (1996) indicated that the educational status of women is much more instrumental in reducing fertility.

Nepal is characterized by a rural agrarian economy where the socio-economic value of children has been persistently high. In such community demand for more labour force encourages people to have more children to fulfill labour demands. Occupation is also determining factor of fertility. In Nepal 66 percent of the total population are engaged in agricultural activities (CBS, 2003). The highest number of women found to be engaged in agricultural job having mean CEB 3.71, the number being followed by household job having mean CEB 3.14 and the non agricultural job was prefered by less number having mean CEB 3.02 (Das; 2000: 65-74).

The higher experience of child loss increases the number of children ever born (CEB) which is cause of high fertility. The positive relationship exists between child loss and fertility. When women loose her child, she will be motivated to compensation her dead child. So, the higher child loss promotes women to reproduce more children.

Marriage usually takes place at very early ages in Nepal. One of the important determinants of fertility is age at entry into sexual union. The female mean age at marriage is reported as for 18.1 in 1991 (CBS, 1995) and 19.5 in 2001 (CBS, 2003). Age at marriage is one of the major intermediate variable affecting desired family size of currently married women in Nepal. There is positive relationship between women's age at marriage and small family size (UNFPA, 1989:29)

Fertility rate in Nepal is one of the highest in Asia. The determinants of fertility is associated with the level of income, education, child survivors,

cultural and religious factors. Family planning, in general has an important role to play in reducing marital fertility (Dahal, 1989:73).

The Chepangs are called one of the indigenous people of Nepal. They live in mainly in 5 districts (Chitwan, Makawanpur, Dhading, Gorkha and Tanahun) of Nepal. The literal meaning of Chepang is that "Che" means dog and 'Pang" means arrow. This indicates that Chepangs are good hunters. (Adhikari, 1998) For quite a long time, the Chepangs were neglected ethnic groups, however, from the government side had renamed this group as "Praja"

The study of the Chepang community of Siddhi VDC is relatively young. The median age was 17.07 while the national figure was 18.92. (CBS, 1995: 15)

The Chepangs have very poor knowledge about the modern world as well as reproductive health. They are unknown that there is a sound relationship between family planning and quality of life. They are suffering from poverty, malnutrition, high fertility and mortality. (Shrestha, 2006)

The Pande (Jhankri) plays a unique role in the social system of the Chepang community. They believe that high fertility is caused by the religious practices. (Gurung, 1998)

The population below 14 years of age was 46.03 percent. Similarly the population aged 15-64 and 65 and above were 51.33 and 2.64 respectively. The dependency ratio among the Chepang of the study area was 95.8 while the national 88.8 in 1987. (Adhikari, 1998)

1.2 Statement of the Problem

Prevailing high fertility in Nepal is the result of almost universal marriage and demand for children in economic, social and cultural beliefs. It has been observed that, Chepang's social values and norms, early marriage exists in rural societies which lengthens the span of child bearing and increase the fertility performance.

High economic value of children, high infant mortality rate, socio-economic status of women and low literacy rates are some of the sufficient

factors contributing high level of fertility in Nepal (Adhikari, 1990). Besides the persistent of high fertility in Nepal is also attributed to the lack of knowledge about and access to contraception particularly reversible method (Tuladhar, 1989).

Rapid population growth in the present day has been a worldwide problem. Fertility rate in Nepal is one of the highest in Asia. In many developing countries, high fertility is associated with the level of education, income, child survivors and cultural and religious factors. In addition family planning has an important role to play in reducing marital fertility (UNFPA, 1989: 73). Early and universal marriage prevails through out developing countries like Nepal. Even though the largely accepted age at marriage for boy and girl is 18 years and 16 years respectively. Early marriage has been practiced in Nepalese society due to different socio-cultural norms and values.

The ethnic diversity also differs the fertility rate in society. The minority group exhibits a high fertility rate in comparision to the majority group, thus it is notable that the population of ethnic group has shown considerable variation in demographic and socio-economic characteristics (Tuladhar, 1989).

Low age at marriage and low socio-economic, cultural and demographic variables affect the fertility of women. Contraceptive prevalence method is also an effective component of fertility behaviour. Due to low use and lack of knowledge about contraceptive methods, this community has been seen higher level of fertility. Infant mortality is also one of the important factor for determining fertility. So the increasing number of their children is unknowingly being over burden for them and decreasing their economic status. However, they want to overcome their poverty problem producing more children as economic assets to earn more money by working.

In the Chepang community, women are living with high fertility due to lack of awareness, education and other factors. It is observed that greater proportion of women in Chepang community know the general modern method but could not use because of traditional beliefs, child loss experiences and lack of awareness.

The traditional values, norms and socio-economic condition are the main cause for not using family planning methods or maternal health services among the Chepang communities. (Shrestha, 2006)

Slow economic process, dependence on agricultural activities, low productivity, low level of education, no life guarantee of the new born baby, superstitions lead high fertility in this society. (Gurung, 1998)

Until they do not feel that they should reduce their number of children for economical and social prosperity. So how the higher fertility performance of Chepang community could be reduced is the main local problem.

1.3 Objective of the Study

The specific objectives of this study regarding the status of Chepang women are as follows.

- To identify the socio-economic characteristics of the Chepang community.
- To identify the demographic variables of the Chepang community.
- To examine the relationship between socio-economic and demographic characteristics of the Chepang community.

1.4 Significance of the Study

Chepang nationality is that kind of ethnic group that has covered the small proportion in Nepal of their total population size. There has been number of studies about determinants of fertility conducted at national level in various ethnic group. But on the Chepang "determinants of fertility" still has not been observed. Chepangs are out of the main stream so that development outreach facilities and services because they are really isolated and ignored for several years. Almost they live under severe poverty. They need to take special consideration for their upliftment.

This study provides recent data on fertility. There has different types of socio-economic status and different level of norms and values. The identification of “determinants of fertility among Chepang community” would

assist on research gap and observe the reason for high fertility in this community. This study mainly contributes in the academic as well as policy level to address the population issues by ethnicity.

1.5 Limitation of this Study

The research study has some limitations mentioned as follows:

- The study is based on 110 eligible women of 15-49 years.
- The fertility is determined by various factors but only few variables like education, age at marriage, child loss experience, contraceptive use and occupation are examined in this study.
- The research is confined within the Chepang community of Siddhi VDC of Chitwan district. So, findings may not be generalized to national level.

1.6 Organization of the Study

This research study is organized in seven major chapters. The first chapter presents the introduction, statement of the problem, objectives of the study, significance of the study and limitation of the study. The second chapter consists of the review of the literature and conceptual framework. The third chapter deals with research methodology including selection of the study area, sample selection, questionnaire design, sources of data, data collection and data processing and presentation. The forth chapter introduces the background of the study area, background characteristics of the study population including socio-economic and demographic characteristics. The fifth chapter describes and introduces socio-economic and demographic characteristics of respondents. The sixth chapter is devoted to the analysis of fertility with help of selected socio-economic and demographic variables by frequencies, mean and cross tabulation. And finally the summary, conclusion and recommendations are presented in chapter seven.

CHAPTER - II
LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

In this chapter an attempt has been made to review the various literatures based on theoretical as well empirical studies on fertility behaviour. It helps to identify the immediate and ultimate factors explaining the changes in levels of fertility and thereby to formulate a conceptual framework in order to ascertain the determinants of fertility level in the population of interest.

2.1 Review of the Theoretical Literature

Human fertility is responsible for biological replacement and for the maintenance of the human society. Within the biological limits of human fertility several social, cultural, psychological, as well as economic and political factors are found to operate, and these are responsible for determining the levels and differentials of fertility (Bhende, et.al, 1994: pp241-242).

Kingsley Davis and Judith Blake Proposed that cultural and social factors affect fertility through eleven 'intermediate variables' positively or negatively. In an underdeveloped society like Nepal, four of the eleven variables i.e. age of entry into sexual unions, permanent celibacy, contraception and sterilization have high values (Tuladhar, 1989: pp 40-41).

"A number of social, cultural and psychological factors influence the levels of and differentials in, fertility in any society. In the study of fertility it is necessary, therefore, to understand the biological aspects of fertility as well as the effects of various societal norms and customs related to the processes involved in child bearing" (Bhende, et. al, 1994: pp 247).

Backer (1960) developed his economic theory of fertility. He explained that determinants of fertility is the result of household choice. He also mentioned that the household choice of fertility is made in the same manner as in the case of the purchase of the durable goods. An additional child depends

upon the balance of its preference, the constraints of its income and the cost of the child. If knowledge of birth control is widespreaded, fertility would be directly related to the income of the parents (Dwariya, 2005).

Esterlin (1975) developed an economic theory which incorporated the concepts used by non economic i.e. the concept of demand theory or the concept of household production. He defined the determinants of fertility through one or more of the followings:

- The demand of children, Cd; the number of surviving children parents would want if fertility regulations were castles.
- The potential output of children, Cn., the number of surviving children would have if they did not deliberately limit fertility, and
- The cost of the fertility regulation including both subjective psychic costs and objective costs, the time and money required to learn about use of specific techniques (cited in Tuladhar, 1989).

Demography transition theory states that fertility is high in poor traditional societies because of high mortality, lack of opportunities for individuals, less advancement and higher economic value of children. These all change with modernization of urban industrialism and individuals, once their view points become reoriented to the changes that have taken place, can make use of the new opportunities (Caldwell, 1977).

Ronald Freedman (1975) develops a model of sociological framework of fertility. He introduced two types of norms, i.e. norms about fertility size and about intermediate variables. These intermediate variables generally operate together with the effects of norms about intermediate variables and norms about family size. Norms about family size are influenced by varying life style related to position such as education, occupation, income, wealth power, prestige, caste etc. Social organization such as family planning programme that has a goal to reduce fertility may influence the norms about family size (cited in Tuladhar, 1989 pp: 43-44).

The framework presented by Davis and Blake in 1959 focused on the industrial mechanism in society and listed 11 intermediate variables through which any factor such as biological, social, psychological or cultural must operate upon individual fertility (cited in Tuladhar, 1989: 39).

The proximate determinants of fertility are the biological and behavioural factors through which social, economic and environmental variables affect fertility. The important feature of proximate determinant is their direct influence on fertility. The proximate determinants of fertility can be classified in two groups.

(i) Those influencing the length of the reproductive span.

(ii) Those influencing the rate of child bearing within the reproductive span.

(Bongaarts and Potter 1983: 4)

The reproductive process thus identifies the following proximate determinants.

(i) Marriage and marital disruption

(ii) Onset of permanent sterility

(iii) The duration of postpartum infecundability.

(iv) Fecundability

(v) Use and effectiveness of contraception.

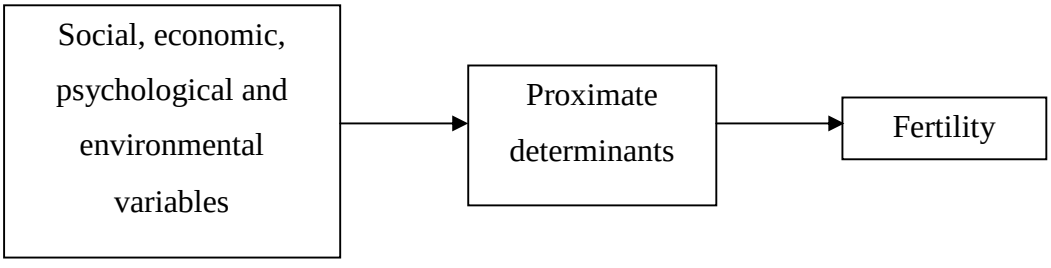
(vi) Spontaneous intra uterine mortality

(vii) Induced abortion

The first two of these factors determine the duration of the reproductive period and the later five determine the rate of child bearing (Ross, 1982: 275-276).

Ross draws a simple diagram between the relationship of some variables and fertility.

Fig. 2.1: Proximate determinant framework



Source: Ross John, 1982: 276.

Fertility is affected by some determinants such as age at marriage post-partum amenorrhoea, contraceptive use; and these proximate determinants are also affected by social economic, psychological and environmental variables.

According to Leibenstein, three types of utilities are derived from, and two types of costs are involved in, having an additional child. The type of utilities are:

(i) The utility of the child as a "consumption good."

(ii) The utility of a child as a source of security in the old age of the parents.

The two types of costs involved in having an additional child are:

(i) Directs costs in the sense of conventional current expenses of bringing up a child, according to conventional standards until the child becomes self-supporting; and

(ii) Indirect cost, which includes opportunities forgone due to the appearance of an additional child, such as the mother's inability to work, inability to purchase a television set or a motor car etc

(cited in Bende & Kanitkar, 1996).

Caldwell (1993) developed a theory, known as "Theory of intergenerational Wealth flow", explaining fertility behaviour in any type of society at any level of the development is rational. The fertility is high if children are economically useful to parents, and low if children are economically not beneficial to the parents (cited in Bhende & Kanitkar, 1996).

According to the report of MOPE, 2000, the four proximate determinates which are proposed by Bongaarts are proportion married, contraception, post partum infecundability and abortion which are assumed the main determinants to reduce fertility. “The proximate determinants of fertility are the biological and behavioural factors through which social, economic and environmental variables affect fertility” (John Bongaarts and Robert Potter, 1983).

According to Dahal (1992) the determining factors of high fertility of Nepal are high economic and social value of children, low education and social

status of women, poor health and insufficient nutritional intake, inaccessibility of quality of family planning and its unmet demand (Dahal, 1992: pp 1-15).

2.2 Empirical Literature

There are various empirical evidences obtained by different authors using different methods by examining the relation of parental fertility values and behaviour. This sub section presents the review of empirical literature related to fertility.

2.2.1 Age at Marriage and Fertility

The Nepalese society is characterized by early and nearly universal marriage. Marriage usually takes place early and by the age of 30 almost every woman is already married. In populations, where use of contraception is low, early marriage leads to longer exposure to child bearing. Therefore, early and universal marriage practice in Nepal results in long-term social and economic consequences including higher fertility (MOPE, 2004).

Marriage is one of the proximate determinant of fertility, the other three being contraception, abortion and breast feeding (Bongaarts and Potter, 1987). In Nepal, marriage is compulsory for all. It is also seen as a primary means of livelihood for women in almost all communities. On the based of age at marriage, they are grouped as high, low and intermediate status of women respectively (Benett and Acharya, 1979)

Nepal fertility and family Health Survey (1993) showed that the fertility of Nepalese women in the age of less than 13 years had 6 mean number of children ever born while the women who got married in the age of 25 years and above had 2.8 mean number of children ever born per women. (MOH, 1993). According to CBS, 1995, higher the age of marriage affects lower the number of children. Age of entry into sexual union is one of the important determinants of fertility.

According to MEBDC survey 1996, age at marriage was found one of the most important determinants of CEB. Women marrying at the age of 14 or

earlier were found giving birth to almost 3.7 children, whereas women marrying at the age 18 years and above had only 2.9 children (Acharya, 2000)

In Nepal age at marriage is found to be lower for female was 15.4 years and 19.5 years for males in 1961. It increased 19.5 years for females and 22.9 years for males in 2001. It shows that, age at marriage is increasing for both sexes in Nepal (MOPE, 2004).

2.2.2 Education and Fertility

ICPD 1994, Cairo, in its chapter eleven revealed that the education is a key element in sustainable development. It helps to reduce fertility, morbidity and mortality. Education empower the women and girls for late marriage and reduction in family size. (UN, 1994)

According to world development report, 1990, education will bring the reduction in the inequalities between sexes and uplift women's sub-jugated position in the society. The role of education has played the movement for improving women's status all over the world. Educated women have small family size proportional to the level of education whereas women's education is lowest in SAARC countries. (Word Bank, 1990: pp 44)

NFHS, 1996 showed a strong relationship between education and fertility women which at least secondary education have shown total fertility rate (TFR) of 2.5 which is less than half the rate among women with no education with TFR of 5% where as women with primary education have TFR 3.78 per women (NFHS, 1996).

It was found that husband education is one of the determining factors of fertility. In Nepalese women with no education have 3.5 children ever born; women with primary education have 2.4 children ever born and secondary education have 2.1 children ever born only. Similarly a women whose husband is illiterate has 3.6 CEB, primary education has 3.1 CEB and secondary education has 2.7 CEB only (Acharya, 2000).

Literacy levels have increased significantly in Nepal. Specially, during the last two decades male literacy has reached 65 percent in 2001 from 34 percent in 1981. Similarly female literacy rate increased from 12 percent in 1981 to 42.5 percent in 2001. The great gap of literacy between male and female was low social status of women in society, low priority for female education, restriction on their mobility outside the home and the system of early marriage. (Acharya, 2003: pp 227)

"Education is an indicator of socio-economic development, that eventually leads to explanation of direct measurement of an ideational mechanism of social change" (Subedi, 2006: pp 24).

2.2.3 Contraceptive use and fertility

Various studies in the past have shown that use of contraception has a strong negative association with fertility. It is accepted that contraceptive is the principal intermediate variables responsible for the shift of high fertility to low fertility during the nineteenth and early twenteenth century (UN, 1994).

According to Bongaarts and Potter, 1983, contraceptive use is considered as one of the most important proximate determinant of fertility. It plays important role to reduce fertility.

Contraceptives have great role to control fertility. In the context of Nepal, the accesses of contraceptives are not sufficient. There are many unseen social, economic, psychological, cultural and other variables affecting the demand for children. The persistent of high fertility in Nepal is mainly due to the lack of popular demand of family planning (Tuladhar, 1989)

In Nepal, the growth of population is 2.25 percent and total fertility rate is 4.1. The success of family planning programmes depends upon the level of currently using contraception. The conventional measure is that higher the current use of contraception, higher the strength of family planning programme effort and vice-versa (Pathak, 2003: pp129).

More than one fourth of the literate women were using contraception is age group 15 to 29 years and 42 percent in age group 25-29. It was also found

that a few literate women aged 15 years did not use contraceptives while 6.3 percent of their counter illiterate part had been used contraceptives (Acharya, 1996: pp 44).

2.2.4 Child Loss and Fertility

Infant and child loss and fertility have strong relationship. The poor level of socio-economic development is the main cause of infant and child mortality. Women with no child loss had 2.5 those with one child lose had 4.3 and those with two or more child loss had CEB 6.5. Women with higher child loss experience had higher CEB. (Acharya, 2000). The other things remaining the same, an early death of a child shortens the breast feeding which hastens the post partum ovulation resulting in short birth intervals. Such early deaths ultimately result in high fertility (Acharya, 1998: pp 40).

Adhikari (1996) observed a positive relationship between infant mortality and fertility. As the number of child loss increase the number of children ever born, is also very likely to increase irrespective of the age and marriage duration of women and sex of dead child. High infant and child mortality experience of individual and couples might affects on fertility.

Women with at least two dead children tend to produce about three more children compared to those who have not lost any child. Lower the chances of survival of children, the higher will be the level of fertility (Acharya, 1994)

2.2.5 Occupation and Fertility

UN (1987), observed that in every region women with an occupation in modern sectors of economy had the smallest number of CEB than women involved in traditional sectors of economy. While observing the fertility in case of CEB of different groups of people i.e. not working in agricultural and non-agricultural according to BDC survey, 1996, Nepal, the CEB for not working was 3.2, 3.3 for agricultural and 2.3 for non-agricultural women (Acharya, 2002: pp 29).

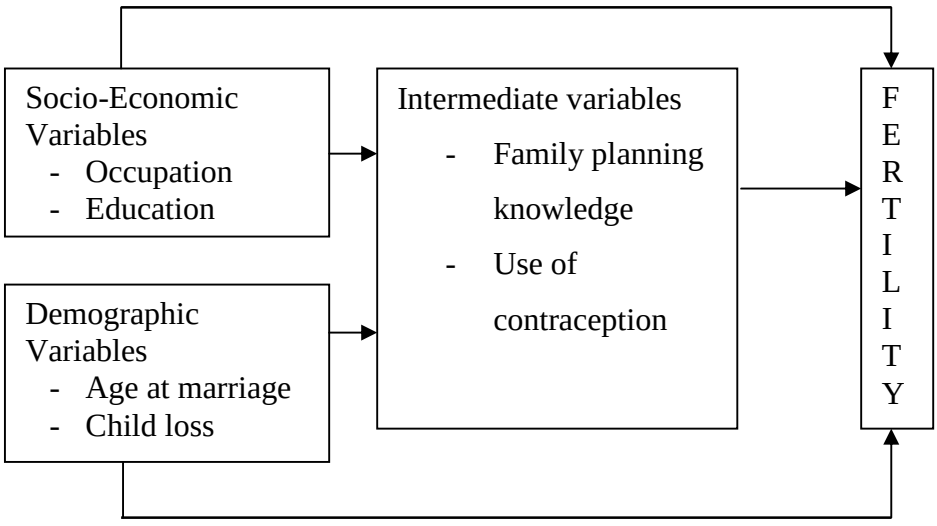
According to UN, 1973, occupation status of the husband has been seen as one of the most influencing factor on fertility. High fertility has been associated with agriculture and lower rate of fertility has been associated with professional sectors in urban and industrial countries.

According to Pradhan, 1989, the work status of husband play an important role for declining fertility level. Whose husbands were engaged in farming has higher fertility with 3.27 mean CEB than that of non-farming with 3.19 mean CEB for women (Pradhan, 1989:pp 106)

2.3 Proposed Conceptual Framework

The determinant of fertility is very complex phenomenon. On the basis of the review of the existing literature, a conceptual framework has been developed to justify. The number of CEB to a particular women in the reproductive age has been taken as dependent variables and the age at marriage, education, occupation, contraceptive use, child loss experience are used as independents variables. Hence, the use of all of them, determine the fertility or CEB.

Fig: 2.2: Proposed Conceptual Frame Work.



CHAPTER - III
METHODOLOGY

3.1 Study Area

The Chepangs are one of the indigenous people of Nepal. They are concentrated mainly in five VDC of Chitwan, Makawanpur, Dhading, Gorkha and Tanahun districts. Among them, Chitwan is one of the main district where the Chepangs are reside in. According to the population census of Nepal, 2001, there are 52,237 Chepangs through out Nepal (CBS, 2001), while it was 36,656 in 1991 census. Siddhi VDC is one of that VDC of Chitwan where the maximum Chepangs are living. It is located in eastern north part of the districts. This research work, basically attempted to focus on fertility nature of the Chepang community or ethnic group. This VDC has been purposively selected.

3.2 Sample Design

This study is primarily based on Chepang women interviewed in the month of April 2007. The sample households were equally chosen from the two wards namely Majbang and Cheurang of Siddhi VDC where the maximum Chepangs were reside in. Out of that two wards, the sample size was 110 households and 110 currently married women. The respondents were selected by using simple random sampling. The household and individual questionnaires were administered to the study population. If there were more than one eligible woman in one household, only one women would be selected by using lottery system. If the household was without belonging eligible women; was left and taken nearest of that household.

3.3 Questionnaire Design

In the field survey, the questionnaire was designed to obtain information on various aspects of fertility behaviour. In addition, the questionnaire was

prepared to collect basic demographic and socio-economic information such as age, sex, education, occupation, marital status, relationship of household member with the household head.

There are two types of questionnaire used namely household questionnaire and individual questionnaire. The household questionnaire was administered to the head of the household about household characteristics as age, sex, occupation, education etc. Individual questionnaire was asked to ever married women in reproductive age as complete age, education, age at marriage, use of contraceptives and other fertility related questions.

3.4 Data Collection

To conduct this study, information were collected by myself in study area. Because of the geographical diversity problem of local language, different social and cultural factors, local people were also used for solving these types of problem.

The data from the field were collected through primary sources. Secondary data was also used at that period. Following techniques were used for the primary data collection. To determine the determinants of fertility, household and individual questionnaires for eligible women were asked with household had and eligible women of 15-49 years.

The household survey was conducted using structured interview schedule. A structured interview schedule was used to collect some of the basic information like population structure and social and economic pattern such as age, sex, literacy status, marital status, age at marriage, occupation and other fertility related questionnaires.

3.5 Dependent and Independent variables

The number of Children Ever Born (CEB) was taken as dependent variable for this study which is one of the best indicators of fertility.

Some socio economic variables as age occupation and education status, and demographic variables as at marriage, contraceptive use and number of child loss were taken an independent variables.

3.6 Data Processing

After the collection of data preliminary editing was done at the field. The data were processed on micro-computer using debase program. Before analyzing data, entered data were edited in order to maintain consistency and accuracy.

To generate the required table, the dbase entered data were translated by using SPSS/PC program on computer. Before entering into SPSS/PC program the data were so checked. The required tables were set up with also the help of scientific calculator.

3.7 Technique of Data Analysis

The study presents data through cross tabulation, which are used to examine the relationship between dependents and independent variables. Frequency tables, graphs and mean tables are also used to describe socio-economic and demographic characteristics of the sample population.

CHAPTER - IV

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE STUDY AREA POPULATION

In order to obtain the specific objectives of the study, it is important to understand clearly the overall background situation of the population as well as respondents being considered in the study. It involves socio-economic and demographic characteristics.

4.1 Age Sex Structure

In 110 households, the total population was found to be 697. Out of that males accounted for 48.9 percent and females accounted for 51.1 percent. The age sex composition of population is the most important factor for studying fertility. The sample population of the Chepangs by age and sex structure is shown in Table 4.1.

Table 4.1: Percentage Distribution of Sample Population of the Chepang Community by Age and Sex, Siddhi VDC, Chitwan 2007

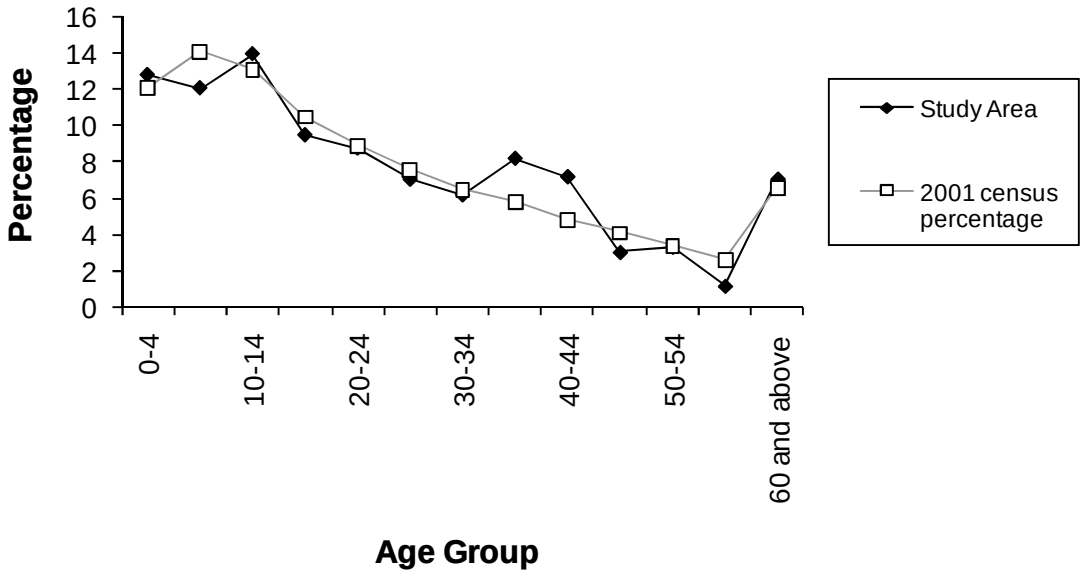
Age group	Sex				Total		*2001 census percentage
	Male		Female				
	No.	%	No.	%	No.	%	
0-4	39	11.44	50	14.07	89	12.77	12.1
5-9	38	11.14	46	12.92	84	12.05	14.1
10-14	49	14.37	48	13.48	97	13.92	13.1
15-19	32	9.38	34	9.55	66	9.47	10.5
20-24	23	6.74	38	10.67	61	8.75	8.9
25-29	24	7.04	25	7.02	49	7.03	7.6
30-34	26	7.62	17	4.78	43	6.17	6.5
35-39	26	7.62	31	8.71	57	8.18	5.8
40-44	29	8.50	21	5.90	50	7.17	4.8
45-49	10	2.93	11	30.9	21	3.01	4.1
50-54	13	3.81	10	2.81	23	3.30	3.4
55-59	5	1.47	3	0.84	8	1.15	2.6
60 and above	27	7.92	22	6.18	49	7.03	6.59
Total	341	100.00	365	100.00	697	100.00	100.00

*Source: Field Survey, 2007and *CBS, 2003.*

The percentage of total population is found the highest (13.92 %) in the age group 10-14 followed by 12.77 percent in the age group 0-4 years. The lowest percentage of population 1.15 are observed in the age group 55-59 years. This indicates that there exists higher proportion of population in the lower age group resulting higher fertility and lower proportion of population in the old age show the low life expectancy at birth.

The percentage of male population is the highest in the age group 10-14 and lowest in the age group 55-59 years representing 14.37 and 1.47 percent respectively. Likewise, the percentage of female population is the highest in the age group 0-4 and lowest in the age group 55-59 years representing 14.07 and 0.84 percent respectively of the total population in the study area. Any age groups are not found similar to national figure 2001.

Figure 4.1: Distribution of Study Population by Age and Sex, 2007



4.2 Sex Ratio

Sex ratio indicates that the number of males per hundred females. 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 of female in a population.

Table 4.2: Percentage Distribution of Study Population by Age Group and Sex Ratio, 2007

Age Group	Sex Ratio (Study Area)	Sex Ratio (Census 2001)
0-4	78.0	105.8
5-9	82.61	103.5
10-14	102.08	102.5
15-19	94.12	96.4
20-24	60.53	91.8
25-29	96.0	90.9
30-34	152.94	94.6
35-39	83.87	98.2
40-44	138.10	100.0
45-49	90.91	102.7
50-54	130.0	105.8
55-59	166.67	106.5
60 and above	122.73	103.1
Total	95.79	99.8

Source: Field Survey, 2007 and CBS 2001.

Table 4.2 represents the sex ratio of the Chepang community in Siddhi VDC of Chitwan district. It was found to be 95.79 which is relatively lower than national level. The highest sex ratio lies in the age group 55-59 and lowest for the age group 20-24 years 166.67 and 60.53 respectively. Sex ratio of different age groups of the study area are not found similar to the national figure 2001.

4.3 Dependency Ratio

The number of dependents is computed on the basis of three board age groups below 15 years, between 15-59 years and 60 years and above. The age group 15-59 years is considered as the working population. Population below 15 years and population 60 years and above are considered young dependents and old dependents. The ratio of the young dependents to working age population (15-59) multiplied by 100 gives the young dependency ratio and the ratio of the old dependents to working age population multiplied by 100 gives old dependency ratio. The sum of these two ratios give the total dependency ratio.

Table 4.3: Percentage Distribution of Dependency Ratio for Study Population and Census 2001 of Nepal, 2007

	Dependency Ratio	
	Field Survey 2007	Census 2001
Child dependency ratio (0-14)	71.43	71.92
Old dependency ratio (60 and above)	12.96	11.09
Total	84.39	83.00

Source: Field Survey, 2007

Table 4.3 indicates the young dependency ratio is slightly lower and old dependency ratio is slightly higher than 2001 census. In the study population the young dependency ratio and old dependency ratio are 71.43 and 12.96 respectively.

4.4 Marital Status of the Study Area Population

The marriage is the primary events in process of family formation. The marital status of the study area population of aged 10 years and above shown in table 4.4.

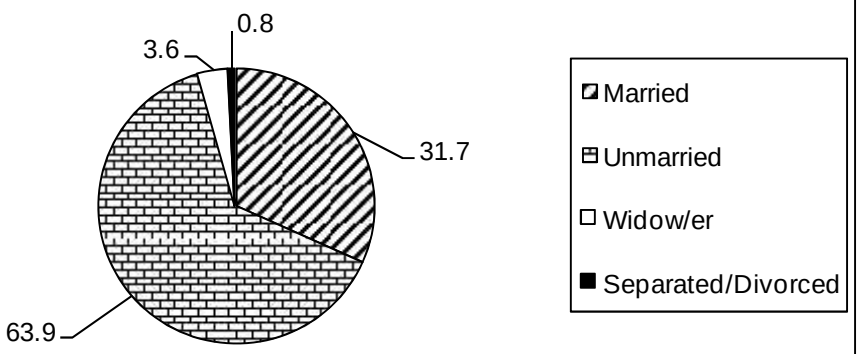
Table 4.4: Percentage Distribution of Marital Status of the Study Area Population by Aged 10 Years and Above, 2007

Marital Status	Number	Percentage
Married	166	31.7
Unmarried	366	63.9
Widow/er	19	3.6
Separated/Divorced	4	0.8
Total	524	100.00

Source: Field Survey, 2007.

Table 4.4 presents the marital status of the study population of aged 10 years and above. Among the total population (524), 63.9 percent are unmarried and 31.7 percent are currently married. The remaining population of study population (4.4 %) are widow/er and separated/divorced.

Figure 4.2: Percentage Distribution of Study Area Aged 10 Years and Above by Marital Status



4.5 Occupational Status

Occupational status is one of the important determinant of fertility and contraceptive behaviour. It refers to any works which are for the condition of their life. The questions about the occupation were asked to the population who were at the age of ten years and above.

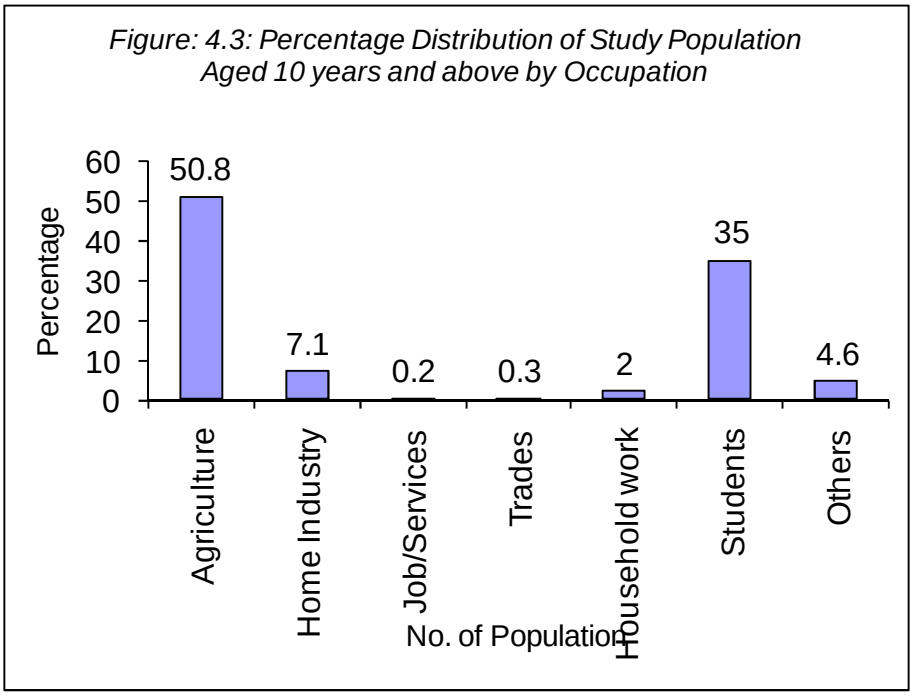
Table 4.5: Percentage Distribution of Study Population Aged 6 Years and Above by Occupation, 2007

Occupation	Number	Percent
Agriculture	309	50.8
Home Industry	43	7.1
Job/Services	1	0.2
Trades	2	0.3
Household work	12	2.0
Students	213	35.0
Others (Fishing, Selling)	28	4.6
Total	608	100.00

Source: Field Survey, 2007.

Table 4.5 shows 50.8 percent of Chepang women are engaged in agriculture sector. About 7 percent people have their occupation as home industry. Students have taken place 35 percent of the total population. The lowest percentages of people in the study area are engaged in job services and trades. Fishing and selling in local production (basket, honey, herbs etc.) are related with others.

Figure: 4.3: Percentage Distribution of Study Population Aged 10 years and above by Occupation



4.6 Family Size Status of the Household

The family indicates the socio-economic and demographic status of the household. The percentage distribution of total population by family size is presented in Table 4.6.

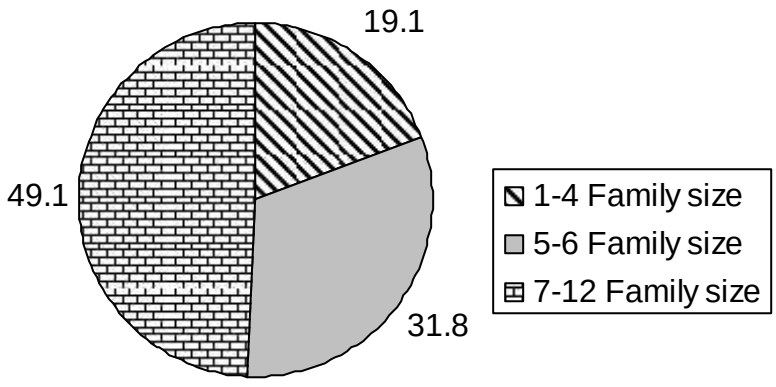
Table 4.6 Percentage Distribution of Total Population by Family Size, 2007

Family size	Number	Percentage
1-4	21	19.1
5-6	35	31.8
7-12	54	49.1
Total	110	100.00

Source: Field Survey, 2007

Table 4.6 shows that about 49 percent have 7 to 12 family size followed by 31.8 percent have 5 to 6 family size. It also shows that only 19.1 percent of the respondents have family size of 1 to 4. Average household size is found 6.3 in the study area. Larger family size is found in the study area.

Figure 4.4: Percentage Distribution of Study Population by Family Size



4.7 Educational Status of the Study Area

Education is one of the most important variables which plays a vital role in 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 age six year and above is given below. (Table 4.7)

Table 4.7 Percentage Distribution of the study population Aged 6 years and above by Literacy, 2007

Educational Status	Number	Percent	Census 2001
Illiterate	214	35.2	55.9
Literate	394	64.8	54.1
Total	608	100.0	100.0
School Attainment level of Literacy Group			
Non-Formal	74	18.8	
Primary	258	65.5	
Lower Secondary	55	14.0	
Secondary	7	1.8	
Total	394	100.00	

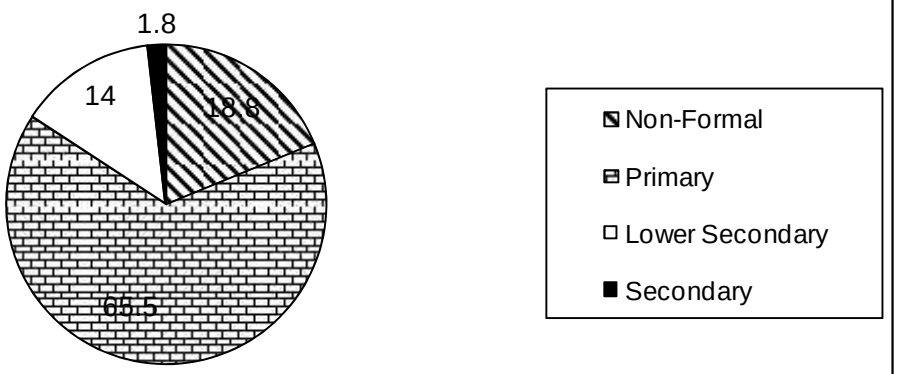
Source: Field Survey, 2007

Table 4.7 shows study population with 35.2 percent illiterate against 64.8 percent literate. The overall literacy rate in the study area is higher than the corresponding national figure because of the increasing awareness. Non-

formal sector has played greater role to be literate. There is much difference in the enrollment under primary and above primary level.

Among literate study population, primary level education accounts for 64.5 percent, followed by Non-formal education 18.8 percent. Similarly 14.0 percent population have lower secondary level and only 1.8 percent population are seen secondary level in the study area.

Figure 4.5: Percentage Distribution of the Study Population Aged 5 years and above by School Affainment Level of Literacy Group



4.8 Religion Status of the Study Area

After the restoration of democracy in 1990, the issue of religion has become a sensitive topic in ethnical group. The religion and social norms also play a role to determine the fertility. The study area population has to be found most of them are Christian. Their mother tongue is found 'Chepang'. The percentage distribution of total population by religion is given in Table 4.8.

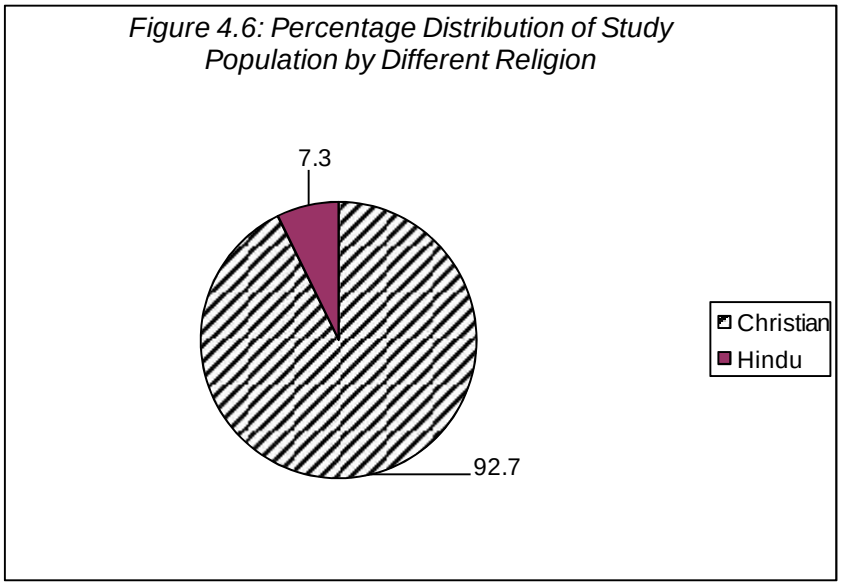
Table 4.8 Percentage Distribution of the Study Population by Different Religion, 2007

Religion	Number	Percent
Christian	102	92.7
Hindu	8	7.3
Total	110	100.00

Source: Field Survey, 2007

Table 4.8 shows that out of 110 households, 102 households (92.7%) are Christians. A few numbers, only 8 households (7.3%) are Hindus. It is observed that, Christian religion has been grown up by their attraction of philosophy in this study area.

Figure 4.6: Percentage Distribution of Study Population by Different Religion



4.9 Land Holding of Households

Land holding status also indicates the socio-economic status of the households. 50.8 percent population are engaged in agriculture (Table 4.5). 48.2 percent households have less than 5 Kattha followed by 22.7 percent have 6-10 Kattha. Similarly 11.8 percent households have 11-15 Kattha, 8.2 percent

have 16-20 Kattha, 2.7 percent have 21-25 Kattha, 2.7 percent have 26-30 and 3.6 percent households have above than 30 Kattha. It is shown in the Table number 4.9

Table 4.9 Percentage Distribution of HH of the study Area Population by Land Ownership, 2007

Land	Number	Percentage
Less than 5 Kattha	53	48.2
6 – 10 Kattha	25	22.7
11 – 15 Kattha	13	11.8
16 – 20 Kattha	9	8.2
21 – 25 Kattha	3	2.7
26 – 30 Kattha	3	2.7
Above than 30 Kattha	4	3.6
Total	110	100.00

Source: Field Survey, 2007

4.10 Housing Characteristics

The socio- economic characteristics of household is determined by various factors like availability of electricity, radio, television, source of drinking water, roof material etc.

Table 4.10: Percentage Distribution of HH by Their Housing Characteristics in Study Area, 2007

Characteristics	Number	Percent
Facility of Latrine		
Yes	55	50.0
No	55	50.0
Total	110	100.00
Source of Drinking Water		
Hand Pump	108	98.2
Pond/River	2	1.8
Piped water	-	-
Facility of Electricity		
Yes	2	1.8
No	108	98.2
Radio (Television was not found)		
Yes	72	65.5
No	38	34.5
Roof Materials		
Tin	3	2.7
Tile	60	54.5
Hay/Grass	47	42.7
Types of House		
Mud/stone	53	48.6
Bamboo/grass	37	33.6
Others	20	18.2

Source: Field Survey, 2007

Table 4.10 presents the distribution of households by different characteristics. Half of the household (50%) have own toilet. Among 110 household of Chepang community, 108 HH (98.2 %) use hand pump for drinking water and only two household (1.8 %) use other resources (river or pond) for drinking water. In the study area, 108 household or 98.2 percent

population have not electricity facility. Only 72 (65.6 %) household have radio and 38 (34.5 %) household have not radio. In this study area only 3 household or 2.7 percent household use tin, 47 (42.7 %) HH use hay and 60 (54.5 %) HH use tile as roof materials. Only 48.2 percent of houses are made by mud/stone whereas 33.6 percent houses are made by bamboo/grass and 18.2 percent houses are made by others.

CHAPTER - V

SOCIO ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

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

5.1 Age Distribution of Respondents

Age of women is one of the demographic factors which affect the fertility directly. The level of fertility is increased with the increment of age of women. Table 5.1 shows the respondent's age classified by five years age group.

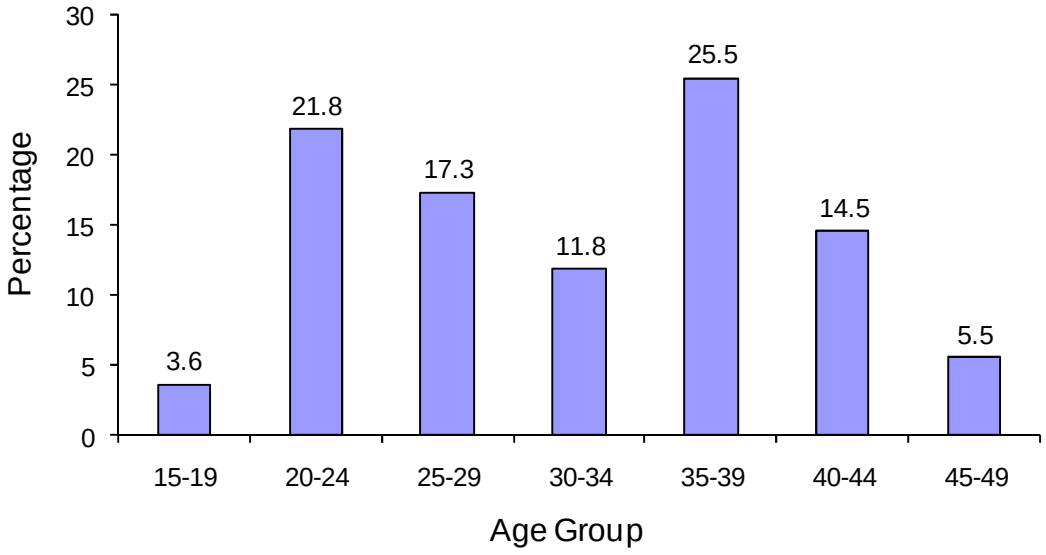
Table 5.1 Percentage Distribution of Respondent Women (15-49 years) and NDHS, 2001 by Five Year Age Groups

Age group	Number of respondent	Percent	NDHS, 2001
15-19	4	3.6	10.8
20-24	24	21.8	19.0
25-29	19	17.3	19.1
30-34	13	11.8	16.4
35-39	28	25.5	13.4
40-44	16	14.5	11.8
45-49	6	5.5	9.8
Total	110	100.00	100.00

Source: Field Survey, 2007 and NDHS, 2001

Data shows that maximum number of women 25.5 percent are found in 35-39 age groups in comparing to 16.4 percent according to NDHS, 2001. It is followed by age group 20-24 years (21.8 %) and 25-29 age groups with 17.3 percent. Lowest numbers of women are in 15-19 and 45-49 age group which are 3.6 percent and 5.5 percent respectively of the total population. The percentage of respondents in every age groups are found different than national figures (NDHS, 2001).

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



5.2 Respondent Women by Age at Marriage

Fertility is affected by many factors. The age at marriage is found most influencing factor in relation to fertility. 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.

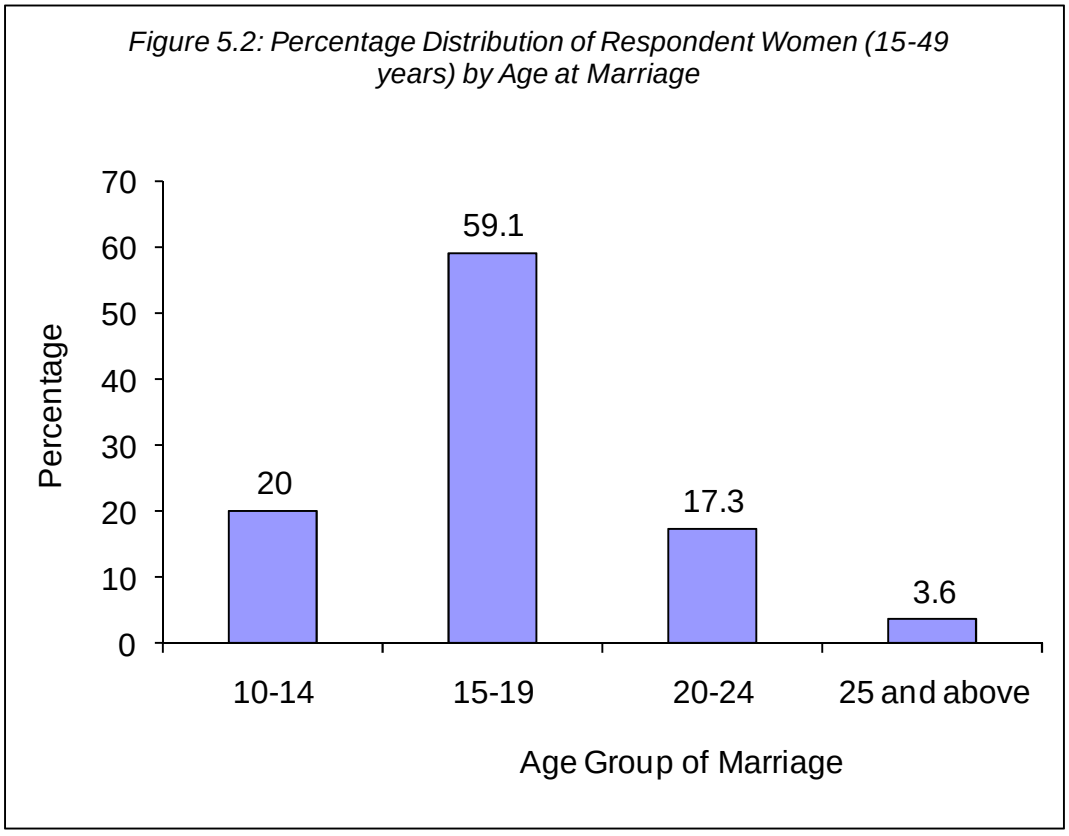
Table 5.2: Percentage Distribution of Respondent Women (15-49 years) by Age at Marriage

Age at Marriage	Number of Respondent	Percent
10-14	22	20
15-19	65	59.1
20-24	19	17.3
25 and above	4	3.6
Total	110	100.00

Source: Field Survey, 2007

The above table shows that 59.1 percent women got married between the age group 15-19 years followed by 20.0 percent who got married between the age group 10-14 years. Similarly, 17.3 percent got married between the age group 20-24 years. Only 3.6 percent got married in the age group 25 and above.

Figure 5.2: Percentage Distribution of Respondent Women (15-49 years) by Age at Marriage



5.3 Knowledge and Use of Family Planning (FP) Methods

Knowledge of Family Planning method is an essential factor in promoting Family Planning Services. The prevalence of Family Planning method is associated negatively with fertility. Temporary family planning methods are used for birth spacing. On the other hand permanent family planning methods are used to control the fertility. If the couples want to have no more children they want to stop their child bearing by the use of contraceptives.

Table 5.3: Percentage Distribution of Respondent Women (15-49 years) by Knowledge and Use of Family Planning Methods

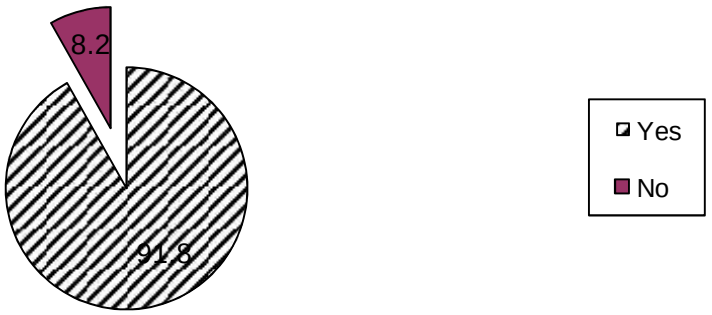
Heard of Method	Number of Respondents	Percent
Yes	101	91.8
No	9	8.2
Total	110	100.00
Type of Method		
Male Sterilization	69	68.3
Female Sterilization	54	53.5
Condom	44	43.6
Pills/Oral Tab	13	12.9
IUD	6	5.9
Depo-Provera	36	35.6
Norplant	65	64.4
Foam Tabs	2	2.0
Total	101	100.00

Source: Field Survey, 2007

(based on multiple response)

Table 5.3 shows that 91.8 percent women have heard about the family planning methods. Out of the total population (101), 68 percent have known about male sterilization followed by Norplant (64.4 %) and female sterilization (53.5 %). Only 2 percent of women are known about foam tablets. Majority of women have known more than 5 types of contraceptive methods.

Figure 5.3: Percentage Distribution of Respondent Women (15-49 years) by Knowledge of Family Planning Method



5.4 Educational Status

Education status is one of the most important factors for determining fertility level. So, 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 method and do not give preference for son. Education always associates negatively to fertility and positively to contraceptive practices. Thus, it is important to assess the educational level of the population to be studied.

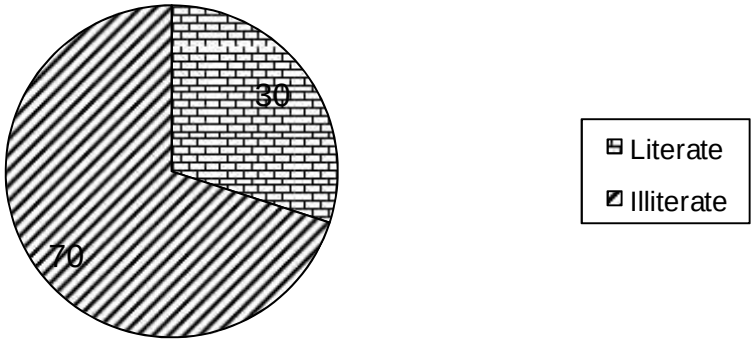
Table 5.4: Distribution of Respondent Women (15-49 years) by Literacy and Level of Education

Education Status	Number	Percent
Literate	33	30
Illiterate	77	70
Total	110	100.00
Level of Education		
Non-formal education	19	57.6
Primary	10	30.3
Lower Secondary	4	12.1
Total	33	100.00
Reason for not going to school		
Lack of awareness	30	33.1
Economic causes	44	52
Far School	9	9.4
Lack of School	8	8.3
Getting married at low age	5	4.5
Total	96	100.00

Source: Field Survey, 2007

Table 5.4 shows the educational status of the respondents. Out of 110 women with age 15-49 years, 70 percent respondents are found illiterate and 30 percent are literate. In the study area majority of the respondents (77) are found unable to read and write. Among the literate respondents 57.5 percent women have attained in non-formal education followed by 30.3 percent women have attended in primary level education. Only 12.1 percent women have attended in lower secondary level education. No one respondents of the study area have attended in secondary level and above. The main reason for not going to school (96 respondents) is shown by the lack of awareness (33.1 %) and economic causes (52 %) in the study area. Similarly, far school (9.4 %), Lack of school (8.3 %) and low age at marriage (4.5 %) are other causes for not going school. Majority of the respondents (57.6 %) are gained with non formal education.

Figure 5.4: Percentage Distribution of Respondent Women (15-49 years) by Literacy



5.5 Occupational status of Respondents

Occupational status is another determinant of fertility. It has also very close relation with fertility. Thus, it is necessary to know the distribution of occupational status of eligible women. Occupational status of Chepang Community is given in Table 5.5.

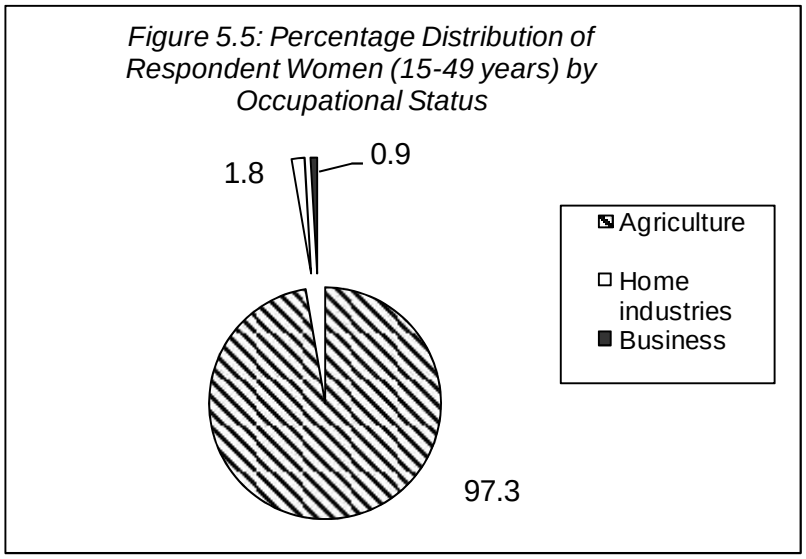
Table 5.5: Percentage Distribution of Respondent Women (15-49 years) by Occupational Status and Working Place

Occupational Status	Number	Percent
Agriculture	107	97.3
Home industries	2	1.8
Business	1	0.9
Total	110	100.00
Working Place		
Inside Home	109	99.1
Outside Home	1	0.9
Total	110	100.00

Source: Field Survey, 2007

Table 5.5 shows the occupation status of the respondents in the study area. Out of the total eligible women 97.3 percent respondents are employed in agricultural work representing highest percent. 1.8 percent respondents are engaged in home industries and only 0.9 percent (1) respondent is engaged in business. In the study area, 109 (99.1 %) respondents work inside the home and only 1 (0.9 %) respondent works outside the home. Different religious and cultural norms and values have observed to play great role for working women inside home.

Figure 5.5: Percentage Distribution of Respondent Women (15-49 years) by Occupational Status



5.6 Respondent Women by Children Ever Born

Number of children ever born (CEB) shows the measure of fertility which play vital role to increase population in the world. The number of children ever born of study area is presented below (Table 5.6)

Table 5.6: Percentage Distribution of Respondent women (15-49 years) by Number of CEB

Number of CEB	Number	Percent
1	8	7.9
2	25	24.8
3	24	33.8
4	8	7.9
5	23	22.8
6	3	3.0
7	5	5.0
8	3	3.0
9	2	2.0
Total	101	100.00

Source: Field Survey, 2007

Table 5.6 shows that 33.8 percent have 3 number of CEB followed by 24.8 percent have 2 number of CEB. Likewise, 24.8 have 2 number of CEB, 22.8 percent have 5 and 7.9 percent have 1 number of CEB respectively. Similarly 91.8 percent of respondents give births to any children against 8.2 percent (not shown in table) do not give birth to any children.

CHAPTER - VI

DETERMINANTS OF FERTILITY BY SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES

Number of children ever born (CEB) to women in reproductive ages is one of the important indicator for fertility. It is measured in terms of mean so that it could be compared between various characteristics of the Chepang women being studied. This chapter describes the interrelation between socio-economic and demographic variables and fertility to define the determinants of fertility among the Chepang community.

6.1 Age pattern of Women Respondent and Mean number of Children Ever Born (CEB)

The number of child ever born varies by age of women. Higher mean children ever born are expected with the increasing age of mother. Mean CEB by current age of women of reproductive ages 15-49 is presented in Table 6.1

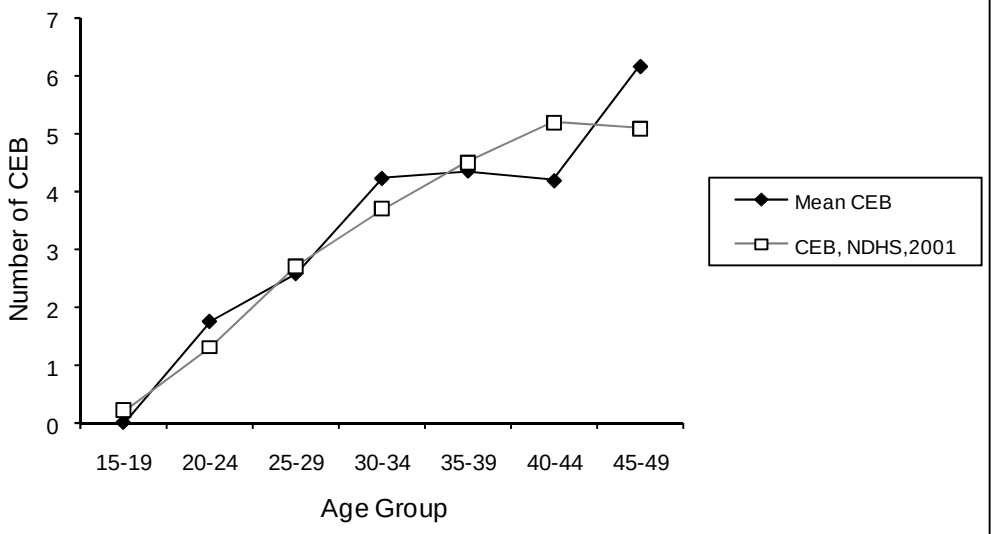
Table 6.1: Mean CEB by Currently Married Women Aged 15-49, in the Study Area, 2007.

Age group	No. of Women	Mean CEB	CEB, NDHS,2001
15-19	4	0.00	0.2
20-24	24	1.75	1.3
25-29	19	2.58	2.7
30-34	13	4.23	3.7
35-39	28	4.36	4.5
40-44	16	4.19	5.2
45-49	6	6.17	5.1
Total	110	3.38	2.7

Source: Field Survey 2007 and NDHS 2001

The overall mean number of children ever born (CEB) was found to be 3.38. This means that currently married women in the study area of Chepang community tended to give birth 3.38, which is higher compared to the national average 2.7 (NDHS2001). It may be due to the lower level of education, lower living standard, less use of Family planning methods and not exposure outside the household mainly in higher occupational status. There is a large variation in mean CEB with the increase in the age of mother. The highest CEB is 6.17 in age group 45-49 and the lowest CEB is 1.75 in age group 20-24 years. There is no CEB in age group 15-19 years.

Figure 6.1: Mean CEB by Currently Married Women Aged 15-49 years with NDHS 2001



6.2 Mean CEB and Age at Marriage

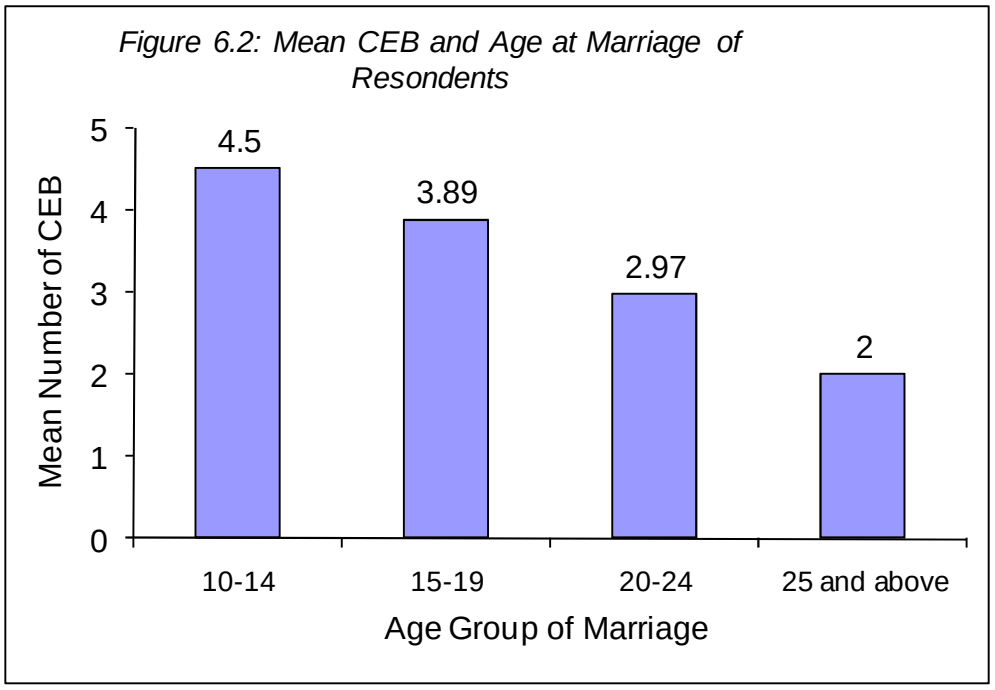
Generally, low age at marriage follows high mean CEB. Age at marriage plays a vital role in affecting fertility. Higher age at marriage is associated negatively with the mean number of CEB among the women. Lower ate at marriage is associated positively with the mean number of CEB among the women.

Table 6.2: Mean CEB by Age at Marriage of the Respondents in the Study Area

Age at Marriage	Number of Women	Mean CEB
10-14	22	4.50
15-19	65	3.89
20-24	19	2.97
25 and above	4	2.0
Total	110	3.38

Source: Field Survey, 2007

Table 6.2 shows that the mean number of children ever born by age at marriage. It shows that higher the age at marriage lower the mean number of CEB. The highest mean number of CEB 4.5 is observed for women who got married between 10-14 years age group followed by 10-15 years (3.89) and 20-24 years (2.97) age group. The children ever born 2.0 is observed for women who got married at age 25 years and above.



6.3 Mean CEB and Education of the Respondents

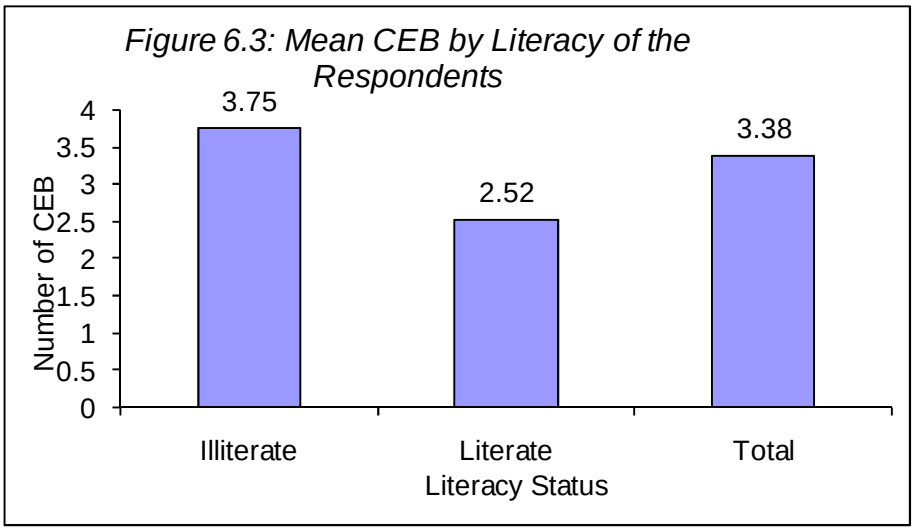
Education of women is one of the most important determinants of fertility and negatively associates with fertility i.e. higher the education lower the fertility and vice-versa. Education directly or indirectly affects fertility. In general, literate women are found more conscious about their family size, have more knowledge about using contraceptives. Women's education is taken as a key factor for reducing fertility.

Table 6.3: Mean CEB and Education of the Respondents Aged 15-49 years

Literacy Status	Number of women	Mean CEB
Illiterate	77	3.75
Literate	33	2.52
Non-formal education	19	2.95
Primary	10	2.00
Lower Secondary	4	1.75
Total	110	3.38

Source: Field Survey, 2007

Table 6.3 shows that CEB of illiterate women is higher than literate women. Literate women have 2.52 mean number of CEB whereas illiterate women have 3.75 mean number of CEB. This study also shows that lower the educational level higher the fertility. The mean number of CEB with primary level education is 2.0 and lower secondary level is 1.75 respectively.



6.4 Mean CEB and occupation of the Respondents

Occupational status of women has also an explanatory power in determining fertility. Women involving in modern occupation maintain better life helps to raise their income and education, thus helps to reducing fertility. It means that the person having higher occupational status have a lower number of CEB and vice-versa. Occupation of women differs from one to another due to various social and economic reasons. The result of this study is presented below.

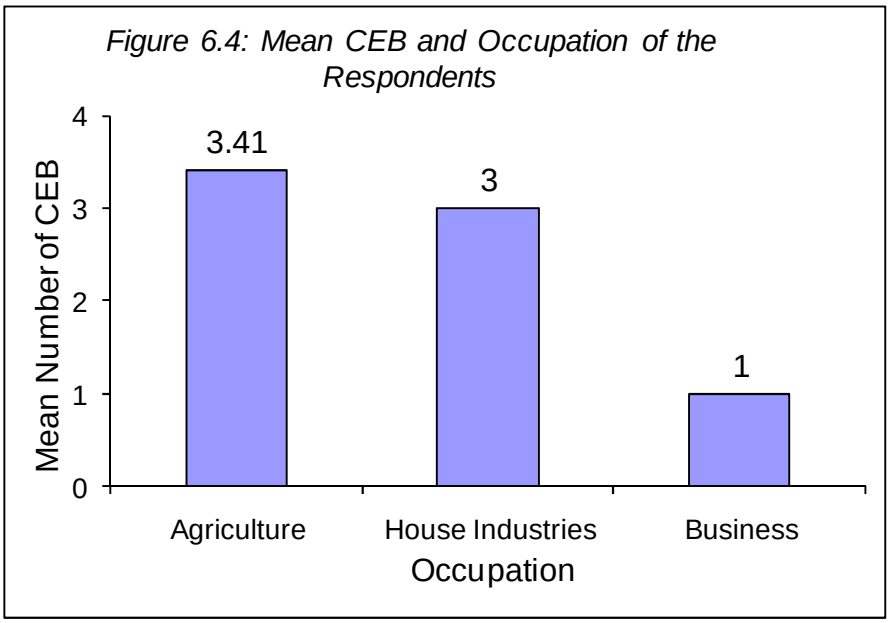
Table 6.4: Mean CEB and Occupation of the Respondents Aged 15-49 years

Occupation	Number	Percentage	Mean CEB
Agriculture	107	97.3	3.41
House Industries	2	1.8	3.00
Business	1	0.9	1.00
Total	110	100.00	3.38

Source: Field Survey, 2007

Table 6.4 shows the occupational status of the respondents by CEB. The higher mean children ever born 3.41 is observed in agriculture field followed by house industries whose mean CEB is 3.0. The lowest mean children ever born 1.0 is observed among the women who are engaged in business.

Figure 6.4: Mean CEB and Occupation of the Respondents



6.5 Mean CEB and Use of Contraceptive Method

Use of contraceptive method is the most important method for deceasing fertility. Use of contraceptive method is inversely related to the fertility. Use of contraceptive by the couple of reproductive age helps to plan a family according to their desire. By the means of birth control methods, couple plan a family in such a way in which child gets maximum benefit from the parents and vice-versa. So birth control methods help couples to achieve their desire family size by preventing unwanted birth. It is expected that there is a negative relationship between fertility and the use of contraceptive methods.

Table 6.5: Mean CEB by Ever Used and Currently Use of Contraceptive Method of Respondents Aged (15-49 years). 2007

Ever Used of Contraceptive method	Mean CEB	Number
No	3.93	60
Yes	2.97	41
Total	3.36	101
Currently using family planning method		
No	4.18	7
Yes	2.71	34
Total	3.93	41

Source: Field Survey, 2007

Table 6.5 shows that 41 number of respondents have ever used the contraceptive methods whose mean CEB is 2.97 and remaining respondents did not ever used the contraceptive methods whose mean CEB is 3.93 out of the total respondents. There is different mean CEB between users and non-users of contraception due to the lack of educational and socio-cultural factors in the past.

Similarly table 6.5 gives other information about respondents who are using contraceptive methods currently. The mean CEB is low (2.71 %) who are

using contraceptive methods and high (4.18 %) who are not using contraceptive methods.

6.6 Mean CEB by Child Loss of Women

There is positive relationship between Child loss and Fertility because when women losses her child, she will be motivated to replace her dead child. In this way higher child loss promotes women more children. So that it is hypothesized that there is positive relationship between child mortality and fertility.

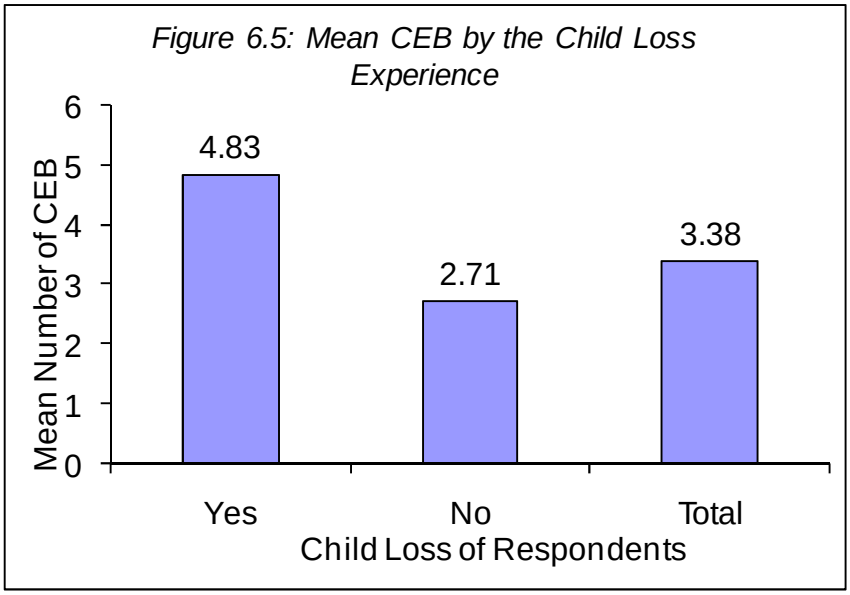
Table 6.6: Mean CEB by the Child Loss of Respondents, Aged 15-49 years.

Child loss of the respondents	Mean CEB	Number
Yes	4.83	35
No	2.71	75
Total	3.38	110

Source: Field Survey, 2007

The mean CEB is found to be 2.71 for those who have not experienced child loss and 4.83 for those who have experienced child loss.

There was too large variation in mean CEB according to the women who have experienced child loss and who did not in the study area. The value shows as the experience of child loss increases, then the fertility also increases.



CHAPTER - VII

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter attempts to summarize the whole study condition and recommendations for the future plans and programs.

7.1 Summary

This study has analyzed socio-economic and demographic determinants of fertility. Data were collected from the field survey conducted in the month of April 2007. The sample survey was conducted in 2 wards out of nine wards of Siddhi VDC where maximum Chepangs were settled. Siddhi VDC lies eastern part of the hill areas of Chitwan District. In the study, out of 201 households 110 households of the Chepang Community were selected by systematic Random sampling technique. To determine the determinants of fertility, households and individual questionnaires for eligible women were asked with household heads and eligible women of 15-49 years.

After the field survey, Frequency and Mean CEB tables were presented to describe socio-economic and demographic factors influencing on fertility. Age of women, contraceptive use, child loss experience, age at marriage, education of women and occupation of women were taken as independent variables and Mean CEB was taken as dependent variable.

The major findings of the study are summarized as follows:

- Among 110 households, there are 697 persons; out of them 48.9 percent are male and 51.1 percent are females. (Table : 4.1)
- The sex ratio of the Chepang community is found to be 95.79 which is less than national figure according to 2001 census. (Table : 4.2)
- The young, old and total dependency ratios are 71.43, 12.96 and 84.39 respectively. (Table : 4.3)

- Out of the total population aged six years and above, 64.8 percent are literate and 35.2 percent are illiterate. (Table : 4.7)
- Out of the total population, aged six years and above 50.8 percent are engaged in agriculture sector followed by 35 percent students, 7.1 percent are in Home industries, 2 percent are in household works, 0.3 percent are in trades, 0.2 percent are in Job (services) and 4.6 percent are in others. (Table : 4.5)
- Out of the total population, aged 10 years and above 31.7 percent are married, 63.9 percent are unmarried, 3.6 percent are widow/er and 0.8 percent are separated/divorced. (Table : 4.4)
- Out of the 110 households, about 49 percent have 7 to 12 family size followed by 31.8 percent have 5 to 6 family size and 19.1 percent have 1 to 4 family size. Average household size is found 6.3. (Table : 4.6)
- Out of 110 household, 92.7 percent are Christians and 7.3 percent are Hindus. Table (4.8)
- Among the household, 48.2 percent households have less than 5 Kattha, 22.7 percent have 6-10 Kattha, 11.8 percent have 11-15 Kattha, 8.2 percent have 16-20 Kattha, and remaining have above 20 Kattha. (Table : 4.9)
- Out of the 110 respondents, 97.3 percent are engaged in agriculture sector while 1.8 percent are engaged in home industries and 0.9 percent are in business sectors. (Table : 5.5)
- Out of the 110 respondents, 30 percent are literate and 70 percent are illiterate. (Table : 5.4)
- Among the 110 respondents, 91.8 percent have the knowledge of Family Planning and 8.2 percent have no knowledge about family planning.
- Among the respondents, 79.1 percent women are married between the age group 10-19 years. (Table : 5.2)

- Out of 110 respondents, 33.8 percent have 3 CEB, 24.8 percent have 2 CEB and 22.8 percent have 5 CEB. (Table : 5.6)
- The mean CEB of 6.17 is highest for women whose age group is 45-49 years at the time of field survey. Similarly the mean CEB of 1.75 is found in the age group 20-24 years. (Table : 6.1)
- The mean CEB is higher with illiterate respondents than that of literate respondents. In the study area, illiterate respondents have 3.75 CEB and literate have 2.52 CEB.
- The mean CEB is found highest (3.41) for women who are engaged in agriculture and lowest (1.0) for women who are engaged in business. (Table 6.4)
- The highest CEB 3.93 is found for those respondents who were non-users of contraception and the lowest CEB 2.97 is found for those who were users of contraception. (Table : 6.5)
- The highest mean number of CEB 4.5 is observed for women who were married between 10-14 years age group and lowest CEB 2.0 is found for women who were married at age 25 years and above.
- The mean CEB is found 2.71 for those who have not experienced child loss and 4.83 for those who have experienced child loss.

7.2 Conclusions:

People of different ethnic backgrounds with their own traditional values including their reproductive behaviour vary between different groups or within a ethnic group. This variation is not due to ethnic differences but due to differences in socio-economic status. The fertility levels in the study area when measured in terms of CEB is 3.38 which is considered higher than national level. It may also be noted that some of the socio-economic variables are likely to be the most fundamental factors for the high level of fertility.

Concluded themes of the study are: -

- The education level of women play an important role in decreasing the mean number of CEB.
- The longer duration of marriage is seen a significant role in increasing the number of CEB.
- Fertility level tends to decrease with increasing contraceptive practice. It can be concluded that fertility level can be reduced through increasing the knowledge of contraception by providing information, education and communication.
- The level of occupation plays an important role to reduce fertility. Thus it can be concluded that a sift of occupation of respondents from agriculture to non-agriculture sector is effective to reduce fertility.
- If the women loose her child, she will be motivated to replace her dead child. So, high child loss promotes women to reproduce more children. This study shows positive relationship between child loss and CEB.

7.3 Recommendations

7.3.1 Policy Implication

- To reduce the fertility informal education and family planning related awareness creation programs should be given for married women.
- The study is dominated by agriculture. More people are engaged in low productive sector. So government should be transferred people from agriculture to productive sector by the creation of more self dependent programs.
- Government should be encouraged people to have small family size such as policy of taxation, prize system, credit system, job opportunity etc.

- Local authorities should be properly instructed to plan, implement, monitor and supervise in population related programs.
- There should be strong integration between government, GOs, NGOs and other social organization in terms of planning and implementation of any programs.
- The poverty alleviation programs should be launched.
- There should be guaranteed of the job at least one person from each household.
- Women's education status seems effective in rising age at marriage, so, education for girls should be encouraged to improve the length of school years.
- To reduce fertility, there should be IEC services and availability of contraceptive methods.
- The concept of not discrimination is recognized as a right.
- Effective and essential programs should be launched to promote their skills and attitude.
- Non-formal education and various awareness programs should be launched.
- There must be reservation system for their employment facilities.
- The political commitment should be implemented into reality for the effective change in this community.

7.3.2 Recommendation for Future Area of Research

This study has tried to find the determinants of fertility among the Chepang Community in terms of fertility on the basis of different socio-economic and demographic variables. To indicate socio-economic and demographic determinants of fertility of women, there are many variables can be used but only some limited variables are used in this study.

Similarly, in other some area of Nepal, Chepangs are available but only one VDC is chosen for this research. It is important to further research by taking large sample and by taking into account the more socio-economic and demographic variables.

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ANNEX - 1

TRIBHUVAN UNIVERSITY

Central Department of Population Studies (CDPS)

(This information will be secrete and it will be used only for M. A. Thesis Purpose)

QUESTIONNAIRE DESIGN

Name of the Village:-
Ward No.-
Respondent's Name.-

Respondent No.:-
Household No.:-
Types of Family: Nuclear/ Joint

Household Questionnaire

S. N.	To be asked all of the family members				To be asked for members above 5 years				Eligible women
	Name of Member	Relation with head of household	Sex	Age	Current occupation	Literacy	Education level	Marital status	
	1	2	3	4	5	6	7	8	9
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									

Sex Code
Male: 1
Female: 2

Literacy Code
Yes: 1
No: 2

Education Code
Illiterate - 88
Non-formal Education: 98
Formal Education: 1 to 10
I. A.: 12
B. A.: 15
M.A.: 17

Occupation Code
Agriculture: 1
Home Industry: 2
Job/Service: 3
Trades: 4
Daily Wages: 5
Household Work: 6
Student: 7
Others: 98

Marital Code
Unmarried: 1
Married: 2
Widow/widower: 3
Divorce/Separated: 4

A. Household Socio-Economic Characteristics

10. What is your religion? ……

11. Can you speak Nepali Language? Yes / No

12. What is your mother tongue? ……

13. What type of house is using for your family? ……..

(I) Cement/Brick (II) Stone and Mud (III) Bamboo/ Grass (IV) Others

14. What material is use for roof of your house? ……

15. How much do you have land? ……

16. What is the main source of income? ……..

17. Do you have your own toilet? Yes / No

18. Have you radio/TV in your house? Yes / No

19. What is your water resource? ……..

20. Do you have the facility of electricity in your house? Yes / No

B. Individual Questionnaires (Asked to Only Married Women)

Socio-economic and Demographic Information

21. Age:- …….

22. Age at Marriage:- …….

23. Education:- ……

24. Occupation:- ……..

25. Working Place:- Out side home/ Inside home

26. Main cause of No Schooling:- …….

Reproduction

27. Have you give birth to any children? Yes / No

28. If yes how many no. of Sons living with you?.....

29. How many no. of daughters living with you? ……

30. How many no. of sons not living with you? ……..

31. How many no. of daughters not living with you? ……..

32. Have you any children were died after born alive? Yes / No

33. If yes how many were died? Sons ……Daughters …… Total ……..

34. Total no. of children ever born (CEB)…….

35. Have you lost any children? Yes / No

36. If yes how many children? ……..

37. What is the ideal no. of children in your opinion? Sons……Daughter…..…….

Family Planning

38. Have you known the name of means of family planning or contraceptives? Yes / No
39. Have you ever used the contraceptives? Yes / No
40. If yes, which methods? ……..
41. Reason for using method…….
42. If no, why don't you or your husband using any method?

Health Problem	Not available	Religious Causes	No Need
Desire for Son	Desire for Daughter	Rejection of Household	Costly
Others			

43. Have you currently using the any contraceptives? Yes / No
44. If yes, what is it? ……
45. Reason for using method…….
46. If no, why don't you or your husband currently using any method?

Health Problem	Not available	Religious Causes	No Need
Desire for Son	Desire for Daughter	Rejection of Household	Costly
Others			

47. Do you desire to give birth further more child? Yes / No
48. If yes, how many sons do you want? ……
49. How many daughters do you want? ……..
50. What is the main cause for such number of child? ……
    ……

ANNEX - 2

PHOTOGRAPHS

Photo 1: Study Area (Siddhi VDC)

Photo 2: Interview taken with a respondent

Photo 3: Interviewer with Chepang's Children

Photo 4: Taking Interview