

**FERTILITY BEHAVIOR AMONG THAMI COMMUNITY OF
DOLAKHA DISTRICT**

**BY
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RECOMMENDATION LETTER

This is certify that Kalika Mainali has worked under my supervision and guidance for the preparation of this dissertation entitled "**Fertility Behavior Among Thami Community of Dolakha District**" for the partial fulfillment of Master of Arts in Population Studies. To the best of my knowledge the study is original. I, therefore, recommend it for evaluation to the dissertation committee.

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Nepal is composed of multi-ethnic, multi-lingual, cultural and multi-religious groups. Among numerous disadvantaged minority groups Thami is a peculiar and one of the very backward ethnic group resided in Dolakha district, structural inequality and ignorance are the emerging consequences within this community. Necessary development programmes are very far behind to their approach. Development could never be imagined that they are still far from daily necessities. IN the context nobody could believe that the nation could move without integrating all minorities in the mainstream of development.

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ABSTRACT

The study on "Fertility Behaviour among the Thami Community in Sundrawoti VDC, of Dolakha District" had been carried out using primary data obtained from 120 respondents from 120 households for currently married women aged 15-49 years in the study area. In this study, the relation between fertility and demographic variables (age at marriage of women's education level of women, contraceptive used, sex, preference, breast feeding, child loss experiences and occupation) among currently married women aged 15-49 years were examined.

The total sample population in 952 in the study area, among them 482 were male and 470 were female. The sex ratio was 102.5 and dependency ratio was 31.5. In the study area 70.99% people were literate and major occupation is agriculture 27.1% people were engaged in this sector.

In the study area 67.5% currently married women were literate, 2.5% illiterate. About 47.5% people engaged in households work, 39.2% engaged in agriculture, 8.3% engaged in services and only 5% engaged in wage labour.

Socio-economic, demographic and cultural variables increasing fertility were observed as 56.7% currently married women were not using any contraceptive methods. Their socio-economic status was also very low and child loss experience was high in the study area. So the child ever born was observed 2.74 which was higher than national fertility level (2.24). This study indicated the main cause of higher CEB are low level of education, not using contraceptives, low level of socio-economic status, not availability of FP, depending upon agriculture, more women depended on household work, early marriage, son preference and high level of child loss experience.

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ACRONYMS AND ABBREVIATIONS

ANC	Antenatal Care
ASFR	Age-Specific Fertility Rate
CBR	Crude Birth Rate
CBS	Central Bureau of Statistics
CDPS	Center Department of Population Studies
CEB	Child Ever Born
DDC	District Development Committee
ICPD	International Conference of Population and Development
INGo	International Non-Government Organization
MCHW	Maternal and Child Health Worker
MEBDC	Migration, Employment, Birth, Death and Contraception
MOH	Ministry of Health
NCP	National Commission on Population
NDHS	Nepal Demographic and Health Survey
NEFIN	Nepal Federation of Indigenous Nationalities
NPC	National Planning Commission
NPR	Nepal Population Report
PRB	Population Reference Bureau
SDC	Swiss Development Corporation
SLC	School Leaving Certificate
SPSS	Statistical Package for Social Science
TFR	Total Fertility Rate
TMFR	Total Marital Fertility Rate
TU	Tribhuvan University
UN	United Nations
UNDP	United Nations Development Programme
VDC	Village Development Committee
VHW	Village Health Worker
WB	World Bank
WHO	World Health Organizations

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CHAPTER I

INTRODUCTION

1.1.1 Background of the Study

Different kinds of community live in Nepal. They have own religions, custom language and usage. According to the book entitled "chnapa Ma Janajati" there are 60 ethnic caste or tribes living in Nepal. Among them, Thami is a caste which is a very strange and disappearing tribe inhabited from beginning. Majority of them are residing in Dolakha district. They are supposed to be migrated from next part of the country. This statement is very confusing and contradictory. There are different statements on its arrivals or origin. According to one statement, Yapti Chhuku and Sonari Aaji were coming from Simangardh through Kamaru Kamaksha, Satkamala, Dhuni best, Thankot, Hanumandhoka, Pshupati, Kiteshwar, Dolalghat. When they reached Dolalghat they separated each other. After some months they met each other near Tamakoshi. Then they reached Ran—Rang Thali of Kashamwoti. They had brought Bar Lord and Bhume God with them. They had received some land as Kipat bordered by Dolakha to Sundrawaotiinn in the east and Tamakohsi to Kahmawoti in the west. Later, they have seemed to be spread in other parts of Dolakha from Rang-Rang Thali of Kshamawoti Dc. They brought a Jabe (A kind of bag) and Aara (Saw) by male and lathe and thread by female with them. Their life was like a roaming, when they reached in Rang-Rang Thali, they stayed there and since then they used to be said as Thami, Thus their roaming life was changed in permanent open depend their livelihood in the jungle.

At that time there was a separate state of Newar in Avayapur of Dolakha. A worker used to fish and took to the king. One day he found a piece of wood. He took it to the king., Then the king ordered to find the

people who lived in their kingdom. The worker load found to the Thami and delivered to the king. One day he found a piece of wood. He took it to the king. Then the king ordered to find the people who lived in their kingdom. The worker had found to the Thami and delivered to the king. The king begged the present but male Thami hadn't any things to present him. Next day they went to the King and female picked up her three pieces of hair and banged down hard on the land which produced a dish and a deer of gold. She gave deer to put the dishes to the king. The king gave them land as Kipat (Pandey, 2051).

They gave birth to seven sons and seven daughters. There were no other families to get marriage for their children. So they discussed about marriage of their sons and daughters and decided that biggest daughter for biggest son and smallest daughter for smallest son for marriage. Thus they married and settled in seven places. So Thami are called as sat Gaunle (Seven villages). Seven places are Bigu, Aalampu, Dmukot of Sundrawoti, Suspa, Tarevir, Chagu and Lapilang spreading in different parts of Dolakha. Some person said UKE Chhuku (Male) and Betiyazi female) are the ancestor of Thami community in the context of Nepal (Shiwakoti, 2056).

According to other statement they had come from Simangadh with Limbuwan and Khumuwan to Amber Koshi. Then Thami couple were reached in Thankot through Tamakoshi; Seti river, Kali River, Trisuli river. Some time they lived in Thankot. After some time they moved through Indrawoti, Sunkoshi to Fulbari Dapcha. They stayed for some time there also. Because of conflict over there, they didn't stay there for long time. Later they reached Avayapur of Dolakha. In Avayapur they become ruler for sometime. After sometime Near tribes attacked them and took Avayapur as their land. Some of them moved to the east and others lived in Dolakha. Thami are densely populated in Dolakha district

and Sindhupalchowk district. Thami people are lives in 24 VDCs in Dolakha district.

The title of this thesis is "Fertility Behaviour among Thami community. The basic premise for the thesis is to set out the pattern of fertility and its determinants with a sample, cross-cultural social survey of all women of reproductive age (15-49) in the Thami community of Nepal. To facilitate this, I will start with good reason to think that why we use a case study approach to studying fertility and its theoretical base.

Fertility is actual reproductive performance of an individual, a couple, a group or population (PRB, 2001). A biological process which is determined by socio-cultural and economic factors such as proper health facilities, status of women, literacy rate, level of income, age at marriage and contraceptive prevalence is called fertility.

Among them, a fertility behavior is the process of giving birth, which is interacted with the ambient environment and the environment is different in different societies. Within the biological limits of human fertility several social, cultural, psychological as well as economic and political factors are found to operate and these are responsible for determining the levels and differentials of fertility (Bhende and Kanitkar, 1994).

Human fertility is a very complex process relating not only to biological components but also to the social and economic components of the society (Dahal, 1992). The subject of human fertility covers a wide range of areas reflecting the complexity of this aspect of human behaviour. It is influenced by a host of biological, sociological and economic factors. Similarly, fertility is not only biological as opposed to social, so it is also historically and culturally specific, structured by a particular set of social assumptions (Bourdieu 1977).

Three demographic processes that determine the structure, distribution and growth of any population are: fertility, mortality and migration. Among these factors, fertility is one of the main factors in determining the age structure of a population compared to other demographic processes, the study of fertility is complex because it is affected by host factors including biological as well as behavioural (NPR, 2007).

Nepal is facing the problem of high fertility especially in different caste ethnicity groups, characterized with distinct characteristics advanced groups. (NEFIN-2004).

Especially, the fertility is affected by various socio-economic factors like education, Age at marriage, duration of breast feeding, employment, occupation, level of income knowledge and use of contraceptives ethnic groups geographical areas old traditions and practices etc. affect the fertility behavioural of any group and community. in Nepal. Fertility level is high due to high economic values of children, high IMR, socio-economic traditions, sons preference, low socio-economic status of women in the society low literacy rates. Besides these system of early and child marriage, types of occupation, joint family system and equally responsibility for high fertility level.

Why this study?

Thami community is economically backward group. Early marriage is persistent. Mortality (Infant and child) rate is higher in this community compared to other communities (NEFIN, 2004).

They might have the demographic patterns different from other ethnic minorities of Nepal. So this study attempts to examine the fertility behaviour and its socio-economic and demographic determinants in this community. The area of study is Sundrawati VDC of Dolakha District where "Thami" are considerably large in population.

A detailed study has been made of the study area focused on Thami community. It has attempted to sketch the living standard, political awareness, occupation, educational status, income resources. Thami are the laborious, honest and frank. They use own language among to communicate in their community, Nepal is also used as the medium of communication. They have no written scripts. They worship deities and they neither fall themselves as Hinduism or Buddhims "(Adhikari, 1994). They depend on agriculture and wage labour for their livelihood. In short they are economically deserted and socially back warded but culturally rich and distinctive.

They have own religions. They are neither Hindu nor Buddhist, their main lor is Bhhume (God of earth). They worship of nature. They celebrate Dashain, tihar, Sanne Sankranti and Bhume Pooja (Worship of land) as festivals. But most of the Thami of Sundrawoti DC celebrate Dashain, Tihar which is the main festivals of Hindu. Some Thami people celebrate others festivals also. Because of low capacity of expenditure they couldn't celebrate festivals also. Because of low capacity of expenditure they couldn't celebrate festivals well. They believe on Dhami Jhankri,¹ and Tantra mantra (Practice of Witch doctor). Dhami, Jhakri are necessary for other religions ceremony and social activities also.

Thami are very cooperative and cultured people. They live in the principle of consistence. They go to jungle for firewood and fodder in groups. Cattle heard are taken to jungle and brought back home together. They do their farming from Parma (sharing labour for farming) which is a main example of cooperative and co-existence).

Thami had claimed that they were come from Hindu community. Devi mas usually worshipped during the fool moon. Sacrifice of the animals particularly chicken and she goat was widely practiced in

¹ Dhami, Jhakri means Jharphuk garne Manchhe.

Devithan. Devithan, the place of worship was found to be near trees which had given an impression that Thami originally worshiped natural forces. They had given special emphasis to Bhume (The land god). Other Hindu Gods and Goddesses have got little attention to this community. (Shedain, 2003).

Thus to find the solution of population growth, it is necessary to know the "fertility behaviour" by the government and individual as well by which effective implementation of central measures and success of development planning become possible. I can say that, in the Thami community fertility level is high than other community. So in this community to provide a awareness of education, FP education then the thesis develops a case study approach by treating fertility behaviours in order to a closer relationship with more general social theory. Similarly, Thami people have no any problem related to citizenship certificates. They said that they are able to get if they requested for it. Most of them have citizenship certificates, so, I can say that all opportunities like education, health facilities, communities and so on which is to provide equally without discrimination in upper communities.

1.2 Problem Statement and Research Question

Population growth has appeared as a threatening challenge to development and prosperity of human race. It is defined definite that the population growth will continue in future due to high birth rate and low death rate. Therefore the world's main concern of the government has been to check rapidly increasing population growth and consequently there has been remarkable awareness of the implications of population change in process of national development. Rapid increase of population is burning problem for Nepal special caused by fertility. The level of fertility is considered seriously and measured by different rate as CBR and TFR. Socio-economic factors like education and occupation,

demographic factor like Age at marriage, infant mortality and use of contraceptive effective the life time fertility of women in many ways.

In Nepal, people normally, trend to marry in early ages. Some of them marry before teenage and most of them marry before teenage and most of them in the late teenage which results into a longer span of marital and child bearing period with substantially a higher fertility. Additionally prevailing high infant and child mortality, particularly in rural setting is further responsible to motive the mothers to give more births. They do not want to bear the risk of dying of their infant and children. The social structure of each society is interrelated with specific population levels. It is also closely related to environmental, technology and others marital factors which intervenes reproductive behaviour, more over there are significant caste differentials (Niraula and Shrestha, 1997). Also it is noticeable that the population of ethnic groups has shown considerable variables in demographic and socio-economic characteristics (Karki, 1996). Low socio-economic status of women in the society high economic value of children, high infant mortality rates, low literacy rate of the women etc. are some main factors that contribute to high level of fertility in Nepal. Besides these factors, the persistence of high fertility is also attributed to the lack of knowledge, attitude and practice to contraception methods in Nepal as a whole or they special community and also every stage of life irrespective of caste and ethnic groups of fertility (Dahal, 1989).

Nepal is the second poorest country of the world. Above 38 percentage people are marginalized, disadvantaged and deprived of basic amenities. Social, economical and educational conditions are unsatisfactory. Dolakha being the district of same category where most of the people live in rural parts is selected for research, Sundrawoti VDC is one of the poorest and remote VDCs of the district.

Thami community is one of the very beginning inhabitants of Nepal living particularly in this district. They are disadvantaged minority community in Nepal's population. Most Thami people are working in agriculture sector. They have the subsistence agriculture farming which produce foods to feed them for only three to six months. In spite of food deficiency, they are illiterate, male nourished, far from modern medical facilities and so on. High birth rate, high IMR, poor health and unhealthy hygiene system can be commonly found in this VDC.

In "Thami" community generally the prevalence of low age at marriage because of their socio-economic, cultural and religious reasons. Contraceptive prevalence may be low among Thami because of the lack of knowledge about contraceptive use. The majority of the women of this community are engaged in household work. The main activity of Thami community is works which is their traditional occupation. They have low level of income some of them are involved in agriculture, wages, labour as agriculture workers, domestic workers etc.

There are several studies related to fertility behaviour in different ethnic groups but there is no study carried out on this "Thami Community. So this study mainly focuses on fertility behaviour among "Thami Community. Most of them are illiterate so fertility level of Thami is higher. The analysis of fertility among Thami community from poor and non poor households as well as household size from poor and non-poor households fertility level will essentially fill the gap in this area. Generally, this study will attempt to answer the following research questions in Sundrawati V.D.C. of Dolakha District.

- (i) To record demographic socio-economic characteristics of Thami community at the study area?
- (ii) To examine fertility behaviour (i.e. age at marriage) linking with other socioeconomic characteristics (education, income.

This study is different from those studies, this study would be useful for the other scholar who are interested to know about Thami community.

1.3.1.3 Scientific Knowledge (Literature review)

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Of the three components fertility, mortality and migration of population dynamics, fertility is attributed to one of the most important elements in changing total population is considered to be major components of population change. Many scholars (Notestein 1952, Thomson 1929, among others) have devoted to examine the inter-relationship between fertility and socio-economic and other variables that have consequences on reproductive behaviour in society. If the world is not able to manage for the fertility, it might be a great problem for the world because productivity can't increase at the increment of population and at that time people will be distressed with starvation and misery. They have done many studies that socio-economic variables directly or indirectly affect fertility. Various literatures on fertility, have been reviewed which help to formulate a conceptual frame work of fertility of population under study.

The foundation of demographic transition theory is based on the experiences of westerns, especially European countries. European countries experience a change in mortality and fertility along with the socio-economic development.

In 1929, Warren Thomson grouped the nation of the world in three groups according to the level of their birth and death rates. His classification was completely based upon the experiences of European countries, which are:

-) Countries with very rapidly declining birth and deaths, with the former declining more rapidly so that the growth rate is also declining (more developed countries).

) Countries with declining birth rates and death rates for certain classes, but with death rates declining rapidly than the birth rate, producing a stable or even increasing population growth (Intermediate countries).

) Countries where both birth and death rates are less controlled, but with the evidence that death rates (less developed countries).

In 1952, Frank Notestein is considered as one of the major narrators of demographic transition. The demographic evolution from higher stages of births and deaths from low birth and deaths are divided into three stages by Notestein. They are:

- (a) Incipient decline,
- (b) Transitional growth and
- (c) High growth potential.

) Population with very "high growth potentials" or transitional growth not yet begun (most of the countries in Africa, Asia and Latin America), where fertility remains high with no tendency to decline and where the high but declining death rate is the main growth factors.

) A transitional type of population (Soviet Union, Japan, some countries in Latin America) with a rate of growth which is still relatively rapid but where a decline in birth rate is well established.

) Population with incipient decline or transition completed. (United States, Europe, Australia) characterized by a fertility rate declining to or even below the replacement level.

Notestein particularly emphasized the role of the popular education which might stimulate an innovative and rational view of life enhance the important of the individuals opposed to the extended family group

improve the status of women and substitute the ideal of a wealthy prosperous family for that a large family.

The fertility declines with the advancement of industrialization and urbanization. This is generally based on European and some well developed countries.

Coale's (1973) three preconditions for sustained fertility decline were linked to diffusionism which are: effective methods for birth control must be available their practice must be recognized as socially and economically advantages by potential reproductive partners; and such attitudes and practices must become part of partners' everyday 'calculus' of decision-making.

A fertility model devised by coale and trussel (1973) with the intention of capturing the range of age patterns of fertility typically observed in human populations. The schedule of ASFRs depends on four parameters: the age at which a consequential number of people form several unions; k , the speed with which cohabitation becomes a general phenomenon in the population; M , Q measure of the maximum fertility experienced in the population under study (normally that of women age 20-24); and m , the degree of fertility control. The model its itself based on two sub models, one describing the age of entry into marriage (or more generally cohabitation) (Coale and McNeil 1972), the other dictating the age schedule of fertility rates for married or cohabiting women (Coale 1973). Since fertility in many societies is largely confined to those who are married, the two sub-models can be viewed as models of marriage and marital fertility.

Unlike many other fertility models this one is empirically based observed schedules of first marriage and marital fertility being used to construct standard distribution. The shape of the rising part of the fertility

schedule is dominated by the schedule of entry into marriage while that of the falling part is determined by the degree of fertility control.

Davis and Blake (1956) developed a framework for looking at the causes of a particular fertility determinant. They recognize that the proximate determinants of natural fertility are a set of biological and behavioral factors that affect fertility directly through socio-economic and other background variables. Davis and Blake list three major variables determining fertilities intercourse conception and generation. There were further broken down into 11 distinct sub-variables, which were known as the proximate fertility determinants but all these variables have not been accepted widely in quantitative fertility studies because some are not easily incorporated into fertility models. So, Davis and Blake further categorized these intermediate variables into three groups which are:

1. Factor affecting exposure to intercourse
2. Factor affecting exposure to conception and
3. Factor affecting contestation and successful parturition (gestation variables) are affected by social, cultural and economic factors.

Bongaarts and Potter (1983) produced a modified version of the work of Davis and Blake. Davis and Blake list 11 variables as determinant of fertility. These were further broken down into distinct sub-variables, which were known as the proximate determinant of fertility determinants, but all these variables have not been accepted in quantitative fertility studies because some are not easily incorporated into fertility models. So, Bongaarts (1983) has identified seven proximate determining variables of fertility as:

1. Marriage
2. Contraception

3. Induced abortion
4. Post-partum fecundability
5. Spontaneous intrauterine mortalities.
6. Waiting time to conception and
7. Permanent sterility

Among many variables, John Bongaarts and Potter (1983) identified four main proximate determinants, which directly or indirectly affect fertility behaviour are:

1. Age at marriage
2. Post-partum infecundability
3. Use of Contraception and
4. Induced abortion.

Potentially this Bongaarts model can provide a starting point for the integration of demographic and anthropological traditions by focusing on a framework of biological universals with which all local cultures must deal and ascribe meaning to in some way. Theoretically Bongaarts model emphasizes the four principal proximate determinants which are considered inhibitors of fertility because they lower fertility from its maximum value. Fertility does not reach its maximum value due to absence of intercourse (which is interpreted to mean delayed marriage and marital disruption), failure to conceive (which is interpreted as the use of contraception); induced abortion' and postpartum infecundability (introduced by breastfeeding and sexual abstinence). He further notes that the remaining proximate determinants (natural fecundability, spontaneous intrauterine mortality and permanent sterility) are much less important causes of variations in fertility and for purposes of this thesis I will treat them as secondary factors. He examines individual level variations in the timing of family formulation and identifies breastfeeding as the most

important factor limiting fertility. He also suggests temporary separation of spouses due to migration is an important fertility inhibiting factor.

Easterline (1975) has developed a generalized model for fertility decision according to which a woman varies her child bearing in order to optimize their household utility. The decision is affected by demand of children supply of children and cost of fertility regulation. Some see the determinants of fertility working through one or more of the following.

1. The demand of children, C_d the number of surviving children parents would want if fertility regulation were castles.
2. The potential output of children, C_n the number of surviving children parents would have if they did not deliberately limit fertility, and
3. The cost of fertility regulation including both are subjective psychic costs and objective costs, the time and money required to learn about use of specific techniques (1975:55).

In the economic theory of the household, the demand for children, C_d is determined by taste, prices and income considerations. It is deemed a sociologist term such as norms regarding family size and the quality of the children operate through tastes or subjective preferences in a situation where tastes, prices and income are constant. Fertility might vary due to changes in the survival prospects of children. The potential output of children, C_n depends on natural fertility and the probability of a baby surviving to adulthood. The motivation for fertility regulation is determined by the joint factors of the potential output of $C_d < C_n$ which means that there is no desire to limit fertility. If $C_d > C_n$ parents would have more children than they wanted which leads to a motivation to regulate their fertility. Motivation is a necessary condition for fertility regulation but it is not sufficient. The degree of fertility control depends on the costs of fertility control. Thus, fertility regulation is

expected to occur in a situation where there is a greater degree of motivation, (i.e. $C_n > C_d$) and lower costs of fertility control.

Among them, the formulation of Easterlin (1978) postulates that fertility depends on both the relative demands for children and fertility regulation. The former is balance between the household's demands for children called desired family size and potential supply of children the number of surviving children, the household would have if it did not regulate fertility. Fertility regulation is the limitation of fertility through abortion.

Caldwell (1976:343-344) paints out that there are at least six different economic advantages of children's to one of both parents which might have kept stable fertility levels in pre-transitional rural societies. They are:

1. Situation gain is of particular importance to patriarchal males. As the number of children beyond infancy grows, and indeed as the number of wives and ultimately the number of children law increases, it is inevitable that the percent on top of the pyramid controls more resources and has access to more services (as well as enjoying more obvious power) even if per capita income remains static.
2. Children work in the household and on the farm not only producing goods but also providing a range of services that adults regard as whole or partly children's work and that they are both to do themselves.
3. Adult children usually assist their parents, especially with labor imports into farms.
4. Adult children provide particular assistance in making up the family contributions to community festivities and to such

family ceremonies as marriage, funerals and celebration concerned with births.

5. The care of aged parents who may insist of having their farms, business and household propped up as if they were still running them can be a major undertaking, and
6. Parents can invests entraining or education of children. So, increase this ability to make returns

Caldwell claims that even in the transitional society there will be sustained high fertility levels, which are rational in non-agricultural urban conditions as long as the flow wealth is pre dominantly from the younger to the older generation. The defines as traditional society where there are rapid changes in the way of the life, especially changes into the impact of children and in the possibilities available to parents for limiting the number of their children.

Decline infertility levels are attributed to change in the family system. The larger family tenets to keep weak emotional link between spouses and denies a strong link between young children and their biological parents. On the other hand, the small nuclear family has strong emotional bounds and demands greater egalitarianism in family consumption. As children become more expensive and the return from the investment becomes less rewarding i.e. wealth's flows are mostly from parents to children, there is no economic rational in having a large family.

Caldwell (1980:227) argues in his later paper that mass education may be a fundamental determinant which will bring fertility from high to low levels. The effect of education works through the restructuring of family relationships which in turn affect family economics and the direction of the net wealth flow. He suggests that education has an impact on fertility because:

1. Education reduces the child's potential work inside and outside the home.
2. It increases the cost of children.
3. Schooling creates dependency both within the family and within the society
4. It speeds up cultural change and creates new cultures; and
5. The school serves as a major instrument for propagating the values not of the local middle class, but of the western middle class. He further points out that demographic change is unlikely to penetrate. If the movement toward mass schooling is restricted to male only.

According to J.C. Caldwell in primitive and traditional society children are assets to parents and having a larger number of them is economically advantageous. In such societies the net flow of wealth is from children to parents and hence high fertility is economically rational when the direction of this net flow wealth changes i.e. when the flow of wealth is from parents to children, low fertility becomes economically rational.

Caldwell (1993) developed a theory known as "theory of intergeneration of wealth flow" explaining fertility behaviour in any types of society at any level of the development. In a society, the fertility is high if children are economically beneficial to the parents.

According to Fricke (1997 a, 1997 b, 1997c, 2003) has argued for the concept of culture in demography. He bears some of the characteristics that Hammel and Kertzer criticize. Fricke draws on Geertz's (1973) "Culture as models of and for reality". As model of reality, Fricke (1997c:828) argues "Cultural patterns constitute the perceived worlds of human actors and define the significance of

behaviours and institutions for the investigator. Beginning with cultural model of reality allows demographers to discover what is significant from the point of view of the actors themselves.

Fricke argues that:-

These ideas of culture as negotiated meanings rather than external constraints depend on the idea of agency partly Fricke's approach is similar to Caldwell's quasi-anthropological methods in which the cultural were chosen not on the basis of contemporary culture. He writes ' If anthropological conceptions of culture have moved beyond the earlier notion of behavioral prescription and institutions, their measurement becomes much more problematic and their uses of demography less evident' (1997a:252).

Fricke concludes that 'demography is in the midst of an epistemological crisis centering on its recognition of the need to incorporate localised notions of meaningfulness and culturally shaped motivations into analysis'. (Fricke 1997: 270)

Thorton and Fricke (1987) Tamang's fertility to be result to combination of social and biological factors, especially marital exposure and breastfeeding. The expression of fertility is then related to the household developmental cycles and its implications for changing household fortunes through time (Chayanov 1966).

American Demographer Rodolfo A. Bulatao (2001) summarizes the basic agreements among these theoretical approaches (2001:11-12) as:

- Fertility decline is a largely rational process. It is based on individual calculations that lower fertility makes sense not

sold in economic terms but also for social and psychological reasons.

- As with most rational actions, both the motivation and the means must exist. "Demand" explanations that account for the desire for smaller families and "supply" explanations that account for access to methods of fertility regulation each receive attention from most perspectives.
- As predominately rational processes, fertility transition involves a multitude of individual decisions some theoretical approaches analyze these decisions more closely than others but not ignores them.
- The framework for individual decisions is set by socio-structural and economic factors. These factors are conceived in different ways with different emphases. They may include the gender rules society enforces the labour market requirements produced by globalisation, and the policy perceptions that governments adopt.

1. Education and fertility

Education is one of the most important variables to determine fertility behaviour of human beings. The relationship between education and fertility is more pronounced in less countries than in developed countries. There is inverse relationship between education and fertility. Education can affect fertility directly and indirectly and its relation is two-way traffic. In which highly fertility countries have to invest more in education but education enhancement eventually help to fertility decline. The proximate variables proposed by Davis and Blake (1956) and Bongarts and Potter (1983) were used to seek pathways in the relationship between schooling and fertility behaviour in the developing

countries. We can explained the education and fertility in the following view.

- i. Educated women's opinion becomes respected in society, especially in their family circle. They have an influences an household decisions concerning expenses. Family planning and the education of children.
- ii. Educating delays the entrance of women into their reproductive life by delaying the age of marriage.
- iii. Educated women have expectations of help from their children because they have themselves been educated. They would rather see their children in school than at home.
- iv. Schooling improves female children's understanding of the outside world. It also expands these future women's horizon beyond motherhood and a household existence, giving them more confidence in their capacity and potential.
- v. In almost every country, educated women have healthier children than those who are uneducated the survival rate of children born to an educated women is very high and results in a lower desire birth rate.

From the point of view of education as socially situated practices neither of these explanation is concerned with the specific meaning of education in context and this might vary across settings: schooling and its consequences vary with the practices of which it is composed and the social and cultural context in which it is embedded. (after 1999:66) Many empirical investigations have been conducted to examine the relationship between fertility and socio-economic variables in Nepal. So education is an important variable of socio-economic variables. There is inter-relationship between education and fertility, education has been

considered a catalytic agent to reduce fertility in Nepal. Educated women are more aware of the issue of quality of children than the non educated (Rishal and Shrestha 1989).

According to Nepal demographic health survey 2006, there is strong association between fertility and education. The women who have no education have 3.1 whereas women with primary 3.2 women with secondary education have 2.3 and women with SLC and above education have 2.1. (MOH, New Era and Cairn International 2001)

According to NDHS 2007, More than half (53%) of women compared with less than one in five (18%) men do not have any formal education. 18% of women and 28% of men have only reached primary school, 21% of women and 33% of men have only attended secondary school and 9% of women and 20% of men have completed their SLC or gone on to higher levels of education.

This indicates that the level of schooling determines the women's fertility. This is a weak inverse relationship between respondents and polygyny. The proportion of married women in a polygynous union is 5% among uneducated women compared with 3% among women who have at least SLC level of education. The corresponding data for men is 4% and 1% respectively. This indicated that as the level of schooling increases, both women and men are less likely to be in a polygynous union. The desire to limit child bearing is more apparent at higher level as 68% of women with no education want more child compared with 59% of women with at least SLC (MOHP, New ERA, Macro International Inc., 2007).

World Bank 1984: 3000 household randomly selected from the districts of Kerala state shown that the average number of CEB was lower for better education than for illiterates i.e. 2.1 for women with three

or more years of schooling and 4.5 for women with no schooling. That survey also showed that average completed fertility of the highly educated women 4.4. was less than that these counter parts with no schooling (.8) by 1.4 children (World Bank, 1991)

2. Age at Marriage and Fertility

Nepalese society does not allow sexual union of unmarried people. Therefore marriage is the most essential events. Conception outside marriage is not accepted by the society. Family formulation process starts after the marriage religious better and practices in Nepal provoke individuals to many early. They marriage plays the vital role for the low fertility of an individual as well as social level.

Educational attainment also affects on fertility. As the literacy rate is low in Nepal age at marriage makes a great different in governing fertility. Nepalese society does not allow the sexual union of unmarried people before marriage. Therefore, marriage is the most essential event in our society. Conception before marriage is not accepted. Family formulation is started after marriage. Thus, thye marriage is directly related to the low fertility of an individual as well as social level.

Marriage is compulsory for all men and women in Nepal. For women besides the social need to produce progeny, marriage is also seen as a primary means of livelihood for women in all most all communities (Acharya and Bashnett, 1981; Gurung, 1999). There is strong relationship between age at marriage and fertility. The age at marriage is closely related that to high status of women in a society lower the fertility level by limiting the number of younger women in child bearing who are exposed to pregnancy.

Singulate Mean Age at Marriage (SMAM) using never married population by sex. The SMAM for males has steadily increased from 19.5 yrs in 1961 to 22.9 in 2001 and the corresponding figures for

females were 15.4 and 19.5. The male and female gap in SMAM was 4.1 yrs in 1961, which has declined to 3.4 by 2001 (Karki, 2003:52).

A study claims that women marrying between 20 and 24 have similar fertility to that of those marrying before age 20. Only if the marriage age reached 25 or over would there be a significant reduce of fertility. Perhaps this is one of the reason for persistent of fertility in Nepal. (Karki 2003: 52)

Acharya (1993) observed 13.4 ages at marriage for the women with 5 children ever born compared to 17.1 age at marriage and CBS was found to be 0.4172 in a study in Hill village of western Nepal. Even in 2001, ninety-four percent of the women and 81% of the men were married before they reached the age of thirty, Nearly two percent of the 10-14 yrs girls and 33% of 15-19 girls were already married (Acharya, 2003: 222).

According to MEBDC Survey 1996, the increase age marriage is found one of the determinants of CEB. Women marrying at the age of 14 or earlier were found giving live birth to almost 3.7 children, where as women marrying at the age 18 yrs and above had only 2.9 children. The difference of 0.8 or almost 1 child shows that if those women marrying at the of 14 or earlier would be encouraged to marry at 18 or later they will help to reduce Nepal's fertility by almost one forth (Acharya, 2000)

Marriage marks the starting points in a women's life at which child bearing becomes socially acceptable. Women who marry early on average have a longer exposure to the risk of becoming pregnant and therefore, early age at first marriage often implies early age at child bearing and higher fertility in a society (MOH, New ERA and ORC Macro, 2002).

The percentage of women and men who have married by specific ages. According to current age, marriage occurs relatively early in Nepal:

among women age 20-49, 60% are married by 18 and 78% are married by age 20. The median age at first marriage among women age 20-49 is 17.2 yrs. The proportion of women married by age 15 has declined from 25% among women age 45-49 to 6% among women age 15-19. There has been a noticeable increase in the median age at marriage among women age 20-49 over the last 10 yrs from 16.4 yrs in 1996 to 17.2 yrs in 2006. However this change was marked between 1996 and 2001, with little difference between 2001 (17.0 yrs.) and 2006. (Source: NDHS 2006)

2.2. Occupation and Fertility

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The work status of women is also an important determination of fertility level. Moreover, women's education and employment are confined within the domestic sphere of Nepalese society. The relationship between the working status of women and fertility is little known. Educational attainment leads to small families, changes the status of women in society and changes the social and economic aspiration which women have. This affects both attitudes towards particular methods. Occupation of husband and wife is one of the important determinants of fertility level. Females of different occupations are found to have different levels of fertility.

Occupation is one of the socio-economic factors that identifies subgroups with different levels of fertility. When differential by occupations are considered, the mean number of children ever born (CEB) per ever married woman is the highest for farm and sales workers (2.7).

Similarly, the lowest fertility is observed among the professional, administrative and clerical workers (1.6). This means that the fertility level of white collar female workers is lower than that of other groups. (CBS, 1995:78)

According to 2001 census results, women constitute more than 43% in the labor force, 73% in agriculture and 27% in non agricultural sectors. Women's proportion has increased almost in all occupations to some extent. But their greater concentration in agriculture is also visible. A positive trend is visible in their empowerment as reflected in the increasing proportion among female professionals, technicians, administration and management (CBS, 2003:223).

The work status of employment of women determines the level of "fertility behaviour". According to world fertility survey, women who work in nurse or administrative sector marry on average 24 yrs later than those who work in domestic and agriculture sectors.

Working women in rural Nepal are often poorer and less educated than non-working women working women in rural Nepal either works on their farm or working as agricultural or wages labors (Dahal 1992:2). Hilly women contribute 72% labor time to household production (Pradhan 1989: 116) and they also flow the high fertility in Nepal. A study of Pakistani women has shown that the work of women outside the home increase the decision making power in them ever on the desire number of children. (UN 1996:26) Women in farm work supposed to have more children in Nepal. The women perform more work that their male counterparts in rural Nepal. Their status is very low. They lag behind the educational attachment in over all health including nutritional support in gainful employment patterns and as a consequential experience an almost unrestricted high reproductive behaviour.

Female in different occupation are found to have different fertility level. The mean number of CEB per ever married women is the highest for the farm, fish worker and sales worker which 2.7 but the lowest fertility is observed among the professional, administrative and clerical workers with 1.1 less than farm workers i.e. 1.6 (CBS, 1995). The CBS

information from the data of census 1991 emphasized that there is a remarkable differences in between white color and blue color occupational groups of women.

Adhikari (1992) found that the work status of women was inversely related with mean number of CEB.

3. Use of Contraception and Fertility

There is an inverse relationship between use of contraceptive methods and fertility. Many programmes have been launched to reduce the fertility and increase the use of contraceptive by Government of Nepal, NGO, INGO etc. It is not successful as expected in developing countries like Nepal due to various indirect factors i.e. social, economic, psychological, cultural and others.

Family programme is the most effective ways to control the high fertility. Unfortunately, this is not more successful in developing country including Nepal due to various factors since its inception. There are many unseen social, economic, psychological, cultural and other affecting the demand for children. The ideal birth control method should be harmless reliable and acceptable. Acceptability of any method is generally high when its use is not associated with sexual intercourse. The factor of cost also needs to be taken into consideration for an ideal birth control method should be cheap.

Infant and child loss experience is highly co-related with fertility due to poor health facilities more children are dying and the risk of dying is still aggregated if they are born to very younger or older mother, if they are born after short interval, or if their mother already have had many children. High fertility is mainly due to the high infant and child mortality in order to compensate for the decreased one.

The 2006 NDHS collected information on ever of contraception for men as well but with respect to four male methods only: male

sterilization, Condoms, rhythm method and withdrawal. More than one is two currently married men age 15-49 (56%) have ever used a method in past, with most having used a modern method (49%). There is close relationship between the use of contraceptive method and it's knowledge, Attitude and Practice (KAP).

The target of the tenth plan is to increase contraceptive prevalence rate from 39.3 to 47% (Bista, 2003). CBS 1998, reported that only 38.4% of women with 4 living children have used contraception and 40.5% of women with 3 and more living sons.

This shows that the women with fewer numbers of sons or not sons do not use contraceptive. The pitiable situation in Nepal is that only 34% of reproductive women with 5 children had used contraception in 1996 (Acharya 1999:5)

According to fertility planning and Health Survey 1991, 93% married women of age 15-49 years know at least one method of family planning methods. The demand for contraceptive was 50.5% but the rate of current use was seen low.

4. Infant and Child loss experience and fertility

A strong linear relationship exists between fertility and the survival of children due to poor health facilities more children dying and risk of dying is still aggravated if they are born to very younger or older mother, if they are born after short after short interval or it if their mother already have had many children. High fertility is mainly due to the high infant and child mortality in order to high infant old child mortality in order to compensate for the decreased on (cited from pant: 1999)

According to Adhikari (1996), in Nepalese perspective, the poor level of socio-economic development is the most catalyzing factor for high level of infant mortality and fertility poor health facilities/services lack of knowledge on personal health and hygiene and sanitation of the

reproductive aged women and deficiencies of the calorie intake portentous diet and mien nutrients impairs the personal health of mothers and children in Nepal.

In a study "Fertility and mortality rates in Nepal" New Era found a close relationship between infant mortality and number of CFB. The study concluded the existence of strong child replacement effect in Nepal (New Era, 1968:90).

Moreover, the interdependent relationship between fertility and infant child mortality will trigger subsequent decline infertility. It has also found that a lower IMR motivates couples do produce fewer children (MOPE, 2004:44).

5. Breast Feeding and Fertility

Breast feeding is an important determinant of the postpartum amenorrhea. Thapa (1987) use the data of Nepal Fertility Survey 1996 and concluded that breasting was most important fertility reducing facts of Nepal. An average of nearly 25 months of breast feeding contributes about 18 months of postpartum amenorrhea, which is important factor affected fertility in Nepal (cited in Adhikari, 1999).

The longer a women breast feeds lower is her hence of conceiving a baby. Through breast-feeding in Nepal is universal culturally patterned and ritually sanctioned. The duration of breast feeding is not uniform and many socio-economic characteristics play important role in the duration of breast-feeding is affected by the age of mother. Use of contraception, parity, women's education and working status, place of residence and death of a child. The volume of milk produced by the breast-feeding mother decrease with age, the urban women breast-feed for shorter duration than rural ones.

The educated and employed women breast-feed for shorter duration than uneducated and unemployed. Higher party in family

suggests shorter birth interval verses shorter breast-feeding. Breast-feeding does prolong birth interval but to achieves the best result post partum sexual intercourse must be calibrated both breast-feeding as well as the use of contraception.

6.6. Sex Preference and Fertility

There is direct relationship between sex preference and fertility. Many researches have shown that desire of son is the main cause of high fertility in Nepal.

Karki (1988), examined the sex performance and specific value of son daughter to parents in Nepal using urban and rural data in 1979. Ideal family size among all respondents was on average three children with two sons and one daughter. This preferred sex composition was reported by about 90% of all respondents. Among those who reported that they were currently using contraceptive, the many number of living son was higher than the mean number of living daughter for all respondents most couple had at least one son and on the average three to four births before adopting contraception. Sons are preferred to daughter by Nepalese parents mainly for socio-economic and religious reasons as reported elsewhere in many developed society. The findings indicate that the economic motive for having both sons and daughters may be weakening in Nepal but preference for son does exist (Karki 1988).

Subedi (2006) examined the "Fertility behaviour among Dura Community" using primary and secondary data collected in 2006. He argued that the contemporary meaning of culture is influenced by ideas of human agency. This is a very different view from the old structural-functional models of culture. Furthermore anthropologists are involved in the central issues of social theory that link political economy, history and culture to the major issues of population. The classical demographic theories of fertility, on the other hand, is one of methodological

individualism-attention has been given to the micro-level fertility processes and no clear mechanism of how socio-economic and cultural factors influenced fertility behaviour is indicated. He has also shown that demography theory has problems with the new meanings of culture and agency.

This thesis argues that as fields, demography and anthropology share some similarities, but there are also significant differences between them. However, over the years there have been systematic attempts to assess the extent to which analytical approaches from anthropology can provide insights into demographic behaviour. The reviews of anthropological demographic studies suggest the macro-level demographic studies on fertility, mortality and migration follow classic demographic methodologies- the investigator designed structured questionnaire to measure their research subjects. These studies examined and analysed the data by counting and measuring variables over specific periods. One of the serious drawbacks of these studies is their lack of attention to cultural and political issues. Their description of demographic processes is relatively narrow and failed to explore in any depth, culture and this related religious and ideological underpinnings. Without understanding the cultural-economic-political mechanisms which link fertility behaviour to the other institutions of society we cannot explain global transitions in fertility behaviour.

Local social transformations of life course, family and kin relationships and status relationships are shaped by individual and collective strategies devised in response to specific local circumstances. From this perspective many social scientists, especially foreign anthropologists founded anthro-demographic research in Nepal that began a new era and contributed considerably to the application of

anthropology to demographic issues. However, most of these studies have focused on kinship systems and culture defined largely in terms of rural norms of behaviour. The more proximate determinants of population processes were not specifically examined and linked systematically to social processes. They overlooked the potential contributions from mathematical demography that might be of assistance and concentrated instead on institutional analysis through ethnography.

Using Bongaarts model, the work of Ross (1986) tested a cultural hypothesis of controlling fertility rates between the polyandrous groups living in the mountain region and the high caste Hindu groups. This study noted that fraternal polyandry does reduce aggregate fertilities but does not show significant differences in all over total fertility with that of the high Caste Hindu groups.

With special reference to the Gurung community, the work of Macfarlane (1976) focused on consideration of long-term changes in the economy. He argues that an ever-increasing further independent on an ever-declining local remaining base and productivity capacity. He further argues as land becomes scarce, forest communal resources dwindle, independent and involvement in the market and 'The problems India faces now. Nepal will face during the next two decades' (1976:200). Macfarlane (1976) set the standard for anthropological demographic research in Nepal. He uses a framework developed by Davis and Blake (1956) to examine the relationship between demography and social structure considering factors affecting intercourse, conception, gestation and parturition actual reproductive rates, mortality rates and their courses, and the age and sex structure of the Gurung population. He concludes that population trends rather than economic changes provide a framework for understanding the current world (1976:303).

1.4 Limitation/Significance/Justification/Rational of the Study

Limitation

The following will be the limitation of the study:

-) Since the data used in this study will not be collected from the whole district but only VDC will be selected from the data collection. These data will be collected by questionnaire and observation.
-) The study is limited to the Thami Community in Sundrawati VDC Dolakha District.
-) Fertility as a whole of a society is determined by various factors but in this study only some of the important factors are explained.
-) Due to limitation of time and budget, the study takes 120 eligible women of age between 15 to 49.
-) Only a limited demographic and socio-economic variables are considered to explain the fertility behaviour in terms of computed family size.

1.5 Significance/Justification/Rationale of the Study

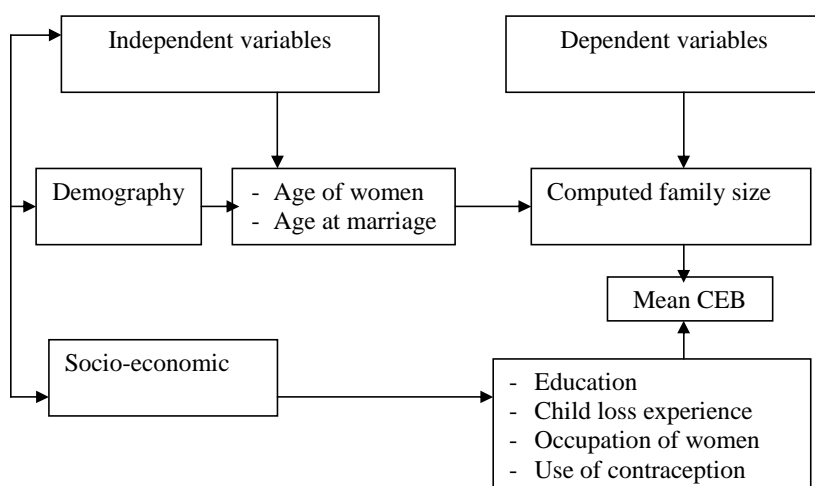
To the national development strategy, population policy and programs have a district relation to over all development including education, occupation, health, nutrition is essential if quantitative, qualitative change and improvements are to be brought about the people's life. For this ground approaches to be welfare of individualism and demographic factors emerge clearly as important elements on the formulation of development policy and strategies. Although Nepal has introduced population policies with respect of as strategy of national development since 1970's. A correct and cultural specific population policies are lacking.

There were number of studies conducted at the National level and on the other ethnic groups. The poor ethnic minorities are often ethnic groups. The poor ethnic minorities are often left by the researchers, while they might have a significant role in the overall fertility behaviour of the country. The "Thami" of the Sundrawati VDC are impoverished and are supposed to have a less exposure to the modern world. However, they inhabit in a village near by the village of Brahmin, Chhetri etc., they possess the different level of norms and values which might have an impact on their fertility behaviour.

This study will be very important for the concerned people and agencies, NGOs/INGO's planners and policy makers, for formulating plans and development activities related to fertility behaviour. Besides, this study will be more fruitful for future researchers, social workers and politicians of the country.

Thami is one of the highly marginalized ethnic minorities who needing special attention for the protection and development. So a critically examined the strength and weakness of these studies and provided strong justification why I am choosing a "Fertility behaviour among Thami community". Thami community is economically backward group. Early marriage is persistent mortality rate is higher in this community. Compared other communities they might have the demographic patterns different from other ethnic minorities of Nepal. So this study this to examine the fertility behaviour and its socio-economic and demographic determinants in community. The area of study is Sundrawati VDC of Dolakha district where "Thami" are considerably large in population. Thus to find the solution of population growth, it is necessary to know the "Fertility Behaviour" by the government and individual as well by which effective implementation of control measures and success of development planning become possible.

1.6 Conceptual Framework of the Proposed Study



This conceptual framework shows independent variables and the dependent variables i.e. computed family size.

Dependent and independent variables are shown in the conceptual framework. Independent variables are categorized as socio-economic variables, demographic variables and background variable. There are six variables in socio-economic variables such as education, occupation, income, use of contraception, Breastfeeding and child loss experience. Also in demographic variables, three variables such as age, age at marriage and age at first birth and in background variables religion are considered.

1.7.1.7 Objective of the Proposed Study

The present study aims at analyzing the pertinent issues connected with the fertility behaviour and the overall impact on socio-economic demography and socio-economic variables. The following are the immediate objectives of this study.

1. To identify socio-economic and demographic characteristics of the Thami community.
2. To examine the fertility behaviour of the Thami community.

1.9.1.8 Organization of the Study

This study is organized into four chapters. The first chapter deals with the general background of the study, problem statement and research question, literature, Review, limitation significance/ justification/ rational of the study (e.g. community study), conceptual framework for the proposed study, Objectives of the study and hypothesis etc.

The second chapter deals with the data and method used for the study. The third chapter describe main analysis of the study and discussions and lastly, the fourth chapter deals with proximate determinants of fertility and fifth chapter deals with conclusion.

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CHAPTER II DATA AND METHOD

2.1.2.1 Introduction to the Study Area

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This chapter provides basic information on introduction of the study area, introduction to the study population, research method, define variable, type of study, determining the sample size, tools and techniques or information/data collection and data management. This chapter is important for studying and identifying major determinants of fertility.

The study area was chosen Sundrawati VDC of Dolakha district. Dolakha district was like in Janakpur zone of central region of Nepal. Dolakha district is situated between 27°28" South to 28°00" South longitude and 85°50" east to 86°32" east longitude (District Profile, 2058). The area of Dolakha is 2191 sq. km. The total population of Dolakha district is 2,04,744 in 2058. Among this, 100147 male and 104597 females (District Profile, 2058). The average annual growth rate during the period 2048-2058 is 2.00%. The political boundary of Dolakha district is, Solukhumbu and Ramechhap in east, Sindhupalhock and Kavrepalanchowk in west. Tibet of China in south and Ramechhap district in North. Among them, the political boundary of Sundrawati VDC is, Sunkhani VDC in east, Suspakshamawoti in west, Kalinchock and lapilang is south and Bhimeshwor municipality in North. There were 51 VDCs and one municipality. Sundrawati VDC was the third smallest VDC of Dolakha district. The major Himalayan peak in district Gaurishankar. From this peak to determined the Nepalese time. The major river in the district in Tamakoshi. Among them, Sundrawati VDC is my chosen area which is 14 km far from the district headquarter Charikot. The climate of Dolakha district is cool-temperature. The average temperature of Dolakha district is 8° to 19° degrees Celsius. The

height of Gaurishankar is 7134 meter and there is depth land which is called 'sital' is 762 meter.

In June 28 to July 09, I began to collect more through information on fertility related variables. For drafting structured questionnaires, the standard structured questionnaires of NDHS 2006 in developing the structured questionnaires on socio-demographic survey, individual characteristics in the households, socio-economic status of the households. The set of questionnaires was originally constructed in both English and Nepalese. . NEFIN (Nepal Ethnic Federation of Indigenous Nationalities) has studied 59 indigenous people (nationalities into five major categories (i) endangered group (ii) highly marginalized groups (iii) marginalized groups (iv) disadvantaged group.

This study focused only Sundrawoti VDC of Dolakha district because this is origin place of Thami. I choose this study area because of the area is new in the view of such study.

This village was selected because of my desire to work in village and my previous knowledge of it. Firstly, I collected some demographic characteristics of households from Thami community using informal interviews, village census was designed to obtain basic characteristics such as sex, education, marital status, education level and occupation etc. Responses to my census more collected from the household heads or their wives or eligible women of the household. I returned to households to check information with actual household members when they were home. From the census I was able to determine those women who had been exposed to the risk of pregnancy through and cohabitation. Information on marriage and pregnancy histories, family planning, breastfeeding and desire for children etc. was also assembled. The contraceptive use question was only asked of currently married women aged 15-49 and excluded pregnant, divorced or separated women and widows. Reposes to

questionnaires were cross checked during qualitative data collection for additional continuous monitoring of the interviewers performance. To minimize coverage error, I lived within the community and become familiar with in all households in the selected area. In addition, I found many errors and mistakes. I then revisited each household where the questionnaires were not completely filled in. In the field, there is various obstacles suffered me. So, experienced people like researchers of SDC helped me. Then after I easily finished my work from Thami community.

Thami is one of the highly marginalized ethnic minorities who needing special attention for its protection and development. Thami lives mainly in hilly area of Dolakha, Sindhupalchock and Ramechhap district and they speak a Tibeto-Burman language which has two distinctly recognizable and mutually incomprehensible dialects. While the greatest concentration of ethnic Thangmi and Thangmi speakers live in the area Northeast of Kathmandu, there are additional populations in fifteen other districts of eastern Nepal, most notably Ramechhap, Illam and Jhapa.

2.2 Introduction to Study Population

Tami ethnic groups belongs to the highly marginalized groups of mongoloid stock. Ecologically, Thami people link themselves with pasture land of Dolakha districts and the "Tamakoshi" river system, while ethnically they believe that they share the Kirant ancestors with Rai, Limbu, Hugu and Sunuwar ethnic groups. Total Thami population as we have calculated from the district and VDC wise population census given by the CBS was 22,999 in 2001. Through the concentration of the population about 62% is still in Dolakha district followed by Sindhupalchock about 18% and Ramechhap 7%. Thami people at present are also found thinly scattered around in 100 VDC of 28 districts out of 75 in Nepal.

They are the nature worshiper neither Hindu nor Buddhist by religion except some influences. Thami languages called "Thangmi Kham" belongs to the Tibeto-Burman family. Bamboo products and nettle weaving are traditional occupation of Thami people. They have distinct culture and social norms and values. It is not in a verge of extinction "Mart Turin", British linguist studied it. According to CBS data of 2001 only 18,991 people speaks Thami language among them 9,608 female and 9,383 male. There is no only language preservation and development work in this language. So linguistic study must be conducted to preserve promote and develop Thami language. Similarly, I also study must be conducted to preserve promote and develop Thami language, religion and culture so far, its study has done on Thami people and community. They also want to preserve their traditional religion and culture although it is becoming increasingly difficult for them due to outside pressure.

According to District profile 2063 the population of Dolakha district is 2,47,634. Among this 1,24,684 male and 1,22,950 female. The annual average growth rate during the period 2057-2063 is 2.00%. Similarly, according to district profile in 2001, the total population of this VDC is 3467, out of which the male population is 1735 and 1732 of female population. According to the district profile-2063, the total household is 628. Among them Thami household is 124, Brahamin 194, Kshetri 257, Kami 21, Damai 19 and Sarki 13 household. Among them total Kshetri, Brahmin, Thami, Kami and Sarki is 1293, 1101, 952, 107 and 62 respectively.

In Dolakha district, 99.14 per sq.km. density in latest sources. Among them 85 per sq.km density of sundrawoti VDC.

According to population monograph of Nepal in 2003, the population of Dolakha district is 1,75,912. Among them 13,936

population of Thami people that means 7.9% Thami people living there. (Dolakha)

2.2.2.3 Research Method

The method of the study is basically village census method as it is suitable for collection qualitative, quantitative both information as well for doing small cases studies. To examine the fertility behaviours, the computed family size is compared by demographic and socio-economic variables such as current age of women, age at marriage, use of contraceptive, child loss experience, education and occupation

The set of structured questionnaire was prepared by consulting NDHS report 2006 and data were for collected during the period June 28 to July 2009 in 2008. For the people of low education level the set of questionnaire was translated in Nepali language too. Because of the familiar-ness with this study area, the area was chosen and its characteristics were necessary to study such as high fertility rate, backwardness, traditional occupational system etc. The area is also new in the view of such study because of which the area was chosen.

To generate necessary data different data collection tools and techniques were used such as questionnaire survey, key information interview, village census and observation.

Basically the data were generated related to sex, education, marital status, occupation, family planning, breast feeding, desire for children, contraceptive use, socio-economic status household and individual information through household head and other respondents.

Two types of questionnaires were developed for the survey. Household information related questionnaire was surveyed to household head and individual information related questionnaire was surveyed to women aged 15-49. But contraceptive use, family planning, breast feeding and child also related questions were not asked to those who were

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divorced separated and widow women. To minimize the possible errors cross-check and continue monitoring was done. To know the ground reality the researcher stayed long time in the study area was found different than what the replied in questionnaire i.e. Thami drink local alcohol much than they asked before in formal survey time. The next new fact was found that the women replied not use of FP while surveying questionnaire and number of children but the birth interval seems like using FP methods it may be because of the shamefulness (Field survey, 2008).

2.4 Define Variables

Independent Variables/Dependent Variables both are used in this study.

Independent variables are categorized as socio-economic variables and demographic variables. There are four variables in socio-economic category includes education, occupation, use of contraception and child loss experience. Similarly, demographic variables are current age of women, age at marriage of respondents. No. of mean CEB is taken as dependent variables for this study.

2.5 Types of Study

~~2.5~~ Mainly this study is based on analytical generated from field work using structured questionnaire from sample households. Currently married women of reproductive age 15-49 years and their head of household are the main types of study data. Head of households are interviewed for household characteristics and women in reproductive age are for individual characteristics and fertility behaviour.

The secondary data were obtained form VDC office, DDC, development organizations, library, published and unpublished journals, articles and compare with Dalit community than that VDC of Baglung district under going thesis report of Khumnath Sharma.

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2.6 Determine Sample Size

~~2.6~~ This is a case study on Thami community. Among the total 124 Thami household and total population 952 (district profile, 2058) in the study area according to village census method 120 household were selected in a sample out of 124 household. The respondents were currently married women aged 15-49 years. Although there were more respondents in a household all one respondents (15-49) women was taken from every household because one respondents can represent the socio-economic status of that household. The sample size is relatively small due to limited time and other factors as well.

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2.7 Tools and Techniques for Information/Data Collection

~~2.7~~ Both the primary and secondary were used. Primary data were collected by village census method in the field, through interview and observations. Other secondary data were obtained from published and unpublished sources, literatures, journals, conference papers and reports etc.

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2.7.1 Interview Schedules

Structured interview was directly administrated to the eligible women. (Eligible women denote for currently married women of age 15-49 in the sample population of study area who had participated at the time of field survey). Such interview involves the use of a set of predetermined questions. The interview schedule comprises the set of questions to meets the objective of the study.

2.8 Data Management

This study is based on primary data. So it is important to check the consistency and quality. The data were in computer software programme. Different statistical method and tools as frequency tables, cross tables, mean tables are used to examine the relationship between dependent and independent variables. The out comes are analyzed under the different topic of fertility behaviours.

CHAPTER III

DATA ANALYSIS RESULTS AND DISCUSSIONS

In this chapter, deals with the basic information in demographic and socio-economic characteristics of study population and respondents. It provides the information background characteristics of study population, age and sex composition, dependency ratio, marital status, educational status, occupational status, type of house, type of family, caste and religion, level of income, landholding status, toilet facility and sources of drinking water. Among them, background characteristics of respondents. It also compares Thami community data with Dalit community of Pyuthanthap VDC in Baglung district undergone thesis report of Khum Nath Shara. It helps to find out the fertility difference between Dalit and Thami communities.

3.1 Demographic and Socio-Economic

In this chapter, deals with the general characteristics of the study population. It provides basic information about the characteristics.

3.1.1 Age and Sex Composition

The study is conducted to obtain reliable information to the study area of fertility behaviour among the Thami community. In 120 households, the total population was found to be 952. Out of that males accounted for 470 (49.4%). the age and sex composition is the most important factor for studying fertility. The sample population by age and sex composition is shown in below tables.

Table 1: Age and Sex Composition

Age group	Thami community*						Nepal, 2006**		
	Male	Percent	Female	Percent	Total	Percent	Male%	Female %	Total%
0-4	49	10.2	48	10.2	97	10.2	14.30	12.0	13.1
5-9	45	9.3	42	8.9	87	9.1	15.5	12.7	14.0
10-14	49	10.2	61	13.0	110	11.6	14.10	12.8	13.4
15-19	82	17.0	88	18.7	170	17.9	10.1	11.2	110.6
20-24	62	12.9	54	11.5	116	12.2	6.70	9.40	8.20
25-29	26	5.4	25	3.3	51	5.4	6.10	0.8	8.20
30-34	18	3.7	23	4.9	41	4.3	5.50	6.30	7.10
35-39	36	7.5	38	8.1	74	7.8	5.0	15.6	5.90
40-44	41	8.5	43	9.1	84	8.8	4.50	4.90	4.70
45-49	40	8.3	33	7.0	73	7.7	4.1	4.2	4.2
50-54	24	5.0	08	1.7	32	3.4	3.6	3.4	3.5
55-59	4	0.8	05	1.1	9	0.9	2.5	2.9	2.7
60-64	6	1.2	02	0.4	8	0.8	6.5	5.3	6.9
Total	482	100.0	470	100	952	100	100	100	100

Source: *Field survey, 2008.

**MOH, New Era and Macro International, Inc., 2007.

Sex ratio shows the sex composition of population. It is defined as number of per 100 females. A sex ratio over 100 denotes all excess of male over females and sex ratio below 100 means an excess of females over males age five, the sex ratio is considered to equal because male babies have higher, probability of dying than female babies.

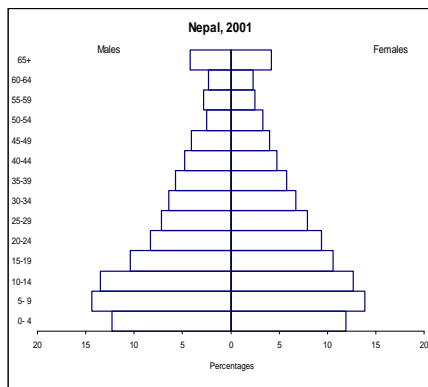
So, sex ratio = $\frac{M}{F} | 1000$. Therefore in my study area sex ratio is,

$$\frac{482}{470} | 100 = 102.55.$$

NDHS 2006 shows the overall sex ratio of Nepal is 89, similar to the sex ratio obtained in the 2001 NDHS but lower than that obtained in the 2001 census (99.8%), 1996 NFHS (93) and Thami community 2008 (102-55). The marked different in the sex ratio between the 2001 census, NDHS survey and Thami community's field survey could be due to fact that the sex ratio form the census is based on the de jure population, where as the sex ratio obtained from the NDHS surveys is based on the defacto household population. On the other hand, Thami community survey is a very small survey than the NDHS and census. So marked is difference in the sex ratio. The highest proportion of population is found in the age-group 15-19 and lowest in 60 over. This indicates that there exists higher proportion of population in the lower age groups resulting higher fertility and lower proportion of population in old age shows the low life expectancy at birth.

Figure 1

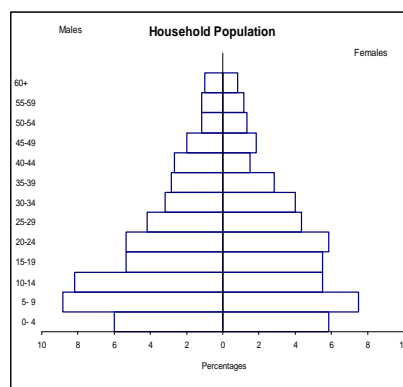
Population Pyramid of Nepal



Source: CBS, 2003

Figure 2

Household Population Pyramid



Source: Field survey, 2008.

Above the study population of pyramid is bimodal pyramid. Dual peaks, commonly denoting relatively large numbers in parents and child ages in sub-groups.

A population's age may be considered as a map of its demographic theory. Population researchers often graphically illustrate the age composition of a population by use of population pyramid. Graphical analysis of age-sex distribution (age-sex pyramid) techniques has become a standard method in the evaluation of all population censuses (Shylock 1976); US Bureau of Census, 1985), age-sex pyramids graphically display demographic characteristics to improve understanding and easy comparison. In the above study population pyramid, highest proportion of the population in age group 15-49. Because of this pyramid, many people were immigration in 15-19 age group. Comparatively in the age group 25-34 population is lower the other near age group. Because this age group people are active age or working age groups. SO they were going to another place seeking for a job to earn money or work. When they make elder age people came back to origin place.

Finally, above the pyramid not to match with the Nepalese pyramid, because in this study sample size is very small, so this pyramid not to similar to Nepal but it is bi-modal pyramid.

Similarly, the overall shape of pyramid of Nepal indicates the potential for future growth. In total population, male population is comparatively higher than female. Among them, in the context of Nepal is vice-versa. The age structure of different population is usually in term of the working age child under the working age. These age groups are below 15 to 60 and above. The above pyramid that study area has the lowest percentage of age under 15 (3.9%) while in Nepal has the highest (40%). Study area has the highest percentage of person 15-19 and 14.1% of the age group 10-14 has the highest proportion of female population compared to male population. In the context of Nepal, male population is highest than female in the same age group. In total population, male

population is comparatively higher than female. So in the context of Nepal is vice-versa.

3.1.2 Age Composition by Broad Age Group

Table 2: Population Composition by Broad Age Group

Age	Sex				Total	
	Male	Percent	Female	Percent	Number	Percent
0-14	143	29.7	151	32.2	294	31
15-59	333	69.1	317	67.4	650	68.5
60+	6	1.2	2	0.4	8	0.8
Total	482	100	470	100	952	100

Source: Field survey, 2008.

In Thami community 0-14 years population is still high 294 (31.2%). The population of age group 15-59 years occupies 68.2 percent of the total population. Out of total female population 467 more than half 67.4 percent is in 15-59 age group. It indicates that the fertility rate of this population is higher. The total population of male is 482. Out of male population 0-14 age group contains 143 (29.7%). 15-59 age group contains more than half 333 (69.1%) and the rest age group 60+ above is very less 6(1.2%). Therefore, the life expectancy of male is low.

3.1.3 Dependency Ratio

Age dependency ratio is the ratio of dependency to independence in terms of ages, but not of actual economic activity. There are two kinds of dependency population child and old.. In the context of Nepal child age has taken of age 0-14 and old dependency age 60+ and activity. Age population 15-59. Dependency ratio measures the number of population age 0-14 per hundred working population aged 15-59. IN this way the old dependency ratio is the number of people, aged 60 and above per hundred working people 15-59 years. Total dependency ratio is the sum of the young old dependency ratio.

Table 3: Dependency Ratio of Study Population and Census 2001 of Nepal

Dependency	Thami community*	Dalit community**	Nepal 2001***
Young dependency	30.9	42	39.35
Old dependency	1.2	3.26	11.09
Total dependency	32.1	45.26	50.44

Source: * Field survey 2008 in Dolakha.

** Field Survey, 2008 in Baglung.

***CBS 2003.

Above the table indicates the child dependency ratio of study is lower than census of 2001 and field survey of Dalit community in Baglung (2008). In the study population, the young dependency ratio was 30.9 and old dependency ratio was 1.2. According to CBS 2001 young dependency ratio was 61.92 and old dependency ratio was 11.09 and field survey of Dalit community in Baglung (Field survey 2008) child dependency was 42 and old dependency ratio was 6 which is higher than the field survey 2008 in Dolakha district. It is because of the small coverage of study area and population. So I used to compare Thami and Dalit community data which is helped me to find out the differences of the study in difference area.

3.1.4 Marital Status

Percentage distribution of sample population in Thami community aged 10 years and above by marital status of Sundarwati VDC, Dolakha.

Table 4: Marital Status

Marital status	Thami community*		Dalit community**		Nepal 2001***
	Number	Percent	Number	Percent	
Married	470	61.2	284	66	34.70
Unmarried	242	31.5	137	31.9	61.95
Widow	43	5.6	8	1.9	2.6
Separated	10	1.3	1	0.02	0.5
Divorced	3	0.4	0	0.00	0.25
Total	768	100	599	100	100

Source: *Field survey 2008 in Dolakha.

** Field Survey in Baglung.

***CBS, 2003.

In the above table, the marital status of Thami community population of age 10 years and above 768 (80.7%) were 61.2% married, 31.5% unmarried, 5.6% widow, 1.3% separated and only 0.4% divorced. Similarly CBS 2001, married 34.7% which is lower than field survey in Thami community and Dalit community in 2008. In Dalit community 61.95% unmarried which is doubled in Thami community. Then after widow 2.6% in CBS 2001 which is lower than field survey in Thami community and higher than Dalit community in 2008. In Thami community separated and widow 1.3% and 0.4% respectively which is higher than CBS 2001 and Dalit community in Baglung 2008. The unmarried population of Dalit community is 31.9% which is almost equal to Thami community and almost half than national level. The divorced population of Thami community 0.4% it is higher than Dalit community and national level. Above the table shows married population is higher in Thami community and Dalit community than CBS 2001 and unmarried population is vice-versa and especially in Dalit community there was not found separated population. In the Thami community where is,

married is persistent, so there is lower unmarried population than married population. That means Thami community and Dalit community married and unmarried population is drastically different and other likes widow, separated and divorced population is decreased.

At last, I can say that Thami and Dalit community marital was going on almost all same trend but not national level, because of Thami and Dalit community population size, area is small than national level, so there is vast different to each others.

3.1.5 Educational Status

Percentage distribution of study population aged 5 years and above by educational attainment 2008.

Table 5: Educational Status

Educational status	Thami community*		Dalit community**		Nepal 2001***
	Number	%	Number	%	
Literate	607	70.99	361	68.40	53.74
Illiterate	248	29.01	167	31.60	46.26
Total	855	100	528	100	100

Source: *Field survey 2008 in Dolakha.

** Field Survey 2008 in Baglung.

*** CBS, 2003.

Above the table shows literate population 607 (70.99%) and illiterate population 248 (29.01%) in the field survey 2008 in Thami community of Dolakha district where literate population is (70.99%) higher than Dalit community of the CBS 2001, 68.4% and 51.1% respectively. Among them illiterate population 29.01 which is lower than Dalit community and CBS 2001, 31.6% and 45.9% respectively. So above the table shows literate population is higher in Thami community due to increased concept of education and Dalit community where is slightly low concept of education and overall in Nepal 54.1% only literate means almost fifty percent people deprived on education.

3.1.6 Educational Attainment of Population

Table 6: Educational Attainment

Educational attainment	Thami community	
	Number	Percentage
Non-formal	83	13.67
Primary	219	36.01
Secondary	214	35.26
Tertiary	91	15.06
Total	607	100

Source: Field survey, 2008.

Above the table shows, in the study population of Thami community is highest percentage of primary level 36.01% secondary and tertiary 35.26% and 15.06% respondents respectively and lowest percentage of non-formal where 13.67%. Above the table shows in Thami community, primary secondary and tertiary percentage is nearly closed to each to other level.

3.1.7 Occupational Characteristics

Percentage distribution of the sample population aged 10 years and above by occupational status of study area 2008.

Table 7: Occupational Characteristics

S.N.	Occupation	Thami community *		Dalit community **	
		No.	Percent	No.	Percent
1	Agricultural	208	27.1	66	15.3
2	Daily wages labours in agricultural sector	139	18.1	88	18.8
3	Daily wages labours in non-agricultural sector	86	11.2	59	13.7
4	Foreign employment	47	16.1	86	20.0
5	Household workers	203	26.4	127	29.5
6	Services	65	8.5	15	1.2
7	Others	20	2.6	6	1.4
Total		768	100	430	100

Source: *Field survey, 2008 in Dolakh.

** Field survey 2008 in Baglung.

Above table shows the percentage distribution of population aged 10 years and above occupational status. Out of total population 768 in

study area (27.1%) engaged in agricultural sector, 26.4% household worker, 18.2% engaged in daily wages labours in agricultural sector, 11.2% in non-agricultural sector 8.5% engaged in services and foreign employment and others (business) 6.1% and 2.6% respectively.

While comparing two communities; Thami community in agricultural sector is higher (27.7%) than Dalit community (15.3%). IN daily wage labour in agriculture the engagement percentage of both communities is almost equal Thami and Dalit (18.1% and 18.8%). In service sector the engagement of Thami community is higher (8.5%) than Dalit (1.2%). In the foreign employment sector Dalit are engaged in higher percentage 20% whereas Thami contains only 6.1%. Similarly, in the Thami community business percentage is 2.6% and 1.4% in Dalit community, which is higher than Dalit community in Thami community.

By comparing two communities' data, we find out the level, trend and concept of different sector indifferent community. So we comparing two communities.

3.1.8 Level of Income

Income is a most important factor which determines the fertility. In this study to categories the income into 6 categories, which are undertaken:

Table 8: Level of Income

Income Rs. (per year)	Thami community*		Dalit community **	
	No. of women	Percentage	No. of women	Percentage
Less than 5000	10	8.4	12	48
5000-10000	15	12.5	51	7.6
10000-20000	22	18.4	18	17.1
20000-30000	35	29.2	15	14.3
30000-50000	17	14.1	06	5.7
50000-80000	21	17.4	03	2.9
Total	120	100	105	100

Source: *Field survey 2008 in Dolakha.

**Field survey 2008in Baglung.

In the study area 35 (29.2%) women have the yearly income of Rs. 20000-30000 as similarly 22 (18.4%) women have yearly income of Rs.

10000-20000, 21 (17.4%) women have the yearly income of Rs. 50000-80000, 17 (14.1%) women have the yearly income of Rs. 30000-50000 and 15 (12.5%) women have the yearly income of Rs. 5000-10000. At lastly, 10 (8.4%) women have the yearly income of Rs. less than 3000 in the Thami community. On the other hand, in Dalit community high income 51 (48.6%) women have the yearly income of Rs. 5000-10000. As, similarly, 18 (17.1%) women have the yearly income of Rs. 1000-20000, 13 (14.3%) women have the yearly income of Rs. 2000-30000. 12 (11.4%) women have less than 5000. 6 (5.7%) women have the yearly of Rs. 50000-80000. According to the above table, few households can maintain their yearly expenditure.

Out of 120 respondents only 46 (38.3%) women easily to maintain the household and except 46 women difficult to maintain the household. So we can say that Dalit and Thami community, there is medium types of people lived there, above the income Rs. their people to maintained the household while comparing both communities, I find out almost equal level of income. Both communities people difficult to maintained the households. So by the Dalit communities data, I helped to find out the level of income in Dalit communities and to easily compared the both communities level of income. So, Dalit communities data also essential for my studies. Income level of both Dalit and Thami community is similar.

3.1.9 Ownership of Land (In Ropani) Households

Table 9: Ownership of Land

Landholding pattern	Number	Percentage
Less than 1 ropani	16	13.3
1-2 ropani	80	66.7
3-4 ropani	23	19.2
4 and above	1	0.8
Total	120	100

Note: 16 Aana = 1 ropani.

Source: Field survey, Kalika, 2008.

Above table shows only 0.8% lies in 4 and above ropani in Thami community of Sundrawoti VDC. The highest 66.7% lies in group 1-2 ropani similarly 19.2% lies in group 3-4 ropani and 13.3% lies in a group less than 1 ropani and 13.33% lies in a group less than 1 ropani. So, we clearly find out the highest percentage lies in group 1-2 ropani and lowest lies in group 4 and above ropani land ownership.

3.1.10 Housing Characteristics

Distribution of households by their housing characteristics in study area, 2008.

Table 10: Characteristics

Roof materials	Number	Percentage
Stone	28	23.3
Steel	15	12.5
Grass	77	64.2
Total	120	100

Source: Field survey, 2008.

Above table shows that Thami community of Sundrawoti VDC use in stone ass roof 28 (23.3%), used steel 15 (12.5%) and largest percentage about 77 (64.2%) households used grass as roof materials.

Similarly, according to occupation of family highest percentage of family engaged in agriculture which percentage is 85.8%, then after 7.5% engaged in agricultural sector and lowest people engaged in service, only 0.8% nuclear family. Nuclear family means single family where lived in children with parents and 31.7% people lived in joint family. Joint family means lived in one house. More than two or more couples and their children, father, mothers and household worker also included.

Similarly in the Thami community, the percentage of Hindu population is 65% which is lower than Nepalese Hindu population 80.62%. Among them 24.2% is Buddhist which is higher than Nepal

(NDHS, 2006), Christian 7.5% which is also higher than 0.45% NDHS (2006) and others 3.3% in the study area.

3.1.11 Sources of Drinking Water

Table 11: Sources of Drinking Water in the Study Area

Sources	Number	Percentage
Pipe	111	92.5
Well	9	7.5
Total	120	100

Source: Field survey, 2008.

Above the table shows almost all people drinking water of pipe lien 92.5% and only 7.5% people drinking water of well.

3.1.12 Facilities of Latrine and Electricity

Table 12: Facilities of Latrine and Electricity

Latrine	Number	Percentage
Yes	50	41.7
No	70	58.3
Total	120	100
Electricity		
Yes	49	40.8
No	77	59.2
Total	120	100

Source: Field survey, 2008.

Above the table show, higher the percentage of not used latrine percentage 58.3 % than using latrine and electricity facilities is lower (40.8%) than not electricity facilities (59.2%). According to NDHS 2006 in Nepal, the facility of electricity is 49.5% which is higher than the field survey Kalika 2008 in Thami community of Dolakha district 408% and

24.5% people gave a latrine facilities which is lower than the field survey 2008 among the Thami community in the study area.

3.2 Background Characteristics of Respondents

Respondents characteristics are important in the analysis of fertility behaviour. Among various background of variables of socio-economic and demographic characteristics are analyzed in this section. Demographic characteristics includes current age at marriage and age at first birth and socio-economic characteristics includes education, occupation income, use of contraception, breast feeding practice and child loss experiences.

3.2.1 Age Composition of Respondents

The study is conducted to obtain reliable information to the study area of fertility behaviour of Thami community. It is directly related to the women of reproductive age (15-49) years. Which is presented in below:

Table 13: Age Composition of Respondents

Age group	No. of respondents	Percentage
15-19	16	13.3
20-24	26	21.7
25-29	9	7.5
30-34	21	17.5
35-39	23	19.2
40-44	14	11.7
45-49	11	9.2
Total	120	100

Source: Field survey, 2008.

Above the table shows, respondents involved in 15-19 to 45-49 age group. Similarly, the highest no. of women includes in age group 20-24. Where out of 120 respondents 26 (21.7%) includes in 35-39. On the other

hand, the lowest age of respondents in age-group 45-49 where out of 120 respondents 11 (9.2%) included. So above table shows, in 20-24 age groups where is higher No. of women, there is fertility high. IN that age group higher the fertility then another age group and lower the fertility in 45-49 age groups there is lower the fertility women, so decreasing level of fertility.

3.2.2 Educational Status

Education plays a vital role to determine fertility and family planning. It always associates negatively to fertility and positively to contraceptive practices.

Table 14: Distribution of Respondents by Educational Status

Educational status	Number		Percent		
	Yes	Percent	No.	Percent	Total
Read and write	81	67.5	39	32.5	120
Ever gone to school	58	71.6	23	28.4	81
Primary	19		32.8		
Secondary	35		60.4		
Higher level	4		6.8		
Total	58		100		

Source: Field survey, 2008.

Above the table shows, out of 120 respondents 81 (67.5%) can easily read and write and 39 respondents (32.5%) who do not easily read and write similarly the highest percent of respondents 58 (71.7%) ever gone to school and only 23 respondents (28.4%) who do not ever gone to school. In the study area, there is higher the percent of illiterate than literate. Out of 120 respondents 62 (51.7%) respondents are illiterate. So we can easily say that, their educational status is generally considered as the occupation, income and awareness of knowledge, among them their educational level categories into three types like: primary, secondary and

higher level for the study, 19 females (3.28%) education level is concentrated in primary education, 35 (60.4%) female education is concentrated in secondary education and only 4 (6.8%) female educational level is concentrated is secondary level and lowest concentrated in primary.

3.2.3 Cause of Non-Schooling of Respondents in the Study Area, 2008

Table 15: Cause of Non-Schooling

Causes	Number	Percentage
Social norms	16	13.3
Wage labours	30	25.0
Business	16	13.3
Total	62	51.7

Source: Field survey, 2008.

Various causes of non-schooling which shows above. Among them out of 62 (51.7%) respondents, 16 (13.3%) respondents are involved in social norms, 30 (25%) are involved in wage labours and 16 respondents involved in business (Theki, Kucho, Nanglo, Dalo, Doko, Thunche, Mandro etc.). In the Thami community the highest no. of respondents involved in wage labours due to their no own land and do not survived from own land and others. Therefore, they were going on wage labours. On the other hand, in the Dalit community in Baglung 76 respondents (93.8%) involved in social norms, 3 (3.7%) involved in wage labours and only 2 (2.5%) respondents involved in business (Field survey, Khum, 2008).

So comparing two communities data, there is vast different each to other because of the lack of awareness in Dalit community so various people who are involved in social norms and traditional practice, that in these people's compulsion.

3.2.4 Occupational Status of Respondents' Husband

Husband occupation plays a vital role to determine fertility level. If their husband were in modern sector of occupation than fertility will be low and vice-versa.

Table 16: Occupational Status

Husband occupation	Number	Percentage
Agriculture	48	42.5
Wage labour in agricultural sector	26	23.0
Services	21	18.6
Foreign employee	13	11.5
Household work	3	2.7
Others	2	1.8
Total	113	100

Source: Field survey, 2008.

Above table shows, 42.5% respondents husband are involved in agriculture whereas 23% were in wage labour in agricultural sector, 18.6% were in services, 11.5% were in foreign employee and only 27% in household work. Similarly, time of first menstruation of respondents starts form 11 years to 19 years. The highest no. of women's time of menstruation's starts in 15 age whereas 49 (40.8%) women, and the lower ages 11 and 19 year only 0.8%. Above these percentages are inter-related in fertility, which are not separated each to others.

3.2.5 Occupational Status of Respondents

Occupational status is one of the important determinants for fertility. There is inverse relationship between modern sector occupation and fertility. The occupational status of respondents are presented in the below table.

Table 17: Distribution of Respondents by Occupational Status

Occupation	Number	Percentage
Agriculture	47	39.2
Wage labours	6	5
Services	10	8.3
Household work	57	47.5

Source: Field survey, 2008.

The large No. of women are involved in household work (47.5%). Among them, 47 (39.2%) women involved in services and only 6 women (5%) are involved in wage labour. It shows respondents wage labour occupational status is very low compared to household work, agricultural sector and services.

3.2.6 Marital Status of Respondents in the Study Area, 2008

Table 18: Marital Status of Respondents

Marital status	Thami community		Nepal %
	Number	Percentage	
Currently married	113	94.2	71.95
Widow	6	5.8	1.4
Separated	1	0.87	0.1
Total	120	100	100

Source: Field survey, 2008, MOHP et al. 2007.

Above table shows the Thami community 113 (94.2%) were currently married, 6 (5%) widow and only 1 (0.8%) separated., On the other hand, in NDHS 2006, married 71.95% widowed and separated 1.4% and 1% respectively. So in Thami community and NDHS 2006 where is closed percentage of separated and widowed but currently married percentage is vast different in Thami community.

3.2.7 Age at Marriage

Age at marriage is one of the important factors which affects the fertility by culture, religion, marriage is almost universal. Age at marriage is often used as proxy for first exposure to intercourse and risk of pregnancy. But the two events not occur at the same time before some people may engage in sexual activity before marriage.

Table 19: Age at Marriage

Age at marriage	Thami community*	Dalit community**	Nepal***
Mean age at marriage	18.42	16.26	#
Median age at marriage	19	16.00	17.2

Source: *Field survey, 2008.

** Field survey, Khum, 2008.

***MOH, New ERA and Macro International Inc. 2007.

Mean age at marriage is not estimated in MOHP et al. 2007.

In the above table shows that the compared the Thami, Dalit community and NDHS 2006. In the Thami community, and Dalit community of mean age at marriage and median age at marriage. In the Thami community is 18.42 and 1.9 years and Dalit community 16.26 and 16 years respectively. To compare above data, Thami and Dalit community, mean age at marriage and median age at married are closed but higher in Thami community. On the other hand, in NDHS 2006 median age at marriage is 17.2. So higher the median age at marriage in the Thami community than NDHS, 2006 also.

According to field survey, 2008 in the Thami community, out of 108 respondents mean age at first birth is 20.24 and median age at first birth is 20.

Similarly, in the Dalit community out of 102, median age at first birth is 18, higher the median age at first birth in Thami community than

Dalit community and lower the NDHS 2006 than Dalit community and higher the Thami community.

So I analyzed the above data, Thami and NDHS 2006 of median age at first birth is very closed than Dalit community. In the Thami community out of 81 respondents 55 respondents birth spacing is 24 months, 17 respondents birth spacing is 36 month and 9 respondents birth spacing is 48 month. So highest of the birth spacing is longer of 9 respondents. In NDHS 2006, average birth spacing is 33.6 months.

Among them, out of 120, 108 respondents ever breast feeding. Out of 108 respondents 9 respondents immediately breast feeding, 70 respondents hourly breast feeding and 29 respondents day breast feeding. ON the other hand, 2006 NDHS data shows that mothers of children under 6 months of age with a higher level of education are less likely to exclusively breast feed. The 2006 NDHS, indicate that the practice of introducing complementary foods in a timely fashion for many children has improved over the years. The percent of children who received complementary food at 6.7 months of age increased from 53% in 2001 NDHS to 63% in 2006 NDHS, though same of the age increased could also be due to the more intensive questions in the 2006 survey. The median duration of any breast feeding in Nepal is 34 months, while the mean duration is about 34 months. Male children are breast feed longer than female children. The median duration of exclusive breast feeding in Nepal about 3 months. Both duration and frequency of breast feeding can affect the length of postpartum amnorrhoea.

In the study of Thami community, only 26 (24.1%) still breast feeding. Out of 265, 14 (5.3%) of children under 12 months of age were breast feed, 12 (4.6%) of children. 12 to 24 months of age were breast feed. Breast feeding during the day and the night is more frequent

among children residing in the central terai sub-region the in the other sub-regions.

3.3 Fertility Behaviour Among Thami Community

No. of children ever born (CEB) in women in reproductive age is one of the best indicator for fertility, fertility of a women up to the age at marriage. It is measured in terms of means so that it could be compared between various characteristics. This chapter deals with fertility level according to various demographic and socio-economic characteristics of Thami community. It is examined on the basis of currently married women of 15-19 years with some selected demographic and socio-economic variables.

3.3.1 Age Group of Women and Children Ever Born (CEB)

Number of children ever born varies by age of women. Higher mean CEB are expected with increasing age of mother. Mean CEB by current age of women of reproductive age 15-49 which is given below:

Table 20: Mean CEB by Currently Married Women age 15-49

Age group	No. of women	Live birth	Mean CEB
15-19	15	21	1.40
20-24	22	43	1.95
25-29	10	25	2.56
30-34	16	40	2.50
35-39	21	82	3.90
40-44	14	55	3.93
45-49	10	30	3.0
Total	108	296	2.74

Source: Field survey, 2008.

The overall mean number of children ever born (CEB) was found to be 2.74. This means that currently married women in the study area of Thami community of Sundrawoti VDC in Dolakha district tended to give

birth 2.74, which is higher compared to the national average 2.24 (CBS, 2001). The table also explains that lowest level of CEB is found in age group 15-19 year i.e. 1.4 per women. It is gradually increasing with the increment of age. The highest level of CEB can be observed in age group (40-44) years i.e. 3.93 per women.

While, comparing with NDHS, 2006, the mean CEB is gradually increasing with the increment of age. According to NDHS 2006, the CEB of 15-19 age group of women was 2.2 while this survey shows 1.4. Similarly, NDHS shown the CEB of 25-29 years of women was also 2.2 while survey shown 2.56. Hence it is clearly shows that the mean CEB is gradually increasing with the increment of age.

3.3.2 Education and Mean CEB

Education of women is one of the most important determinants of fertility and it is negatively associates with fertility i.e., higher the education lowers the fertility and vice-versa. Education directly or indirectly affects fertility. In general, literate women are found more conscious about their family sizes, have more knowledge about using contraceptive and in high standard of living. That is why education of women is key factor for reducing fertility.

Table 21: Mean CEB by Educational Status of Respondents

Literacy status	Thami community		
	No. of women	No. of children	Mean CEB
Illiterate	39	2120	3.08
Literate	81	176	2.17
Total	120	296	2.56
Level of education			
Non-formal	27	83	3.67
Primary	19	44	2.32
Secondary	35	49	1.40
Higher level	4	6	1.5
Total	81	176	2.56

Source: Field survey, 2008.

Above the table presents the mean number of CEB for currently married women age 15-49 years by women's education controlling for the effect of age. The mean number of CEB is lower for literate than illiterate women. Then mean number of CEB has been observed to be zig-zag due to low number of items in secondary education is 1.4. The highest mean CEB is 3.067 who have got non-formal education. The women who have got primary and higher levels their CEB was 2.32 and 1.5 respectively.

3.3.3 Occupation and Mean Children Ever Born (CEB)

Occupational status of women has also explanatory power in fertility behaviour. Women involving in modern of occupation and fertility which is maintain better life help to raise income and education, thus help to reduce fertility. It means that the person having higher occupational status have a lower no. of CEB and vice-versa.

Table 22: Mean CEB by Occupation of Respondents

Occupation	Thami community		
	No. of women	No. of child	Mean
Agriculture	42	114	2.71
Wage labour	6	16	2.67
Service	10	19	1.90
Household work	50	147	2.94
Total	108	296	2.74

Source: Field survey, 2008 in Dolakha.

In the Thami community of women who are involved in household work have higher CEB 2.94 than other occupation. The mean CEB of agriculture is 2.71, the women who are involved in wage labour 20 have 2.67 and the lowest no. of women have are involved in services 1.9.

Finally, where is concluded that the women who are involved in modern sector occupation have lower fertility than primitive occupation.

3.3.4 Age at Marriage and Mean CEB

Age at marriage is inversely related with mean number of CEB if marriage occurs to the age of childbearing period. Therefore low mean number of CEB could be expected for those who have married relatively at higher ages.

Table 23: Age at Marriage and Mean CEB

Age at marriage	No. of CEB in Thami community		
	Women	Birth	Mean CEB
14	4	10	2.5
15	14	28	2.0
16	7	14	2.0
1	13	26	2.0
18	16	35	2.19
19	15	52	3.46
20	23	75	3.26
21	6	24	4.0
22	5	22	4.4
23	2	3	2.5
24	1	2	2.0
25	1	2	2.0
27	1	1	1.0
Total	108	296	2.74

Source: Field survey, 2008.

Above table shows that whereas the mean no. of CEB was found 4.4 for the women who married age 22 years. It was followed by mean CEB 4 who married in age group 21 years n the lowest mean no. of CEB was found 1 who married in age group 27, overall, increasing of age at marriage, mean no. of CEB is also increasing, and after more than 22

years mean no. of CEB is gradually decreasing because of this study is limited in small area.

3.3.5 Mean CEB and Knowledge of Contraception of Respondents

Table 24: Mean CEB and Knowledge of Contraception

Knowledge of contraception	No. of women	No. of child	Mean CEB
Yes	91	238	2.62
No	17	58	3.41
Total	108	296	2.74

Source: Field survey, 2008.

Higher mean CEB is 3.41 among these respondents who have no knowledge of contraception but 2.62 who have the knowledge of contraception. **Table**

3.3.6 Mean CEB and Use and Non-Use of Contraception in Thami Community

Use of contraceptive method is the most important method for decreasing fertility. Use of contraceptive method is inversely related to the fertility. Use of contraceptive by the couple of reproductive age helps to plan a family according to their desire. By the means of birth control methods, couple plans a family in such a way in which child gets maximum benefit from the parents and vice-versa.

In this way using birth control methods, help couples to achieve their desire family size by preventing unwanted birth. It is expected that there is a negative relationship between fertility and the use of contraceptive methods.

Table 25: Mean CEB and Use and Non-use of Contraception of Respondents

Contraceptive	No. of women	No. of children	mean CEB
User	74	205	1.77
Non user	17	33	1.94
Total	91	238	2.64

Source: Field survey, 2008.

The mean CEB is 2.77 among those couples who are using contraceptives where as the mean CEB is 1.94 who are not using contraceptives. In the above table, higher majority of contraceptive use than non-user. So I can say that where is the high majority of contraceptive practice there is lower fertility. So in this study selected hypothesis is correct.

3.3.7 Mean CEB by Current and Non-Use of Contraception of Respondents

Table 26: Mean CEB by Current and Non-Use of Contraception

Contraception	No. of women	No. of child	Mean CEB
User	50	144	2.88
Non-user	58	152	2.62
Total	108	296	2.74

Source: Field survey, 2008.

Mean CEB is 2.88 among those couples who current use contraceptives whereas the mean CEB is 2.62 of non-users which is lower than current users. The majority of contraceptive current users than non-users. So I can claim that where there is majority of contraceptive current practice there is automatically lower fertility.

3.3.8 Child Loss Experience and Mean CEB

There is a positive relationship between child loss and fertility when women loses her child. She will be motivated to replace her dead

child. IN this way, higher child loss promotes women reproductive more children. Therefore it is hypothesized that there is a positive relationship between child mortality and fertility.

Table 27: Child Loss Experience

Child loss experience	Respondent	No. of live birth	Mean CEB
Yes	38	68	1.79
No	70	228	3.26
Total	108	296	2.74

Source: Field survey, 2008.

According to above table shows that the women who have the experience of child loss their mean CEB 1.79 is lower than the women who do not have any experience of child loss (3.26). The mean CEB increases with dead of children. So there is quite different of mean CEB according to the women who have experienced child loss and who did not.

CHAPTER IV

ESTIMATION OF TFR OF THAMI COMMUNITY APPLYING PROXIMATE DETERMINANTS OF FERTILITY

4.1 Calculation of CBR of Study Area

$$\text{CBR} = \frac{\text{No. of birth during the 12 months}}{\text{Total mid}} \times 1000$$

$$\frac{22}{952} | 1000 = 23.11 \text{ per } 1000$$

There were 23 births per 100 population in underwrote VDC in 2008. It is lower than the NDHS 2006 which is 28 per thousand women because of the sample population is very few, so necessary to other similar other study.

4.2 GFR of the Study Population

The general fertility rate also called the fertility rate is the number of live births per 1000 women age 15-49 in a given year.

$$\text{GFR} = \frac{\text{No. of birth during the 12 months}}{\text{Total number of women age, 15-49}} \times 1000$$

$$\frac{22}{304} | 1000 = 72.37 / 1000$$

There were 72.37 births per 1000 women age 15-49 in Sundrawoti VDC of Dolakha in 2008. Also it is lower than the NDHS 2006 which is 117 per 1000 women. Because of sample population is lower in the study area.

4.3 ASFR (Age Specific Fertility Rate) of Study Population

Fertility rate can be calculated for specific age group to see differences in fertility behaviour at different ages or for comparison over time.

$$\text{ASFR} = \frac{\text{No. of births to women age gorup}}{\text{No. of women of same group}} | 1000$$

Table 28: ASFR (Age Specific Fertility Rate) of Study Population

Age Group	No. of Women	No. of Birth	ASFR of the Study Area	NDHS 2006
15-19	88	12	0.136 (136)	98
20-24	54	7	0.130 (130)	234
25-29	25	0	0 (0)	144
30-34	23	2	0.087 (87)	84
35-39	38	0	0 (0)	48
40-44	43	1	0.023 (23)	16
45-49	33	0	0 (0)	2
Total	304	22	0.376 (376)	

Source: Field survey, 2008.

ASFR = $0.376 \times 1000 = 376$ per 1000 women.

4.4. TFR (Total Fertility Rate of Study Population)

The TFR sums up, in a single number, the fertility of all women at a given point in time. TFR is the average number of children that would be born to a woman by the time she ended child bearing if she were to pass through all her child bearing years conforming to the age-specific fertility rates of given year. TFR is alone of the most useful indicators of fertility because it gives the best picture of how many children women are currently having.

$$TFR = 5 \times \frac{\phi ASFR}{1000} = \frac{5 \mid 376}{1000} = \frac{1880}{1000} = 1.88$$

It is lower to NDHS, which is 3.1 per thousand because of study population is lower than national figure.

4.5. Marital Fertility Rate

MFR = sum of MASFR x 5

Table 29: Marital Fertility Rate

Age Group	No. of married Women	No. of Birth	ASMFR
15-19	20	12	0.600
20-24	26	7	0.269
25-29	10	0	0
30-34	17	2	0.118
35-39	22	0	0
40-44	14	1	0.071
45-49	11	0	0
Total	120	22	1.058

Source: Field survey, 2008.

$$TMFR = \frac{\text{Total No. of Birth}}{\text{Total No. of Married women}} | 1000$$

$$= 5 \times ASMFR$$

$$= 5 \times 1.058$$

$$= 5.290 \text{ per women}$$

4.6. Child Dependency Ratio

$$= \frac{P_{0Z5}}{P_{15Z59}} | 100 = \frac{97}{650} | 100 = 14.9 \text{ per hundred}$$

$$= 14.9 \text{ per hundred}$$

4.7 Old Dependency Ratio

$$= \frac{P_{60\Gamma}}{P_{15Z59}} | 100 = \frac{8}{650} | 100$$

$$= 1.2 \text{ per hundred}$$

4.8 Overall Dependency Ratio

$$\frac{P_{0Z14} \Gamma P_{60\Gamma}}{P_{15Z59}} | 100 = \frac{294 \Gamma 8}{650} \times 100 = \frac{302}{650} | 100 = 0.465 \times 100 = 46.46$$

$$= 46.462 \text{ per hundred}$$

4.9 Child Women Ratio

$$\begin{aligned} \text{CWR} &= \frac{\text{Total no. of children}}{\text{Total no. of female population}} \\ &= \frac{296}{470} = 0.63 \end{aligned}$$

4.10 GRR (Gross Reproduction Rate)

GRR is the total no. of daughters that 1000 women will bear at the end of their reproductive period i.e. at the end of 49 years of age assuming that all of them survive to the end of their reproductive period and experience at fixed age schedule of fertility.

$$\begin{aligned} \text{GRR} &= 5 \times \text{ASFR} \times \frac{B^f}{B} \\ &= 5 \times 0.376 = \frac{11}{22} = \frac{20.680}{22} = 0.940 \text{ per women} \\ &= 940 \text{ per thousand women} \end{aligned}$$

4.11 Parity Progression Ratio (PPR)

A PPR is simply the probability of having another children given that one has already had a certain number.

The calculation of PPR is as follows. One first tabulates the women by parity, as in the first column below the table. These figures are then cumulated from the bottom to give the number of women with at least 'n' children ever born. Lastly, one divides adjacent figures to give the probabilities. For example:

S, a_0 is just the proportion of women in the cohort who become mothers.

Table 30: Parity Progression Ratios, Sundrawoti VDC, 2008

CEB (Children ever born)	Women with current children	Women with at least CEB	PPR
0	12	12	0.9000 (90)
1	17	108	0.7500 (91)
2	28	81	0.6543(92)
3	21	53	0.6038(93)
4	16	32	0.5000(94)
5	11	16	0.3125(95)
6	04	5	0.200 (96)

Source: Field Survey, 2008.

By definition CTFR = $a_0+a_0+a_1+a_0 \times a_1 \times a_2+a_0 \times a_1 \times a_2 \times a_3+ \dots$

= $0.90+0.9 \times 0.75+0.9 \times 0.75 \times 0.654+ \dots$

= $0.9+0.675+0.4417+0.2667+0.1333+0.417+0.0083$

= 2.4664

= 2.5 approx

4.12 Proximate Determinants of Fertility

Mathematically, Bongaarts (1978) and Bongaarts and Potter (1983) identified that reproductive change can be accounted for in terms of seven determinants that directly affect fertility. Here, I focus on quantitative evidence concerning the proximate determinants especially the four that Bongaarts found to be of the greatest importance and that link with intermediate variables, I will first elaborate on the formation of the model I wish to use in order to work out fertility rates and then make a contrasting comparison. The following components of reproductive physiology attempt to standardize measures for the effect of the separate variables in terms of the purely sociological influences on the more physiological processes.

The fertility effect of the four main proximate determinants is measured in the model by four indexes: C_m , C_{ci} , C_a and C_i ,

C_m = index of marriage (equals 1 if all women of reproductive age are married and 0 in the absence of marriage)

C_c = Index of contraception (equals 1 in the absence of contraception and) if all found women use 100% effective contraception)

C_a = Index of Induced Abortion (equals 1 in the absence of induced abortion and 0 if all pregnancies are aborted)

C_i = Index of post partum infecund ability (equals 1 in the absence of lactation and postpartum infecundabilty and 0 if the duration of infecundability in infinite)

This method is very robust. It was tested with observed TFRs in different populations (Frick 19934, Kandel et al 1987, Ross et al 1986, Thapa 1987). The total fertility rate (TFR) is a product of the four indices times the total fecundity rate (TF)

$$TFR = C_m \times C_a \times C_c \times C_i \times 15.3$$

TF was assumed to be 15.3 births per women, because Bongaarts and potter (1983) stated that the age –specific marital fertility of butteries women married during the period 1921-30 serves as the standard age profile of fertility in the absence of deliberate birth control.

It is worth stressing he several to these measures, particularly those referring to contraception effectiveness and induced abortion, require a variety of assumptions to be made in order to convert children earlier (i.e.e the mean age of childbearing falls), the period wise will increase, while if they have them later it will fall. The coherent rate (i.e. PPR) will not change. The great value of TFR is that it is a single figure measure that is independent of age structure. The GFR only partially controls for age structure, and CBR does not do so at all. These measures do not give

a straight causal link with fertility, One problem is that it requires a lot of data on births by age of mother and mother age group and these are usually only available where there are the high quality registration and census system. Another problem is its interpretation. Formally TFR can be thought of as the number of children a women would have if she survived to age 50- and thought her reproductive life she experience exactly the ASFRs for the year in question.

Table 31: Summary of Various Fertility Measures

Measures	Ratio/Rate in Thami Community	Ratio/Rate in Nepal, 2006
Child Birth Rate (CBR)	23.11 per thousand	28 per thousand
Chile/women Ratio (CWR)	0.630 per women	0.5351
General fertility rate (GFR)	72 per thousand	88 per thousand
Marital fertility Rate (MFR)	5.290 per women	3.3 per women
Total fertility Rate (TFR)	1.88 per women	3.1 per women
Computed family size	15.3 per women	
Completed total fertility rate or completed family size		5.4 per average married women

Source: Field survey, 2008 and MOH, New ERA and Macro International Inc., 2007.

Calculation of proximate determinants of fertility (TFR)

Total fertility Rate (TFR) can be estimated as = $C_m \times C_c \times C_a \times C_i \times 15.3$

Firstly

The Bongaarts model has been applied to examine the effect of contraception, marriage, and postpartum infecundity in generating observed fertility levels and differentials in study are a based on survey data.

4.13 Index of Marriage (C_m)

It is the ratio of total fertility rate to total marital fertility rate, the index of marriage equals to the ratio of TFR to TM and can be written as:

$$C_m = \frac{T.F.R.}{T.M.}$$

$$= \frac{1.88}{5.290} = 0.355$$

The value of index of marriage (C_m) ranges between 0 and 1. It equals to one (1) if all women in reproductive ages are married and it equals to 0 in the absence of marriage. The effect of marriage in reducing fertility from (TF to TFR) $C_m = 1 - c_m$

$$= 1 - 0.355$$

$$= 0.645$$

2. Index of Contraception (C_c)

The index of contraception (C_c) varies inversely with prevalence and use effectiveness of contraception practiced by couples in the reproductive ages. (C_c) the index of contraception is derived from following equation.

$$C_c = 1 - 1.08 \times u \times e \text{ where}$$

u = average proportion of married women currently using contraception (Prevalence rate)

e = average use effectiveness of contraceptive

The value of 1.08 is an adjustment factor (correction factor for sterility which takes into account the fact that an average women using contraception are more than those who are not using it.

Average use effectiveness (3) is estimated as the weighted average of the method specific use effectiveness level $e(m)$ with the weights $u(m)$ equal to the proportion of women using specific methods given by:

then,

$$C_c = 1 - 1.08 \times u \times e$$

$$\frac{u(m) \times e(m)}{u(m)}$$

For e,

Table 32: Knowledge and Use of Contraception Method

Method	Knowledge of FP	
	Number	Percentage
Female sterilization	6	5.9
Male sterilization	4	3.9
Pills/condom	34	33.3
IUD	1	1.0
Depo-Provera	52	51.0
Norplant	5	4.9
Total	102	100.0

Source: Field survey, 2008.

Ever Used of FP

Method	Ever used of FP	
	Number	Percentage
Female sterilization	5	6.6
Male sterilization	4	5.3
Pills/condom	19	25.0
Depo-Provera	42	55.3
Norplant	5	6.6
Safe period	1	1.3
Total	76	100.0

Source: Field survey, 2008.

Calculation of Cc from contraceptive prevalence and use effectiveness

Method	Proportion of women using given method u(m)*	Method specific use effectiveness e(m)**	u(m) x e (m)
Sterilization	0.119	1.00	0.119
Pills/condom	0.250	0.90	0.225
Depo-Provera	0.553	0.70	0.387
Norplant	0.066	0.70	0.046
Safe period	0.130	.0.70	0.091
Total	1.118		u(m) x e (m) = 0.868

Source: *Field survey, 2008.

** The standard estimated use effectiveness developed by Bongaarts (1978)

The average use effectiveness of contraception is calculated as:

$$e = \frac{u(m) \mid e(m)}{u(m)} \times \frac{0.868}{1.118} = 0.776$$

$$u = \frac{\text{Currently using contraceptive method}}{\text{Currently non Zused contraceptive method}}$$

$$= \frac{52}{68} = 0.76$$

Then, we know that,

$$\begin{aligned} Cc &= 1 - 1.08 \times u \times e \\ &= 1 - 1.08 \times 0.76 \times 0.776 \\ &= 1 - 0.637 \\ &= 0.36 \end{aligned}$$

The effect of C_c on reducing fertility

$$= 1 - 0.36 = 0.64$$

$$0.64 \times 100 = 64 \% \text{ contribution}$$

3. Index of induced abortion Ca

Index of induced abortion is estimated as the ratio of observed total fertility rate to the expected TFR in the absence of induced abortion

$$\begin{aligned} Ca &= \text{TFR} / \text{TFR} + \text{births aborted by induced abortion} \\ &= \text{TFR} / \text{TFR} + (0.4 \times (1+u) \times \text{Total induced abortion}). \end{aligned}$$

Where, u = proportion of married women currently using contraception.

TA = Total induced abortion rate (average no. of abortion a woman is likely to have at the end of her reproductive age)

Value of 0.4 indicates that the average no.; of births aborted per included abortion in the presence of contraception

0.4 x (1+4) x TA is the average no. of births aborted per women by induced abortion by the end of her reproductive prido.

$$\begin{aligned} (15-49) \text{ TA} &= \text{No. of abortion} / \text{no. of women (15-49)} \\ &= 13/304 \\ &= 0.0428 \end{aligned}$$

Index of induced abortion (Ca) is 1, in the absence of induced abortion and it equals to 0 if all pregnancies are aborted. So

$$\begin{aligned} Ca &= \frac{\text{TFR}}{\text{TFR} \Gamma(0.4 \times (1 \Gamma u) \times \text{TA})} \\ &= \frac{1.88}{1.88 \Gamma(0.4) | (1 \Gamma 0.76) | 0.0428} \\ \frac{1.88}{1.88 \Gamma 0.4 | 1.76 | 0.0428} &= \frac{1.88}{1.88 \Gamma 0.030} \times \frac{1.88}{1.910} = 0.984 \end{aligned}$$

$$\begin{aligned} \text{The effectiveness of Ca on reducing fertility} \\ &= 1-0.984 \\ &= 0.016 \end{aligned}$$

4. Indices of postpartum in fecund ability (Ci):

Indices of postpartum infecundability (Ci) is equals to the ratio of the average birth interval in the absence and presence of post partum infecundability caused by breast feeding and postpartum sexual abstinence.

Despite this case, the Thami survey did not find out the exact information on the postpartum infecundability in the study areas and the post partum infecundability rate is assumed to be zero (0) according to Bangaarts model, where

$$\text{Then, } C_i = 1 - 0 = 1$$

At lastly, Calculation of proximate determinants of fertility (TFR)

TFR can be estimated as

$$\begin{aligned} \text{TFR} &= C_m \times C_c \times C_a \times C_i \times 15.3 \\ &= 0.64 \times 0.64 \times 0.98 \times 1 \times 15.3 = 6.14 \end{aligned}$$

Table 33: The fertility inhabiting effects of proximate determinants

S.N.	Intermediate fertility variable indices	Thami	Dalit	NCPC 2001
1	Index marriage (Cm)	0.64	0.55	0.73
2	Index of contraception prevalence (Cc)	0.64	0.66	0.68
3	Index of duration of postpartum infecundability (Ci)	1	1	0.48
4	Index of induced abortion (Cq)	0.98	0.97	0.99
-	Fertility measure			
-	Total fecundity rate TF	15.3	15.3	15.3
-	Total natural fertility rate TN = Ci x TF	15.3	15.3	7.4
-	Total marital fertility rate TM = Cc x Ca x TN	9.596	9.69	5.1
-	Total fertility rate TFR = Cm x Tm	6.14	5.4	3.7

Source: Field survey, 2008, Khum 2008 and MOHP et al. 2007.

Above the table shows that the level of fertility is higher than the national level and Dalit community as estimated by Bongaarts methods. Thami figure is about one and half births for women higher than the estimate for Nepal and two times birth per women higher than the estimated for Dalit community. The level of TFR in Thami is lower the average for Nepal and Dalit. The possible explanation is that the material and educational standards are very low and sample size is small, economies are dominated by agriculture and the collective identities and culture in Thami and Dalit history is highly influenced by the process of Sanskritization.

Thus, we can see that not only is there considerable practical utility in using such quantitative techniques as those pioneered by Bongaarts, but we can also see that such techniques are neither culture free, nor merely the some techniques of positive science applied by naïve empiricists. The models are not simply derived from the 'facts'. It is clear that understanding the model requires knowledge of the demographer's assumptions about women and their logy and behaviour about the specific methods by which data was gathered, and fundamentally about the cultural context in which fertility behavior is located.

CHAPTER V

CONCLUSION

This study has been conducted to examine the fertility behavior of Thami community. It is based on primary data collection from field survey in July 2008 in Sundrawoti VDC of Dolakha district. Out of the total study population 120 women of reproductive age were selected from 120 households were selected by census method. Household questionnaire, individual questionnaire and key information were asked to fine out the fertility behavior of Thami community.

To fulfill the objective of this study some selected demographic and socio-economic variables are taken as main influencing variables of fertility behavior. Age at marriage, occupation, income education, child loss experience, sex preference and use of contraception is taken as independents variables and mean CEB is taken as dependents variable for eligible women of 15-49 years.

The main findings obtained by the analysis of data collected from sample survey were as follows:

- 1) Out of total 952 population, 482 and 470 were male and female respectively. Among them 120 respondents were selected by using village census method.
- 2) The sex ratio in Thami community in Sundrawoti VDC was 102.
- 3) Total dependency ratios were 46.46 and overall TFR 1.88.
- 4) In total sample population, total literacy rate was 70.99%.
- 5) Among the study area, out of 120 respondents 27% women were involved in Agriculture, 26.4% were involved in household work, 18.1% engaged in daily wages labour in agricultural sector. Among them, foreign employment, Daily wages labours in non agriculture sector, services and others like 16.1%, 11.2%, 8.5% and 2.6% respectively.

- 6) In this study area, 64.2% woman use in grass as roof, 23.3% use in stone and only 12.5% use in steel.
- 7) In the study area almost all people drinking matter of pipe line 92.5% and
- 8) Only 7.5% people drinking water of well, highest percent of household latrine percent 58.3% than using latrine 41.7%.
- 9) Electricity facilities are lower 40.8% and not electricity facilities 59.2%.
- 10) Out of 120 respondents 81 respondents (67.5%) can easily read and write and 39 respondents (32.5%) who do not easily read and write.
- 11) In the total no. of population, mean CEB 2.74.
- 12) While considering the mean CEB by age at marriage is 20.
- 13) Those women who are engaged in household work were 2.94 and agriculture 2.71 of mean CEB.
- 14) Those women who use contraceptive method mean CEB was 2.770 and who not use contraceptive method mean CEB was 1.941.
- 15) The mean CEB was found to be 2.74 for those who have not experienced child loss 3.26 and 1.789 for those who have experienced child loss.

Thami is backwarded people of Dolakha district. They had come from Simangradh of India form very beginning. Their present condition is very poor. They are struggling for survival or basic requirements. Their main profession is agriculture but at the same time most of them have involved in business (Dalo, Doko, Thunche etc.) and pottering labour. There is a slab stone mine, which gives secondary profession for the Thami people. They receive above 50 percent of income from nine labour and pottering labour, but a few percentage of income from agriculture.

They lack modern technology, transportation, training and saving habits. They have used traditional technology for agriculture and business sector.

People of different ethnic backgrounds have their own traditional value system governing their daily life, including their reproductive behavior very different groups or with difference but due to difference in socio-economic conditions of people. As, Hindu, Muslim, fertility is not due to differences in the religious but due to differences in socio-economic status. Thami in Nepal are Indigenous groups. They have remained and rooted to the land and the agriculture and is almost every one's principal occupation. In terms of social organizations, they are tied to each other through family kinship or through deeply established beliefs, customs and traditions that guide their behavior in almost all aspects of social life. In their society, children are valuable both economically and socially and regarded as assets rather than liabilities. Hence, their fertility has been persistently high fertility levels in the study area when measured in terms of CEB were 2.74. This figure is generally considered higher than national level. It may also be noted that some of the socio-economic variables like religion-cultural values and social position in the community are likely to be the most fundamental factors for the high level of fertility. The religion-cultural values and social norms seem to decide women's age at marriage, education, occupation, income, sex preference and breast feeding and family planning devices etc.

Level of education of women plays a significant role in fertility. But, it is concluded that fertility level of the study area cannot be reduced through increasing contraceptive practice. It can be concluded the fertility level can be reduced through increasing the use of contraception, contraceptive practice can be increased through increasing the knowledge

of contraception by providing information, education and communication (IEC).

Higher level of occupation plays an important role to reduce fertility, thus it can be concluded that a shift of occupation of husbands from agriculture to non agriculture sector is effective to reduce fertility. Similarly levels of occupation of women plays an important role to reduce the fertility.

When women lose her child she will be motivated to replace her dead children. In this way higher child, loss promotes women to reproductive more children. According to this study area shows positive relationship between child loss and CEB.

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