

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 General Background to the Study**

In the context of developing countries like Nepal, the rapidly increasing population is one of the major demographic characteristics. The population increased from 15 million in 1981 to 18.4 million in 1991 and 23.1 million in 2001. The annual population growth rate (PGR) during the last inter-censal period was 2.24 percent and it was increased by 34 percent during the year 1991 to 2001. The annual population growth rate was 2.1 percent in 1981-1991. The birth rate has roughly declined from 41.2 to 33.58 per 100 population during 1991-2001. The total fertility rate (TFR) has declined from 5.6 to 4.1 in the same year. Similarly, the death rate during the same period has declined from 13.3 to 10.3 per thousand population (MOPE, 1998) and infant mortality rate (IMR) from 97 to 79 per 1000 live births. The average life expectancy in Nepal is around 60 years in 2001.

There are three factors which decide the shape of population of any country. They are birth, death and migration. Among them growth rate (fertility) plays most important role. The present fertility rate of Nepal is 3.7 per woman which is one of the highest rates in the world. The fertility rate of Japan is 1.3, China 1.6, Sri Lanka 2.0 and India 3.0 (World Population Data Sheet, 2005).

There are various factors being the fertility rate high in Nepal. Lack of female education, importance of son child, early marriage, poverty, lesser role of female in decision making are some of the factors being fertility rate high in Nepal (Manandhar, 1991).

Fertility has been the prime concern ever since the initiation of population related policies in Nepal. As such, the fertility aspect has influenced the organizational development process in the areas of population. The Family Planning Association of Nepal (FPAN) was established in 1959 as a non-governmental organization, under the initiatives of a few Nepalese medical practitioners and social workers. The creation of FPAN was sponsored by Pathfinder Fund and later by International Planned Parenthood federation (IPPF). The FPAN has been the pioneer non-governmental organization involved in the promotion and delivery of family planning services in the country. In the NGO sector, the FPAN has the largest network spread over different parts of the country. At present there are several other NGOs/INGOs involved in the delivery of reproductive health and family planning services. In the government sector, the Department of Health Services (DoHS) has been the lead agency involved in providing reproductive health services including family planning as well as maternal and child health section of the DoHS. The governmental initiation towards population, especially on family planning and maternal/child health was started by mid period of the third plan. It was in 1968, a semi autonomous body in the name of Nepal Family Planning and Maternal Child Health Board was created. This board was chaired by the Health Minister and a separate vertical project titled the Family Planning and Maternal/Child Health Project was also established during the period for effective planning and programming purposes.

Fertility is the child-bearing performance of the individuals, couples, groups or population. Conventionally most measures of fertility are related to the women in child-bearing ages; therefore, fertility is a complex process responsible for biological maintenance of society. It is generally determined by the physiological factors and their interplay with social, cultural, economic and modernization factors.

The level of current fertility is one of the most important indicators for health and family planning policymakers and professionals in Nepal because of its direct relevance to the population policy and programs. The TFR is the sum of the ASFRs and can be interpreted as the number of children a woman would have by the end of her childbearing age if she experienced the prevailing ASFRs. The GFR is defined as the total annual number of births per 1000 women age 15-44, and the CBR is defined as the total number of live births in a year per 1000 persons.

Attempting to influence human fertility behavior is perhaps one of the most difficult tasks. In the words of Eberstadt (1983) “formulating effective policy to influence human behavior is difficult in many spheres, but probably nowhere do policy-makers and planners encounter so many problems as when attempting to alter human fertility”. Population planning with the objective of reducing fertility level therefore becomes most intractable of planning areas (CBS, 2003).

Despite the effort from the governmental and non-governmental sectors, there is still prevalence of high fertility rate in Nepal which has ultimately increased the population growth rate. There may be several causes behind the less achievement as:

- ) Low level of women’s education,
- ) Low reproductive health status because of which high maternal deaths,
- ) Low level of implementation of law and exclusion of women in some important social and economic sectors, and
- ) Poverty, traditional values and low status of women in society.

In line with the programme of Action of the ICPD, Nepal has pursued several measures to strengthen reproductive health and reproductive rights over the last decade. Pertaining to reproductive health services in Nepal, it has been duly recognized that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the

information, education and means to do so. Nepalese women of reproductive age constitute 24.6 percent of the total population and 49.2 percent of the total female population. About 18 percent of Nepalese women of reproductive age (15-49 years) have never married and 79 percent Nepalese women of reproductive age are currently married (Bista, 2003).

Differential fertility is the study of fertility differences between specific population groups. Common analyses are by socio-economic group, by religion, by education level, by race, by occupation, by urban/rural region, by wife's work experience and by husband's income. Such analyses are carried out in order to throw light on the causes of reproductive behaviour, to interpret the changes which have taken place in the birth rate and as a guide to changes likely to take place in the future. If, for instance educated persons experience lower fertility, and if the proportions of the population in these classes are increasing, then this could be a factor causing the overall birth rate to fall.

## **1.2 Introduction to the Study Area**

Oraste VDC is one of the administrative units of Syangja district which is about 14 km. Far from Syangja district. It takes about three hours on foot from Syangja district headquarter. It is on the eastern part of the district. Oraste VDC has been extended between 28°1'22" north to 28°3'35" north latitude and 83°53'0" east to 83°56'0" east longitude. The northern part is wider than the southern part. So, it looks in a triangular shape. It is bounded by Kolma, Bahakot VDCs in north; Rangbhang and Biruwa Archale VDCs in the west, Kichanas in the east and Kichanas and Biruwa Archale in the south. The elevation ranges from 2000 to 4100 feet from the sea level.

Total area of this VDC is 15.04 km<sup>2</sup> (1452.34 hectars). The population is about 6000. The density of population is 399 persons per square kilometer. The main

castes and ethnic groups are Magar, Brahmin, Gurung, Chhetri, Kami, Sarki, Bhujel and Damai respectively.

According to the study done in March 2005, there were 817 households and 5158 people in which 63.1 percent were males and 36.6 percent were females in 30 settlement units. Literacy rate of the VDC was 79.32 percent. There were 12.14 percent people engaged in service.

### **1.3 Statement of the Problem**

Population growth is one of the serious problems in many developing countries. Nepal is one developing of poorest country of the world facing the problem of rapid population growth which is caused by lack of industrialization, low productivity, illiteracy and unemployment. Because of the practice of tradition method of farming, our food production is unable to feed the rapidly growing population. Thus, to balance the ratio of total production and population growth, we should control population. The contraceptive prevalence rate in our country is comparatively low with other Asian countries, which is found 38.9 percent in 2001 (MoH, 2001).

Various activities are conducted in Nepal regarding family planning. Many governmental and non-governmental agencies are involved in family planning programmes. These organizations are distributing different kinds of temporary and permanent types of family planning means in different parts of the country. The main objective of these programmes is to reduce fertility rate and control population. But most of these programmes have been failed to reach in the poor and rural part of the country. That is why, Nepal is lacking bend in using family planning means.

The contraceptive prevalence rate in Nepal has been found to be 39 percent in 2001 (NFHS, 2001). While unmet need of family planning service accounts for

28.8 percent desiring couples in 2001 (NFHS, 2001). The unmet need of family planning service is low than CPR. More specifically, the reason is more using contraception by the women.

On the one hand the study of differential of fertility is an important area, which deserves special attention. Understanding differential fertility helps to identify the groups, areas or sectors in a country which may need special attention with respect to birth control and other development programme. The reduction in TFR in urban area from 5.8 in 1981 to 2.9 in 1996 is more glaring than that observed for the rural area. The TFR in rural area reduced from 6.4 in 1976 to 4.8 in 1996 (MOPE, 2000) which indicates high fertility in rural areas of Nepal.

People of different ethnic background have their own tradition and value system governing their daily life including their reproductive behavior. In this situation, the fertility behavior would also vary among different ethnic groups but the relationship between the ethnicity and the fertility has hardly been explored in Nepal. Karki (2003) examined the relationship between ethnicity and fertility by employing data from rural areas of Nepal. His study on the whole supports the assumption that the higher ethnic status has the lower fertility (CBS, 1987: 294).

Marriage usually takes place at very early age in Nepal which makes a real difference in governing fertility. Some studies have demonstrated that an increase in female age at marriage contributes to a reduction in fertility. The level of fertility declines with increase in educational level of females. Higher the level of female literacy in a community, the lower will be the fertility. This also implies that the level of fertility should be low for the literate females compared to the illiterate females. Females in different occupation are found to have different fertility levels. This could be due to the social status given to the occupation itself and the time available to working women for rising children.

There are different caste/ethnic groups in Oraste VDC of Syangja district and the major ethnic groups are Gurung and Brahmin therefore their fertility behaviour determines the other groups as well. Due to the different values on fertility of these castes, there seems variance in fertility. Therefore, find out the main determining causes and variability on fertility between these groups is the main problem for this study.

### **1.3 Objectives of the Study**

The overall objective of the study is to assess fertility differential and behaviour between Gurung and Brahmin community. The specific objectives of the study are as follows:

- ) To find out the socio-economic condition of Gurung and Brahmin women in the study area,
- ) To measure the completed family size among Gurung and Brahmin respondents,
- ) To find out the variance in fertility and causes of variability.

### **1.4 Significance of the Study**

This study provides essence of fertility data in population. This study may be the guideline for other researches. It tries to focus on the importance of data on fertility and its impact in national development and population data therefore it helps for organizations, planners and policy makers to formulate policies, laws which should support for reducing and managing fertility among females.

### **1.5 Limitations of the Study**

This study is totally based on the limited sources, particularly monograph 2003 and NDHS 2001 report. This also tries to provide data of NDHS 2006 preliminary

report. This report analyses the data on fertility based on the primary sources. This does not provide such data by VDCs or districts.

## **1.6 Organization of the Study**

This study is organized in three chapters in which first is the introductory chapter which includes background to the study, statement of the problems, objectives of the study, rationale of the study, limitation of the study and organization of the study.

Second chapter presents the analysis relating to fertility trends and differentials of population in Nepal and the last chapter briefs the study presenting summary, conclusions and recommendations.



## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Theoretical Literature**

The most important factors that changes the shape and structure of population are birth rate, death rate, and migration. Out of these, birth rate dominates other two. The fertility rate of Nepal is among the highest in the world (World Population Data Sheet, 1998). Population growth rate is greater than the economic growth rate, due to which all the developmental efforts have been failed.

The uses, attitude and knowledge are the most important factor in reference of family planning which determines the fertility rate. Proper knowledge and positive attitude leads people to use family planning means. Easy access in the means and proper knowledge of using it will help people to adopt the family planning means. Family planning means having side effects make negative impact on people. General public observing this fact develop negative attitude on all means of family planning. Thus, the study on the knowledge use and attitude play vital role on conducting family planning programme.

Different governmental and non-governmental organizations related to family planning activities are engaged in overcoming problems emerged due to population growth. In 1959 A.D. the Family Planning Association established with the objective "SANO PARIWAR, SUKHI PARIWAR" means small family is happy family/. Like the family planning association Nepal, there are other organizations too concerned with family planning programmer. The objective of all these organization is to control the haphazard growth of population. By the use of family planning means, any women can give birth of desired number of children.

The meaning of family planning is not to postpone birth. To give freedom to the people about the number and spacing of their children, to have the information and means to do so and to ensure informed choices and make available to full range of safe and effective methods are the aims of the family planning programme. The success of population education and family planning programmes in a variety of settings demonstrate that informed individual everywhere can and will act responsible in the light of their own needs and those families and communities. The principle of informed free choice is essential to the long-term success of family planning programme (ICPD, 1994).

In 1994, International Conference on Population and Development (ICPD) held in Cairo has also emphasized women empowerment as a basic tool for a country's overall development and improving the quality of people's life. The conference recommends that the full participation and partnership of both women and men is required in productive and reproductive life including shared responsibilities for care and nurturing of children and maintenance of the house hold in all parts of the world women are facing threats to their lives, health and well being as a result of being over burdened with work and of their lack of power and influence in most regions of the world. Women receive less formal education than men and at the same time women's own knowledge abilities and coping mechanism often go unrecognized. The power relations that impede women's attainment of healthy and fulfilling lives operate at many levels of society.

In the middle of twentieth century, the theory of demographic transition summarises the historical transition of fertility and mortality in the countries of Northern Europe. The theory advocates the transition from high fertility and mortality to low fertility and mortality along with the socio-economic development of society. This theory was based on the experience of fertility decline after declining in mortality with advancement of industrialization and urbanization in the west. In 1945, Notestein stated that at pre-industrial society

high fertility was required to balance high mortality rate, otherwise, the averages of mortality would have led to population decline and extinction. When the process of modernization had brought the death rates fell down, this results the decline in fertility. Urban industrial society is the crucible of demographic transition theory that is the development of technology lies at the root of matter (Caldwell, 1977: 30-33).

Bongaarts (1978) showed the four principles proximate determinants of fertility namely proportion of married women, post-partum infecundability, induce abortion and prevalence of contraceptive use. Bongaarts claimed that 96 percent of fertility could be explained by these four factors. In typical traditional society where fertility, the principle role is generally played by former two determinants and in non-traditional or modern society where fertility is found in transition it is highly affected by later two determinants (Dhakal, 1995:8).

In 1995, Esterlin proposed a generalized model for fertility decision, according to which a woman varies her child bearing in order to optimize her husband's utility. Her decisions are affected by income, price and cost of regulation on fertility required examination of the net effects via the proximate variables directly. The theory regarding migrant fertility assumes that migrants earn more in cities than in their rural places of origin. The higher income is supposed to raise the living standard and increase the cost of the child bearing which result in decline in fertility. In addition, migrant are expected to adapt and became more like native city dwellers. Urban born women generally have fewer children than rural born women, thus migrant fertility is expected to fall approaching urban fertility level (Sally, 1982: 248-251).

Bongarts and Potter said that the use of contraceptive change fertility assuming it one of the most important proximate determinants.

The ministry organization was restructured to accommodate a majority of vertical projects staff members. In 1987, His Majesty Government made a decision

regarding to family planning services would be provided by integrating all vertical projects in all 75 districts with the restructuring to the ministry, the Integrated Community Health Services Department Project (ICHSDP) was abolished and converted into the public health division in 1987. Furthermore, it is integrated with reproductive health in 1996 and adopted some strategies.

### **2.1.1 Family Planning Policy in the Tenth Plan**

The Ninth Plan's long-term schemes were to materialize the concept of two children only in the Ninth Plan period and to get the total rate of fertility to the replacement level in 20 years. Similarly, in the Ninth Plan, the major objectives were to carry out various population related programmes for attracting the common people to a small family size according to the concept of two children, to conduct different population related programmes to get the total fertility rate to the replacement level of fertility, and to make easily available or accessible the family planning related devices as well as the standard maternal child health services to the people. In that period, the main goals were to bring the total fertility rate from 4.68 to 4.2 , to increase the users of the family planning devices from 30.1 to 37.0, to decrease the infant of married women of 15-19 ages from 42.1 to 36.1, to decrease the infant mortality from 74.7 to 61.5 (per 1000 live births) and to decrease child mortality (per 1000 live at birth under 5 years of age) from 118 to 102.3 persons (NPC, 2002).

#### **Strategies:**

- Reproductive health services will be made easily available and the late marriage and breast-feeding will be encouraged.
- Emphasis will be given to raise public awareness extensively in the management of population.

**Policy/Action Plan:**

- Encourage availability of reproductive health services to all, encourage late marriage, and promote of breast-feeding.
- The population related behaviour change communication programmes will be taken at the village level with the help of the local bodies as well and by mobilizing the community-based organization to raise public awareness in such the areas as, education to children and health about the importance of small family, late marriage, reproductive health, enhances social status of women, importance of family planning, involvement of men in family planning, and so on (NPC, 2002).

**2.2 Empirical Literature**

In many industrialized countries and some developing countries such as China and Thailand, average fertility is now well below the two-child average. Because these low fertility levels lead to population decline sooner or later, some reports have sounded alarms about the possibility of a worldwide "birth dearth." The majority of the world's countries, however, have fertility above the two-child average and large numbers of women of reproductive age due to higher fertility in the past. Thus, global population growth is ensured for many decades.

The United Nations population projection often considered to be the most likely (the "medium" projection) assumes that fertility in developing countries will drop to an average of 2.1 children per woman by 2050 and eventually to 1.85. As with any projection, such assumptions may prove correct for some countries but not for others. Although the 1980s and 1990s saw rapid fertility decline in many countries, fertility now stands at 3.0 in developing countries, and the pace of decline tends to slow as countries reach lower fertility levels.

In a recent analysis of survey data between 1990 and 2003 in developing countries, demographer John Bongaarts of the Population Council found that some had not yet experienced fertility decline while others had "stalled" in their transition from high to low fertility. Countries such as Burkina Faso, Mali, Mozambique, Niger, and Uganda are very poor countries with high fertility that remained virtually unchanged from one survey to the next in the late 1990s. In "stalled" countries, such as the Dominican Republic, Ghana, Kenya, and Turkey, fertility rates settled in a range from 2.5 children per woman (Turkey) to 4.7 children (Kenya) after earlier substantial declines. The accompanying graph illustrates different patterns of fertility decline: little or no decline in Uganda, rapid fertility decline in Iran, the stall in Kenya, and a stall followed by resumption of fertility decline in Bangladesh.

Bongaarts found that factors associated with fertility decline – contraceptive use and a desire for fewer children – also remained nearly unchanged in the stalled countries. Similarly, unintended births and unmet need for contraception remained high in these countries. ("Unmet need" is the proportion of women who prefer to avoid a pregnancy but are not using contraception.) In Ghana, Kenya, and the Dominican Republic, socio-economic improvements, such as increases in per capita income and education, stagnated as well (PRB, 2005).

Aryal (1999), John et al. (1992:1) studies has shown that paralleling the fertility decline has been equally revolutionary change in the use of the contraception. There were about 38-40 percent contraceptive users in the developing countries in 1980 among the married women in the reproductive ages (MWRA). By 1990, this rate reached about 51 percent of MWRA. Among all contraceptive methods, sterilization is the most prevalent method, more than 20 percent of all contraceptive methods, sterilization is the most prevalent method, and more than 20 percent of all contraceptives rely upon it in 27 countries. IUD is the second prevalent method, which is used by 20 percent or more of all contraceptives in ten

countries, mostly famous in China. The Pills ranks third, it is used by 20 percent or more of all contraceptives in 20 countries.

This study indicates that the contraceptive users vary among regions. About 70 percent of all MWRA, the use of contraceptives in the East Asia and 60 percent do so in Latin America. The South and south East Asia have a contraceptive prevalence rate of 40 percent. North Africa and Middle East have a moderate rate of 36 percent but Sub-Saharan region have a very low rate of 9 percent only. It is also noted that the actual number of users is of course is users is the largest in the East Asia due to China's large population and high contraceptive prevalence. The South Asia including India, Indonesia and Bangladesh come next followed by other regions with much smaller number.

An article of contraceptive needs and demand in developing countries in 1990s submitted to the United Nations Population Funds declare that if the total fertility rate in developing countries is to decline If the CEB 3.3 per women by the year 2000, and if population growth is not exceed 900 million, contraceptive prevalence must rise to 59 percent. The projection of contraception use 1990-2000 estimated that the proportion of married women of reproductive age practicing contraception is 51 percent. And UN low population projection contractive prevalence will have to increase to 65 percent in 2000. Furthermore, even it shows that among contraceptive users in 1990, 45 percent relied on sterilization and nearly 37 percent depend on female sterilization. Only 8 percent are protected by male sterilization. Some 24 percent relied on IUDs, 12 percent were pills users and 6 percent relied on condoms. Other method mostly traditional was the choice of slightly fewer than 10 percent of all users.

### **2.2.1 Fertility in Nepal**

The fertility levels tempt one to conclude that the birth control programmes did not have much effect on population growth rate until the early 1980s. These programmes were at best successful in checking TFR from rising to very high

level of about, say, 7 or more per women because estimates of TFRs show consistent rise from about 5.7 in 1961 to well above 6 until early 1980s. This trend is perhaps due to improvements in general health standards (Langford, 1981). The other possible factor could be increasing co-operation from the people reporting their vital events in the recent past. Further data collection method itself might have improved recently. However, it is quite clear from Table 1 that the onset of fertility decline has begun in Nepal, perhaps somewhere in the early 1980s.

### **2.2.2 Trends and Differential of Fertility in Nepal**

Comparing the TFR obtained from three earlier surveys with the TFR obtained from the 2001 NDHs indicates a steady decline in fertility which declined from 5.1 children in 1986 to 4.1 children in 2001. NFHS 1991 showed 4.8 children per woman and the same source stated slight decline in fertility in 1996 which was 4.6.

There was a 6 percent decline in TFR between 1984-1986 and 1989-1991, compared with 3 percent decline between 1989-1991 and 1993-1995. Between 1994-1996 and 1998-2000, the percentage decline in fertility was 12 percent. Fertility trends have to be interpreted within the context of data quality and sample size.

Differences in the fertility of specific population groups arise mainly from three sources, namely, differences in the number of children which couples in the various population groups want, difference in their knowledge, attitude and practice of fertility control which enable them to obtain these desires, and difference due to the demographic characteristics of each population group. The cultural differences in fertility is concerned with the examination of the factors, the 'intermediate variables' of Davis and Blake (1995), through which cultural conditions can affect fertility. These include age at entry into sexual unions,



proportion of women never entering sexual unions, periods of abstinence (voluntary or involuntary), fecundity or infecundity, use of contraception and foetal mortality, etc.

Census data estimated the total fertility in Nepal in 2001 as 2.82 per woman and rural fertility as 4.37. However, NDHS report 2001 estimates the fertility for urban and rural residence as 2.1 and 4.4 respectively.

The rural TFR of 4.37 in 2001 was about one and a half times the urban TFR. Ten years ago, the rural woman on average gave birth to about 5.35 children. It is clearly seen that both in the rural as well as the urban areas the fertility level has gone down in the last ten years. Fewer younger women under 20 years of age bear children now compared to some 10 years ago. However the peak age of fertility has remained the same. Women belonging to the age group 20-24 are most active in reproduction. The second most reproductively active age group is 25-29 in both rural and urban areas. It is also seen that compared to the urban women the rural women keep on producing children late in their 40's up to about they are 50 years old.

The high mountain area is sparsely populated and also less developed overall than the other ecological regions. This region is remote and inaccessible. The fertility level in the mountain region has remained high. In 1991 the TFR was estimated at 5.93, almost 15 percent higher than the national rate of 5.16 and in 2001 the corresponding figures were 4.57 and 3.79. The mid hill region has the second highest fertility level. The TFR was 5.33 in 1991 and it declined to 3.77 in 2001. The Terai exhibits the lowest fertility level. The TFR was estimated at 4.72 in 1991 and this level further declined to 3.64 by 2001. Most Terai settlements are accessible by road and every year increasing number of migrants settles there. Socio-economically too the Terai region is better-off. More than half of urban populations are in the Terai.

The fertility peaked for the age group 25-29 in the mountain region in 1991 when the level of fertility was nearly 6 per woman but when the level declined by 2001 the peak shifted to younger age group, i.e., 20-24. In other regions the peak age of fertility is 20-24. In all ecological belts more than half of all births take place in the age groups 20-24 and 25-29. It is also seen that as the level of fertility declines fertility increasingly concentrates in the age group 20-24.

According to NDHS 2001, TFR in the mountains (4.8) is the highest among the three ecological zones, while the TFR in the hills (4.0) is about the same as in the Terai ecological zone (4.1). By to development region, women in the Western and Eastern regions have on average one child fewer than women in the Mid-Western and Far-Western regions and half a child fewer than women in the Central region. There is a strong association between fertility and education, with the TFR declining as the level of education increases. The TFR of women with no education (4.8) is more than double that of women with at least an SLC level of education (2.1).

### **2.2.3 Knowledge of Family Planning:**

#### **Women in Reproductive Ages (WRA):**

Among currently married women aged 15-49, the proportion who have heard of family planning has risen steadily from about 21 percent in 1976 to 98.4 percent in 1996 (MOH) to almost universal knowledge at 99.5 percent in 2002. While the ability to name at least one modern method is almost universal, the overall practice of family planning remains low.

#### **Men:**

The research on men illuminates an interesting gap between knowledge and attitudes and actual behavior. Men have a high level of knowledge about FP, with 99 percent able to name a modern contraceptive method.

**Mothers-in-Law (MIL):**

Mothers-in-law have slightly less knowledge of FP methods (94 percent) than women or men.

**Female and Child Health Volunteer (FCHVs):**

Almost all FCHVs provide information to couples on FP: 82 percent provide services and 32 percent referral (NFHP, 2003).

## **2.2.4 Family Planning Services**

Family Planning Association of Nepal publishes in its overall programme summary 2004, "FPAN provided FP services to a total of 280,499 clients during the program year. Overall achievement in providing FP service was 150% as against the stipulated target of 186,295 clients. Percentage share of new clients in total FP clients (current users) was 24 percent. The total FP users increased by 35 percent over the year. Such an increase was attributed by revision of MIS system with inclusion of last years clients who have taken clinical services (IUCD, Norplant and sterilization from FPAN clinics and non reporting of withdrawals) up to the CYP period and relatively high continuous users in condom, pills and Depo, whereas the recruitment of new FP clients decreased by 16 percent compared to 2003. Such decrease in the recruitment of new FP clients was contributed by frequent strikes and Bandhas called by the insurgents and political parties and apprehension of field workers to go at the door steps for FP counselling, follow up services and contraceptives distribution during such days."

The method mix of family planning methods reveals higher preference for Injectable Depo (35.5%), followed by condom (30.6%), oral pills (24.2%), sterilization (6%) Norplant (2.9%) and IUCD 0.6 percent. Majority of FP clients in FPAN branch and outreach clinics were using spacing methods as the programmatic focus was given to birth spacing among young people.

Analysis of clients' age profile indicates that majority of FP users were young adults. The percentage share of adolescents in total FP users was 5.5%, followed by 26% youth and 68% young adults. It is important to note that the CPR among young people was 12 in Nepal and one third of young FP users in total FP services indicated that the FPAN programs were rightly focused towards adolescents and youth.

According to Family Health Survey 1996, knowledge on family planning methods is almost universal. Among the married women aged 15-49 years, 98 percent know about at least one means of family planning, 44 percent women of same age group know modern means of family planning while 96 percent married women were aware of Laparoscopy operation, 85 percent married women know about injection and 75 percent know about condom. About 20 percent women know about periodic abstinence (NFHS, 1996).

According the same source (NFHS, 1996), 48 percent women of urban area, eight percent of rural area, 12 percent of Tarai and three percent of Mountain region women had got information about family planning through radio and television, 60 percent educated and seven percent uneducated women got information about family planning from radio and television both (NFHS, 1996).

Breast feeding help to control fertility. This natural process of fertility control is known as post partum amenorrhoea (Thapa, 1998). Bongaarts has stated that post partum amenorrhoea process can be lasted up to two years.

Aryal (1991) has studied contraceptive knowledge and use at Kumal community in gulmi district. The study reveals contraceptive prevalence rate at 25.6 percent of the currently married women in reproductive ages. Almost twenty-six percentage of total CPR is contributed by female sterilization. Injectable (5.6%), Pills (5%) and condom (3.9%) are also used methods. Traditional and other methods

constitute less than three percent and users of male sterilization, IUD and Norplant are not found.

Contraceptive prevalence rate as well as use of modern method was higher among urban women than that of rural women. The prevalence rate was 48.9 percent in urban areas and 28 percent in rural area in Nepal. Overall contraceptive prevalence rate increased with the educational attainment of the respondents. The level ranged from 27.4 percent for women with now schooling to 40.2 percent for women with secondary or more education (Subedi, 1997: 61-63).

NFHS, 1996 shows that 98 percent of both ever married and currently married women aged 15-49 years knew at least one method of family planning. This survey indicated that 35 percent currently married women have ever used any modern method of family planning (NFHS, 1996).

Majority of the currently married women (73.5%) were familiar with at least one method of family planning, among the individual methods, female sterilization appears to be the best known contraceptive method followed by males sterilization, pills and injectables (K.C. et. al., 1998).

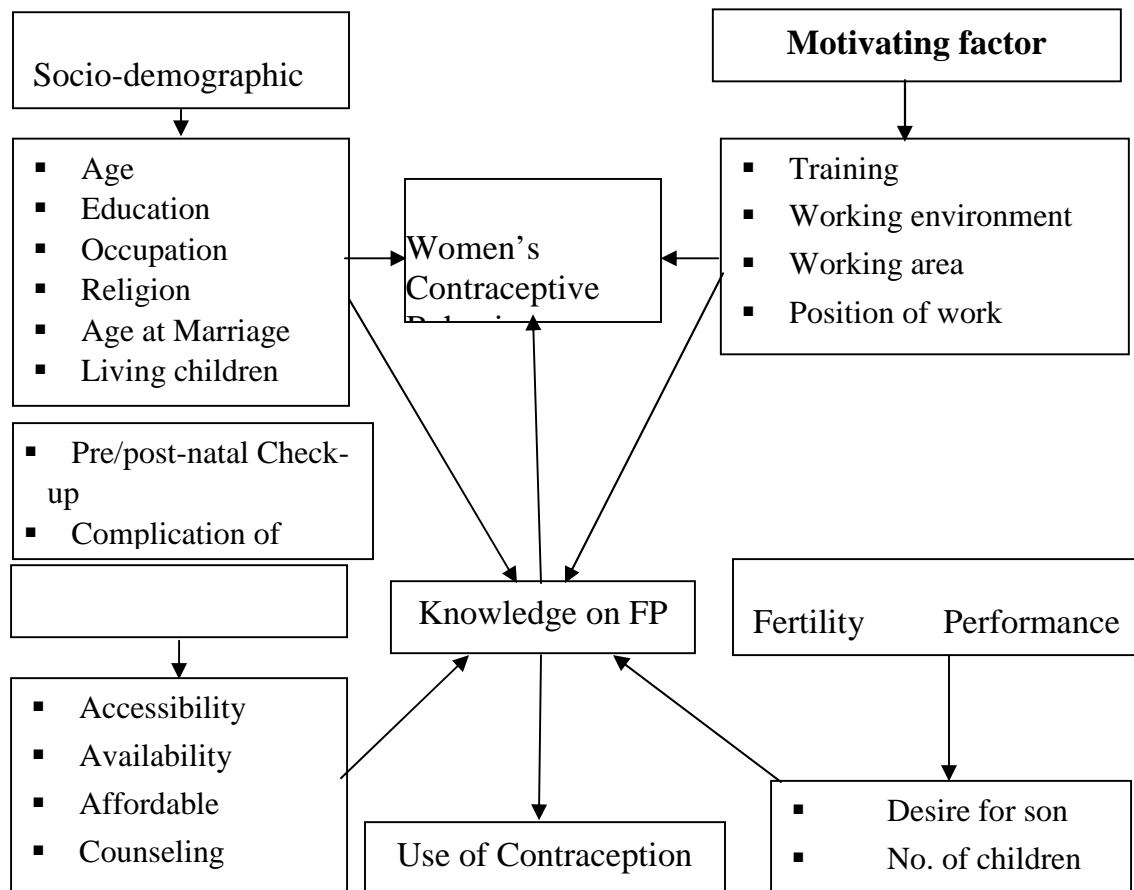
Among Nepalese ethnic groups, Tuladhar (1989:233) has found the highest contraceptives prevalence rate among Newars (19.4%) followed by Brahmins (14.6%), Chhetries (11.6%), Thakuries (6.6%), Tharus (5.1%), Magars (4.7%) and Muslims (1.6%) in 1989.

Due to modernization and changing life style, many of the child bearing women do not want breast feeding. They have the feeling that, breast feeding is not good for physical beauty. This reason reduces the chance of post Partum Amenorrhoea (Subedi, 1997).

Religious reasons, want of more children, demand of son, medical reason, disagreement among husband and wife, side effect of the means, no easy access on

the means are the main reasons for not using family planning means in Nepal (NFHS, 1996).

## 2.3 Conceptual Framework



## 2.4 Selection of variables

### Independent Variables

Education

Occupation

Age

### Intermediate Variables

Age at marriage

Child-loss experience

Breast-feeding

Knowledge of family planning

### Dependent Variables

Fertility

Children ever born

Use of contraceptives

## **CHAPTER III**

### **METHODOLOGY**

#### **3.1 Introduction of the Study Area**

##### *Historical Background of Oraste VDC*

Histogenesis deals with the historical origin and development of the human settlements. It helps to understand the evolution of historical geography and settlement. It provides the ground for explaining the history of evolution of human settlements, their function, and migrated places, in the study area, in spite of the lack of inscription and historical maps, the physiological cultural phenomenon have assisted us to make appraisal of settlements.

Throughout four Kots of Syangja district namely Nuwakot, Sataukot, Virkot and Grahaukot, Oraste VDC is constituted by greater parts of Nuwakot and lesser parts of Virkot. Almost all part of Ward No. 9, Chirdanda and Ghantalek of Ward No. 8 and Ward No. 7 lie in Virkot principality. Other parts of this study area lie in Nuwakot.

About 1460 B.S., in post medieval age when the 'Khas State' lastly collapsed then new era started. In this period, there appeared many small principalities known as "Chaubese Rajya" in Gandaki Pradesh. Oraste VDC is one of the small parts which lies on "Chaubise Rajya". It is one of the remote areas where there has the lack of study about social evolution. It is believed that ancient settlements were located in and around the hill side. They were Ghopte, Khudi, Japhati, Arupata and Ranathar. In the beginning the places were in the form of dense forest and grazing land. Gradually, people migrated from surrounding places and started to live there permanently.

Magars are the first settlers of Oraste VDC. They were migrated from Lamjung taking Maulo with them looking for good place and fertile land in 15<sup>th</sup> century when Drabya Shah (king of Lamjung on Gorkna) Brahman are the second settlers of this village, specially they are Pokhrel Brahman. They arrived to this place from “Mattikhan” of Kaski district and settled there. Then, many other castes and ethnic groups arrived and settled in this village.

### ***History of Brahman***

In Oraste VDC, there are four types of Brahman. They are Pokhrel, Poudel, Kafle and Bhandari. They came from different places with different causes. According to elders, Pokhrels were migrated from Mattikhan, Kaski and Farsibash and Gulmi. Bhandari were migrated from Magyam Chisapani VDC of Syangja, Kafle were migrated from Banethock VDC, Samadi Khola Syangja. Poudels have no recorded history. Local people say that they were come from Moduwa of Syangja district. The record of Brahmans and their settlement development is shown in Table 1.

***Table 1: Development of Brahmin Settlement in Oraste VDC from the Different Parts***

<b>Types</b>	<b>Place of origin</b>	<b>Cause</b>	<b>Generation from present</b>
Pokhrel	Mattikhan, Kaski	Food/landslides	Before 7 <sup>th</sup> generation
Kafle	Banethock, Syangja	Migrated	Before 5 <sup>th</sup> generation
Bhandari	Chisapani, Syangja	Migrated	Before 6 <sup>th</sup> generation
Poudel	Moduwa, Syangja	Disease	Before 6 <sup>th</sup> generation

*Source: Field Survey, 2064 B.S.*

The evolution of Brahman settlement clearly shows that, Pokhrels are the first settler. When Seti river at Pokhara started taking its shape very deep, people near Pokhara felt unsafe. Pokhrel Brahman of the place ran away taking some cattle with them looking for grazing suitable place. Then they arrived to this place, Oraste from ‘Mattikhan’ of Kaski district and settled there. Brahman used to live



in the middle part as well as northern part of VDC. When Brahman Pokhrel migrated from Mattikhan they brought their other brother of left generation relatives from Farsibash, Gulmi and Lamjung. Kafle and Bhandari migrated from Banethock VDC, Samadikhola and Magyam Chisapani VDC, Syangja district respectively. Poudel are migrated from Moduwa, Syangja due to fear of disease.

### ***History of Gurung***

In mid period of 16<sup>th</sup> century, Gurung came in this place in the process of catteling from Bizku (Bijayapur), Yangjakot, Siklesh, Jitpur of Kaski and Lamjung district. They settled at Kolma Danda first, Kolma is very nearedt place from Oraste. After passing a few years, communities of Gurungs migrated to Oraste and started to settle down. There is also difference within Gurung community. They can be divided into two groups i.e., ‘Char Jate’ and “Sora Jate”

There are four groups in “Char Jate”. They are: Lamichhane, Ghale, Ghotame and Lama. In “Sora Jate”, there are sixteen types but only three types live in this area namely Lhome, Pachu and Kyabri. Although almost all Gurungs are migrated from Kolma. There seems differences about their place of origin. The record of Gurung community and their settlement development is shown as follows.

***Table 2: Development of Gurung Settlement in Oraste VDC from the Different Parts***

<b>Types</b>	<b>Place of origin</b>	<b>Cause</b>	<b>Generation from present</b>
Ghale	Pokhara, Kaski	Catteling	Before 6 <sup>th</sup> generation
Gotame	Taprang, Kaski	Catteling	Before 6 <sup>th</sup> generation
Lama	Yangjakot, Kaski	Trade	Before 4 <sup>th</sup> generation
Lamichane	Makaikhola, Kaski	Disease	Before 4 <sup>th</sup> generation
Pachu	Adthar, Syangja	Ghar Jwain	Before 4 <sup>th</sup> generation
Kabri	Parbat district	Catteling	Before 4 <sup>th</sup> generation
Lhome	Virkot, Syangja	Ghar Jwain	Before 3 <sup>rd</sup> generation

*Source: Field Survey, 2064 B.S.*

Gurungs are concentrated in the higher elevation on the gentle slope of north facing ground. The table shows that most of the Gurung community came from Kaski and Syangja district with different causes like catteling , Gharjwain, trading and due to fear of disease. As a Gharjwain they are migrated from the same district, Syangja.

The map of the VDC is given in the figure below:

### 3.2 Nature and Source of Data

The study was carried out in the field so the data used in analysis are from primary source. This study adopted both the inductive and deductive methods of analysis. Therefore, secondary sources are used for the enhancement of the study. Literature review chapter is totally based on the review of secondary sources. But the generalization of the study is based on the findings from the field.

### 3.3 Sampling Method and Sample Size

First of all, 123 total sample size was determined purposively. The respondents for this study were currently married women aged 15-49. The households where there were currently married women of reproductive ages (15-49 years) were selected randomly because it was difficult to adopt stratified random sampling method. So, purposive sampling method was adopted to select the sample population. In order to cover the every ward and represent the population, grossly similar size of the women from each ward was represented. Table 3 shows the selected population by Ward.

*Table 3: Distribution of Study Population by Ward*

Ward No.	Brahmin		Gurung		Total Selected women	
	No.	%	No.	%	No.	%
1	26	31.0	2	5.1	28	22.8
2	13	15.5	8	20.5	21	17.1
3	24	28.6	-	-	24	19.5
5	4	4.8	24	61.5	28	22.8
6	6	7.1	5	12.8	11	8.9
7	11	13.1	-	-	11	8.9
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

### **3.4 Questionnaire Design**

A structured questionnaire was prepared for this study. Both close-ended and open-ended questions were included in the questionnaire. The questionnaire was divided into two parts. In the first part, demographic and household characteristics of the respondents were included. In the second part, the main theme i.e., questions related to knowledge and use of family planning methods were asked. The close-ended questions were pre-coded and in terms of semi-open and open questions, they were post coded.

### **3.5 Data Collection Method**

Data were collected using direct interview method. Going to the respondents' door with one graduate student, the researcher had interviewed to all of the respondents. After selecting the respondent asking few primary questions that were not included in the questionnaire to find out the eligible respondents, the eligible women were interviewed.

### **3.6 Research Tools and Instruments**

A structured questionnaire was the main tool of the study. Language and structure of the questionnaire were checked thoroughly so as to make simple and clear. Questionnaire was developed based on previous studies questionnaire from which some modifications were made based on the objectives of this study. Questionnaire was developed in English and asked in Nepali and sometimes Gurung language where necessary taking help from local friend at the time of interview. Pencils, erasers and sharpeners were used to fill up the responses for the purpose to correct suspected and recalled answers.

### **3.7 Data Management and Interpretation**

The filled-up questionnaires were scrutinized each day after the data collection. The reported errors were corrected thoroughly then the data were entered into the computer. Data were entered using computer software, SPSS (statistical package for social sciences). Data were again cross checked by output tables and cross tables in order to check entry errors or reported errors. Based on the tables and figures processed from the SPSS software and using descriptive method, data were analysed.

## CHAPTER IV

### ANALYSIS OF BACKGROUND CHARACTERISTICS OF THE HOUSEHOLDS

This chapter provides some demographic and socio-economic characteristics of respondents' household in the study area. Demographic characteristic deals with age, marital status, children ever born, and socio-economic characteristic provides the education level of respondents, occupation, size of land holding, average income, etc.

#### 4.1 Household Characteristics

##### 4.1.1 Family Size

Family size determines the socio-economic as well as living standard of household. These variables contribute in determining desire for the size and number of male and female baby in a house. Considering this fact, the study has included the question of family size in the households where the survey was conducted. The households are separated by the number of family members in the households.

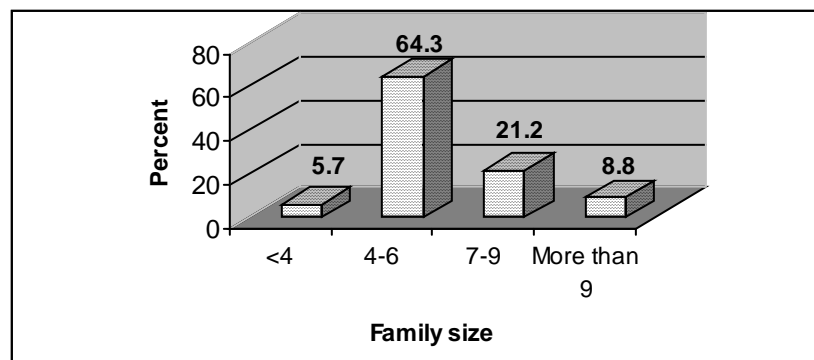
*Table 4. 1: Distribution of the Households by Family Size*

<b>Family Size</b>	<b>Number of househods</b>	<b>Percent</b>
<4	7	5.7
4-6	79	64.3
7-9	26	21.2
More than 9	11	8.8
<b>Total</b>	<b>123</b>	<b>100.0</b>
<i>Average Family Size</i>	<i>6.09</i>	

*Source: Field Survey, 2007.*

It is clear to see from the Table 4.1 that the average size of family is large in the study area. Total household size is calculated as 6.09 members in which males consist 3.08 and females 3.01. Majority of the households (64.3%) have 4-6 members in their family followed by 7-9 members which is accounted for 21.2 percent. Only 5.7 percent of the households are found having less than 4 members.

*Figure 1: Family Size*



#### 4.1.2 Literacy Status of the Households

In order to check the status of literacy in the households who have crossed five years, respondents were asked about the number of persons literate and illiterate in the households.

*Table 4. 2: Distribution of the Households by the Number of Literate and Illiterate Members*

No. of family members	Literate households		Illiterate households	
	No.	%	No.	%
<4	34	27.6	74	60.2
4-6	75	61.0	-	-
7-9	9	7.3	2	1.6
More than 9	5	4	-	-
<b>Total households</b>	<b>123</b>	<b>100.0</b>	<b>76</b>	<b>61.8</b>

*Source: Field Survey, 2007.*

There was population of 749 in all the 123 households where 704 were at the age of 6 years and above which consisted 583 literates and 121 illiterates. The literacy percent is 82.8 and the remaining 17.2 percent were illiterate. This shows the high

literacy status in the respondents' households (Data is not presented in the table but calculated from the survey data).

Table 4.2 shows that there was at least one member literate in all the households but 61.8 percent of the households had at least one member illiterate. About 60 percent (60.2%) of the households have less than 4 members illiterate. Sixty-one percent of the households have 4-6 literate members. It is interesting to note that no household are found not having literacy to all the members. This means that in every household there was at least one member literate which has already been mentioned.

## 4.2 Individual Characteristics

### 4.2.1 Age Distribution of the Respondents

Age is very important demographic characteristics which determines knowledge, attitudes and behaviours of an individual because of maturity. However, maturity is not only one characteristic which determines one's knowledge and behaviour. It is determined by various socio-economic situation of the individual. Again without maturity in age, change in knowledge, attitude and behaviour is not possible.

*Table 4. 3: Distribution of the Respondents by Age*

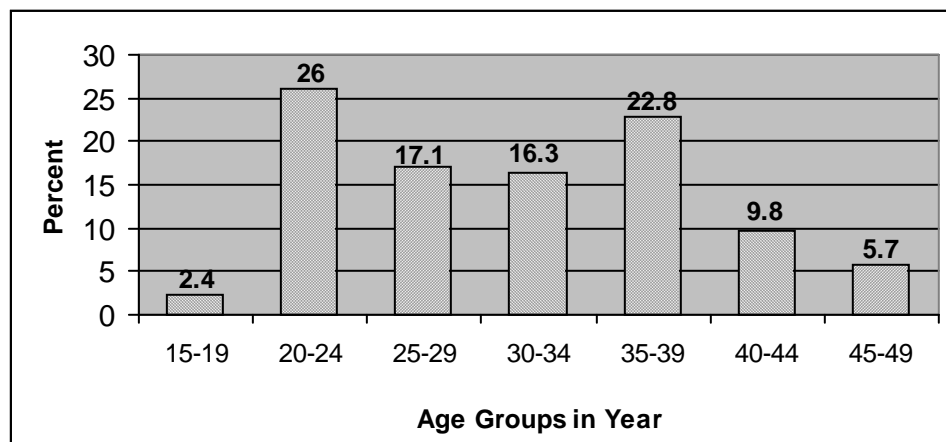
<b>Age Group</b>	<b>No. of Respondents</b>	<b>Percent</b>
15-19	3	2.4
20-24	32	26.0
25-29	21	17.1
30-34	20	16.3
35-39	28	22.8
40-44	12	9.8
45-49	7	5.7
<b>Total</b>	<b>123</b>	<b>100.0</b>

*Source: Field Survey, 2007.*



Table 4.3 depicts that higher proportions of the respondents are of 20-24 years of ages followed by 35-39 which is accounted for 22.8 percent. About 17 and 16 percents (17.1 and 16.3 percents respectively) are at the ages 25-29 and 30-34 years of ages respectively. The least proportions (2.4%) of respondents reported at ages 15-19 years.

*Figure 2: Percentage Distribution of the Respondents by Age Group*



#### 4.2.2 Caste/Ethnicity

Nepal is a country with multi-lingual, multi-ethnic and multi-cultural society. The norms, values, thinking, knowledge and attitude among the society differ widely. A simple table on caste/ ethnicity has been collected in the study to check whether there is any difference in women's educational and socio-economic status. The data obtained from the field study on caste/ethnicity is given in Table 4.4.

*Table 4. 4: Distribution of the Respondents by Caste/Ethnicity*

Caste/Ethnicity	No. of Respondents	Percent
Brahmin	84	68.3
Gurung	39	31.7
<b>Total</b>	<b>123</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

As the purpose of study was to collect data from Brahmin and Gurung, 68.3 percent of the respondents reported as Brahmin and the rest 31.7 percent reported of Gurung.

#### 4.2.3 Religion

Religion also affects fertility because in some community using contraceptives are thought to be sinful. Hindus believe that the children are the gift of God and son is very much important to make possible for the parents to reach into heaven after they die. Even son is thought to regulate the family blood and security for the parents in their old ages. That's why, the data on religion was also collected among the respondents which are presented in Table 4.5.

*Table 4.5 : Distribution of the Respondents by Religion*

<b>Religion</b>	<b>No. of Respondents</b>	<b>Percent</b>
Hindu	114	92.7
Buddhist	9	7.3
<b>Total</b>	<b>123</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

It is clear to notice from the Table 4.5 that only two religions were reported by the respondents in which a vast majority (92.7%) reported as Hindu and the rest 7.3 percent reported as Buddhist.

#### 4.2.4 Respondents' Literacy and Education

Literacy and educational level of the respondents determines the status of fertility regardless of caste/ethnicity. In the same level of education also, there may be variation in knowledge, attitude and level of fertility by caste/ethnicity. But it may be said universal for every society that higher the education, higher the knowledge on fertility and family planning and lower the fertility. Respondents were asked about their educational status. The responses are tabulated in Table 4.6.

**Table 4. 6: Distribution of Respondents by Literacy and Education**

<b>Literacy/Education</b>	<b>Brahmin</b>		<b>Gurung</b>		<b>Total</b>	
<i>Literacy</i>						
Literate	75	89.3	36	92.3	111	90.2
Illiterate	9	10.7	3	7.7	12	9.8
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<i>Education</i>						
No Schooling	5	6.7	5	13.9	10	8.1
Primary	23	30.7	11	30.6	34	27.6
Lower Secondary	14	18.7	9	25.0	23	18.7
Secondary	18	24.0	5	13.9	23	18.7
SLC passed	12	16.0	4	11.1	16	13.0
IA and above	3	4.0	2	5.6	5	4.1
<b>Total</b>	<b>75</b>	<b>89.3</b>	<b>36</b>	<b>92.3</b>	<b>111</b>	<b>90.2</b>

*Source: Field Survey, 2007.*

It is persistence from the Table 4.6 that about 90 percent (90.2%) respondents are literate and the rest are illiterate. Out of 90.2 percent literate, higher proportions (27.6%) have attended primary level education followed by lower secondary and secondary education which are accounted for 18.7 percent each of the respondents. Thirteen percent of the respondents reported that they have passed SLC and only 4.1 percent have attended IA or above level of education.

There was no significant difference in literacy between Brahmin and Gurung women however a slight more proportions of Gurung respondents (92.3%) than Brahmin respondents (89.3%) was reported. It was also reported that up to SLC level, there is slight more proportions of Brahmin but it is reverse after SLC.

#### **4.2.5 Respondents' Occupation**

Occupation is one of the determinants of fertility status and knowledge because normally people engaged in occupation based on their educational and socio-

economic background. Therefore, this determines the level of knowledge about anything. Respondents were asked about their main occupation, the summary of their report is presented in Table 4.7.

**Table 4. 7: Distribution of Respondents by Occupation**

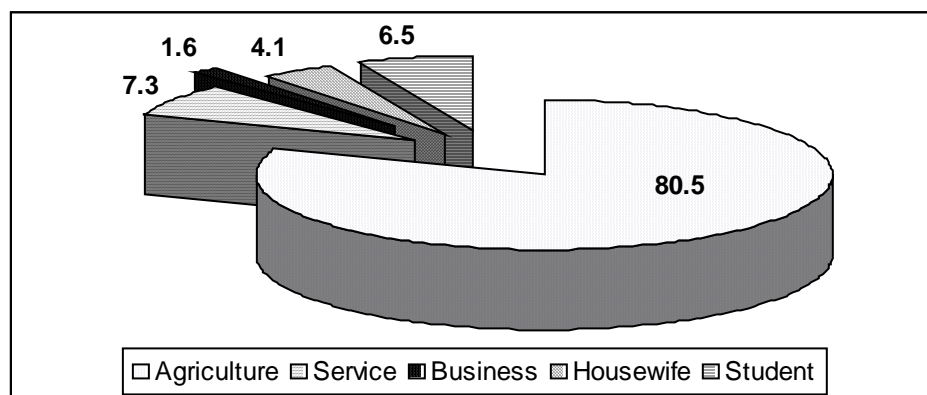
<b>Occupation</b>	<b>Brahmin</b>		<b>Gurung</b>		<b>Total</b>	
	No.	%	No.	%	No.	%
Agriculture	70	83.3	29	74.4	99	80.5
Service	7	8.3	2	5.1	9	7.3
Business	1	1.2	1	2.6	2	1.6
Housewife	-	-	5	12.8	5	4.1
Student	6	7.1	2	5.1	8	6.5
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

It is clear to see from the Table 4.7 that most of the respondents are engaged in agriculture which is accounted for 80.5 percent followed by service (7.3%), student (6.5%) and housewife (4.1%). The least proportions of the respondents were found having engaged in business accounting 1.6 percent of the respondents.

Comparing Brahmin and Gurung with respect to their occupation, more Brahmin than Gurung (83.3% and 74.4%) respectively are found to have engaged in agriculture. More than 12 percent (12.8%) of the Gurung respondents reported that they are engaged in housewife whereas no Brahmin reported on it. They worked as housewife also but spent more time in agriculture so they don't think it is work. More Brahmin than Gurung respondents reported having service as their main occupation. It is pertinent that most of the Gurung have reported that they don't do anything except household work like cooking and sanitation. It is because of lack of cultivable land as well as their husband either foreign employee or British and Indian army.

**Figure 3: Percentage Distribution of Respondents by Occupation**



#### 4.2.6 Husband's Occupation

Women's status is also determined by the occupation of her husband. If the husband is engaged in service, business and the like, they understand the rights of female as well as the perception in any household matters will be different. Therefore, wives of such husbands will be more knowledgeable regarding the family size, fertility and family planning. So the occupation of husband was given priority in the questionnaire. The responses are tabulated in Table 4.8.

**Table 4. 8 : Distribution of the Respondents by Husband's Occupation**

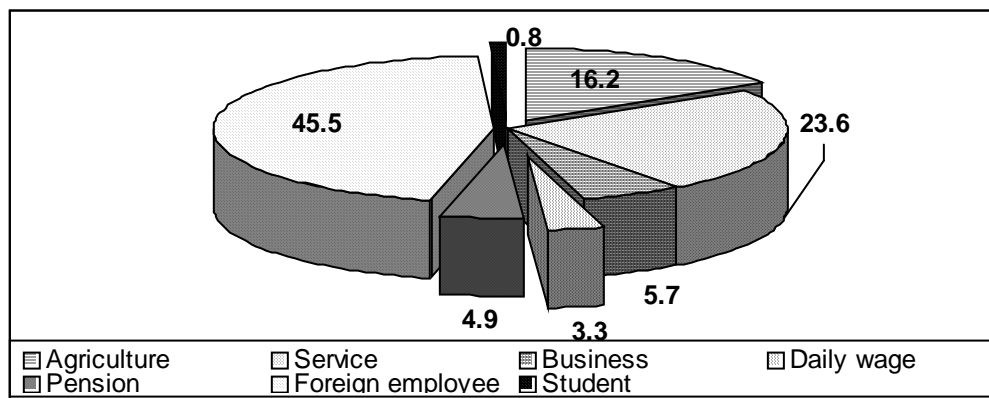
Husband's Occupation	Brahmin		Gurung		Total	
	No.	%	No.	%	No.	%
Agriculture	14	16.7	6	15.4	20	16.2
Service	25	29.8	4	10.3	29	23.6
Business	5	6.0	2	5.1	7	5.7
Daily wage	1	1.2	3	7.7	4	3.3
Pension	4	4.8	2	5.1	6	4.9
Foreign employee	35	41.7	21	53.8	56	45.5
Student	-	-	1	2.6	1	0.8
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>

Source: Field Survey, 2007.

Table 4.8 shows that higher proportions of the respondents' husband are found to have employed in foreign countries which is accounted for 45.5 percent of the respondents' husband. More than 23 percent of the respondents husbands are reported to have engaged in service and 16.2 percent are found to be engaged in agriculture. Only about three percent of the respondents' husbands are reported to have engaged in daily wage whereas only one respondent's husband is reported as student.

More than half of the husbands of Gurung respondents (53.8%) are foreign employee whereas only 41.7 percent of the Brahmin counterparts. Also higher proportions of Brahmin respondent's husbands are found to have engaged in agriculture and service.

*Figure 4 : Percentage Distribution of the Respondents by Husband's Occupation*



#### 4.2.7 Ownership of Land by Respondents

Women have got rights to property but there is no implementation in Nepalese society. Many women are called by their husband's or son's name. They have no identity which may result their domination and suppression in the society. Respondents were asked whether they had own their own property especially the property of land. The report is presented in Table 4.9.

**Table 4. 9: Distribution of the Respondents by Land Ownership Status**

<b>Ownership of Land</b>	<b>No. of Respondents</b>	<b>Percent</b>
Yes	3	2.4
No	120	97.6
<b>Total</b>	<b>123</b>	<b>100.0</b>
Size of Land (in Ropani)		
3 Ropani	1	0.8
5 Ropani	1	0.8
8 Ropani	1	0.8
<b>Total</b>	<b>3</b>	<b>2.4</b>

*Source: Field Survey, 2007.*

It is depicted from the Table 4.9 that the very less proportions of the respondent women have owned land of their own whereas a vast majority have no ownership. Only 2.4 percent of women have rights to property in which one each of the respondents reported to have 3 *Ropani*, 5 *Ropani* and 8 *Ropani*.

#### **4.2.8 Sufficiency of Income**

In order to find out the economic background of the respondents' household, they were asked about the sufficiency of income. The respondents who reported having insufficiency of income were further asked about the way of management. The responses for these two questions are presented in Table 4.10.

**Table 4. 10: Distribution of the Respondents by Sufficiency of Income and Way of Household Management**

<b>Sufficiency of income</b>	<b>No. of Respondents</b>	<b>Percent</b>
Yes	114	92.7
No	9	7.3
<b>Total</b>	<b>123</b>	<b>100.0</b>
<i>Way of household management</i>		
Doing labour	1	0.8
Labour/wage	1	0.8
Taking debt & hard work	6	4.9
Wages/labour	1	0.8
<b>Total</b>	<b>9</b>	<b>7.3</b>

*Source: Field Survey, 2007.*

It is clear to see from the Table 4.10 that most of the respondents have sufficiency of income to manage the household for which 92.7 percent of the respondents reported. The rest 7.3 percent of the respondents, however, reported that they have insufficiency of income. Two-third of the respondents who reported to have insufficiency of income said that they are managing the household by loan and doing hard work.

#### **4.2.9 Source of Drinking Water and Sanitation Situation**

Source of drinking water and sanitation determines the life standard of the people. People having good sanitation and drinking water are probably can prevent from the disease. People with sound health have lower infant and child mortality rate which helps in less birth because the parents will be sure that the children they bear will live longer. Therefore, they give birth of the children that they needed. Respondents were asked about the source of drinking water and facility of toilet and its type. The result from the study is shown in Table 4.11.



**Table 4. 11: Distribution of the Respondents by Source of Drinking Water and Sanitation Status**

<b>Source of drinking water</b>	<b>No. of Respondents</b>	<b>Percent</b>
Tap	119	96.7
Well	4	3.3
<b>Total</b>	<b>123</b>	<b>100.0</b>
<i>Toilet facility</i>		
Yes	115	93.5
No	8	6.5
<b>Total</b>	<b>123</b>	<b>100.0</b>
<i>Type of toilet</i>		
Simple pit	40	34.8
Advanced pit	3	2.6
Concrete	15	13.0
Toilet with flush	57	49.6
<b>Total</b>	<b>115</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

It is persistence from the Table 4.11 that most of the respondents use tap water for drinking which is accounted for 96.7 percent of the respondents. But the rest 3.3 reported that they use well water for drinking.

Similarly, 93.5 percent of the respondents' household have toilet facility but the rest don't have it. Among the respondents who reported that they have toilet facility, about half (49.6%) respondents reported that they have toilet with flush followed by simple pit for which 34.8 percent of the respondents reported. The least proportions (2.6%) of the respondents reported that they have advanced pit latrine.

### **4.3 Conclusion of the Background Characteristics of the Respondents**

Average size of family is large in the study area which was calculated as 6.09 members. Majority of the households (64.3%) have 4-6 members in their family followed by 7-9 members which is accounted for 21.2 percent. The literacy percent of the households is 82.8 and the remaining 17.2 percent were illiterate. There was at least one member literate in all the households. Higher proportions of the respondents are of 20-24 years of ages followed by 35-39 which is accounted for 22.8 percent. Only two religions were reported by the respondents in which a vast majority (92.7%) reported as Hindu and the rest 7.3 percent reported as Buddhist. About 90 percent (90.2%) respondents are literate and the rest are illiterate. Out of 90.2 percent literate, higher proportions (27.6%) have attended primary level education followed by lower secondary and secondary education which are accounted for 18.7 percent each of the respondents. Most of the respondents are engaged in agriculture which is accounted for 80.5 percent followed by service (7.3%). Higher proportions of the respondents' husband are found to have employed in foreign countries which is accounted for 45.5 percent of the respondents' husband. More than 23 percent of the respondents' husbands are reported to have engaged in service and 16.2 percent are found to be engaged in agriculture. A very less proportions of the respondent women have owned land of their own. Most of the respondents have sufficiency of income to manage the household for which 92.7 percent of the respondents reported. Most of the respondents use tap water for drinking which is accounted for 96.7 percent of the respondents. More than 93 percent (93.5%) of the respondents' household have toilet facility but the rest don't have it. Among the respondents who reported that they have toilet facility, about half (49.6%) respondents reported that they have toilet with flush.

## CHAPTER V

### FERTILITY DIFFERENTIAL AND USE OF FP METHODS

This chapter presents the distribution of the eligible women by age at menstruation, age at marriage, number of births and their knowledge of family planning methods, the sources of information about the various methods of family planning, the source of contraceptive supplies, etc. based on their caste/ethnicity.

#### 5.1 Age at First Menstruation

Age at first menstruation has significant impact on fertility because women's reproductive life is directly connected with menstruation. Timely and regular menstruation is the reproductive health of a woman. Age at first menstruation may also determine the marriage of a girl. A girl can conceive only after the onset of menstruation. To find out the fertility status based on the age at first menstruation, respondents were asked about the age at first menstruation. The result is presented in Table 5.1.

*Table 5. 1: Distribution of Respondents by Age at First Menstruation and Caste*

Age at first menstruation	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
<13 years	0	0.0	1	2.6	1	0.8
13-14 years	29	34.5	23	59.0	52	42.3
15-16 years	45	53.6	11	28.2	56	45.5
17 + years	10	11.9	4	10.3	14	11.4
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<b>Mean age at first menstruation</b>	<b>15.13</b>		<b>14.62</b>		<b>14.97</b>	

*Source: Field Survey, 2007.*

Table 5.1 indicates that Gurung girls are likely to get first menstruation earlier than those of Brahmin. The average age at first menstruation is calculated as 14.62

for Gurung whereas this is 15.13 years for Brahmin. About 62 percent of the Gurung respondents are found to have first menstruation before they completed 15 years whereas only 34.5 percent of the Brahmin women got their first menstruation before 15 years. More than half (53.6%) of the Brahmin respondents reported that they had first menstruation at the ages 15-16 years.

## 5.2 Fertility Status and Behaviour

### 5.2.1 Age at Marriage

Age at marriage is one of the factors which determine the status of women as well as the fertility. Marriage is very important to analyse the fertility behaviour of women in Nepal because fertility is almost impossible before marriage in Hindu religion. It is almost universal that lower the age at marriage, higher the number of children ever born. The women who tend to marry in early ages are likely to bear more children than that of women who marry lately. Table 5.2 represents the age at marriage of the respondents.

*Table 5. 2: Distribution of Respondents by Age at First Marriage and Caste/Ethnicity*

Age at marriage	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
<15 years	7	8.3	1	2.6	8	6.5
15-17 years	27	32.1	9	23.1	36	29.3
18-20 years	40	47.6	19	48.7	59	48.0
21-23 years	9	10.7	6	15.4	15	12.2
24 + years	1	1.2	4	10.3	5	4.1
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<b>Mean age at marriage</b>	<b>17.9</b>		<b>19.4</b>		<b>18.6</b>	

*Source: Field Survey, 2007.*

Table 5.2 shows that majority of women in the study area are married in the right age as compared to the national level where it is supposed that more than 40

percent of the women marry before they reach to 16 years. The mean age at marriage is found to be only 18.6 years constituting 17.9 years for Brahmin and 19.4 years for Gurung respondents. This shows that Brahmin women are likely to marry earlier than the Gurung women. This also indicates that age at first menstruation is not significant to determine the marriage of a girl in the study area.

### 5.2.2 Age at First Birth

As the women get married early, they are also likely to bear children in the early ages. Also they are likely to bear more children because they use their most of their reproductive period. But the respondents are found marrying at early age and bear the first child in their early ages. Respondents were asked about their childbearing age and the responses are tabulated in Table 5.3.

*Table 5. 3: Distribution of Respondents by Age at First Birth*

Age at first birth	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
Having birth	75	89.3	35	89.7	110	89.4
Not having birth	9	10.7	4	10.3	13	10.6
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<i>Age at first birth</i>						
< 18 years	5	6.7	7	20.0	12	10.9
18-20 years	39	52.0	10	28.6	49	44.5
21-23 years	23	30.7	12	34.3	35	31.8
24-26 years	6	8.0	5	14.3	11	10.0
27 years & above	2	2.7	1	2.9	3	2.7
<b>Total</b>	<b>75</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Mean age at birth</b>	<b>20.35</b>		<b>20.54</b>		<b>20.41</b>	

*Source: Field Survey, 2007.*

Table 5.3 depicts that 89.4 percent of the respondents are having at least one birth and the rest have no children at all. Respondents who had said to have child were further asked about the number of children they have. Among the respondents who

have given birth to at least one child, more than half of the Brahmin respondents (52%) gave birth to first child at the ages 18-20 years followed by 21-23 years (30.7%). But 34.3 percent of the Gurung respondents gave birth to first child at the ages 21-23 years followed by 18-20 years (28.6%). Interestingly, there is not significant difference between Gurung and Brahmin women in the age for the first birth which shows by the calculation of mean age at marriage for Brahmin women 20.35 years and for Gurung women 20.54 years. The data show that the Gurung respondents reported their marriage later than the Brahmin but their age at first birth has no variation with Brahmin. This may be because some Gurung marry later after having first birth or pregnancy which is thought common by their society.

### 5.2.3 Children Ever Born

Children Ever Born (CEB) is defined as the number of live births to women at the time of survey or study. Number of live births also determines the status of women because the women having more children are likely to suffer from various family burden by which their economic and health become weak. The number of CEB to respondents in the study area is presented in Table 5.4.

*Table 5. 4: Distribution of Respondents by Number of Children Ever Born and Caste/Ethnicity*

CEB	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
One child	14	18.7	5	14.3	19	17.3
Two children	28	37.3	18	51.4	46	41.8
Three	23	30.7	6	17.1	29	26.4
Four	8	10.7	5	14.3	13	11.8
Five or more	2	2.7	1	2.9	3	2.7
<b>Total</b>	<b>75</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<b>Average CEB</b>	<b>2.41</b>		<b>2.40</b>		<b>2.41</b>	

*Source: Field Survey, 2007.*

It is evident from the Table 5.4 that children ever born among the respondents is found to be 2.41 children per woman constituting 2.41 for Brahmin women and

2.40 for Gurung women. More than half (51.4%) of Gurung women have two children followed by three children (17.1%).

The respondents were found having up to five children. About 37 percent (37.3%) of Brahmin women reported that they have two children followed by three children (30.7%). This shows that there is not significant differences in CEB among Brahmin and Gurung women in the study area.

#### 5.2.4 Living Status of Children

Living status of children also determines the fertility behavior of a couple. If one couple frequently loss their children they tend to give birth to more children because they cannot be sure that all of their children will survive. This also indicates the women's status because there may be anything wrong either in reproductive function of woman or less care and nutritional carelessness during pregnancy time. Data on living status of children are presented in Table 5.5.

*Table 5. 5: Distribution of Respondents by Living Status of Children*

Living status	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
<i>All alive ?</i>						
Yes	65	86.7	30	85.7	95	86.4
No	10	13.3	5	14.3	15	13.6
<b>Total</b>	<b>75</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>
<i>Total Deaths</i>						
One	9	12.0	4	11.4	13	11.8
Two	1	1.3	1	2.9	2	1.8
<b>Total</b>	<b>10</b>	<b>13.3</b>	<b>5</b>	<b>14.3</b>	<b>15</b>	<b>13.6</b>
<b>Average deaths</b>	<b>1.1</b>		<b>1.67</b>		<b>1.41</b>	

*Source: Field Survey, 2007.*

It is clear to see from the Table 5.4 that majority (86.4%) of the respondents' children are all alive but the children of 13.6 percent are not all alive. Among the women who had given birth to at least one child were asked about the survival

status of their children. Twelve percent of the Brahmin women having at least one birth reported that they had one child's death and 1.3 of the Brahmin woman having at least one child said that she had two children's death. Among the women who lose their children, they lose 1.41 children on an average consisting 1.1 children of Brahmin women and 1.67 children of Gurung women.

### 5.2.5 Status and Loss of Pregnancy

Pregnancy is desire for woman after marriage especially for Nepalese women. Society and couple think the goal of marriage is to bear children. When a woman collapses her pregnancy frequently, she will be keen to be pregnant recently and frequently so the couple may not tend to use fertility control methods. The health of woman may also diminish when she gets pregnant frequently. Information regarding pregnancy collapse status was included in the questionnaire and the result is presented in Table 5.6.

*Table 5. 6: Distribution of Respondents by Pregnancy Collapse Status and Number*

Pregnancy status	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
<i>Pregnancy loss ?</i>						
Yes	19	22.6	8	20.5	27	22.0
No	65	77.4	31	79.5	96	78.0
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<i>Total pregnancy loss</i>						
One	15	78.9	7	87.5	22	81.5
Two	3	15.8	1	12.5	4	14.8
Three	1	5.3	-	-	1	3.7
<b>Total</b>	<b>19</b>	<b>100.0</b>	<b>8</b>	<b>100</b>	<b>27</b>	<b>100.0</b>

*Source: Field Survey, 2007.*

Table 5.6 clears that 22.6 percent of Brahmin and 20.5 percent of the Gurung respondents have lost their pregnancy. Of all the respondents, 22 percent have lost their pregnancy. Among the respondents who have lost their pregnancy, most of them have lost only one pregnancy (This has not included involuntary abortion



and the separate question was also not kept in the questionnaire for it). Among the study women, up to three terminations of pregnancy were reported. It seems that Brahmin women loss more pregnancies than those of Gurung women. Gurung women reported up to two terminations of their pregnancy involuntarily. More proportions of Brahmin (22.6%) have lost pregnancy than their Gurung counterparts (20.5%). The main causes of variation is that Brahmin women have lack of rest and nutrition during pregnancy.

### 5.3 Fertility Differential Between Gurung and Brahmin

In order to see the fertility status at a glance for both caste/ethnic group, Brahmin and Gurung, the main fertility indicators were summarised in mean. The main analysed indicators were: Age at first menstruation, Age at marriage, Age at first birth, CEB, Total deaths and number of involuntary pregnancy terminations. These indicators are compared for Brahmin and Gurung respondent women in the study area as presented in Table 5.7.

**Table 5. 7: Comparison of Brahmin and Gurung Respondents with Respect to Fertility Indicators**

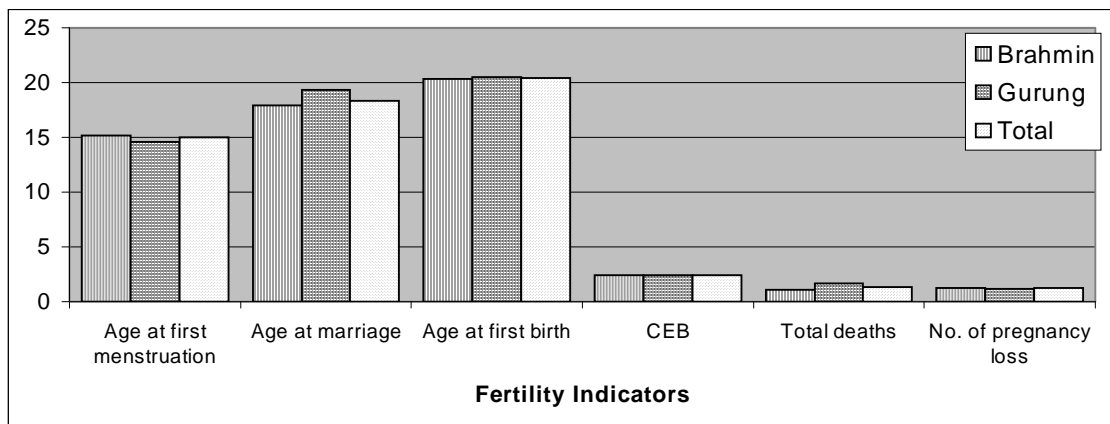
<b>Fertility indicators</b>	<b>Brahmin</b>	<b>Gurung</b>	<b>Total</b>
Age at first menstruation	15.13	14.62	14.97
Age at marriage	17.92	19.36	18.37
Age at first birth	20.35	20.54	20.41
CEB	2.41	2.40	2.41
Total deaths	1.10	1.67	1.31
No. of pregnancy loss	1.26	1.13	1.22

*Source: Field Survey, 2007.*

It is clear to see from the Table 5.7 that Brahmin women are tend to have first menstruation at later age than those of Gurung but they tend to marry earlier than Gurung women. Mean age at marriage from Brahming women is calculated as 17.92 years whereas it is 19.36 for Gurung women. It is also notable from the Table 5.7 that after the marry, Gurung women give birth of first child recently after one year but Brahmin women have wider gap between marriage and first

birth. Age at first birth for both the castes is found relatively same which is 20.35 years for Brahmin women and 20.54 years for Gurung women. It also seems that Gurung women loss slightly less no. of pregnancy than those of the Brahmin counterparts.

*Figure 5: Mean Comparison of Fertility Indicators*



## 5.4 Knowledge of FP

Knowledge of FP among people is universal in Nepal (NDHS, 2001). Knowledge of contraceptive methods is an important precondition toward gaining access and then using a suitable contraceptive in a timely and effective manner. The ability to name or recognize a family planning method is rather a high level of knowledge on it. Knowledge on the FP devices is the prime to decide to use them. Again knowledge on more methods helps the users to choose the suitable method according to their desire and health status.

### 5.4.1 Heard of FP Methods

Heard about contraceptives is a fundamental to adopt and choice the method. There are lots of obstacles in using contraceptives after heard and need of that contraceptives. For example, if one knows about condom and he needs it either for birth spacing or to protect himself from STDs, he should have easy access to the condom nearby him, that should be affordable to him and even at the time of use

he need to be sensitive using that. So, complete knowledge about contraceptives, proper supplies according to the demand, affordable to low income people, etc. are necessary to convert the knowledge into practice. Similarly, heard about family planning and information on family planning devices are different because one can heard about family planning (*Pariwar Niyojan*) but they may not have information on it. Such as what it is, why it is needed and what are the methods. Some questions were asked about the knowledge of contraceptive which is presented in Table 5.8.

**Table 5. 8: Distribution of Currently Married Women (Respondents) by Heard of FP and the Methods Heard**

Knowledge on FP	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
<i>Heard of FP methods</i>						
Yes	81	96.4	39	100.0	120	97.6
No	3	3.6	-	-	3	2.4
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>
<i>Methods heard</i>						
Pills	41	50.6	24	61.5	65	54.2
IUD	4	4.9	-	-	4	3.3
Depo-Provera	43	53.1	21	53.8	64	53.3
Female sterilization	18	22.2	14	35.9	32	26.7
Male sterilization	8	9.9	4	10.3	12	10.0
Condom	38	46.9	19	48.7	57	47.5
Norplant	5	6.2	-	-	5	4.2
Kamal Tablet	9	11.1	1	2.6	10	8.3
Withdrawal	21	25.9	3	7.7	24	20.0
Safe period	3	3.7	-	-	3	2.5
All method	23	28.4	12	30.8	35	29.2

Source: Field Survey, 2007.

Note: The sum of percentage column may exceed 100 because of multiple responses.

It is pertinent from the Table 5.8 that all of the Gurung and 96.4 percent of the Brahmin women have heard of family planning methods. Out of the women who reported to have heard of FP methods, 54.2 percent reported to have heard about Pills constituting 50.6 percent of Brahmin and 61.5 percent of Gurung women.

About 53 percent of the respondents (53.3%) of the women reported to have heard about Depo-Provera. There was no significant difference among Brahmin and Gurung women to have heard about Depo which recorded 53.1 percent of the Brahmin and 53.8 percent of the Gurung women. Least proportions of the women are found to have heard about IUD and Norplant for which 3.3 and 4.2 percent of the respondents reported respectively.

## 5.5 Ever Use of Contraceptives

Fertility depends on the use of contraceptives. Every couple does not use them. First they should hear about it and among the ever heard they may use it and control fertility. Ever use of FP shows the fertility behaviour of women. Women who have used FP methods may have fewer children than those who have not ever used. Respondents were asked if they have ever used FP methods among the respondents who had said to have heard about FP methods and were married. The respondents were asked about ever use of contraceptives the responses are tabulated in Table 5.9.

**Table 5. 9: Distribution of the Respondents by Ever Use of Contraceptives according to their Caste/Ethnicity**

Ever use of FP	Brahmin		Gurung		Total	
	Number	Percent	Number	Percent	Number	Percent
Pills	64	79.0	23	59.0	87	72.5
IUD	2	2.5	-	-	2	1.7
Depo-Provera	34	42.0	13	33.3	47	39.2
Female sterilization	17	21.0	10	25.6	27	22.5
Male sterilization	11	13.6	2	1.7	13	10.8
Condom	38	46.9	19	48.7	57	47.5
Norplant	2	2.5	-	-	2	1.7
Kamal Tablet	6	7.4	-	-	6	5.0
Withdrawal	21	25.9	3	7.7	24	20.0
Safe period	6	7.4	1	2.6	7	5.8

Source: Field Survey, 2007.

Note: The sum of percentage may exceed 100 because of multiple responses.

It is interesting to note from the Table 5.9 that 64 women reported of having ever used of FP method all of which are found to have used Pills once (Data is not presented in the Table 5.9). More percentage of women have responded on ever use of withdrawal methods than the women who reported to have heard of this methods. This shows the shyness to expose about their sexuality. This also indicates that in some cases they are using traditional FP methods but they don't know which methods they are. Use of Pills, Depo and Condom have been found more for all the respondents for which 72.5, 47.5 and 39.2 percents of the respondents reported. It seems that Brahmin women use more contraceptives. Seventy-nine percent of the Brahmin women reported to have ever use of Pills whereas 59 percent of Gurung counterparts reported. Forty-two percent of the Brahmin women reported to have ever used of Depo whereas 33.3 percent of the Gurung women reported. Use of condom and female sterilization is slight more to Gurung women. About 49 percent (48.7%) of the Gurung women reported to have ever used of condom whereas 46.9 percent of the Brahmin counterparts reported. More than 25 percent of the Gurung women reported to have used of female sterilization whereas 21 percent of the Brahmin respondents reported.

## **CHAPTER VI**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

In this chapter is the central part of the report which provides the main findings and main things about study. This chapter presents the summary of the findings, conclusions and recommendations for policy making. Based on findings conclusions has drawn and according to conclusions drawn, recommendations are attempted in order to improve the women's status especially in terms of fertility in the study area.

#### **6.1 Summary of the Findings**

The following findings highlight the main notable findings as obtained from data collection.

- ) Average size of family is large in the study area. Total household size is calculated as 6.09 members in which males consist 3.08 and females 3.01.
- ) Majority of the households (64.3%) have 4-6 members in their family followed by 7-9 members which is accounted for 21.2 percent.
- ) There was population of 749 in all the 123 households where 704 were at the age of 6 years and above which consisted 583 literates and 121 illiterates.
- ) The literacy percent of the households is 82.8 and the remaining 17.2 percent were illiterate.
- ) There was at least one member literate in all the households.
- ) Higher proportions of the respondents are of 20-24 years of ages followed by 35-39 which is accounted for 22.8 percent.

- ) It is clear to notice that only two religions were reported by the respondents in which a vast majority (92.7%) reported as Hindu and the rest 7.3 percent reported as Buddhist.
- ) About 90 percent (90.2%) respondents are literate and the rest are illiterate. Out of 90.2 percent literate, higher proportions (27.6%) have attended primary level education followed by lower secondary and secondary education which are accounted for 18.7 percent each of the respondents.
- ) There was no significant difference in literacy between Brahmin and Gurung women however a slight more proportions of Gurung respondents (92.3%) than Brahmin respondents (89.3%) was reported.
- ) Most of the respondents are engaged in agriculture which is accounted for 80.5 percent followed by service (7.3%).
- ) Comparing Brahmin and Gurung with respect to their occupation, more Brahmin than Gurung (83.3% and 74.4%) respectively are found to have engaged in agriculture. It is because of lack of cultivable land as well as their husband either foreign employee or British and Indian army.
- ) Higher proportions of the respondents' husband are found to have employed in foreign countries which is accounted for 45.5 percent of the respondents' husband.
- ) More than half of the husbands of Gurung respondents (53.8%) are foreign employee whereas only 41.7 percent of the Brahmin counterparts
- ) More than 23 percent of the respondents' husbands are reported to have engaged in service and 16.2 percent are found to be engaged in agriculture.

- ) A very less proportions of the respondent women have owned land of their own whereas a vast majority have no ownership. Only 2.4 percent of women have rights to property in which one each of the respondent reported.
- ) Most of the respondents have sufficiency of income to manage the household for which 92.7 percent of the respondents reported.
- ) Most of the respondents use tap water for drinking which is accounted for 96.7 percent of the respondents.
- ) More than 93 percent (93.5%) of the respondents' household have toilet facility but the rest don't have it.
- ) Among the respondents who reported that they have toilet facility, about half (49.6%) respondents reported that they have toilet with flush.
- ) Gurung girls are likely to get first menstruation earlier than those of Brahmin. The average age at first menstruation is calculated as 14.62 for Gurung whereas this is 15.13 years for Brahmin.
- ) About 62 percent of the Gurung respondents are found to have first menstruation before they completed 15 years whereas only 34.5 percent of the Brahmin women got their first menstruation before 15 years.
- ) Majority of women in the study area are married in the right age as compared to the national level where it is supposed that more than 40 percent of the women marry before they reach to 16 years.
- ) The mean age at marriage is found to be only 18.6 years constituting 17.9 years for Brahmin and 19.4 years for Gurung respondents.



- ) About 89 percent (89.4%) of the respondents are having at least one birth and the rest have no children at all.
- ) Among the respondents who have given birth to at least one child, more than half of the Brahmin respondents (52%) gave birth to first child at the ages 18-20 years followed by 21-23 years (30.7%). The mean age at marriage for Brahmin women 20.35 years and for Gurung women 20.54 years.
- ) Children Ever Born (CEB) among the respondents is found to be 2.41 children per woman constituting 2.41 for Brahmin women and 2.40 for Gurung women.
- ) More than half (51.4%) of Gurung women have two children followed by three children (17.1%).
- ) The respondents were found having up to five children. About 37 percent (37.3%) of Brahmin women reported that they have two children followed by three children (30.7%).
- ) The majority (86.4%) of the respondents' children are all alive but the children of 13.6 percent are not all alive.
- ) Twelve percent of the Brahmin women having at least one birth reported that they had one child's death.
- ) Among the women who lose their children, they lose 1.41 children on an average consisting 1.1 children of Brahmin women and 1.67 children of Gurung women.

- ) About 23 percent (22.6%) of Brahmin and 20.5 percent of the Gurung respondents have lost their pregnancy. Of all the respondents, 22 percent have lost their pregnancy.
- ) Among the study women, up to three terminations of pregnancy were reported. It seems that Brahmin women loss more pregnancies than those of Gurung women. Gurung women reported up to two terminations of their pregnancy involuntarily.
- ) Mean age at marriage from Brahming women is calculated as 17.92 years whereas it is 19.36 for Gurung women.
- ) Age at first birth for both the castes is found relatively same which is 20.35 years for Brahmin women and 20.54 years for Gurung women.
- ) All of the Gurung and 96.4 percent of the Brahmin women have heard of family planning methods.
- ) Out of the women who reported to have heard of FP methods, 54.2 percent reported to have heard about Pills constituting 50.6 percent of Brahmin and 61.5 percent of Gurung women.
- ) About 53 percent of the respondents (53.3%) of the women reported to have heard about Depo-Provera.
- ) The use of Pills, Depo and Condom have been found more for all the respondents for which 72.5, 47.5 and 39.2 percents of the respondents reported.
- ) Seventy-nine percent of the Brahmin women reported to have ever use of Pills whereas 59 percent of Gurung counterparts reported.

- ) About 49 percent (48.7%) of the Gurung women reported to have ever used of condom whereas 46.9 percent of the Brahmin counterparts reported.

## 6.2 Conclusions

This shows the high literacy status in the respondents' households (Data is not presented in the table but calculated from the survey data). All together there were 704 people at the age of 6 years and above in the respondents households, which consisted 583 literates and 121 illiterates.

Although the fertility level has begun declining, the last census data show Nepal's TFR of 3.8 (Table 1), which is by the world standards still high. The high fertility level in Nepal can be attributed to a number of contributing factors that continue to labor high fertility. They include early and universal marriage, desire for sons for both religious and economic reasons- immediate economic gains and old age security (Karki, 1982). Besides, various religions while do not prohibit the use of contraception may give a disposition to high fertility. Many also hold the belief that in situations where life offers little but hardship to the majority, sexual pleasure and the joy the children can bring, are one of the few sources of satisfaction.

The mean age at marriage is found to be only 18.6 years constituting 17.9 years for Brahmin and 19.4 years for Gurung respondents. This shows that Brahmin women are likely to marry earlier than the Gurung women. This also indicates that age at first menstruation is not significant to determine the marriage of a girl in the study area. The respondents were found having up to five children. About 37 percent (37.3%) of Brahmin women reported that they have two children followed by three children (30.7%). This shows that there is not significant differences in CEB among Brahmin and Gurung women in the study area. Among the study women, up to three terminations of pregnancy were reported. It seems that

Brahmin women loss more pregnancies than those of Gurung women. Gurung women reported up to two terminations of their pregnancy involuntarily.

Brahmin women are tend to have first menstruation at later age than those of Gurung but they tend to marry earlier than Gurung women. Mean age at marriage from Brahming women is calculated as 17.92 years whereas it is 19.36 for Gurung women.

Gurung women give birth of first child recently after one year but Brahmin women have wider gap between marriage and first birth. Age at first birth for both the castes is found relatively same which is 20.35 years for Brahmin women and 20.54 years for Gurung women. More percentage of women have responded on ever use of withdrawal methods than the women who reported to have heard of this methods. This shows the shyness to expose about their sexuality. This also indicates that in some cases they are using traditional FP methods but they don't know which methods they are. Use of Pills, Depo and Condom have been found more for all the respondents for which 72.5, 47.5 and 39.2 percents of the respondents reported. Use of condom and female sterilization is slight more to Gurung women. About 49 percent (48.7%) of the Gurung women reported to have ever used of condom whereas 46.9 percent of the Brahmin counterparts reported.

Law regarding property rights and abortion has amended in recent years but the level of implementation is very low. In this light, the role of individuals, families, organizations and others is equally important to ascend the implementation level of laws and regulations. Because of such deplorable condition of women, they are compelled to breed more children even they know the bad impact of more births.

As there is much progression in fertility rates since 5-6 decades, the growth rate in population has not decreased. The main reason for it can be said to have increased

in life-expectancy at birth and improve in health condition of people which improved in infant and maternal mortality rates.

The age pattern of fertility indicates that Nepalese women have high fertility in the early part of the childbearing period. At the current ASFRs, a woman in Nepal will have given birth to about three children by age 30 (NDHS, 2001).

### **6.3 Recommendations**

Based on the small-scale study and from its findings, the following recommendations can be drawn.

- ) Information, education and communication programmes must be reinforced by health or community workers at the village level who can teach the villagers – the involvement of women must be encouraged.
- ) Birth rate can possibly be reduced by careful design of population policies and programmes that are correctly implemented. These should take into account the experience of other counties with similar problems.
- ) Integrated programmes with multidimensional approach which emphasizes literacy, education, lowering infant mortality and providing contraceptives along with follow-ups are necessary to reduce in fertility rates.
- ) Brahmin women tend to marry early and higher proportions of the women have termination of pregnancies. Therefore, they should be encouraged to marry late or they should be educated to the advantages of delayed marriage.
- ) Use of contraception has also seemed low, therefore dissemination of information on the contraceptive methods and distribution of the contraceptives should be made rapid.

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