Fertility Behaviour of Bhutia Women in Sikkim – A Sociological Study

Dissertation Submitted to Sikkim University in Partial Fulfilment of the Requirement for the Award of the Degree of MASTER OF PHILOSOPHY

> Submitted by Chung Chung Doma Bhutia



Department of Sociology School of Social Sciences Sikkim University 2015

#### ACKNOWLEDGEMENTS

I would like to take this opportunity to avow my heartfelt gratitude and indebtedness, to Dr. Khangembam Indira for her constant guidance and encouragement in preparing this dissertation. Without her help, patience and the time to read and provide important comments, I would not have been able to complete the dissertation in its present form.

I am thankful to Dr. Swati Akshay Sachdeva for keeping faith in me. I also whole heartedly acknowledge my gratitude to the University Grants Commission, New Delhi for granting me a fellowship for pursuing my M.Phil. study.

I also extend my sincere appreciation to Dr. Phuchungla Bhutia, Assistant Professor of Surgery, Sikkim Manipal University and Dr. Dechenla Tshering Bhutia, Professor of Community Medicine, Sikkim Manipal University who helped me to a great extent in analysing the data.

My acknowledgement would not be complete if I do not thank the participants of this research who have been kind enough to give their valuable time and share their personal experiences with me.

Last but not least, I express my immeasurable love and appreciation to my family for their love, encouragement and financial support throughout my study.

#### **Chung Chung Doma Bhutia**

#### CONTENTS

#### **CHAPTER I**

- 1.1 Background of the Study
- 1.2 Review of Literature
- 1.3 Rationale of the Study
- 1.4 Objectives
- 1.5 Research Questions
- 1.6 Methodology
- 1.7 Limitations of the Study
- 1.8 Chapterisation of the Study

# CHAPTER II: THE BHUTIAS OF SIKKIM AND THE SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS

- 2.1 Sikkim: An Introduction
- 2.2 The Bhutias of Sikkim
- 2.3 The Socio-Economic Profile of the Respondents
- 2.4 Conclusion

## CHAPTER III: THE SOCIAL AND CULTURAL CONTEXT OF CHILDBEARING AMONG THE BHUTIAS IN SIKKIM

- 3.1 Childbearing among the Bhutias in Sikkim
- 3.2 Notions Regarding Pregnancy
- 3.3 Cultural Beliefs and Practices Regarding Pregnancy
- 3.4 Precautionary Measures/Myths Regarding Pregnancy
- 3.5 Rituals of Childbirth
- 3.6 Marriage Practices among the Bhutias in Sikkim
- 3.7 The Rules of Marriage among the Bhutias in Sikkim
- **3.8** Conclusion

# CHAPTER IV: REVIEW OF HEALTH CARE AND FAMILY PLANNING SERVICES IN SIKKIM

- 4.1 Health Care Services in Sikkim
- 4.2 Family Planning and Maternal and Child Health (MCH) Services in Sikkim
- 4.3 Family Planning and Maternal Health Care among Bhutia Women in Sikkim
- 4.4 Knowledge and Practice of Family Planning
- 4.5 Utilisation of Maternal Health Care Services
- 4.6 Antenatal Care (ANCs)
- 4.7 Institutional Delivery
- 4.8 Schemes for Promoting Institutional Delivery
- 4.9 Conclusion

#### **CHAPTER V: SOCIO-ECONOMIC CORRELATES OF FERTILITY**

5.1 Conclusion

#### **CHAPTER VI: CONCLUSION**

#### List of Tables

Table No. 1.1 Lepcha, Bhutia and Nepali Population in Sikkim during 1931-2011

Table No. 2.1 Distribution of Respondents by Age

Table No. 2.2 Educational Level of the Respondents

Table No. 2.3 Occupational background of the Respondents

Table No. 2.4 Distribution of Respondents by Monthly Income

Table No. 2.5 Distribution of Respondents' Husbands by Age

Table No. 2.6 Distribution of Respondents' Husbands by Education.

Table No. 2.7 Distribution of the Respondents' Husbands by Occupation

Table No. 2.8 Distribution of Respondents by Monthly Household Income

Table No. 2.9 Distribution of Respondents by Type of Family

Table No. 2.10 Distribution of Respondents by Place of Residence

Table No. 2.11 Distribution of Respondents by Type of House

Table No. 2.12 Distribution of Respondents by Ownership of Land

Table No.3.1 Distribution of the Respondents by Marital Status

Table No.3.2 Nature of Marriage of the Respondents

Table No. 3.3 Respondent's Consent in the Choice of the Spouse

Table No.3.4 Distribution of Respondents by Age at Marriage

Table No.3.5 Age at Marriage of the Husband

Table No.3.6 Distribution of Respondent's by Age at First Childbirth

Table No. 3.7 Desired Number of Children

Table No.3.8 Ideal Number of Children and the Actual Number of Children in the Family

Table No. 4.1 Maternal Health Indicators in Sikkim

Table No. 4.2 Child Health Indicators in Sikkim

Table No. 4.3 State Health Target, 2012-2013

Table No. 4.4 Distribution of Respondents by Knowledge of Modern Methods ofFamily Planning

Table No. 4.5 Sources of Knowledge of Modern Methods of Family Planning

Table No. 4.6 Distribution of Respondents by Use of any Method of Family Planning

Table No. 4.7 Distribution of Respondents by Reason of not using Contraceptives

Table No.4.8 Distribution of Respondents by Decision-making on the Use of Methods of Family Planning

Table No. 4.9 Number of Induced Abortions

Table No. 4.10 Number of Miscarriages

Table No. 4.11 Percentage of Women having Antenatal Care (ANC)

Table No. 4.12 Sources of Antenatal Checkups

TableNo.4.13 Place of delivery of the Child

Table No.5.1 Distribution of Respondents by Educational Level and Number of Children

Table No. 5.2 Husband's Education and Number of Children

Table No.5.3 Respondent's Occupation and Number of Children Born

Table No. 5.4 Husband's Occupation and Number of Children

Table No. 5.5 Monthly Household Income and Number of Children

Table No. 5.6 Type of Marriage and Number of Children

Table No. 5.7 Age at Marriage of the Respondents and Number of Children

Table No. 5.8 Place of Residence and Number of Children

Table No. 5.9 Type of Family and Number of Children



## DEPARTMENT OF SOCIOLOGY SCHOOL OF SOCIAL SCIENCES SIKKIM UNIVERSITY

[A Central University established by an Act of Parliament of India, 2007]

Date: 5 03 2015

#### DECLARATION

I declare that the dissertation entitled "Fertility Behaviour of Bhutia Women in Sikkim - A Sociological Study" submitted to Sikkim University for the award of the degree of Master of Philosophy is my original work. This dissertation has not been submitted for any degree of this University or any other university.

Chung Chung Chung Chung Doma Bhutia

Chung Chung Doma Bhutia Roll No: 13MPSG03 Registration No: 10SU1960

We recommend that this dissertation be placed before the examiners for evaluation.

Indu

Department Supervisor

Bwari. A. Ohlar: Coordinator

Head Department of Sociology School of Social Sciences SIKKIM UNIVERSITY 6th Mile, Tadong 737102, Garigtok - Sickim

Pauhanari-Narmada Academic Bloc, 6th Mile, Samdur, PO Tadong 737.102, Gangtok, Sikkim, India Phone: + 91- 3592-251228 (O) www.sikkimuniversity.ac.in



## DEPARTMENT OF SOCIOLOGY SCHOOL OF SOCIAL SCIENCES SIKKIM UNIVERSITY IA Central University established by an Act of Parliament of India, 2007

**CERTIFICATE** 

This is to certify that the dissertation entitled "Fertility Behaviour of Bhutia Women in Sikkim: A Sociological Study" submitted to Sikkim University in partial fulfilment of the requirement for the degree of Master of Philosophy in Social Science embodies the result of *bona fide* research work carried out by Ms. Chung Chung Doma Bhutia under my guidance and supervision. No part of the dissertation has been submitted for any other degree, diploma, associate-ship, fellowship.

All the assistance and help received during the course of the investigation have been duly acknowledged by her.

Signature of the Supervisor Department of Sociology Sikkim University

Place: Gangtok Date: 5 03 2015

Pauhanari-Narmada Academic Bloc, 6th Mile, Samdur, PO Tadong 737102, Gangtok, Sikkim, Ind Phone: + 91- 3592-251228 (O) www.sikkimuniversity.ac.in

#### CHAPTER I INTRODUCTION

#### 1.1 Background of the Study

Fertility constitutes an important basis of national as well as international concerns regarding numerous facets of human life as well as the environment. In the recent years fertility has garnered much attention for research and policy purposes and this on the larger part has been encouraged by the problem of unprecedented population growth in the world. Large families that were once a pre-requisite to assure survival of a particular family line or racial group has come to be seen as an impediment to national growth and development. Zacharia (1995) says that demography should be paid considerable importance, and more so in the third world countries where the security of man is under threat from unprecedented increase of human population (as cited in Datta, 2011:1).Since in the study of human population, of the several demographic variables taken into account a population's size is first affected by fertility, it is thus considered to be one of the most powerful elements that influence the demographic character of a population. Thus knowledge about fertility helps us to grasp an understanding of the demographic behavior and a general understanding of the social structure and human condition as well.

By the term fertility we usually mean all aspects of reproduction (Pressat, 1985: 81-82). It refers to the childbearing performance of individuals, couples, groups, or populations (Dash, 2006:134). It is supposed to be the product of knowledge rational, evaluative, effectual or customary which actors hold about childbearing and rearing (Patel, 2004:4). Taber's Cyclopedic Medical Dictionary (2009:858) defines fertility as the quality of being productive (fertile). The fertility rates are determined by the crude birth rate, which is simply the annual number of children born per 1000 population, and the reproductive age of women is considered to be 15 to 49 years. Fertility behavior refers to the processes of bearing and rearing children in the context of the household and the wider society. As stated by McKintosh (1981:9), "Fertility Behavior means not merely the bearing of children but also to their care and socialization, and the maintenance of adult individuals through their life processes which create individuals to fit more or less into social structure of society and thus ensure the continuation of that society in the next generation". Fertility behavior of an individual and community is said to be largely regulated by social and cultural factors, which are part of the social fabric of life. These factors vary widely from one community to another and within the community itself. Within culture, caste, class, ethnic, religious and educational background, income, age at marriage, number of children etc. influences the value and perception of fertility behavior, while marriage and kinship relation form the setting for bearing, caring and socializing children. Thus fertility pervades many dimensions of social, cultural and economic life (Choudhary, 2012: 10).

There are numerous studies that have tried to establish the relationship of fertility with social, cultural, economic, demographic and psychological factors (Singh, 1986; Jayasree, 1989, Niranjna, 2000, Sharma and Niranjna, 2001; Datta, 2011; Rajput, 2011). A study of fertility behavior usually employs any of the four prominent perspectives namely macro-structural, micro-economic, psycho-social and socioeconomic. In the macro-structural perspective, societies and regions are taken as the unit of analysis. According to this perspective a decline in fertility is caused by modernisation and development. Similarly micro-level studies take household as the unit of analysis, and maintain that social, structural and socio-economic factors inhibit the fertility of passive couples. The micro-economic trend takes couples in reproductive ages as their focus of analysis and deems that couples make a costbenefit calculation before deciding to have children. Thus for them a couple would want a child only if the benefit of having the child is more than the cost of raising it. Lastly, the psycho-social perspective focuses on couples in the reproductive age as their unit of analysis. According to this perspective, decisions to have children are determined by the beliefs, feelings and values that couples hold regarding childbearing (Choudhary, 2012: 10-11).

In the case of India, fertility studies are not uncommon and the importance of studying India's fertility is evident from the fact that a small change in it will have a definite bearing on its population size and in its share in the world's population, given that it consists of 16.87% (1.021 billion) of the world's population (Registrar General of India, 2001). With its current population growth rate (1.6% per year), India, the second populous country in the world after China (whose growth rate is 0.6% per year) at present, will cross China by 2030 (United Nations, 2007). The severity of

population growth in India can be understood as its population had reached 1144 millions in 2007 from 352 million in 1950, which is more than three times the population in 1950. India is one of those 38% of world countries, which have reported that their current populations are too high (United Nations, 2008). Many policies have been undertaken in India starting from 1951 till today to control fertility and thereby the total population size. Historically, India was the first country to adopt an official policy to slow population growth in 1952. Despite the policies and investments in family planning, the Indian population continued to rise during the 1970s. The aim of reducing birth rates through family planning was held back both by deep-seated traditions favouring larger families and by lack of resources to extend services to an extreme, mainly rural population. The desperation on the part of the government manifested itself during the Emergency of 1977 resulting from Indira Gandhi's coup, when many states resorted to forced measures together with quota systems that led to the creation of the notorious sterilisation camps, where men and women alike were made to undergo forced sterilisation under false pretenses (Chambers, 2012:142). Fast forwarding some years and India is now in the midst of a significant demographic revolution. There has been a significant decline in fertility in many parts of India since the early 1980s. Over the last thirty years there has been about 30 percent decline in fertility in India, with fertility decreasing quicker among more-educated women, urban women, Hindu women, and non-Scheduled Caste/Scheduled Tribe women. At present the current total fertility rate of India stands at 2.7 (International Institute of Population Science and Macro International, 2007).

India has varied culture, religion, economic condition, ethnicity, demographic features, geographic and linguistic characteristics etc,. Hence one can experience great diversity in fertility levels and differentials among different Indian groups and communities. One such group that has been an integral part of the Indian population are there has been a decline in the fertility the tribal groups of India. Although all the tribal groups do not fall under the category of Scheduled Tribes (ST) in India, as per the 2011 Census, the Scheduled tribes as a whole form about 8.6 percent of India's total population. Nevertheless, the tribal communities have remained outside the purview of the social demographers and researchers and not much work has been done on them so far. Within the massive text on Indian tribes, there is relatively little systematic analysis of tribal patterns of demographic behavior such as fertility and

mortality. Many scholars have recognized the lack of studies involving the tribal patterns of demographic behavior (Sharma and Niranjna, 2001: 9; Gangadharam, 1999: 6-7; Maharatna, 2005: 3). Moreover whatever work exists on the Indian tribes are mostly about classification and differentiation among various tribal groups and clans, their religious and marriage practices and rituals, and more recently on their economic circumstances and predicaments, but at the same time existing literature on tribal fertility is relatively very scarce.

In the light of the above discussion, the proposed study has focused on the fertility behavior of the women of one of the tribal groups of the Indian state of Sikkim, the Bhutia Tribe. The principal thrust of the study has been to explore and understand the fertility behavior among the Bhutia women of Sikkim and draw an analysis of its socio-cultural and economic correlates.

In Sikkim where the present study has been undertaken, the recent demographic scenario reveals that the state is heading towards a steady decline in the growth rate of the population. During the last couple of decades the state has achieved noteworthy success on demographic front. As per the 2011 Census of India, its total population is 6,10,577 out of which 3,23,070 are males and 2,87,507 are females (Directorate of census Operations Sikkim, 2011). Between the years 2001- 2011, the decadal growth of population has decreased from 33.06 to 12.89 (Department of Economics, Statistics, Monitoring and Evaluation, 2013). As per NFHS-3 report, Sikkim is one of only seven states in India where fertility is below replacement level and as per current fertility level, a woman in Sikkim will have an average of only 2.0 children in her lifetime. Fertility in Sikkim, which was 2.8 children per woman at the time of NFHS-2 decreased by three-quarters of a child between NFHS-2 and NFHS-3. The fertility rate is almost one child lower in urban areas than in rural areas. However, even in rural areas, the fertility rate of 2.2 children per woman is approaching the replacement level (International Institute of Population Science and Macro International, 2008). This unique demographic feature of Sikkim offers a glaring scope of research since the state's demographic composition has undergone a phenomenal change over the decades. In Sikkim, studies on fertility have remained almost neglected and whatever little knowledge on fertility is available is limited to macro demographic studies such as the National Family and Health Surveys, which only offer explanations of data in

statistical form. The lack of studies on fertility has led to very limited knowledge in this respect and caused a knowledge gap. Thus this study on the fertility behavior of the Bhutia community will be a sociological study on fertility and a modest attempt to gain insight in this regard.

#### **1.2 Review of Literature**

A number of literatures that are related to the fertility behavior of women have been reviewed for the purpose of the study from books, articles, research papers and journals, and the literatures are as follows:

Sharma and Niranjna (2001) studied the fertility behavior of Kinnaura women, a Scheduled tribe of Himachal Pradesh. In their study they have tried to analyze the relationship between social structure and fertility behavior. Based on the findings of their study they assert that reproductive behavior is institutionalized and is influenced by different elements of the social structure. According to them fertility of women is determined by various socio-cultural and economic factors of which status of women, marriage practices, education and occupation of both husband and wife, and household income are of vital significance.

Niranjna (2000) studied the fertility behavior of Kinnaura Women in Himachal Pradesh. Her study reported negative relation between type of marriage and fertility behavior. She found that women who have arranged marriage have more number of children than women who have love marriage. The reason behind this is because unlike women having arranged marriages, the women who have love marriage have to take the sole responsibility of managing their house themselves thus they seem to prefer small families.

Gangadharam (1999) studied the fertility behavior of the Chenchus, a tribal community of Andhra Pradesh. The study reveals that socio-cultural and economic factors such as food gathering work, high age at marriage, sexual taboos, adolescent sterility, lengthy period of sexual abstinence after pregnancy, absence of pro-natalist emphasis, nuclear family organization coupled with relative independence, lack of maintenance of property, lack of son preference, lack of control over labour services or commodities acquired by the children, active participation of women in economic

activities and awareness of the disadvantages of high fertility among woman and use of certain indigenous forms of contraception causes the Chenchus to have low fertility.

Singh (1986) examined the socio-economic and sociological correlates of fertility behavior among the rural communities of Punjab and Haryana. The findings of the study suggests that uneducated women, women who are agricultural workers, Backward and Scheduled Caste, migrants and landless showed high fertility. In addition, the educational level of both husband and wife, occupational status of women, standard of living, ownership of land, caste status, place of dwelling and inter spousal communication had a negative bearing on fertility. A significant relationship was also found between infant and child mortality and fertility.

Rajendren (2009) in his study of the fertility behavior among rural women found that fertility behavior is largely shaped by the socio-economic and psychological value that a society attaches to children. According to him society attaches differential values to sons and daughters and sons are generally preferred over daughters for reasons such as inheritance of property by sons, dependence on sons for family income and security at old age, cultural practice of staying with sons at old age, continuation of family lineage, ritual importance, consultation on matters of family to sons etc. The study also highlights that daughters are mostly valued for providing emotional support to their parents at times of illness and old age. In addition, the study also suggested that gender preference has a bearing on fertility. Preference for sons leads to high fertility. In addition the study also reveals that parent's perception about direct and indirect cost of child rearing has depressing effect on fertility. Thus higher the direct cost involved in rearing children lower will be the fertility.

Das and Pandhiyar (1991) examined the determinants of fertility of women of South Gujarat. The factors determining fertility include religion, caste, education of wife, education of husband, occupation of husband and annual income of the family. The findings of the study suggest that the educational levels of husband and wife had a negative impact on marital fertility. Moreover, family income, too, was negatively associated with fertility. Interestingly, the study highlighted that 'fertility' of manual workers was higher in comparison to white-collar workers.

Jayasree (1988) in her study found that women engaged in different occupations exhibit different levels of fertility. According to her, women engaged in petty business, working as labourers and those engaged in traditional sector of economy manifest high fertility. In contrast women who work outside their home usually have low level of fertility.

Fukuda et al., (2012) tried to study the co-relation between religion and fertility. The findings of their study suggest that Buddhism is not associated with increased level of fertility outcome. This according to them could be due to the fact that Buddhism does not have clear pro-natal teaching and that it is not against most forms of contraception. On the basis of examination of the Buddhist teachings regarding contraception, family formation, and childbearing ideals, they came to the conclusion that Buddhism is basically pronatalist and that the followers are not advocated to have high fertility levels.

Reddy and Sujata (2009) studied the impact of women's education on fertility behavior and autonomy of women in Andhra Pradesh. Their study suggests that women's education has an inverse relation with fertility. Education level till middle school leads to decline in the total fertility rate and attainment of secondary education initiates fertility transition and women's autonomy. They also found that preference of male child was more prevalent among illiterate women. In addition to this, it was discovered that education influenced fertility by bringing about changes in the duration of breast-feeding, increase in the practice of contraception, increasing age of marriage and also by reducing the preferences for large number of children.

Patel (1994) explored the highly sensitive demographical problem of fertility behavior through intensive fieldwork method of social anthropology. Her study has provided an interpretive account of fertility behavior in the village society of Mogra in Rajasthan. The study highlights that culture and social values play an important role in determining the fertility of women. Customs of marriage such as remarriage of widowed and divorced women also have a bearing on fertility. It was noted that among the upper castes where remarriage was not permitted women had to suffer the stigma of barrenness throughout their lives, while on the other hand castes permitting remarriage showed high fertility. The study also discovered that in agricultural societies, children are valued for the labour they provide as well as for keeping the house running during difficult times. Incidences of high mortality rate and fear of losing children were also found to motivate couples to have more children than they would like to have. Thus, it was observed that fertility was controlled only after having the socially expected number of children.

All the above-mentioned literature gives us an insight about the factors that play a significant role in determining fertility. These literary pieces have contributed to us an understanding of how the social, economic and cultural variables lend a hand in shaping the fertility behavior of couples in general and women in particular. But coming to Sikkim such kind of work is almost negligible and very minimal effort has been directed to initiate research focused on fertility. Thus this research work will be helpful to explore and examine fertility behavior of Bhutia women in Sikkim. This work could also be useful for future exploration in this regard.

#### 1.3 Rationale of the Study

YEAR	COMMUNITIES		TOTAL POPULATION	Decadal Growth for Lepcha	Decadal Growth for Bhutia	Decadal Growth for Nepali	
	LEPCHA	BHUTIA	NEPALI				
1931	13,060	11,955	84,693	1,09,8086	-	-	-
1951	13,625	15,625	97,863 <sup>1</sup>	1,37,7257	4.3	30.7	15.6
1961	14,847	36,577	88,916 <sup>2</sup>	1,62,1897	9.0	134.1	-9.1
1971	22306	36,760	1,34,236	2,09,8437	50.2	0.5	51.0
1981	22147	21548	1,92,295	3,16,385 <sup>7</sup>	-0.7	-41.4	43.3
1991	56,904	65033	2,84,520 <sup>3</sup>	4,06,457 <sup>7</sup>	156.9	201.8	48.0
2001	40,568 <sup>4</sup>	70,308 <sup>4</sup>	4,27,272 <sup>5</sup>	5,40,851 <sup>7</sup>	-28.7	8.1	50.2
2011	42,909	69,598	N.A.	6,10,577 <sup>8</sup>	5.8	-1.0	-

Table 1.1: Lepcha, Bhutia and Nepali Population in Sikkim during 1931-2011

Source: For Upto 1991:Gurung (2011:99-120).

<sup>1</sup>Figure based on religion(Hindus) inclusive of Indian plainsmen.

<sup>2</sup>Figure based on linguistic affiliations.

<sup>3</sup>Figure inclusive of "Others" including the Gurungs, Rais/Jimdars/Khambus, Mangar,

Chhetri, and Kami sub-cultural groups of the larger Nepali Community.

Source: For Upto 2001: <sup>4</sup>Data Highlights: the Scheduled Tribes Census of India, Sikkim, 2001; <sup>5</sup>Choudhury (2006: 19).

Source: For Upto 2011: Data Highlights: the Scheduled Tribes Census of India, Sikkim, 2011.

Source: <sup>6</sup>Sinha (2008:37); <sup>7</sup> Urban Development and Housing Department (UDHD), Govt. of Sikkim; <sup>8</sup> Primary Census Abstract 2011, Govt. of India.

There has been a steady growth in population in Sikkim in the last many decades. The population of Sikkim has increased from 1,09,808 in 1931 to 610577 in 2011. Table 1.1 gives the population of the Lepchas, Bhutias and Nepalis in Sikkim during 1931 to 2011. It is clear from the table that the population of the Lepchas, Bhutias and Nepalis in Sikkim has grown gradually between the years 1931 to 2011. From the table above, community wise population figures reveal that the Lepcha population has grown over the years between 1931 to 2011, except for the year 1981 where the population has gone down. The decadal growth for the Lepcha population shows irregularity in the growth pattern. While there was negative growth in 1981 and 2001, the year 2011 shows positive rate of growth. Similarly the Bhutia population has also grown over the years between 1931 to 2011. But the decadal growth rate for Bhutias shows irregular growth pattern with negative growth rate in the years 1981 and 2011, indicating that the Bhutia Population is rapidly declining at an alarming rate. On the other hand, in the case of Nepali population the growth has been steady and the decadal growth rate shows more or less steady pattern. Thus it is obvious that while the Nepali and Lepcha (though still showing low growth of rate) populations show stable trend, the population of the Bhutias on the other hand has dropped at an alarming rate which is a matter of concern.

If we look at the population dynamics of Sikkim from 1931 to 2011 in Table 1.1, we find that the Nepali population is high whereas the Bhutia and Lepcha population are comparatively low. In a heterogeneous ethnic community like Sikkim these differences in the population takes in to the question of why this is so. In India, studies on fertility behavior have been conducted on other tribal groups, but in the context of Sikkim this area of research remains relatively unexplored. In some studies on other tribes, it has been found that certain indicators such as social, cultural and economic have a bearing on fertility (Gangadharam, 1999; Niranjna, 2000;Sharma

and Niranjna, 2001; Maharatna, 2005), but it remains to be seen whether these indicators are applicable to Sikkim or not. So using the above mentioned indicators this study tries to study the fertility behavior among the Bhutias, one of the tribal groups in Sikkim.

#### **1.4 Objectives**

The specific objectives of the study are set as follows:

- To explore the fertility behaviour among Bhutia women in Sikkim.
- To identify the socio-cultural and economic factors related to their fertility behaviour.
- To bring to light the cultural practices regarding fertility behavior among the Bhutias in Sikkim.
- To review the Health Care and Family Planning Services in Sikkim with particular emphasis on Maternal and Child Health Services.

#### **1.5 Research Questions**

- What kinds of marriage and nature of childbearing practices are prevalent among the Bhutias in Sikkim?
- What is the general level of knowledge and nature of family planning practices among the Bhutias? What type of methods of family planning do they use?
- What is the value of sons and daughters among the Bhutias in Sikkim?
- What are the programmes and policies implemented by the State for the welfare of the mother and the child? Do Bhutia women utilize these services?

#### **1.6 Methodology**

The present study focuses on the fertility behavior of the Bhutia women. This study makes use of both qualitative and quantitative data to achieve the research objectives and the data for the present study was collected from both primary and secondary sources. The secondary data for the study were collected from various books, journals, articles, Internet sources, reports and relevant information. The study area is East district of Sikkim. For a comprehensive analysis of the interrelationship the study includes both rural and urban areas. For the rural sample two Gram Panchayat Units (GPUs) were selected. The GPUs so chosen were Samlik-Marchak and Rawate-Rumtek. As far as the urban population is concerned, Chandmari and Ranipool Bazaar were selected.

110 ever-married Bhutia women in the age group of 15-49 years were randomly chosen from the selected study areas. A semi-structured interview schedule was used to collect the relevant data from women. Before administering the interview schedule in the selected field areas, a pilot survey was carried out to 10 married Bhutia women, which helped the researcher to find the flaws in the interview schedule. Consequently, needed changes were effected in the original interview schedule. The data for the study has been computed by using Microsoft Excel and SPSS.

#### 1.7 Limitations of the Study

One of the major drawbacks of the study comes from the lack of availability of data on the coital behavior of the respondents, which is a vital for understanding fertility behaviour. As the research area and population selected is small and the study is limited only to the East District of Sikkim, the findings may not generalize the whole Bhutia Community living in others parts or districts of Sikkim. The problem of transportation, especially to reach the field area in the rural places was a tough one and most often the researcher had to make arduous journey, as most of the houses in the rural areas were set miles apart from each other and far away from the main road. Since the study was restricted to ever-married women in the age-group 15-49, upon reaching the houses for conducting interviews many a times, the researcher had to encounter a situation where the married women had exceeded the age limit taken for the study. Given these limitations, a sincere attempt has been made to sociologically analyze the fertility behavior of the Bhutia women in Sikkim.

#### Chapterisation of the Study

The first chapter introduces the topic by presenting a clear case for carrying out this study and spells out the main objectives and research questions. The chapter also reviews the relevant literature focused on this study, presents a discussion on the methodology and tools employed for fieldwork and analysis and lists out the major limitations of the study.

The second Chapter titled "The Bhutias of Sikkim and The Socio-Economic Profile of the Respondents" briefly introduces Sikkim and the Bhutias and brings out the Profile of the Respondents in which a detailed account of the socio-economic background of the respondents has been brought out.

The third Chapter titled "The Social and Cultural Context of Childbearing among the Bhutias in Sikkim" discusses at length the rules and practices of childbearing and marriage prevalent among the Bhutias in Sikkim.

The fourth Chapter titled "Review of Health Care and Family Planning Services in Sikkim" discusses a brief historical background on the evolution of Health Care Services in Sikkim and outlines the present scenario of health care services in Sikkim with particular emphasis on family planning and maternal health care services. The chapter also exemplifies the utilization of family planning services and maternal health services by Bhutia women in Sikkim.

The fifth Chapter titled "Socio-Economic Correlates of Fertility" deals with the analysis of fertility of Bhutia women by their socio-economic characteristics.

The last chapter summarizes the overall findings of the study.

#### **CHAPTER-II**

## THE BHUTIAS OF SIKKIM AND THE SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS

#### 2.1 Sikkim: An Introduction

Sikkim, a small and peaceful state snuggled in the western most part of the Eastern Himalayas is a landlocked terrain bounded on the four sides by Nepal in the West, Bhutan in the East, the Darjeeling district of West Bengal in the south and Tibet in the north. It has a total area of 7,096 sq. km, constituting 0.22 per cent of the total geographical area of India. Affectionately called by various names, Sikkim is "Nyema-el" (heaven) for the Lepchas, Su-khim (new house) for the Limbus and "Denzong" (land of rice) for the Bhutias (Sikkim Human Development Report, 2001:6).Sikkim is a former Buddhist kingdom that was ruled by the Namgyal dynasty since 1642 until its incorporation into India in 1975, by virtue of which it became a full-fledged 22<sup>nd</sup> state of the Indian Union on 16 May 1975.

Even today the population of Sikkim accounts for only 0.05 per cent of India's population (ibid:6) and according to the 2011 Census of India, Sikkim has a total population of 610,577 of which male and female are 323,070 and 287,507 respectively. The Child Sex Ratio (0-6) of Sikkim stands at 957 females per 1000 males and the Sex Ratio (All Ages) is 890 females per 1000 males. Between the Censuses 2001-2011 the decadal growth of population in Sikkim has decreased from 33.06% to 12.89%. Out of its total population, about 20.6 per cent are listed as Scheduled Tribes while the Scheduled Castes (exclusively of Nepali origin) comprise about 5 per cent of Sikkim's total population. Based on religion, the population comprises of 68 per cent Hindus, about 27 per cent of Buddhists, 3 per cent of converted Christians and some Muslims. The State has been performing well in the field of education and records literacy rate of 82.20%.

Sikkim consists of a multi-ethnic society composed of more than 20 different groups, most predominant being the Lepchas, Bhutias and Nepalis. In terms of religious affiliation, the population of Sikkim largely consists of Hindus (68 per cent), followed by Buddhists (27 per cent), while Christians make up for only 3 per cent of the total

population (Sikkim Human Development Report, 2001: 7). Furthermore, a small portion of the population essentially the Lepchas and the Nepalis of Mongoloid-stock still practice animism (Gurung, 2011: 92).Here one can also find a significant tribal population. As per the Census 2011, the total tribal population of Sikkim is 206,360 constituting 33.8% of the total population. Among the constitutionally notified four tribal groups of Sikkim, the Bhutia tribe comprises the largest with a population of 69,598 persons forming 33.73 percent of the total tribal population of the state. The Bhutias are found throughout the state but majority of them are concentrated in the East district (48.9%), followed by the South district (19.83%), the West district (19.79%)) and lastly the North district (11.45%).Majority of the Bhutias (73.07%) largely reside in the rural areas while their urban population stands at just 26.92%.

#### 2.2 The Bhutias of Sikkim

The term 'Bhutia' often spelt and pronounced, as 'Bhotia' is popularly believed to have originated from the word 'Bod', which means Tibet. It is a generic term used to label several socially unrelated groups of people of the Indo-Tibetan borderlands (Dash, 2006:34; Subba, 2008: 267; Gurung, 2011:105). The Bhutias of Sikkim thus constitute one of the many tribes belonging to the corpus 'Bhotia'. It is alleged that they are the descendants of the Tibetan immigrants who came to Sikkim in different waves from the 13<sup>th</sup> Century onwards from the Kham region of Tibet and established the Kingdom of Sikkim in the 17<sup>th</sup> Century. After coming and settling in Sikkim, the Bhutias have developed their own distinct culture and social patterns that is different from their Tibetan counterparts, so they are called as 'Sikkimese Bhutia'. They even speak their own language 'Denjongke' and refer to themselves as 'Sikkimese' or 'Denjongpa'. Majority of the Sikkimese Bhutias are devout Buddhist and believe in the fundamental doctrines of merit and sin. They profess Tibetan Mahayana Buddhism known as Vajrayana. Their chief deity is Boddhisattva, but they also worship other guardian deities comprising of the local deities, village deities, family deities and Kanchendzonga. Earlier the Bhutia society was divided into three social classes namely the aristocracy, the quasi-aristocracy<sup>i</sup>, and the commoners. But such social arrangement has been done away with in the present time.

<sup>&</sup>lt;sup>i</sup>They were also called as Kazis and belonged to affluent and leading families.

The Bhutias are basically patrilineal and follow a patriarchal family system, with the adult male (father) as the head of the household. Among them the family property and all material inheritance is passed on to men. However, women are given gifts and property, which they take with them at the time of marriage. The Bhutias practice monogamous marriages, except the Bhutias of Lachen and Lachung areas in North Sikkim who still follow fraternal polyandry<sup>ii</sup>. As Bhutias are Scheduled Tribes, the Hindu Marriage Act of 1955 is not applicable to them. Matters of divorce, custody of children, and issues related to property is determined by customary law. Even today the Bhutias have upheld their own distinct culture.

The social structure of the Bhutias is almost egalitarian. There does not seem to be much distinction between men and women. There is relatively no rigorously binding division of labour and both men and women equally engage in diverse forms of occupation but the work load of women is comparatively more than men as the women have to look after both the domestic sphere and the public sphere. Bhutia women also enjoy the right to choose their own spouse, to divorce, and to remarry. They also actively take part in family affairs and economic pursuits. But their participation in the political sphere still remains limited.

As compared to other tribal groups of India, the Bhutias of Sikkim are a well educated and well represented lot. They have a literacy rate of 81.09%, with the male and female literacy rate at 86.88% and 75.03% respectively. They are also in many high level bureaucratic posts and other important institutions in the state. They are a land owning community and are also economically well off (Department of Economics, Statistics, Monitoring and Evaluation, 2006).

The above paragraph offers a brief description of Sikkim and a profile of the Bhutia tribe of Sikkim. Likewise the succeeding paragraphs deals with the socio-economic profile of the respondents of the study.

<sup>&</sup>lt;sup>ii</sup>It is a form of marriage where the brothers in a family take a common wife. It is usually practiced to prevent the division of land between brothers. Although in earlier times fraternal polyandry was common among the Bhutias of Lachen and Lachung areas in North Sikkim, but with time and spread of education its occurrence is becoming very rare nowadays.

#### **2.3 The Socio-Economic Profile of the Respondents**

Woman as a child bearer is an indispensible component in fertility studies. Women and fertility are inseparable. Traditionally a woman's role in society has been to cater to the needs of child bearing, child rearing, taking care of the household and providing domestic and other services to adults, and childbearing is considered to be the main feature of every woman's life. All women are supposed to be bestowed with an instinct, a biological urge to become mothers, whereby they gain both personal satisfaction and social approval. But fertility does not only have a biological connotation. It is in fact influenced by a host of factors of which socio-cultural and economic factors are considered to be of vital significance (Choudhary, 2012: 10). Sociologists and demographers suggest that reproductive decisions are determined by social institutions, culture and traditions (Sharma and Niranjna, 2001:12).

In understanding fertility differentials the analysis of social and economic dimensions of a society and the group under study are not only desirable but constitute an essential condition. Women constitute an important social category. Since traditionally they have been entrusted with the responsibility of gratifying the requirements of the family, such as childbearing and rearing, looking after the household, procuring household provisions etc., and they live under specific sociocultural and economic conditions, the way women think, orient their life and act is not their own but imposed by the social structure of which they are a part. In the present study, an attempt has been made to identify the socio-economic background of the respondents on the basis of sample population of 110 respondents. For the study the major variables involved in the interview schedule are respondent's age, educational qualification, occupation, income, husband's educational qualification, husband's occupation, husband's income, family type, type of residence, ownership of landholdings and standard of living. Here information has been elicited directly from the women respondents. On numerous occasions while the women were being interviewed, their answers were also reinforced, contradicted or complemented by others present during the interview, including their husbands, in laws, friends and children.

To begin with, Table 2.1 provides an insight into the age wise distribution of the 110 respondents. The respondents include only those women who are in the age group of 15-49 years, which is the biologically defined reproductive age period of women. The available data shows that majority of the respondents (36.4%) are in the 40 and Above year age group, followed by those belonging to the age groups 30-34, 35-39 and 25-29, each of which constitutes 29%, 20.9% and 10.9% respectively. The remaining respondents (2.7%) fall in the 20-24 years age category. It is also clear from the table that majority of the respondents occupy the highly reproductive age group i.e., 21-35 years.

Age (in years)	Frequency	Percentage
15-19	-	-
20-24	3	2.7
25-29	12	10.9
30-34	3	29
35-39	23	20.9
40 & Above	40	36.4
Total	110	100.0

Table 2.1: Distribution of Respondents by Age

Source: Field Data: July- September, 2014

In the field of education we can see that women are not lagging behind. The data in Table 2.2 portrays that only 2.7% of the respondents interviewed are illiterate whereas 97.3% are literate with varying levels of formal education. Amongst the educated 14.6% have primary level education, 33.6% are secondary school educated, and 15.5% are senior secondary school educated. There is also a fair share of respondents with Graduate and Post Graduate & higher level of education and they form 19.1% and 14.6% respectively. This encouraging trend in educational level of the respondents is reflective of the State Government's effort for the improvement and development of education in Sikkim, especially women's education. Education has been given top primacy in Sikkim. As per Census (2011) Sikkim recorded literacy rate of 82.2% and ranks among the highest in the country, earning 13<sup>th</sup> place among all the states of India. A big achievement of Sikkim is the rate of female literates in the state, which stands at 73.46% against the National female literacy rate of 65.46%.

Educational Level	Frequency	Percentage
Illiterate	3	2.7
Primary	16	14.6
Secondary	37	33.6
Senior Secondary	17	15.5
Graduate	21	19.1
Post Graduate	16	14.6
Total	110	100.0

Source: Field Data: July- September, 2014

In Sikkim, women actively take part in economic activities and they contribute in a major way to the society and economy (Sikkim Human Development Report, 2001:33). Their contribution to the family economy, if not more has probably been equal to that of men. The respondents were asked to identify their working status and regarding the occupational background, the research reveals that majority of the respondents (50.9%) consists of homemakers, closely followed by 41.8% who are employed in the Central and State Government services. Out of them some are employed on regularized basis and some on either Muster Roll, Adhoc or Contractual basis. A small proportion of the respondents (6.4%) and (0.9%) also consist of small business owners and agriculturists respectively. This shows that the respondents have the opportunity to take up an array of vocation.

Occupation	Frequency	Percentage
Homemakers	56	50.9
Agriculturists	1	0.9
Small Business Owners	7	6.4
Government Employees	46	41.8
Total	110	100.0

Table 2.3: Occupational background of the Respondents
---

Source: Field Data: July- September, 2014.

Table 2.4 shows income wise distribution of the respondents. It can be observed from the table that a major proportion of women (54.5%) have an income of their own. Among them, 10% of women have a monthly income of around Rs. 5000, 10.9% earn between Rs. 5001-10000, whereas 4.5% generates income between Rs. 10001-15000. Those respondents who earn between Rs.15001-20000 consist of 3.6% women whereas 10% of respondents reported to earn between Rs. 20001-25000. The data also reveals that around 15% of the interviewees have considerably high income as

they earn more than Rs. 25000 per month. However, significant proportions of women (45.5%) are found not having any income of their own and are dependent on their husbands and other family members.

Income per Month (in Rs.)	Frequency	Percentage
No income	50	45.5
Up to 5000	11	10.0
5001-10000	12	10.9
10001-15000	5	4.6
15001-20000	4	3.6
20001-25000	11	10.0
25001-30000	8	7.3
30001-35000	3	2.7
Above 35000	6	5.5
Total	110	100.0

Table 2.4: Distribution of Respondents by Monthly Income

Source: Field Data: July- September, 2014

Since both men and women participate in marriage, childbearing and rearing, the demographic and socio-economic characteristics of the husbands of the respondents have also been taken into account. Table 2.5 shows the age wise distribution of the husbands of the respondents. Here majority of the husbands (40.9%) are in the age group of 43 and above years, followed by 21.8% and 18.2% in the 33-37 and 28-32 years age groups respectively. 17.3% of respondents' husbands fall in the 38-42 age group while a few i.e. 1.8% belong to 23-27 year age group. Compared to women their husbands seem to relatively older in age. Like in many other societies of India, in Sikkimese society also, it is generally expected and preferred for a wife to be younger in age than her husband.

Husband's Age (in years)	Frequency	Percentage
18-22		
23-27	2	1.8
28-32	20	18.2
33-37	24	21.8
38-42	19	17.3
43 & Above	45	40.9
Total	110	100.0

Table 2.5: Distribution of Respondents' Husband by Age

Source: Field Data: July- September, 2014

In the field of education, the data from the field shows that there is not much difference in the educational attainment of the respondents and their husbands. Among the husbands of the respondents, a meager 0.9% falls in the illiterate category as against 2.7% of women. Even other educational categories do not exhibit much

variance. Data shows that 15.5% husbands have just primary education, 33.6% and 12.7% have studied till Secondary and Senior Secondary level respectively, 23.6% are in the Graduate category and 12.7% in the Post Graduate and higher level while 0.9% has informal education. The virtually egalitarian level of education among the respondents and their husbands show the absence of gender bias in educating girl child among the Bhutias in Sikkim.

Education	Frequency	Percentage
Illiterate	1	0.9
Informal Education <sup>1</sup>	1	0.9
Primary	17	15.5
Secondary	37	33.6
Senior Secondary	14	12.7
Graduate	26	23.6
Post Graduate & Higher	14	12.7
Total	110	100.0

Table 2.6: Distribution of Respondents' Husbands by Education.

Source: Field Data: July- September, 2014

Informal Education<sup>1</sup> indicates those having monastic education

The occupational classification of husbands of the respondents presented in Table 2.7 shows that a substantial proportion of them (54.6%) are government employees. This may be due to the fact that the State Government is still the largest provider of employment in Sikkim (DESME, 2006). This is followed by 20% of the husbands who are Businessmen/Contractors and 18.2% of the respondents who constitute the

Others<sup>1</sup> category. A handful of them also work as agriculturists and Health Professional Medicos, each sharing 3.6% and 3.6% respectively.

Occupation	Frequency	Total
Agriculturalists	4	3.6
Businessmen/Contractors	22	20.0
Government Employees	60	54.6
Health Professional Medicos	4	3.6
Others <sup>1</sup>	20	18.2
Total	110	100.0

Table 2.7: Distribution of the Respondents' Husbands by Occupation

Source: Field Data: July- September, 2014

Others<sup>1</sup> indicate Drivers, Laripas (Tibetan Buddhist traditional and religious painters), Priests.

Table 2.8 enumerates the total monthly household income of the respondents. The data given below shows that 25.4% of the respondents earn a monthly household income between 5001-15,000, followed by 18.2% earning between Rs. 25001-35000, 16.4% between Rs. 15001-25000, 9% between 45001-55000 and 4.5% each between Rs. 35001-45000 and Rs. 55001-60000 respectively. On two extremes we have 8.2% who have monthly household income of up to Rs. 5000 per month and 13.6% who have beyond Rs. 60000. It thus becomes obvious that majority of the respondents belong to households that have moderate to high income. The finding is coherent with SSEC (2006), according to which majority of Bhutia household (85.80%) belong to Above Poverty Line (APL) household against 14.20% belonging to Below Poverty Line (BPL) household.

Household Income per Month (in Rs.)	Frequency	Percentage
Upto 5000	9	8.2
5001-10000	16	14.5
10001-15000	12	10.9
15001-20000	10	9.1
20001-25000	8	7.3
25001-30000	8	7.3
30001-35000	12	10.9
35001- 40000	4	3.6
40001-45000	1	0.9
45001-50000	5	4.5
50001-55000	5	4.5
55001-60000	5	4.5
Above 60000	15	13.6
Total	110	100.0

 Table 2.8: Distribution of Respondents by Monthly Household Income

Source: Field Data: July- September, 2014

As far as the distribution of the respondents into various types of families is concerned, maximum numbers of respondents are part of a nuclear family. These nuclear families are mostly supplemented in nature, meaning where one or two members of the husband or the wife, either their mother or father or unmarried brothers or sisters are living with them. Data shows that only 23.6% of women live in joint family. The high prevalence of nuclear family in the sample population may be indicative of the changing nature of family structure among the Bhutia community, which largely used to be joint in nature in the past.

Household	Frequency	Percentage
Nuclear	84	76.4
Joint	26	23.6
Total	110	100.0

Table 2.9: Distribution of Respondents by Type of Family

Source: Field Data: July-September, 2014

Table 2.10 shows the distribution of women on the basis of their place of residence. The data shows 49.1% of women included in the study live in rural setting and 50.9% are from urban areas.

#### Table 2.10: Distribution of Respondents by Place of Residence

Place of Residence	Frequency	Percentage
Urban	56	50.9
Rural	54	49.1
Total	110	100.0

Source: Field Data: July- September, 2014

Talking about the type of house of the respondents, all the respondents live in their own house. The data from the table 2.11 indicates that a very high number of the respondents (71.8%) live in pucca houses, followed by 26.4% of those who live in semi-pucca houses. On the other side of the spectrum there are only 1.8% of respondents who live in kutcha houses. The logic behind this could be since most of the respondents belong to moderate to high-income group they have the capacity to build RCC houses. The type of house owned by the respondents is related to their overall income level.

Type of House	Frequency	Percentage
Kutcha	2	1.8
Semi-pucca	29	26.4
Pucca	79	71.8
Total	110	100.0

Table 2.11: Distribution of Respondents by Type of House

Source: Field Data: July-September, 2014

The Bhutias are a landowning community and own large landholdings (DESME, 2006). In terms of distribution of respondents by ownership of land, Table 2.12 reveals that a higher number of them own land, and the percentage of those who own land stands at a whopping 70%. Among the landowners, majority of them (35.5%) have 1-5 acres of land while a minority of 1.8% and 1.8% of the respondents owns 11-15 acres and 16-20 acres of land respectively. In addition to this, 14.5% of the respondents have up to half acres of land, 4.5% hold 6-10 acres of land and 11.8% did not want to reveal the size of their landholdings while 30% of them do not own any land at all, except for the ones they have built their houses upon.

Land owned (In acres)	Frequency	Percentage
Nil	33	30.0
Up to ½	16	14.5
1-5	39	35.5
6-10	5	4.5
11-15	2	1.8
16-20		
21 & Above	2	1.8
Don't know the size	13	11.8
Total	110	100.0

Table 2.12. Distribution of Respondents by Ownership of Land

Source: Field Data: July-September, 2014.

#### 2.4 Conclusion

To sum up, the foregoing descriptive analysis and discussion of the social and economic profile of the respondents the following findings are obvious. It may be said that majority of the sample falls in the highly reproductive age group. But at the same time there are also a noticeable number of women who are above 40 years of age. When it comes to education, the educational background of the women shows positive trends and those who are illiterate constitute only a very minute percentage of the total sample. The women were found to be holding various jobs and according to the kind of jobs they hold their income level also differs. The analysis of the attributes

of the spouses of the respondents reveal that they are older in age than their wives, more or less equally educated as their wives but having better occupational status than their wives. Accordingly they also have a better income level than their counterparts. The research also throws light on changing nature of the family structure among the Bhutias. Among the respondents majority of them have nuclear families in comparison to joint families. The general standard of living of the respondents is of moderate to high-class level as many of them have good income and pucca houses. It is expected that some of the variables of social and economic profile of the respondents will have a bearing on their fertility behavior which will be discussed elsewhere/in the following chapters.

#### **CHAPTER III**

# THE SOCIAL AND CULTURAL CONTEXT OF CHILDBEARING AMONG THE BHUTIAS IN SIKKIM

Mandelbaum (1974: 1) writes, "When a woman bears a child, when a man becomes a father, together they begin anew and continue again the strongest, most intimate social bonds of their lives. These bonds and all their acts in producing the child are moulded by their culture, by the expectations and standards commonly shared in their society. So to understand the fertility of any people, we must know something about their culture and society. To try to affect their fertility without guidance of that knowledge is to blunder about blindly." It is widely believed that childbearing is a privilege exclusive to women and thus becoming a mother the most special and joyous occasion of her life. For a woman, giving birth to a child is an important event one that, at once, marks her transition from a wife to a mother. A woman is said to be incomplete until she attains motherhood. Every society accords a lot of emphasis on childbearing as it is a declaration life, one that promises and assures emotional fulfillment and old age security for the parents on the one hand, and the survival and continuity for the tribe on the other (Loon, 2014:2). Childbearing also constitutes a social institution, in the sense that it encompasses a complexity of values, beliefs, norms and behavior focused on the need to procreate. This complexity of values, beliefs, norms and behavior vary from culture to culture and from one community to another. It lays down the basis that governs every aspect of childbearing such as childbearing practices, marriage practices, family planning practices, etc. This chapter is generated mainly from the present research study and it attempts to provide an effective way of understanding the larger social and cultural context of childbearing and their related norms, values, beliefs, practices, and traditions including the marriage practices prevalent among the Bhutias in Sikkim.

#### 3.1 Childbearing among the Bhutias in Sikkim

When it comes to childbearing, the Bhutias in Sikkim follow their own social norms, values, beliefs and customs. They regard childbirth as an important affair, one that involves not just the couple but also the entire family, kin and the neighbourhood. As per the value system of the Bhutias, childbearing ought to occur within marital

unions. But in the event that pregnancy occurs outside wedlock, marriage is celebrated quickly so that birth of a child takes place in a socially acceptable way. Under such circumstances usually the man is made to marry the girl whom he has made pregnant by her relatives.

#### **3.2 Notions Regarding Pregnancy**

Generally pregnancy is seen as a normal and desirable condition for a married woman. Usually it serves to fulfill two purposes: on the one hand, it makes the relation of the bride and other household members more stable and secure and on the other hand it helps to prove that the new bride is biologically fit and capable of bearing children. To be able to conceive a child brings a lot of relief especially to a new bride as it saves her from the disgrace of being barren. Pregnancy as such does not demand much restriction on the part of the woman. Among the Bhutias, there isn't any notion of the pregnant woman being dirty or polluted. She is not kept isolated or barred from touching people or visiting places of worship. Even during pregnancy Bhutia women continue to carry out domestic chores and other work as usual but they are advised against lifting heavy weights and doing work that requires a lot of physical strength. But in the rural areas some pregnant women, especially those engaged in agriculture and working as labourers can be found engaging in physical labour. During pregnancy, the dietary habit of the woman is paid considerable attention. Intake of nutritive food is encouraged to meet the requirements of both the mother and the growing baby, as she is now thought to be eating for two. Nowadays pregnant women also take doctor recommended supplements like iron tablets, calcium tablets, folic acid etc. and other nutritional supplements easily available in the market namely Horlicks etc. It is considered normal for women to develop appetite for certain kinds of food items. During pregnancy women may show desire to have certain kinds of food and such desires are usually met and it is the responsibility of the husband to make sure that his wife's food cravings are satisfied. Overall pregnancy as such does not demand much adjustment in the behavior of the pregnant woman.

#### **3.3 Cultural Beliefs and Practices Regarding Pregnancy**

As required by custom, there are some important things that need to be followed by the couple during the pregnancy period to ensure the wellbeing of the child. It is believed that all the food items like tsampa (roasted powdered rice), butter etc. that have been prepared for the mother and the child should not be consumed by other family members before being eaten by the mother and the baby. It is also customary to make an amulet of a kowri (snail's shell) and an old copper coin for the baby to prevent him/her from having nightmares. In place of it, some people also use the umbilical cord (cut after birth) of the child as an amulet. This amulet is either tied around the child's body or as in most cases tied to the baby's cradle for protection against evil forms and spirits. In addition to this, there is also a list of things that the couple must bear in mind and observe during the state of 'Bhuchhem Naykap' or pregnancy. Though these are more of precautionary measures meant for the security of the child, they appear to be mythical in nature. Thus they constitute the myths about pregnancy that is prevalent among the Bhutias.

#### **3.4 Precautionary Measures/Myths Regarding Pregnancy**

**1.** A pregnant woman should not come out of her house at night to save herself from the ill effects of demons.

**2.** A pregnant woman should not eat the flesh of an animal whose throat has been slit or which has been killed in her presence. It is a bad omen, an indication that the child is going to die soon after its birth.

**3.** Both the husband and wife should not look at a corpse or watch any animal being slaughtered. It is believed that doing so would cause the child to be physically deformed.

**4.** It is believed that until the fifth month, a pregnant woman should not look at snakes because by doing so she will give birth to a 'Kangkyok'or a crippled baby. The logic behind this is that only by the fifth month of pregnancy a child completely develops all its body parts and if the mother looks at a snake before the baby is fully formed then just like the snake that has no limbs and crawls around, the baby would also be

born with limbs that do not function properly or as called in Nepali a 'Sapay Nani'. Here the baby is being compared to being like a snake.

**5**. A pregnant woman should avoid watching solar or lunar eclipses. If they do so then it is believed that their child would have epilepsy or 'charay rog.'

**6.** Both the husband and wife should also avoid opening the lock of any temple or a monastery. If they do so then their child would be born dumb.

7. Looking at a corpse is also prohibited for pregnant women. It is believed that doing so would lead the child to be born with the umbilical cord wrapped around its neck.

**8.** A pregnant woman should also avoid walking over or crossing a rope that has been used to tether a cow or an ox. Doing so is believed to postpone childbirth and instead of nine months, the child will take the same amount of time to take birth that a calf of a cow takes to be born.

**9.** A husband should abstain from hunting throughout his wife's pregnancy. In case the animal dies of excessive bleeding then the child would be born with a blood mark on his/her face or the body.

**10.** The husband should also refrain from fishing with a hook. If he does so then his child would be born a 'Khorey' or with a cleft palate.

**11.** The husband should avoid making pitcher out of bamboo for carrying water. If he does so, then his child in his later years would speak through his nostril or develop a problem in his throat.

**12.** The husband should avoid blocking the holes of any leaking bamboo can. If he does this, then the child would be born without an anus.

### 3.5 Rituals of Childbirth

The Bhutias have a complex set of beliefs and practices in which rituals are extensively used. Rituals are an integral part of Bhutia culture and performing these rituals deeply binds almost every Bhutia to Buddhism and their culture. Ritual serves to provide them a sense of continuity in their culture and help them retain a kind of relationship with the gods and deities who influence their lives.

The birth of a child also requires the enactment of rituals to help the newborn move from one stage of his or her new life to another. As soon as a child is born, butter is placed in his/her mouth along with a few drops of honey<sup>iii</sup>. Then a branch is cut from any tree and planted as 'Tshamshing' in the courtyard of the house to mark the arrival of the baby and the subsequent pollution that now surrounds the house. Childbirth is considered to be polluting. Pollution or 'Dhip' is observed for three days and during this period; the parturient mother is considered to be ritually impure and kept in the corner of a room. Throughout the observance of pollution other people are refrained from entering the house. After three days following childbirth, a monk or a lama conducts a 'Bhangsang' or a purification rite to remove the pollution. It involves the lama burning incense and sprinkling 'thi' or holy water or in all the rooms of the house. Thereafter the mother takes a bath with water in which the holy water is mixed to remove her physical pollution. If the parents want then they ask a lama for the horoscope of the child to be made based on the child's year, time, date and the day of birth. On the same day, women from the neighbourhood and village gather at the house to celebrate the event or 'Phyakay'. 'Phyakay' a combination of two words ' Phya'- hen and 'kay'- share means to share a hen. As a gesture of helping the family, women from the village contribute a live cock or hen and some butter. The host family then reciprocates by serving the guests with rice and chicken curry. As per customary belief, wood of 'Chilaune' or 'Sishing' (Balayo), both of which are found to cause intense itching and skin rashes upon coming in contact, should be placed in the hearth before cooking the meal that will be served during Phyakay. It is believed that by doing so even if the child touches these two trees in the future they will not cause skin allergies in the child. The eldest amongst the womenfolk gives a name to the newborn mainly based on the child's appearance, colour, auspicious dates or the

<sup>&</sup>lt;sup>iii</sup>Among the Bhutias butter is extensively used during rituals to mark the beginning of something new and auspicious. Thus butter is put in the mouth of the child to welcome him or her into the world and mark the beginning of an auspicious life. Similarly honey is put as an antiseptic to prevent sores from forming in the mouth of the child. Another version states that if the child after coming into the world tastes good food, then his or her life ahead will also be good and fruitful.

day on which he or she was born. For example if the child has a dark skin colour then he may be named 'Naku' meaning black etc. In the event the parents are not happy with the name, they go to a Rinpoche (a high-ranking monk) and ask for a suitable name. These days Phyakay ceremony is usually not practiced and the newborn is just taken to a Rinpoche and named by him.

In addition, on the birth anniversary of the child, Jhi-ton' or birth-feast is given. On this day two lamas are requested to come in the house to read the prayer texts 'Bumchung' and 'Jhipoe Donchen Chonga' for the good fortune and safeguarding of the child from demons and other evil spirits. The children of the village are also invited and served porridge prepared from rice or wheat, and given sweets and coins as gifts. Nowadays the practice of 'jhi-ton' has come to be replaced by the western custom of hosting birthday parties.

#### 3.6 Marriage Practices among the Bhutias in Sikkim

In all societies, the general norm for having children has been through the institution of marriage. The institution of marriage is clearly one of the most elementary and vital institutions of all societies whereby a family comes into being. It is through marriage that the relation between a man and a woman gets social and legal approval. As defined by Westermarck, " Marriage is a relation of one or more men to one or more women which is recognized by custom and law and involves certain rights and duties in the case of the parties entering the union and in the case of the children born of it" (as cited in Bhattacharya, 2008:427). Though marriage as an institution is universal, its forms are varied. The patterns of marriage vary from community to community differentiated by culture, language, social customs and traditions. Diverse forms of marriage are witnessed in India keeping in tune with the myriad social, cultural, regional and linguistic differences that exist in the country. The norms and values governing marriage and marriage practices (and some of its aspects such as age at marriage, duration of marriage and its termination) are found to have a bearing on childbearing practices and fertility behavior.

#### 3.7 The Rules of Marriage among the Bhutias in Sikkim

Marriage is an important institution among the Bhutias in Sikkim. When it comes to matters of marriage, they are guided by their own unique rules and customs, which differ from that of other groups of the Bhutia tribe. As far as the rules of marriage are concerned, the Bhutias in Sikkim are still governed and guided by their customary laws. Among them, the fundamental rule of marriage is clan exogamy and endogamy at the community level. The knowledge of "Rueh" (Caste) and "Khung" (Clan) of the parties seeking marriage union is mandatory. Prior to the finalization of marriage proper verification of the clan and the background of the boy and the girl is carried out by the parents and kin of the prospective bride and groom, as Bhutia society does not allow marriages to take place between kins. However, marriage is allowed after fifth generation on the father's side and third generation on the mother's side. But same clan marriage is strictly proscribed. If anyone violates the above guidelines of marriage or marries their blood relation then they are tagged as 'Dompi Domna' and boycotted from their family and kin, their respective clans, and the Bhutia Community.

Among the Bhutias, marriage by negotiation and marriage by service are the approved types of mate selection, although marriage by service is no longer practiced. Marriage by tradition is monogamous, although the Lachenpas and Lachungpas in North Sikkim practice fraternal polyandry. The concept of junior levirate and junior sororate also exists among the Bhutias. Incidences of child marriages, female infanticide and dowry system have not been reported amongst them. But giving of bride price called as "Rin" is practiced, which is given to honour the bride. The Bhutias in Sikkim have an elaborate procedure of marriage that is composed of five different stages. The procedure begins with 'Thi-chang' (inquiry formalities), 'Kha-chang' (proposal (engagement 'Nyen' formalities), 'Nang-chang' ceremony), and finally 'Tashichangthung' (the wedding ceremony). These elaborate rituals and formalities accord legal sanction to the marriage.

Keeping in view the above-mentioned rules of childbearing and marriage of the Bhutia community, an attempt was made to investigate the nature of marriage and childbearing practices prevalent in the contemporary Bhutia society in Sikkim, and the data from the field have yielded some interesting insights. Marriage is universal among the Bhutias. Traditionally Bhutia society is pro-marriage and prospective boys and girls are encouraged to marry and produce children to ensure the continuity of the family lineage. Even the lamas or monks can marry and have children if they wish to (Bhasin and Bhasin, 2000:74). Table 3.1 shows the marital status of the ever-married 110 women. Out of the 110 respondents as shown in the table below majority (97.3%) are currently married, two (1.8%) are separated or divorced and only one (0.9%) is widowed. Of the 97.3% currently married women, four are remarried and amongst them one had levirate marriage where she was married to her husband's younger brother after his death. In Bhutia society widow remarriage is permitted, and the system of levirate exists as a societal defense mechanism for widows against insecurity and destitution. It reflects an obligation on the part of the deceased husband's parents or brothers to protect the widow. According to Nag (1962) the system of levirate boosts widow marriage (as cited in Gangadharam, 1999:151). Though levirate was widely practiced earlier, now the incidence of such unions has become quite occasional. The widows are free to remarry of their choice if they want to. The Hindu Marriage Act of 1955 does not apply to Bhutia and Lepcha tribe in Sikkim and matters related to dissolution of marriage, child custody etc. rests on customary laws. Of the two separated or divorced respondents, the marriage was dissolved not through the court of law rather but on mutual terms.

Marital Status	Frequency	Percentage
Currently Married	106	97.3
Widowed	1	0.9
Separated/Divorced	3	1.8
Total	110	100.0

Source: Field Data: July- September, 2014

The data presented in Table 3.2 shows that more than half of the women (66.4%) had love marriage, thus indicating a high incidence and preference for love marriages among the Bhutias in Sikkim. To add to this, all of them had married by elopement. Marriage by elopement remains one of the recognized ways of marriage in Sikkim and it is very commonplace for lovers (especially those who are quite young in age or those who have not been permitted to marry each other) to go for it. Another form of marriage prevalent in Sikkim in general and the Bhutias in particular is marriage by negotiation or arranged marriage. Although it is the officially accepted form of marriage among the Bhutias, women who have arranged marriage constitute only 33.6% of the population. Even out of the 37 respondents who had arranged marriage, for 13 respondents their arranged marriage has sprung out of love affair. Prior to marriage, the married couples already knew each other and were in a love relationship which was later committed into a marriage by negotiation.

Type of marriage	Frequency	Percentage
Love Marriage	73	66.4
Arranged Marriage	37	33.6
Total	110	100.0

Table 3.2:	Nature of	Marriage	of the	Respondents

Source: Field Data: July- September, 2014

Usually in Sikkim decisions about marriage are taken either by parents and kin or by the individual themselves. The former usually results in an arranged marriage and the latter in a love marriage. Though arranged marriages are set by parent or kin, the women who had arranged marriage were asked whether or not their opinion was asked in the selection of their spouse. As an answer to this question, it can be deduced from the table below that out of the 36 women (32.7%) who had arranged marriage, majority of them (25.5%) were given the freedom to choose their would be life partner. In contrast, in the case of 7.3% women who had arranged marriage, the decision was made entirely by the parents and elders of the family. Thus drawing

inference from above, it would be fair to say that Bhutia women in general possess a great degree of freedom when it comes to selecting their spouse. This could be due to the fact that Bhutias are a tribal community and among them, the social structure is almost egalitarian and women enjoy a great deal of freedom in many aspects of life.

Choice	Frequency	Percentage
Self	28	25.5
Parents	8	7.3
Not applicable	74	67.3
Total	110	100.0

Table 3.3: Respondent's Consent in the Choice of the Spouse

Source: Field Data: July- September, 2014

In the olden days, the socially approved marriageable age among the Bhutias in Sikkim was 15 years for both male and female. In India, as per the Sharda Act or the Child Marriage Restraint Act, 1978, the legal marriageable age has been fixed at 18 years for a girl and 21 years for a boy, and the same marriageable age applies to Sikkim as well. Regarding the age of the respondents at marriage, the data in Table 3.4 reveals that 30% of respondents were married between 26 to 30 years of age, followed closely by 29.1% married between 16 to 20 years of age and 25.5% who were married between the age of 21 and 25 years. A fair proportion of the respondents (15.4%) were also found to have married at a high age. Out of them 12.7% were married between the age of 31 to 35 years, 1.8% between 36 to 40 years and 0.9% between 41 to 42 years. The mean age for marriage among the respondents is 25 years. The mean age at marriage of the respondents is much higher than the mean age at marriage for girls for the Sikkim as a whole i.e. 21.5 years (DLHS-3). It thus becomes clear that there is an increasing trend in the age at marriage, and the present day Bhutias have come to accept the marriageable age promulgated by the Government of India. Overall it can be said that Bhutia women usually marry at a

high age, some marrying even in their late thirties and forties. The increase in the age of marriage has been prompted by attainment of higher level of education among the girls, which opens up better employment prospects for them. These days girls want to stand on their own feet before settling down. Moreover girls who are more educated and holding good jobs want to marry someone of their own level and so wait until they get the right person.

Age (in years)	Frequency	Percentage
16-20	32	29.1
21-25	28	25.5
26-30	33	30
31-35	14	12.7
36-40	2	1.8
41-45	1	0.9
Total	110	100.0

Table 3.4: Distribution of Respondents by Age at Marriage

Source: Field Data: July- September, 2014

In Bhutia society husbands are expected to be older in age than their wives. Usually Bhutia women prefer to marry men who are older as compared to men younger than themselves because they believe that older men are more matured, established, and can provide a better and stable life. Table 3.5 shows the age at marriage of the husbands of the respondents. According to the table a greater number of the respondents (30.9) have married between 26 to 30 years of age, followed by 29.1 % who were married between 21 and 25 years of age. There is also a sizeable number of husbands (32.7%) who were married after 30 years of age. However husbands who

got married quite early between 16 to 20 years is very less (7.3%). The mean age for marriage among the husbands of the respondents is 27.8, which is more than the state mean age at marriage i.e. 24.9 (DLHS-3). When compared with the age at marriage of the respondents, we find that the husbands have a higher age at marriage than their wives thus showing that the husbands have married later than their wives. On average the men were found to marry three years later than their wives. The reason for late marriage among the men could be since men are responsible for looking after the family and taking care of them economically or otherwise they want to procure a good job before tying the knot to be better able to look after the family. High bride-price is also believed to delay marriage among Bhutia men who are poor (Bhasin and Bhasin, 2000: 64).

Age (in years)	Frequency	Percentage
16-20	8	7.3
21-25	32	29.1
26-30	34	30.9
31-35	30	27.3
36-40	4	3.6
41-45	2	1.8
Total	110	100.0

Table 3.5: Age at Marriage of the Husband

Source: Field Data: July- September, 2014

The desire to have a child after marriage is quite natural. It has been found that in India in general and the tribal society in particular, women are expected to produce a child usually in the first year of marriage (Niranjna, 2000:88-89). The simple reason behind this is the desire for an offspring to guarantee the continuation of the family lineage. It is also to establish that the newly married woman is capable of producing children. Table 3.5 shows the frequency distribution of the respondent's age at first childbirth. While 33 women were married before the age of 20, 22 had their first child by then. Nearly 26% of women became mothers between 21 and 25 years, 29% between 26 and 30 years and 17% after 30 years of age. A small proportion of women (7.3%) have not attained motherhood yet. The mean age of childbirth among the respondents is 26 years.

Age	Frequency	Percentage
16- 20	22	20
21-25	29	26.4
26-30	32	29.1
31-35	16	14.5
36-40	1	0.9
41-45	2	1.8
Not yet mothers	8	7.3
Total	110	100.0

Table 3.6: Distribution	of Respondent's by	Age at First Childbirth

Source: Field Data: July- September, 2014

When asked about the value of sons and daughters among the Bhutias all the respondents said that sons are valued for reasons like continuation of lineage, security and protection of the family and for old age support. Likewise when asked about the value of girls, all the respondents said that girls are valued for the emotional support that they give to their parents. It was also put forth that girls take lifelong care of the parents, looks after them in sickness and is a mother's closest companion and helps her with the chores. In view of the above given values of the sons and daughters it needs to be seen what family size the respondents find desirable and whether or not there exists any gender bias among the Bhutias. In Sikkimese society high fertility and large families have generally been socially and economically rewarding (Bhasin and Bhasin, 2000:74). In Sikkim in general and the Bhutias in particular, a big family size is widely approved and accepted. The patriarchal nature of the Bhutia society demands a high emphasis on male child. This is evident from the fact that earlier, Bhutia couples that did not have sons were referred to as 'Aputalay' (not having any children) even if they had daughters. Another account that reflects this emphasis on sons can be witnessed during marriage rituals, when a priest evokes the ancestral deity of the bride to bless the couple getting married with sons to foster the lineage. Table 3.8 presents the respondents preferred number and the composition of the children. When asked on this regard, 46% of the respondents were in favor of 2 children, 33% 1 child and 17% 3 or more children. Regarding the composition of the children, preference for daughter (only daughter/ two or more daughters and one son) was reported by 45.5% of the respondents, any sex preference (one son and one daughter/ two or more daughters and two or more sons) by 51% and preference for sons (only son/ two or more sons and one daughter) by only 7% of the respondents. 2.7% and 30% of respondents reported preference for either only son or only daughter respectively. It is noteworthy to find that such a high percentage of respondents (30%) desire to have only daughters. This implies that son preference is very insignificant among the respondents. Since Bhutia society is patriarchal, the presence of preference for daughters instead of sons appears to be quite incredible. The paradoxical nature of this situation can be explained by the present attitude among the respondents towards sons. When asked on this regard the respondents were of the view that sons these days are less caring, they feel no obligation to take look after their parents in old age and are more susceptible to go haywire and indulge in anti-social behavior where as girls were viewed to be more caring, reliable, trustworthy and understanding.

As said by one respondent: "A son is nothing more than a big headache. These days if you have a son you have to be constantly worried and be on guard that he might get into bad company and develop a habit of taking tablet. So many boys take tablets (drugs) these days. It is better not to have a son these days".

Another respondent said: "A son remains a son only until he marries. Who knows what kind of wife he will bring. If his wife turns out to be bad then he might kick us out of the house if his wife tells him to".

Another respondent said: "In almost every family that I have seen the boys are doing nothing but making the life of their parents miserable. They do nothing but roam around aimlessly all day and return home at night just to eat and sleep. In some cases some of the boys even beat up their parents if their demands are not fulfilled. So I think it is better to not have a son."

On the other hand the respondents feel that daughters are more loving and caring, take lifelong care of the parents, look after them in sickness, are more attached with the mother, more responsible, trustworthy and understand the problems of the parents.

As said by one respondent: "A daughter is the gem and happiness of the house. She helps you with the chores and asks the whether the parents have eaten or not. When you are sick she will be the one to look after you. Even if the daughter marries and goes away her heart and soul will still be in her natal home. If anything happens she will be the first to come running and help".

Another respondent said: "I have seen in many homes that it is always the daughter who takes care of the parents throughout their lives. Even if there are sons, it is the daughter who is more caring, reliable and understanding. A daughter is capable of fulfilling all the duties that a son carries, and I feel she can do it even better than a son. Daughters hold and keep the family together. In families that have daughters, the sons grow up and learn to respect women".

Desired Number of Children	Frequency	Percentage
Only Son/ No Daughter	3	2.7
One Son &One daughter	50	45.5
Two or more sons & One daughter	5	4.5
Two or more daughters & One Son	13	11.8
Two or more Daughters &Two or more sons	6	5.5
Only Daughter/No Son	33	30
Total	110	100.0

Table 3.7: Desired Number of Children

Table 3.9 shows that majority of the respondents have one and two children represented by 39.1% and 41.8% respectively. Those respondents who have four or more children, their number is very small. By and large, the data in the Table exhibits that the families of the respondents are restricted to one to two children at the most. It is also clear from the data that there is inconsistency between what is considered as the ideal number of children and the actual number of children that the respondents have. Firstly most of the respondents have less number of children than the ideal number and secondly some of the respondents have no children at all. The reason being that most of respondents who don't have children have been married for only quite some time and could have children anytime in the future. For others who have less number of children than their ideal number the reason could be that they have made a rational choice by bearing few numbers of children. The respondents feel that it is not just enough to give birth, but they as parents should also be able to give their children then

they will be able to give their children everything even if their income is not high. The respondents are aware that the advantages of having a small family far outweigh the desire to have a big family.

Table 3.8: Ideal Number of Children and the Actual Number of Children in the Family

Ideal Number of Children		Actual Number of Children				Total	
	0	1	2	3	4	5	
One	4 (25)	11 (68.8)	1 (6.3)				16 (100.00)
Two	4 (6.2)	30 (46.2)	27 (41.5)	3 (4.6)		1	65 (100.00)
Three			8 (57.1)	5 (35.7)	1 (7.1)		14 (100.00)
Four		1 (9.1)	8 (72.7)		1 (9.1)	1 (9.1)	11 (100.00)
Five		1 (25)	2 (50)	1 (25)			4 (100.00)
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)

Source: Field Data: July- September, 2014

#### **3.8 Conclusion**

Childbearing and marriage practices are said to affect the fertility behavior of women. Childbearing constitutes a social institution that is made up of values, beliefs, norms and behavior about reproduction that may vary from culture to culture and from one community to another. In this chapter, the larger social and cultural context of childbearing and marriage and their related norms, values, beliefs, practices, and traditions prevalent among the Bhutias in Sikkim have been discussed. In view of the analysis done above it was found that Bhutias have their own beliefs, values, rules, customs and norms about marriage and childbearing. Here love marriages were found to be common as compared to arranged marriages along with prevalence of high age at marriage among both the respondents and their husband. In addition high age at childbirth, preference for daughters and difference in the ideal number and actual number of children among the respondents were also observed.

#### **CHAPTER IV**

#### **REVIEW OF HEALTH CARE AND FAMILY**

#### PLANNING SERVICES IN SIKKIM

Health care services and family planning programmes have been found to have a determining effect on fertility behaviour. There are many studies that maintain that Maternal and Child Health Care Services majorly influences couples' fertility behavior by bringing about a decline in mortality (Caldwell 1986; Foster 1984; Pebley 1984 as cited in Brauner-Otto, Axinn and Ghimire, 2007:3). By promoting good health of young children and reducing the risks and incidence of death of infants and children, Maternal and Child Health services persuade couples to have lesser number of children. Similarly family planning services through its motivation programmes and contraceptive services influences childbearing behavior by educating people about family planning and its various methods, ushering in a change in the attitude of people towards contraception and couple's desired family size and lastly also by making contraceptives available and accessible to the people. Thus this chapter aims to achieve two purposes: to outline health care services in the State of Sikkim in general and Family Planning and Maternal and Child Health Services in particular, and also to exemplify the utilization of family planning services and maternal and child health services by Bhutia women in Sikkim.

#### 4.1 Health Care Services in Sikkim

Health care received impetus in Sikkim with the intervention of the British. When Sikkim became a British Protectorate in the 19<sup>th</sup> century public health system was almost nonexistent. It was under the patronage of J.C. White, the first Political Officer of Sikkim that an effort was made to initiate health care services in Sikkim, which was in fact on a larger part conceived by the British as a means to their ulterior end of winning the confidence and support of the Sikkimese people. They actually wanted to win the confidence and support of the Sikkimese people through free medical services which in turn would help them in acquiring indigenous consent to British rule, and this 'political' role became the main reason for the presence of Medical Officers in states such as Sikkim (McKay, 2004:26). As a start a very rudimentary government medical dispensary was established in Gangtok in 1896-97 by the British, which was

followed by a second state dispensary in Chidam opened by Scottish missionaries and a third in Rangpo in 1902. Along with the British, Christian Missionaries (most prominently Scottish and Scandinavian Missionaries) also had a significant role in contributing to health services in Sikkim. By 1906, Scottish Missionaries founded additional dispensaries in Rhenock, Seriyong and Dentam. The Scandinavian Alliance Mission opened a dispensary in Lachung, North Sikkim. By the year 1923-24 there were 11 mission dispensaries run by compounders that catered to the health needs of the people in Sikkim. Thus throughout the first two decades of British rule in Sikkim, the British and the Christian Missionaries were largely responsible for providing health services in Sikkim (ibid: 28-33). During this time rural dispensaries and primary health care centers manned by compounders catered to the health needs of the majority of the population. In addition to this, the Sikkimese health services were also greatly dependent on the expertise of Indian specialists commissioned on contractual basis (ibid: 38)

The first official hospital of Sikkim came to realization on 24<sup>th</sup>September, 1917 in the form of the 10 bedded Sir Thutob Namgyal Memorial Hospital at Gangtok, founded by the Chogyal (King) Tashi Namgyal of Sikkim. The hospital was later on provided with a Tuberculosis Ward in 1920s and with a Maternity ward in late 1930s handled by a trained midwife. But medical progress as such remained dormant in Sikkim during the years that followed due to lack of state income and over-reliance on Royal aid for even the most basic medical supplies (ibid: 35-36).

A former Buddhist kingdom ruled by the Namgyal Dynasty, Sikkim before its merger with the Union of India in 1975 lacked a well-developed and well-expanded health care infrastructure. At the time of the Indian appropriation in 1975, there were just four district hospitals along with one major hospital, Sir Tashi Namgyal Memorial (STNM) Hospital at Gangtok (Sikkim Human Development Report, 2001: 21).

After becoming a constituent state of India, Sikkim has been following the policies and programmes devised by the Government of India for the implementation of health care and family planning. As per the Indian Constitution, health is a state issue. Each state therefore has its own healthcare delivery system in which both public and private actors function. While states are responsible for the working of their respective health care systems, the Central government also has its own assigned task, specifically related to policy-making, planning, guiding, assisting, assessing and managing the work of numerous regional health authorities and giving funding to implement National Programmes. Successive Five- Year Plans have been providing the policy framework and funding for the planned development of nationwide health care infrastructure and manpower.

At the national level, the Union Ministry of Health and Family Welfare (MOHFW) heads the organization followed by the State Department of Health and Family Welfare at the state level. At the state level it is led by a State Minister and with a Secretariat under the charge of the Secretary/Commissioner (Health and Family Welfare) belonging to the cadre of Indian Administrative Service (IAS).

In the years following 1975, Sikkim has added numerous feathers in her cap in the area of delivery of health care services to the people. Since then the state's public health care infrastructure has developed substantially and there has been a commendable progress in meeting the unmet needs for health. Health care services are provided free of cost to the public through Hospitals, Primary Health Centres (PHCs) and Primary Health Sub-Centres (PHSCs) distributed throughout the state. It is worth mentioning that although there were only 15 Primary Health Centres (PHCs) and 6 Primary Health Sub-Centres (PHSCs) running in 1979, a notable rise in the establishment of PHCs and PHSCs has been accomplished over the years. Sikkim is perhaps the only state in India to achieve the National Norms of establishment of 1 PHC for 20,000 populations and 1 PHSC for 3000 (SHDR, 2001: 21). Presently in terms of health infrastructure, Sikkim now boasts of 1 State Referral Hospital (STNM), 1 Central Referral Hospital (Manipal Pvt. Hospital), 4 District Hospitals, 24 Primary Health Centres (PHCs), 147 Primary Health Sub-Centres (PHSCs) and 1 District Tuberculosis Centre at Namchi that are equipped with qualified Medical and Para-Medical Staff (Department of Health Care, Human Services & Family Welfare Department, Sikkim). In addition a number of privately run small clinics are also operating throughout the state that offer health services to the general population.

#### 4.2 Family Planning and Maternal and Child Health (MCH) Services in Sikkim

Under the auspices of the Government of India, Family Welfare Programme was launched in the state of Sikkim from 1976-77 and has mainly been disseminated through mass awareness initiatives. The Family Welfare Programme is centrally sponsored and 100 per cent centrally funded and it basically emphasizes on health care for women and children and provision of contraceptive services. It aims at providing easy and convenient integrated MCH and family planning services free of cost along with awareness about these services through information, education and communication. Thus Family Welfare Programmes provides the states the infrastructure, manpower and consumables necessary for raising the health standard of women and children and to meet all the required needs for fertility regulation.

A cursory look at the history of Family Welfare Programme in India shows that it has developed to bring Family Planning Services and Maternal and Child Health Services within the reach of every person. Though Maternal and Child Health services remained neglected throughout a number of successive Five Year Plans overshadowed by other problems perceived to be more important like fighting communicable diseases during the First Five Year Plans and controlling population growth that occupied much of the third five-year plan (1961-66), it wasn't until after the Emergency period (1975-77) that strong criticism against the target approach of family planning led to the establishment of a broader family welfare approach which was renamed as the National Family Welfare Programme. Under this Programme an effort was made to integrate family planning services and maternal and child health and nutrition. In 1980s under the World Health Organization's Alma Ata declaration of health for all by 2000 A.D, a network of centers were established in urban and rural areas to provide essential primary health care to all, and to improve access to family welfare services the network of post partum centers was also expanded. With the formulation of the National Health Policy in 1983 a comprehensive framework for planning, implementation and monitoring of health care services was started and by the end of the seventh Five Year Plan in 1986, the Universal Immunisation Programme (UIP) came into effect in 30 districts to cover 448 districts. During the Eighth Plan, efforts were made under the Child Survival and Safe Motherhood initiative and the Social Safety Net Programme to improve the access of women

to maternal and child health by adding Vitamin-A supplementation, training of traditional birth attendants, disposable delivery kits and First Referral Units (FRU) for emergency obstetric care (EmOC) in MCH services. The Global women's movements for reproductive rights during 1990s led to the target-free approach in family welfare programming with focus on overall reproductive health. To further improve maternal and child health, the Reproductive and Child Health (RCH-I) Programme was initiated in 1997 by the Department of Family Welfare which aimed at providing integrated reproductive, maternal, child, adolescent health and family planning services, through a participatory and decentralized "bottom-up" approach. Then in 2005 quality improvement strategies emerged with National Rural Health Mission (NRHM), India's flagship health programme to carry out fundamental reforms in the country's basic healthcare delivery system, integrating all existing programmes including RCH programme phase II (RCH II). RCH-II provides quality assurance guidelines for establishment of Quality Assurance Committees at district and state level for continuous quality monitoring through periodic facility visits and feedback for corrective action. RCH-II also provides guidelines for implementing maternal death reviews to improve the quality of obstetric care and reduce maternal morbidity and mortality.

Sikkim has been following the guidelines of the Government of India for implementation of MCH and Family Planning services. Under the Family Welfare Programme promotion of maternal and child health has been given a lot of primacy. To promote well being of the mother and the child women are encouraged to deliver in a medical facility or if at home with assistance from a trained health professional and get at least three post-delivery checkups. The target set is for each expectant mother to get at least three antenatal checkups, two tetanus toxoid injections, and complete course of Iron and folic acid supplement. In Sikkim before NFHS-2, only 43% women received antenatal examination thrice, 53% received tetanus toxoid vaccine as suggested and 62% received iron and folic acid supplementation. The situation was even worse for women from underprivileged backgrounds and those residing in rural areas. When it came to childbirth only 32% of births took place in a medical facility, whereas 64% births took place at home without the help of any skilled health professionals thus showing poor performance and low utilization of maternity related services in Sikkim. However within the years there has been many improvements in the field of maternal health care delivery in Sikkim and programmes concerning mother and child health have met with remarkable success. Table 4.1 presents the Maternal Health Care Indicators in Sikkim and as is evident from the table below the maternal health care indicators show an upward trend. Between NFHS 2, NFHS 3 and the State Report (SR) 2012- 2013, the three or more Antenatal Care (ANC) has increased from 47.4% to 69.4% and 77.8% respectively. Similarly the incidence of institutional births has also gone up from 39% in NFHS 2 to 49 % in NFHS 3 and 89.6% in SR 2012-2013. The prevalence of anaemia among women has also reduced from 61.1% to 46.8% between the two subsequent NFHS. Furthermore 80.9% and 117.6% of women have received tetanus toxoid (TT) vaccines and Folifer tablets respectively. The state makes MCH services accessible to the general public through all the hospitals and health hubs spread throughout the four districts. As a safeguard against nutritional anaemia pregnant women, lactating mothers and anaemic mothers are administered prophylaxis through distribution of folifer tablets free of cost. To further boost these services certain strategies such as Mother and Child tracking System, Common Mother and Child Health Card, organization of Village Health Nutrition Day (VHNDs), Information Education Communication (IEC) and BCC activities, skill based training, continued supervision and monitoring at all levels etc. have been adopted and put to practice. To give specialized care to mothers during antenatal & postnatal period a separate post partum unit has also been set up in STNM hospital. At the same time the State Health Department has also trained and deployed around 293 trained indigenous Dais (midwives) to tend to expectant mothers in the rural areas.

			STATE REPORT
Indicators	NFHS2	NFHS3	2012-2013
Maternal Mortality Rate (MMR)	NA	NA	
Total Fertility Rate (TFR)	2.8	2.02	2.02
3 or More Antenatal Care (%)	47.4	69.4	77.8
Institutional Daliuson (0/)	20	40	80.6
Institutional Delivery (%)	39	49	89.6
Anaemia	61.1	46.8	
	0111		
Pregnant Women Receiving			80.9
tetanus (TT) vaccines			
Pregnant Women Receiving			117.6
Folifer tablets			

#### Table 4.1: Maternal Health Indicators in Sikkim

Source: Health Information Bulletin Sikkim - 2014, Department of Health Care, Human Services & Family Welfare Department, Government of Sikkim.

Along with maternal health, the well being of the child is also vital and given a lot of priority. In Sikkim child health services offers immunization against the six killer diseases namely tuberculosis, diphtheria, tetanus, polio, whooping cough and measles and promotes optimal Infant and Young Child Feeding Practices (IYCF), prophylaxis against anaemia, management of Acute Respiratory Infection (ARI), and diarrhoea with Oral Rehydration Solution (ORS) etc. Table 4.2 gives the Child Health Indicators in Sikkim. The table indicates that Sikkim is faring well in the area of child health care. The Crude Birth Rate (CBR) of Sikkim is 17.2% against the National level of 21.6%, and the Infant Mortality Rate is 24% compared to India's 42%. Even in other fields such as breastfeeding practices, treatment of diarrhoea, ARI and prevalence of anaemia, the figures demonstrates that child health indicators in Sikkim are better than the national average.

Table 4.2: Child Health Indicators in Sikkim

Indicators	Source	Sikkim	India
Crude Birth Rate	SRS 2012	17.2	21.6
Infant Mortality Rate	SRS 2012	24	42
Initiation of breast feeding within 1 hour of birth	CES 2009	55.6	33.5
Exclusive breast feeding for 6 months	CES 2009	63.6	36.8
Increased fluid for Diarrhoea or ORS	CES 2009	63.5	53.6
Care seeking for acute respiratory infection	CES 2009	91.2	82.6
Anaemia in children	NFHS 3	64	78.9

Source: Annual Report 2012-2013, Department of Health Care, Human Services & Family Welfare, Government of Sikkim.

Coming to Family Planning Services in Sikkim, here both the public sector and the private sector hospitals/clinics act as agents of Family Planning services. It is through these venues that women and men alike can procure contraceptives and awareness about them. In Sikkim most of the women (78%) get their contraceptives from a Government Hospital or other sources in the public sector and some women (10%) get it from private medical sector. Here Private medical sector plays a major role in providing Intra Uterine Devices (IUDs) and oral pills. To improve the quality of family planning services in Sikkim attempts have been made to provide complete and correct information about contraceptives while dispensing it to the users and also give follow up services to them afterwards. 79% of modern contraceptive users however reported to have received follow up services. In addition, the State has also made arrangements for provision of laparoscopy operations (sterilizations) from a team of trained doctors and paramedical staff who cater to all the four districts. Following in

the footsteps of the Government of India, the State too has been exploiting electronic and other mass media to promote family planning. Since exposure to mass media (Radio and Television) is high in Sikkim, most women have been able to gain awareness about family planning and its methods through media exposure. The eligible couple protection rate has increased to 21.9% during 1993. According to the Annual Report 2012-2013, Department of Health and Family Welfare, Sikkim knowledge of contraception is almost universal in Sikkim. Among currently married women 98% have knowledge of at least one modern Family Planning method, 54% are current users of some method of contraception, 22% are sterilized and by contrast only 2% of their husbands are sterilized. In Sikkim99% of women are familiar with female sterilization and 91% with male sterilization and sterilization largely accounts for 46% of total contraceptive use. Sikkim is found to be the only State in India where majority of women use temporary methods before accepting sterilization. Male participation in Family Planning through Non Surgical Vasectomy (NSV) has also improved considerably in the State and Sikkim stands as one of the best performing states in the field of NSV since the implementation of NSV Project in 1997 (State Annual Report, 2012-2013).

Since Sikkim has already attained the required Total Fertility Rate (TFR) of 2.02, the State is now putting more emphasis on utilization of spacing method rather than permanent method like sterilization to make sure that the TFR remains as it is. The State hopes to do so by giving the people multiple contraceptive choices and increasing the demand for these contraceptives through community level, interpersonal communication (IPC) and intensive IEC activities and counseling and also make sure that these contraceptives are readily available to them through innovations in supply chains (ibid, 2012-2013).

Though Sikkim at present records promising results in the area of health care and family planning services, the State aims at maintaining as well as improving what it has achieved so far. The State has set target to reduce IMF to 24%, MMR to 20%, maintain TFR at 2.0 and achieve 100% institutional delivery (ibid, 2012-2013).

STATE HEALTH TARGET FOR 2012-2013		
INFANT MORTALITY RATE	24	
MATERNAL MORTALITY RATE	20	
TOTAL FERTILITY RATE	2.0	
INSTITUTIONAL DELIVERY	100%	

Source: Annual Report 2012-2013, Department of Health Care, Human Services & Family Welfare, Government of Sikkim.

## 4.3 Family Planning and Maternal Health Care among Bhutia Women in Sikkim

In the preceding section health and family planning services in Sikkim have been discussed. This section gives an insight into whether or not Bhutia women have been able to take advantage of these services and also provides information concerning the current knowledge, utilization, attitudes and behavior regarding family planning and maternal health care among Bhutia women in Sikkim.

## 4.4 Knowledge and Practice of Family Planning

Knowledge about family planning methods and its usage is said to regulate fertility by helping to time and space pregnancy. In addition possession of proper knowledge of family planning methods is also thought to increase the likelihood of its utilization (Rajendran, 2009: 111; Rajput, 2011: 4). Though traditional methods of fertility regulation like withdrawal method is ubiquitous among the Bhutias, an inquiry about the women's knowledge and practice of modern methods of family planning or contraceptives was conducted. Knowledge of modern family planning methods is given in Table 4. 4 and as per the figures there is nearly universal knowledge of modern methods of family planning or contraceptives among the women. Barring one woman, all the other 109 women were found to be aware of all the methods given in

the table below. This shows high level of awareness of contraceptives among the respondents.

Knowledge of Modern Methods of Family Planning	Percentage
No response	0.9% (1)
Pills	99.1%(109)
Condom	99.1% (109)
Copper T	99.1%(109)
Female Sterilization/Male Sterilization	99.1%(109)
Injectables	99.1%(109)

Table 4.4: Distribution of Respondents by Knowledge of Modern Methods of Family Planning

Source: Field Data: July- September, 2014

Table 4.5 shows the sources from where the women have acquired knowledge of family planning methods. The table reveals that the major sources of information of family planning methods are certified health professionals like doctors and nurses (62.7%), followed by friends and relatives (20%), television (7.3%) and health workers (5.5%). In the case of 2.7% of the women, the source was books and magazines and one woman (0.9%) informed the researcher that she had learnt about it from her husband.

Source of Knowledge	Frequency	Percentage
Doctor/Nurses	69	62.7
Health Workers	6	5.5
Friends/Relatives	22	20
Books/Magazines	3	2.7
Television	8	7.3
Husband	1	0.9
Not applicable	1	0.9
Total	110	100.0

Table 4.5: Sources of Knowledge of Modern Methods of Family Planning.

Source: Field Data: July- September, 2014

Table 4.6 shows that although awareness of family planning methods or contraceptives among the respondents is widespread, still a large number of them (48.2%) were found to be not using any method of contraception. Among those using contraceptives condoms (13.6%) was the most preferred choice. The respondents also reported preference for oral pills (11.8%) and sterilization (10%). However it was found that the use of withdrawal method, a kind of traditional method (5.5%), Copper T (4.5%), Injectables (2.7%) and vasectomy (0.9%) is quite small among the respondents.

Use of Any Method	Frequency	Percentage
No response	1	0.9
No method	53	48.2
Oral Pills	13	11.8
Condom	15	13.6
Copper T	5	4.5
Female Sterilization	13	11.8
Vasectomy	1	0.9
Injectables	3	2.7
Withdrawal Method	6	5.5
Total	110	100.00

Table 4.6: Distribution of Res	pondents by Use of	f any Method of Fa	mily Planning
ruble no. Distribution of fees	policence of cocol	i ung mounoù or i u	ini ji mining

Since such a significant portion of the respondents reported non-practice of any method of family planning they were asked reasons behind it. The women furnished different reasons for not using contraceptives, which have been given in Table 4.7. Of the various reasons, most of the women (21.8%) quoted 'Not having Sex or Infrequent Sex' as the reason for not using any contraceptive. Other reasons quoted were 'Want Children' by 5.5% respondents, Health problems by 5.5% respondents, and 'Postpartum Abstinence' by 4.5% respondents. Among the non-users of contraception were 3.6% of women who were either widowed or separated from their husband.

Reasons	Frequency	Percentage
Not Applicable	56	50.9
No Response	6	5.5
Postpartum Abstinence	5	4.5
Currently Pregnant	3	2.7
Want Children	6	5.5
Health problems	6	5.5
Separated/Widowed	4	3.6
Not having Sex/Infrequent Sex	24	21.8
Total	110	100.0

Table 4.7: Distribution of Respondents by Reason of not using Contraceptives

The respondents were inquired about the power of decision-making between the couples related to the use family planning methods. The data presented in Table 4.8 reveals that in the case of 37.3% of the respondents, the respondents and their respective husbands took the decision regarding use of family planning methods collectively. However in the case of 10% of the respondents, the respondents solely took the decision and for 1.8% of the respondents their respective husbands made the decision.

Decision Maker	Frequency	Percentage
Not Applicable	56	50.9
Husband	2	1.8
Self	11	10.0
Both	41	37.3
Total	110	100.0

Table 4.8: Distribution of Respondents by Decision-making on the Use of Methods ofFamily Planning

Abortion plays an important role in determining fertility (Bongaarts, 1978). Under the Medical Termination of Pregnancy (MTP) Act, 1971 abortion is legal in India under specific conditions and situations. But from a religious and spiritual perspective, abortion is condemned, as it amounts to killing the foetus and therefore believed to be a sin. As mentioned elsewhere, Bhutias are devout Buddhists and Buddhism pervades all aspects of their life. According to Buddhism, life begins at conception and once a being is conceived it has life, even though the being may not have completely developed physically. All life is believed to be sacred and taking life a crime. Therefore abortion is seen as murder and believed to gather severe negative karma. Thus Bhutia people generally do not approve of abortion. They believe slaving one's own flesh and blood is a grave sin, one that cannot be atoned. To find out whether what exists in theory is put into practicality or not, the respondents were asked, whether to limit the family size they have undertaken abortion or not. Table 3.6 shows that only each of the 6.4% respondents had one induced abortion. This demonstrates that abortion is not widespread. All the respondents admitted that terminating a pregnancy is no lesser than murder and thus sinful, but they also argued that under certain circumstances (mainly medical reasons like ill health and danger to either the mother's or the baby's life and also in case of adolescent pregnancy out of wedlock) it is fine for women to have abortion.

Abortions	Frequency	Percentage
Nil	103	93.6
One	7	6.4
Total	110	100.0

#### Table 4.9: Number of Induced Abortions

Source: Field Data: July- September, 2014

Abortion can also occur spontaneously and when it does it is termed as miscarriage. When probed further for any experience of miscarriage, out of the 110 respondents only 10% had endured miscarriage. Among the 10% who had experienced miscarriage, 8.2% had experienced it once and the remaining 1.8% twice. Most of the women who had endured miscarriage reported that it was due to certain medical condition. It was also reported by them that doctors had diagnosed their medical condition beforehand and warned them about the possibility of a miscarriage. And in spite of taking every possible care they had miscarried. In the case of one woman, she had miscarriage from the trauma of her husband's death and in the case of another; she had miscarriage after indulging in a football match. Occurrence of miscarriage implies that childbirth gets postponed to some extent, and repeated miscarriages in addition to postponement of childbirth may also take its toll on the physiological and psychological health of the woman.

Table 4.10: Number of Miscarriages

Miscarriage	Frequency	Percentage
Nil	99	90
One	9	8.2
Two	2	1.8
Total	110	110

## 4.5 Utilisation of Maternal Health Care Services

The outcome of a pregnancy is dependent on the health and behavior of the pregnant woman. Only a healthy mother can give birth to a healthy baby therefore during pregnancy, a woman should not only look after her health but also go for routine checkups under a skilled medical consultant. The maternal health care services that a mother receives during her pregnancy and at the time of delivery ensures the well being of the mother and her child.

## 4.6 Antenatal Care (ANCs)

Antenatal care is the first and most important component of maternal and child health care. As defined by the Textbook of Obstetrics (2001:100) "Antenatal care is systematic supervision (examination and advice) of a woman during pregnancy." It includes careful history taking and checkups and giving advice to the pregnant woman. ANCs are very essential during pregnancy because if there is any kind of medical problem with the pregnant woman then it can be detected early on and treated thereby reducing greatly the chance of both maternal and perinatal mortality. According to the World Health Organisation (WHO), all pregnant women should get at least four antenatal care (ANC) checkups. The guidelines of the Ministry of Health and Family Welfare, also recommends that an expectant mother should receive a

minimum of three antenatal care checkups of which two should be in the last trimester and the third being within last four weeks before term. Table 4.11 shows the distribution of women on the basis of Antenatal care received for their last pregnancies. The data reveals that there is high awareness of ANCs among the respondents as a large portion of them (87.2%) have received ANCs during their last pregnancy. On the other hand, only a small number of respondents (5.5%) reported not having any ANCs. When probed for the reason for not having any ANCs, lack of knowledge or awareness about ANCs was cited as the main reason behind it.

ANC Characteristics	Frequency	Percentage
Having ANC's	96	87.2
Not Having ANC's	6	5.5
Not Applicable	8	7.3
Total	110	100.0

Table 4.11: Percentage of Women having Antenatal Care (ANC)

Source: Field Data: July- September, 2014

Information on the sources of ANCs given in Table 4.11 indicates that most of the respondents (63.6%) have sought ANCs from Government Hospital/Doctor, 11.8% from Private Hospital/Doctor and 0.9% from a dispensary/nurse. It is thus evident that the respondents have sourced their ANCs from competent authorities.

Sources of ANCs	Frequency	Percentage
Govt. Hospital/Doctor	70	63.6
Pvt. Hospital/Doctor	25	22.7
Dispensary/ Nurse	1	0.9
Not Applicable	14	12.7
Total	110	100.0

Source: Field Data: July- September, 2014

### **4.7 Institutional Delivery**

Like antenatal period, the care of the pregnant women in the natal period is also equally vital. From the standpoint of child survival and the health of the mother, it is necessary for the delivery to take place in hospitals or if at home under the supervision of a qualified medical practitioner. Keeping in mind the importance of safe and hygienic delivery for the health of both the mother and the child the Indian government has come up with strategies and schemes to encourage and promote institutional delivery among expectant mothers. Among these include specific services packages namely Janani Suraksha Yojana (JSY), Janani Sishu Surakshya Karyakaram (JSSK) and Mukhya Mantri Shishu Suraksha Ayam Sutkeri Sahayog Yojana (MMSSASSY), which is a state sponsored scheme and Tribal RCH. A detailed account of these schemes has been given as under:

## **4.8 Schemes for Promoting Institutional Delivery**

Janani Suraksha Yojana (JSY): It is a safe motherhood intervention under the National Health Mission (NHM) which has been implemented with for the purpose of reducing maternal and neo-natal mortality through institutional delivery among the pregnant women coming from Below Poverty Line and Scheduled Caste and Scheduled Tribe families. Through JSY cash incentive is given to the pregnant woman along with antenatal, intranatal and postnatal care. For having an institutional delivery cash assistance of Rs.700 is offered to rural women and Rs. 600 to urban women. For home delivery under skilled cash assistance of Rs. 500 is provided to women from BPL families.

Janani Sishu Surakshya Karyakaram (JSSK): Under this scheme provisions have been made to provide free diagnostics and treatment for all mothers who deliver at a health facility, all sick newly born and sick infants. For each institutional normal delivery and caesarian section a cash assistance of Rs. 350 and 1600 is provided respectively and for referral cases Rs.1000 is given as transport expenses. This scheme came into effect since November 2011.

Mukhya Mantri Shishu Suraksha Ayam Sutkeri Sahayog Yojana (MMSSASSY): It is a state sponsored scheme that has been devised to care for and help the high risk group of primi-gravidae mothers of BPL families and their neonates through monetary assistance as well as through promotion of institutional deliveries thus reducing the likelihood of maternal and infant mortality among them. Under this scheme every pregnant woman from BPL families who has institutional deliver is given a onetime grant of Rs. 3000, every newborn of mothers from BPL families who has been delivered at a Public Health facility is given Rs 500 every month till the age of six years.

Tribal RCH: This scheme came into effect in 2010-2011 and covers the whole of two State notified tribal districts of Sikkim i.e., North and South districts. This scheme offers incentives to health workers for conducting institutional delivery. It offers a package of Rs. 1000 for home delivery and Rs. 500 for delivery at PHCs.

In view of the above mentioned importance of safe delivery of the child for the well being of both the mother and the child and the subsequent effort of the Central and State agencies to promote and facilitate institutional deliveries, an inquiry was made regarding the place of delivery of the last born child of the respondents. Table 4.12 shows the place of delivery of the last-born child of the respondents and according to the data presented in the table, the births that took place in a medical institution constitutes 87.3% as opposed to 5.5% births that occurred at home. Of the births that occurred in a medical facility 85.5% occurred in Government hospital and 1.8% in Private hospital. The data thus indicates that occurrence of institutional deliveries is high among the respondents. In addition, those who delivered their child at home were also asked who had assisted in their delivery. Of the 6 respondents who delivered at home, 2 of them had their births assisted by a local midwife and 4 by their mother-in-laws. The reason given by the respondents for the absence of institutional delivery is the same as it was in the case of not having ANCs i.e. lack of knowledge or awareness about institutional deliveries. It thus becomes clear from above that those women who do not receive ANCs also do not go for institutional deliveries thereby increasing the risks of maternal and neonatal mortality.

Place of Delivery	Frequency	Percentage	
Government Hospital	94	85.5	
Home	6	5.5	
Private Hospital	2	1.8	
Not Applicable	8	7.3	
Total	110	100.0	

Table 4.13: Place of delivery of the Child

Source: Field Data: July- September, 2014

# **4.9** Conclusion

This chapter has reviewed the health care and family planning services in Sikkim with special emphasis on maternal and child care services and its utilization among the Bhutia women in Sikkim. Here a detailed history of the development of health care services in Sikkim has been drawn along with an account of the present scenario of health care services. It was found that Sikkim has been performing very well, much better than the national average in terms of health care in general and maternal and child care in particular. Both Maternal and Child Health indicators showed impressive trends. An analysis of the utilization of maternal and child care services by the respondents also indicated encouraging trends. It was found in the study that those women who do not receive ANCs are also most likely to not have institutional deliveries thus increasing the chances of maternal and neonatal mortality.

#### **CHAPTER V**

### SOCIO-ECONOMIC CORRELATES OF FERTILITY

Human fertility is a biological phenomenon that is largely conditioned by a variety of social and economic factors. It has been found that people from different socioeconomic backgrounds will have different notions about the ideal family size (Niranjna, 2000; Choudhury, 2012). Thus the number of children a woman bears during her lifetime will be determined by her age at marriage, literacy level, occupational status, income etc. In this chapter, an assortment of variables such as woman's education, woman's occupation, husband's education, husband's occupation, monthly household income, type of marriage, woman's age at marriage, type of family and place of residence have been examined to ascertain the extent to which these variables influence the fertility among the Bhutia women in Sikkim.

To commence with education, it may be noted that it is assumed to be one of the most essential and influential social variables that affect fertility behavior. According to many studies there exists a negative association between education and fertility (Das and Pandhiyar, 1991; Niranjna, 2000; Sharma and Niranjna, 2001; Singh, 2010; Datta, 2011; Rajput, 2011; Choudhary, 2012). Education, mainly of women has been found to exert a lowering effect on fertility. It is thought that education influences fertility by bringing about a change in the age at marriage, the attitude towards the ideal number of children and acceptance of birth control methods (Singh, 1986: 73). Education, mostly past senior secondary level has been observed to largely affect fertility by delaying the age at marriage (ibid: 23). It provides exposure to modern thoughts and ideas, which brings about a change in the notions about the family size and facilitates the acceptance of birth control methods. Among women, education opens up job prospects and improves their financial condition (Dash, 2006: 175), making them more self-reliant. Table 5.1 shows education wise distribution of the respondents and the number of children born to them. The data in the table below shows that the 3 and 16 women belonging to the illiterate and primary category respectively show high fertility, while the 21 and 16 women with graduate and post graduate & higher level of education respectively have lesser number of children. The finding is coherent with the view that women with higher level of education have lesser number of children. It is found that with an increase in the level of education of the respondents i.e., secondary level onwards the number of children is concentrated more in the 1-2 child category. It is to be noted here that the influence of education is more pronounced from secondary level education onwards. The figures also reveal that maximum number of women in the study i.e., 89 have 1-2 children, followed by 9 with 3 children while only 4 women have 4-5 children. It was found that the mean number of children is more among the respondents who are illiterate and this number seems to gradually decline as the educational level of the respondent increases. The lower fertility of women with increase in education is in congruence with the view presented in other studies by Singh (1986) for rural communities in Punjab and Haryana; Niranjna (2000) for Kinnaura Women in Himachal Pradesh; Datta (2011) for Tripura; Rajput (2011) for Hindu and Muslim Women in Assam and Choudhary (2012) for rural and urban women in Ajmer. Statistically also the table clearly demonstrates that the mean number of live births is decreasing with an increase in the level of education of the respondents, thus indicating a definite inverse relationship between educational level of the respondent and the mean number of live births among them. The Chi-square score (80.0854 significant at 0.05 level, d.f.=30) also endorses that the level of educational attainment of women is inversely proportional to fertility.

Education			Nun	nber of Cl	nildren			Mean No. of Live
	0	1	2	3	4	5	Total	Births
Illiterate			2 (66.7)		1 (33.3)		3 (100.00)	2.7
Primary		2 (12.5)	7 (43.8)	4 (25)	1 (6.3)	2 (12.5)	16 (100.00)	2.6
Secondary	1 (2.8)	10 (27.8)	21 (50.00)	4 (11.1)			36 (100.00)	1.8
Senior Secondary	1 (5.6)	7 (38.9)	9 (50.00)	1 (5.6)			18 (100.00)	1.6
Graduate	2 (9.5)	12 (57.1)	7 (33.3)				21 (100.00)	1.3

Table 5.1: Distribution of Respondents by Educational Level and Number of Children

Post Graduate & Higher	4 (25.00)	12 (75.00)					16 (100.00)	0.8
Total	8	43	46	9	2	2	110	10.8
	(7.3)	(39.1)	(41.8)	(8.2)	(1.8)	(1.8)	(100.00)	

Source: Field Data: July-September, 2014.

Note: Figures in parentheses indicate percentages. Chi-square =80.0854 significant at 0.05 level, Degree of Freedom=30

Since educational level of the husband is said to have a negative impact on women's fertility (Shrivastava, 1996; Raj, 1996 as cited in Rajput, 2011:71) therefore along with an analysis of the respondents' education and fertility, an attempt has also been made to analyse the relationship between the educational status of the respondents' husbands and fertility. Table 5.3 presents the distribution of the educational level of the respondents' husbands and the number of children they have had. The data below reveals that respondents with husbands having primary and secondary level of education shows high fertility while respondents with husbands having graduate and post graduate level of education show lower fertility. It can be seen that the number of children from senior secondary level onwards is concentrated more in the 1-2 child category implying that change in fertility level is more pronounced from the senior secondary level of education. In comparison to their husband's education, the education of the women was found to have more influence on fertility. Thus similar to women's education, the educational level of the husband also indicates a definite negative bearing on fertility. Statistically also the data from the field reveals that there is a definite negative relationship between the educational level of the respondents' husbands and the mean number of live births. Even though the mean number of live births is very low for the illiterate group, the presence of only one case makes it difficult to come to any conclusion about it. Keeping this aside, it is clear from the table below that from the level of primary education, an increase in the educational level of the respondents' husbands is followed by a subsequent decline in the mean number of live births. The highest number of mean live births is recorded among the respondents whose husbands have primary level education and the lowest is recorded among those whose husbands have post-graduate and higher level of education. The study shows that with an increase in the level of education of the husband, there is a decrease in the fertility of the wife. The chi-square value (40.417, significant at 0.05

level, d.f.=35) also suggests significant relationship between educational level of the respondents' husbands and fertility.

Education			Num	ber of Chil	dren			Mean No. of Live
	0	1	2	3	4	5	Total	Births
Illiterate		1 (100.00)					1 (100.00)	1
Informal Education			1 (100.00)				1 (100.00)	2
Primary		4 (23.5)	8 (47.1)	3 (17.6)	1 (5.9)	1 (5.9)	17 (100.00)	2.2
Secondary	1 (2.7)	10 (27.00)	20 (54.1)	4 (10.8)	1 (2.7)	1 (2.7)	37 (100.00)	1.9
Senior Secondary	1 (7.1)	7 (50.00)	4 (28.6)	2 (14.3)			14 (100.00)	1.5
Graduate	3 (11.5)	14 (53.8)	9 (34.6)				26 (100.00)	1.2
Post Graduate& Higher	3 (21.4)	7 (50.00)	4 (28.6)				14 (100.00)	1.1
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	10.9

Table 5.2: Husband's Education and Number of Children

Source: Field Data: July-September, 2014.

Note: Figures in parentheses indicate percentages. Chi-square = 40.417 significant at 0.05 level, Degree of Freedom = 35

The occupational status of a person is also considered to have a determining effect on fertility. Raj (2011:70) mentions that inverse relationship between occupation and fertility has been observed in the developed countries. But occupation of an individual by itself does not regulate fertility. It is through education and age at marriage that occupation affects fertility behavior (Jayasree, 1989: 85). In addition, women holding jobs outside their home are generally said to have lower fertility than their counterparts who do not work outside their home (ibid:85). Table 5.2 gives the distribution of respondents by their occupational background and their mean number

of live births. After examining the table below for occupation wise fertility differentials of the respondents, it appears that those who are homemakers and do not work outside their homes have children ranging between 1-5, followed by those who are small business owners and Government employees, each of whom have children ranging between 1-3 respectively and lowest i.e., 1 among those engaged in agriculture. Among the homemakers majority of them have children in the 1-2 category. Likewise majority of the women who are government employees have 1-2 children, followed by majority of small business owners who have 2 children and agriculturists who have only 1 children. The presence of only one case in the category of agriculturists makes it difficult to draw any decisive conclusion from it. Statistically it shows that although there is variation in the mean number of living children between the different occupational groups, they lack regularity, thus indicating no linkage between occupational background of the respondents and fertility. The Chi-square value (25.600, significant at 0.05 level, d.f.=20) indicates that there is no significant relationship between occupation of the respondents and their fertility.

Occupation		Number of Children								
	0	1	2	3	4	5	Total	No. of Live Births		
Homemakers		18 (32.1)	28 (50.00)	6 (10.7)	2 (3.6)	2 (3.6)	56 (100.00)	1.9		
Agriculturists		1 (100.00)					1 (100.00)	1		
Small Business Owners		1 (14.3)	5 (71.4)	1 (14.3)			7 (100.00)	2		
Government Employees	8 (17.4)	23 (50.00)	13 (28.3)	2 (4.3)			46 (100.00)	1.2		
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	6.1		

Table 5.3: Respondent's Occupation and Number of Children

Source: Field Data: July-September, 2014.

Note: Figures in parentheses indicate percentages. Chi-square =25.600, significant at 0.05 level, Degree of Freedom=20.

Since men are the principal breadwinners of the family and majorly contribute to the economy of the family, the kind of job they hold largely defines what financial state their family would be in (Shrivastava, 1996; Raj, 1996 as cited in Rajput, 2011:71). From this standpoint, the occupational background of husbands of the respondents becomes an important variable that determines fertility. Table 5.4 shows the distribution of the respondents on the basis of their husband's occupational background and the number of children born to them. The data from the field, which is shown in the same table below, indicates that respondents whose husbands are agriculturists have children ranging between 2-4, followed by respondents whose husbands are businessmen/contractors having children ranging between 1-3, respondents with husbands as government employees between 1-5, with health professional medicos having 1 and lastly with Others having children between 1-4.Among them, majority of the respondents with agriculturists husband have two children, with businessman/ contractor husband have 0-2 children, with government employee husband have 1-2 children, with health medicos husband have 0-1 children and lastly with Others have 1-2 children. Statistically it was found that the respondents whose husbands are engaged in agriculture have the highest number of mean live births while those whose husbands are in the medical field have lower number of mean live births. Bashir (1990) reports women whose husbands are agriculturists by occupation having more number of children than women whose husbands have non-agricultural occupation (as cited in Rajput, 2011:71). Although there is variation in the mean number of live births between the different occupational groups but they seem to lack regularity, thus indicating no link between occupational background of the respondents' husbands and fertility. The Chi-square value (54.042, significant at 0.05 level, d.f.=20) also supports that there is no significant connection between occupation of the respondents' husbands and fertility.

Occupation		Number of Children								
	0	1	2	3	4	5	Total	Births		
Agriculturalists			2 (50.00)	1 (25.00)		1 (25.00)	4 (100.00)	3		
Businessman/Con tractor	4 (18.2)	9 (40.9)	8 (36.4)	1 (4.5)			22 (100.00)	1.3		
Government Employee	1 (1.7)	26 (43.3)	26 (43.3)	5 (8.3)	1 (1.7)	1 (1.7)	60 (100.00)	1.7		
Health Professional Medicos	3 (75.00)	1 (25.00)					4 (100.00)	0.3		
Others		7 (35.00)	10 (50.00)	2 (10.00)	1 (5.00)		20 (100.00)	1.9		
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	8.2		

# Table 5.4: Husband's Occupation and Number of Children

Source: Field Data: July-September, 2014.

Note: Figures in parentheses indicate percentages. Chi-square =54.042, significant at 0.05 level, Degree of Freedom= 20

Income undoubtedly plays a big role in controlling the life patterns of people (Dash, 2006:181). It is indicative of the standard of living and it is generally assumed that there is an inverse relationship between income level and fertility (Singh, 1986: 83, Niranjna, 2000: 132). On the basis of the Theory of demographic transition it can be said that higher the income of the household lower will be the fertility level. The reason behind this is that with higher levels of income one gains access to greater amenities of life and better health facilities thereby reducing the chances of child mortality which in turn reduces people's motivation to have more number of births in the family. Table 5.4 shows the number of children born to women on the basis of the monthly household income of the respondents. The data from the table reveals that the mean number of live births is highest among the respondents with a monthly basis. But in the absence of regularity in the mean number of live births no relation can be established between the level of income and the mean number of live births.

The difference between the mean number of live births in this respect is not found to be statistically significant (Chi square= 61.392, significant at 0.05 level, d.f.=60).

Household			Numb	per of Chil	dren			Mean
Income	0	1	2	3	4	5	Total	No. of Live Births
Upto 5000		1 (11.1)	5 (55.6)	2 (22.2)		1 (11.1)	9 (100.00)	2.4
5001-10000	1 (6.3)	7 (43.8)	7 (43.8)		1 (6.3)		16 (100.00)	1.6
10001-15000		6 (50.00)	6 (50.00)				12 (100.00)	1.5
15001-20000	1 (10.00)	2 (20.00)	5 (50.00)	1 (10.00)	1 (10.00)		10 (100.00)	1.9
20001-25000	1 (12.5)	4 (50.00)	2 (25.00)			1 (12.5)	8 (100.00)	1.6
25001-30000			6 (75.00)	2 (25.00)			8 (100.00)	2.3
30001-35000	1 (8.3)	7 (58.3)	3 (25.00)	1 (8.3)			12 (100.00)	1.3
35001-40000		1 (25.00)	2 (50.00)	1 (25.00)			4 (100.00)	2
40001-45000			1 (100.00)				1 (100.00)	2
45001-50000		3 (60.00)		2 (40.00)			5 (100.00)	1.8
50001-55000	1 (20.00)	3 (60.00)	1 (20.00)				5 (100.00)	1
55001-60000		3 (60.00)	2 (40.00)				5 (100.00)	1.4
Above 60000	3 (20.00)	6 (40.00)	6 (40.00)				15 (100.00)	1.2
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	23.2

Table 5.5: Monthly Household Income and Number of Children

Source: Field Data: July-September, 2014.

Note: Figures in parentheses indicate percentages. Chi-square = 61.392, significant at 0.05 level, Degree of Freedom = 60

Though studies on the relationship between type of marriage and fertility behavior are lacking but Niranjna (2000:134) in her study of Kinnaura women reported negative relation between type of marriage and fertility behavior. She found that women who have arranged marriage have more number of children than women who had love marriage. The reason behind this is because unlike women having arranged marriages, women who have love marriage have more burden as they to take the sole responsibility of managing their house themselves thus they prefer to have small families. Table 5.6 shows the distribution of respondents by the type of marriage they had and the number of children born to them. The data from the table below reveals that women having love marriage and women having arranged marriage have children ranging between 1-5 respectively. The table also shows that among women having love marriages and women having arranged marriage, majority of them have 1-2 children. But among those having 3 children, the data from the field suggests that it is more among women having love marriage as compared to women who have arranged marriage. The statistics given in table below reveals that the mean number of live births is more for women having love marriage than women with arranged marriage. But since the difference in mean number of live births between the respondents who have love marriage and the respondents who have arranged marriage is very small i.e. 1.7 and 1.5 respectively, it is statistically not significant. The chi-square score (3.537 significant at 0.05 level, d.f.=5) also supports that there is no significant relationship between type of marriage of the respondents and their fertility.

Туре		Number of Children								
	0	1	2	3	4	5	Total	Births		
Love Marriage	4	28	31	8	1	1	73			
	(5.5)	(38.4)	(42.5)	(11.00)	(1.4)	(1.4)	(100.00)	1.7		
Arranged	4	15	15	1	1	1	37			
Marriage	(10.8)	(40.5)	(40.5)	(2.7)	(2.7)	(2.7)	(100.00)	1.5		
Total	8	43	46	9	2	2	110			
	(7.3)	(39.1)	(41.8)	(8.2)	(1.8)	(1.8)	(100.00)	3.2		

 Table 5 6: Type of Marriage and Number of Children

Source: Field Data: July-September, 2014

Note: Figures in parentheses indicate percentages.Chi-square=3.537, significant at 0.05 level, Degree of Freedom=5

Age at marriage is a very important determinant of fertility. The age at which a woman ties the nuptial knot has a profound influence on her fertility as it marks the commencement of her reproductive life. Women who marry at a low or young age gain an early entry into sexual exposure and enjoy a relatively longer reproductive life span. In contrast women who marry at a high age have late access to sexual exposure and a relatively shorter reproductive life span. Some studies (Agarwala, 1966; Reddy: 1986; Singh, 1986) have shown that there is an inverse relationship between age at marriage and fertility. According to these studies, an increase in the age of marriage brings about decline in fertility. Table 5.7 shows that respondents who got married between 16-20 years have children ranging between 1-5, those married between 21-25 years have 0-4 children, those married between 26-30 and 31-35 years have 0-2 children respectively, while those married between 36-40 and 41-45 years have 0-1 and 1 child respectively. Among the respondents, majority of those married between 16-20 years have 1-3 children, followed by 1-2 children among respondents married between 21-25 years, 26-30 years and 31-35 years respectively while majority of the respondents who got married between 36-40 and 41-45 years have only 1 child. It is clear from above that with an increase in the age at marriage of the respondents their number of children is decreasing, thus indicating that there is an inverse relationship between age at marriage and fertility. Statistics given in the table below also indicate that there is a relationship between age at marriage and the number of mean live births of the respondents. According to the table the mean number of live births is more for respondents who got married between 16 to 20 years of age and lower for respondents who got married between 36-40 years of age. It can be seen that with an increase in the age of marriage of the respondents there is a subsequent decline in the mean number of live births of the respondents. The data also shows that between the respondents with the lower and higher age at marriage there is a difference of one child. The analysis of the present research thus confirms that there is an inverse relationship between age at marriage and fertility among the respondents. The Chisquare value (39.964 significant at 0.05 level, d.f.=25) also indicates an inverse relationship between age at marriage of the respondents and their fertility.

Age		Mean No. of Live						
	0	1	2	3	4	5	Total	Births
16-20		8 (25.00)	15 (46.9)	6 (18.8)	1 (3.1)	2 (6.3)	32 (100.00)	2.2
21-25	2 (7.1)	6 (21.4)	16 (57.1)	3 (10.7)	1 (3.6)		28 (100.00)	1.8
26-30	2 (6.1)	20 (60.6)	11 (33.3)				33 (100.00)	1.3
31-35	3 (21.4)	7 (50.00)	4 (28.6)				14 (100.00)	1.1
36-40	1 (50.00)	1 (50.00)					2 (100.00)	0.5
41-45		1 (100.00)					1 (100.00)	1
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	7.9

Table 5.7: Age at Marriage and Number of Children

Source: Field Data: July-September, 2014

Note: Figures in parentheses indicate percentages. Chi-square = 39.964 significant at 0.05 level, Degree of Freedom = 25

Women's fertility behavior is also influenced by the place or the kind of area where she resides. It is thought that women who live in urban areas have lower fertility in comparison to women from rural areas. The logic behind this is that due to better access to education, women from urban areas are usually more educated and more acquainted with modern thoughts and ideas. Since they devote more time to education they marry late. Moreover since in urban areas the social control of the community and family is not strongly binding on women, they are able to exercise considerable freedom when it comes to fertility related decisions (Rajput, 2011: 69). Table 5.8 presents the distribution of respondents on the basis of the place where they live and the number of children they have. The data from the field shows that the respondents living in urban areas have 0-4 children while those living in rural areas have 1-2 children. Similarly majority of the respondents from rural areas also have 1-2

children. Thus there does not seem to be much difference in the fertility level of women from urban and rural areas. As per the mean number of live births and place of resident of the respondents the table reveals that the mean number of live births is lower in urban area when compared to rural area i.e., 1.5 for urban areas and 1.7 for rural areas. But in the absence of substantial difference in the fertility level of the urban and rural respondents no significant relationship can be drawn between the two. The chi-square value (2.686 significant at 0.05 level, d.f.=5) reveals that there is no significant connection between area of residence of the respondents and their fertility.

Type of Residence			Mean No. of Live					
	0	1	2	3	4	5	Total	Births
Urban	5 (8.9)	22 (39.3)	24 (42.9)	4 (7.1)	1 (1.8)		56 (100.00)	1.5
Rural	3 (5.6)	21 (38.9)	22 (40.7)	5 (9.3)	1 (1.9)	2 (3.7)	54 (100.00)	1.7
Total	8 (7.3)	43 (39.1)	46 (41.8)	9 (8.2)	2 (1.8)	2 (1.8)	110 (100.00)	3.2

Table 5.8: Place of Residence and Number of Children

Source: Field Data: July-September, 2014

Note: Figures in parentheses indicate percentages. Chi-square = 2.686, significant at 0.05 level, Degree of Freedom = 5

The type of family that a woman belongs to can also influence her fertility behavior. There are numerous studies in India that are suggestive of a significant relationship between type of family and fertility behavior. According to some studies, fertility is higher in nuclear families than in joint families (Bhasin and Bhasin, 2000: 70, Dash, 2006:172), which could be due to the fact that there is a shortage of workforce in nuclear families, which leads to increase in the demand for manpower and thus birth to more children to compensate for it (ibid, 2006:174-5). In contrast there are also studies that maintain that fertility is higher in nuclear families as compared to joint families (Rajput, 2011: 69; Choudhary, 2012:30). The reason behind this could be because in joint families all the members of the family collectively share the burden and cost of raising children while in nuclear families this responsibility lies with the couple alone (ibid:30). Table 4.1 presents the distribution of respondents on the basis of the type of their family and the number of children born to them. The data from the

table shows that respondents from both nuclear families and joint families have children ranging between 0-5. Among them, majority of women from both nuclear and joint families have 1-2 children respectively. The table also shows that the number of respondents having 3 children is more among respondents from nuclear family than those from joint family. In addition, respondents who do not have children are more among respondents from nuclear families than joint families. This could be because unlike in joint families where women are under the social control of their in laws and other extended kin of their husband, women in nuclear families have less social constraint and thus to a great extent can exercise their will as to matters regarding their fertility. The mean number of live births for respondents from nuclear and joint families is 1.7 and 1.5 respectively thus indicating only a minor difference in the fertility between them. The chi-square value (6.033 significant at 0.05 level, d.f.=5) indicates that there is no significant association between type of family of the respondents and their fertility.

Type of Family		Mean No. of Live						
1 41111	0	1	2	3	4	5	Total	Births
Nuclear	6	29	39	8	1	1	84	1.7
	(7.1)	(35.00)	(46.4)	(9.5)	(1.2)	(1.2)	(100.00)	
Joint	2	14	7	1	1	1	26	1.5
	(7.7)	(53.8)	(27.00)	(3.8)	(3.8)	(3.8)	(100.00)	
Total	8	43	46	9	2	2	110	3.2
	(7.3)	(39.1)	(41.8)	(8.2)	(1.8)	(1.8)	(100.00)	
	(7.3)	(37.1)	(41.0)	(0.2)	(1.0)	(1.0)	(100.00)	

Table 5.9: Type of Family and Number of Children

Source: Field Data: July-September, 2014

Note: Figures in parentheses indicate percentages. Chi-square = 6.033, significant at 0.05 level, Degree of Freedom = 5

## **5.1 CONCLUSION**

People from different socio-economic backgrounds are thought to hold different notions about the desired number of children, which is reflected, in their differential fertility. The chapter has analyzed the fertility behaviour of Bhutia women. It has highlighted the relationship between education and fertility, occupation and income with fertility, type of marriage and fertility, age at marriage and fertility etc. The study found a negative correlation between the educational level of the respondents and fertility and also between the educational level of their husband and fertility. In contrast the study did not find any significant relation between fertility and other socio-economic variables such as occupation of the respondents and their husbands, household income level etc. It was also found that age at marriage of the respondents and fertility in the study area are inversely related.

#### **CHAPTER VI**

#### CONCLUSION

Growing concerns about the burgeoning population and the subsequent urgency to control fertility has broadened the scope of demographic research throughout the world. The situation in the third world countries where the security of mankind is looming under threat from an ever-increasing population and resultant resource crunch warrants even more immediate attention. In India, the second most populous country of the world, population is a very popular topic of research and many fertility studies concerning people of various linguistic, regional, cultural, social and religious affiliation have been undertaken and the importance of studying India's fertility is evident from the fact that a small change in it will have a definite bearing on its population size and in its share in the world's population, given that it consists of 16.87% (1.021 billion) of the world's population (Registrar General of India, 2001).

Despite this an important section of the Indian population, the Scheduled tribes have largely been ignored by social demographers and researchers and not much work has been done on their patterns of demographic behavior so far. In view of this, the present study is deliberated towards an understanding of the fertility behavior of one of the tribal groups of India located in the State of Sikkim, the Bhutia tribe and also towards identification of the dominant socio-cultural and economic determinants of their fertility. Besides this an effort has also been made to examine the maternal and child health care behavior of Bhutia women and also discussed the facilities available in the state related to women and family welfare.

The study was conducted in two rural Gram Panchayat Units namely Samlik-Marchak and Rawate-Rumtek and two urban areas namely Chandmari and Ranipool Bazaar in the East district of Sikkim. A total of 110 ever-married women in the age group of 15-49 were randomly selected for the study from the selected study areas. The study reveals that the Bhutias are a patriarchal and patrilineal group. They have migrated to Sikkim from Tibet in different waves from the 13<sup>th</sup> Century onwards and after settling in Sikkim, they have developed their own culture, language and social patterns, which is different from their Tibetan counterparts. The study also reveals that Bhutias constitute one of the major ethnic communities of Sikkim and by religious affiliation they are predominantly Buddhists. They are found throughout the state and are well represented in all areas of public life.

The analysis of the data concerning the socio-economic background of the Bhutia women reveals promising trends in educational attainment as majority of the respondents have equal levels of education as their husbands. The women were also found to be holding various jobs especially in the government and on the basis of the kind of jobs they have, their income level also varies. The analysis of the attributes of the spouses of the respondents revealed that majority of them are found to be older than their wives and have better occupational status than their wives. Accordingly they also have a better income level than their counterparts. The research also brings to light the changing nature of the family structure among the Bhutias. Not so long ago, the Bhutias were having joint families. However the present study found that majority of the rural to urban areas as the offices and institutions are located mostly in urban areas. The general standard of living of the respondents was found to be of moderate to high-class level as many of them have good income, own land and live in pucca houses.

The Bhutias follow their customary laws, hence they are governed by their own rules, customs, norms, beliefs, traditions and values when it comes to marriage and childbearing. The field data concerning childbearing and marriage practices showed that marriage is universal among the Bhutias and widow remarriage is permissible. Marriage does not have a religious connotation among the Bhutias. Though marriage is encouraged, it is not mandatory for boys and girls to get married. In case of any unmarried daughters the parents feel worried that their daughters will be left alone after their death. It was found that love marriages are more frequent among Bhutias as compared to arranged marriages and the womenfolk enjoy a great deal of freedom when it comes to choosing their spouses. The mean age of marriage of the women was found to be 25 years and for men it was 27.8 years, which is higher than the state average of 21.5 years (DLHS-3) for girls and 24.9 (DLHS-3) for boys respectively. On an average husbands of the respondents were found to marry three years later than the women indicating that men are usually older in age than their wives. The average age of the respondents at their first childbirth is 26 years, which is considered to be

high. Like all societies, even among Bhutias sons and daughters are valued for different reasons. Among the Bhutias, sons are valued primarily for their role in continuation of the family and clan; protection and security of the family and for provision of old age security to the parents. On the other hand daughters are valued for the emotional support they provide, for taking lifelong care of the parents and for providing companionship to their mother and helping with domestic work. An interesting finding of the study was that majority of the respondent's opined that they preferred daughters over sons, which seems quite irrational given that Bhutia society is highly patriarchal. The reasons given by the respondent was unreliability and likelihood of sons to go haywire and indulge in antisocial behavior like becoming drug addict or alcoholic, whereas daughters were said to be more reliable, trustworthy and caring. The study reveals that the respondents rather than facing the trauma and suffering of having an unruly son prefer not to have a son. The study also found that majority of the respondents want less number of children, most preferably one or two and accordingly majority of them have one or two children. In the rare instance that the respondents preferred more number of children, even among those respondents the number of children they have is also less. This shows that the respondents have made a rational choice regarding childbearing by keeping in mind the costs and time required to raise a child.

Health care services started in Sikkim after the arrival of the British and developed and expanded further with the merger with India. It was only after becoming a part of India that Family Welfare Programmes were introduced in Sikkim. The current health indicators in Sikkim reveal that Sikkim is doing very well in the area of health and performing much better than the National average. In the area of Family Planning and Maternal and Child care the performance of Sikkim has been good. This has been achieved by the combined efforts of the Central and the State government in promoting, facilitating and implementing maternal and child health care and family planning programmes and schemes in the State. Analysis of the field data regarding the knowledge and practice of family planning and utilization of maternal and health care services found that majority of the women reported knowledge of all the modern methods of family planning along with traditional methods like withdrawal method which has been delivered to them through media, health professionals, friends, relatives etc. The role of doctors and nurses in promoting awareness about family planning was found to be very significant. But widespread knowledge of contraceptives was not backed by its widespread use. The prevalence of the use of contraceptive was found to be low among the women. Only young and sexually active women and their husbands were found to be using contraceptives. Among the modern contraceptives, condom was found to be the most preferred method of birth control followed by oral pills. Non-use of contraceptives was caused by postpartum abstinence, desire for children, current pregnancy, health problems and most commonly infrequent sex or no sexual relationship between the couples. When it came to the utilization of Maternal and Child Care Services among the women it was observed that majority of the women had awareness about ANCs and had received ANCs from competent authorities for their last pregnancy. In addition they had delivered their child in health centers. The study found that there is a connection between ANCs and institutional delivery. It was observed that those women who received ANCs delivered their child in a medical facility in contrast to women who did not. It can be said that receiving ANCs increases the likelihood of institutional delivery thereby reducing the risks of maternal and neonatal mortality.

As regards to the objective of examining the effect of socio-cultural and economic factors on fertility, the study has revealed that different determinants have differential effect on the level of fertility. It is worth stating that certain socio-economic factors such as occupational status of the respondents and their husbands, monthly household income, type of marriage, place of residence and type of family was discovered to be statistically insignificant. The Chi-square score of these determinants did not imply anything decisively. On the other hand, socio-economic variables like educational level of the wife and the husband and age at marriage of the respondents were found to be negatively associated with the level of fertility. Sociologically it was found that women's education especially from secondary level onwards has a profound effect on their fertility. It was also found that women's education has more bearing on fertility than their husband's education. In addition, it was found that women who are homemakers and do not work outside their home; women whose husbands are engaged in agriculture; women belonging to household with very low level of monthly income and women who marry at an early age i.e. between 16-20 have higher fertility. On the whole, all the variables discussed above have been responsible for differentially influencing the fertility behavior of Bhutia women in Sikkim. The

foregoing discussion throws considerable light on the relationship between fertility behavior and the above mentioned variables. However a further study with a larger sample may yield more accurate results about the nature of the relation between fertility and its determinants.

### BIBLIOGRAPHY

Agarwala, S. N. 1966. Some Problems of India's Population. Bombay: Vora.

Agarwala, S. N. 1967. Age at Marriage in India. Bombay: Kitab Mahal Pvt. Ltd.

Bhattacharya, D. C. 2008. Sociology. Kolkata: Vijoya Publishing House.

Bisht, N. S. and Bankoti, T. S. 2004. *Encyclopaedic Ethnography of the Himalayan Tribes*. Delhi: Global Vision Publishing House.

Bongaarts, J. and Potter, R. 1983. *Proximate Determinants of Fertility*. New York: Academic Press.

Caldwell, J. C. 1982. Theory of Fertility Decline. New York: Academic Press.

Chambers, D. 2012. A Sociology of Family Life. Cambridge : Polity Press.

Choudhary, K. 2012. Women and Fertility Behaviour. Jaipur: Pointer Publishers.

Choudhury, M. 2006. *Sikkim: Geographical Perspectives*. New Delhi: Mittal Publications.

Dash, C. 2006. *Sociology Ecology and Demographic Structure of Bhotias*. New Delhi: Concept Publishing Company.

Dolma, Y. M., and Namgyal, T. M. 1908. *History of Sikkim*. Gangtok: Namgyal Institute of Tibetology.

Datta, A. K. 2011. *Fertility Behaviour in Transition: A Study of the Determinants*. New Delhi: Akansha Publishing House.

Dutta, D. C. 2001. *Text Book of Obstetrics*. Calcutta: New Central Book Agency (P) LTD.

Dutta, D. C. 2001. *Text Book of Gynaecology*. Calcutta: New Central Book Agency (P) LTD.

Gangadharam, V. *Fertility Behaviour in Tribal World*. New Delhi: Reliance Publishing House.

Government of Sikkim. *Annual Report 2012-2013*. Health Care, Human Services & Family Welfare Department.

Government of Sikkim. *Health Information Bulletin 2014*. Health Care, Human Services & Family Welfare Department.

Government of Sikkim. *State Socio Economic Census 2006*. Economics, Statistics, Monitoring and Evaluation Department.

Government of India. *Sikkim National Family Health Survey (NFHS-3) 2005-*06.Ministry of Health and Family Welfare.

Gurung, S. K. 2011. *Sikkim: Ethnicity and politics- A Triadic Perspective*. New Delhi: Kunal Books.

Jayasree, R. 1989. *Religion Social Change and Fertility Behaviour: A Study of Kerala*. New Delhi: Concept Publishing Company.

Lama, M. P. 2001. *Sikkim Human Development Report*. New Delhi: Social Science Press.

Maharatna, A. 2005. *Demographic Perspectives on India's Tribes*. New Delhi: Oxford University Press.

Mahadevan, K. and M. Sumangala. 1987. *Social Development, Cultural Change and Fertility Decline*. New Delhi: Sage Publications.

McKintosh, M. 1981. *The Sexual Division of Labour and the Subordination of Women*, in K. Yong, C. Wolkowitz and R. McCullagh(eds.), Of Marriage and the Market. London: CSE Books.

Mandelbaum, D. G. 1974. *Human Fertility in India*. Berkeley: University of California Press.

Newbold, K. B. 2012. *Population Geography: Tools & Issues*. New Delhi: Rawat Publications.

Niranjna. 2000. *Status of Women and Family Welfare*. New Delhi: Kanishka Publishers and Distributors.

Patel, T. 1994. *Fertility Behaviour Population and Society in a Rajasthan Village*. New Delhi: Oxford University Press.

Pressat, R. 1985. The Dictionary of Demography (ed.) C. Wilson. Oxford, London: Blackwell.

Rajendren, T. 2009. Value of Child and Fertility Behaviour Among Rural Women: A Study in Athoor Block of Tamil Nadu. New Delhi: Concept Publishing Company.

Raj, H. 1996. Population Studies. Delhi: Surjeet Publications.

Rajput, K. S. 2011. *Fertility and Health BehaviourAmong Hindu and Muslim Women in Assam*. New Delhi: Concept Publishing Company.

Reddy, M. M. K. 1996. *Fertility and Family Planning Behaviour in Indian Society*. New Delhi: Kaniskha Publishers.

Risley, H. H.1894. The Gazetteer of Sikhim. Calcutta: Bengal Secretariat Press.

Shah, A. M. 1973. *The Household Dimension of the Family in India*. Delhi: Orient Longman.

Sharma, A. K.1987. *Fertility and Family Planning in Rural Areas*. New York: Mittal Publications.

Sharma, S. K. and Niranjna. 2001. *Social Structure and Fertility Behaviour*. Jaipur: Rawat Publishers.

Singh, V. 2010. Fertility Behaviour and Nurturing Children: A Study of Muslim Women. Delhi: Academic Excellence.

Singh, K. P. 1986. *Correlates of Fertility Behaviour - A Study of Rural Communities in Punjab and Haryana*. New Delhi: Concept Publishing Company.

Sinha, A. C. 1975. *The Politics of Sikkim: A Sociological Study*. Delhi: Thompson Press.

Sinha, A. C. 2008. *Sikkim Feudal and Democratic*. New Delhi: Indus Publishing Company.

Shrivastava, O. S. 1996. *Demography and Population Studies*. New Delhi: Vikash Publishing House Pvt. Ltd.

Subba, J. R. 2011. *History, Culture and Customs of Sikkim*. New Delhi: Gyan Publishing House.

Venes, D. 2009. Taber's Cyclopedic Medical Dictionary. F.A. Davis Company.

# ARTICLES

Arokiasamy, P. 2009. "Fertility Decline in India: Contributions by Uneducated Women Using Contraceptives," *Economic and Political Weekly*, Vol. XLIV No. 30, pp. 55-64.

Bashir, A. 1990. "Determinants of desired Family size in Rural Bangladesh: A twostage Analysis," *The Journal of Family Welfare*, Vol.36, No. 1, pp.22-31.

Bhasin, M. K. and Nag, S. 2007. "Demography of the Tribal Groups of Rajasthan: 6 Regression Analyses," *Anthropologist*, 9(2), pp. 107-112.

Bhasin, V and Bhasin, M.K. 2000."A Cross-Cultural Fertility Differentials in Sikkim," *J. Hum. Ecol.*, 11 (6), pp. 429-444.

Bhasin, V. 2004."Ecology and Status of Women Among Tribals of India," *J. Hum. Ecol.*, 15(4), pp. 237-247.

Biswas, R. K. and Kapoor, A. K. 2003. "Fertility Profile of a Primitive Tribe, Madhya Pradesh," *Anthropologist*, 5(3), pp. 161-167.

Bongaarts, J. 1978. "A Framework for Analyzing the Proximate Determinants of Fertility," *Population and Development Review*, 4(1), pp. 105-132.

Bonneil, N. 1990. "Contextual and Structural Factors in Fertility Behaviour," *Population: An English Selection*, Vol.2, pp. 69-91

Caldwell, J. C., Reddy, P. H. and Caldwell, P. 1983. "The Causes of Marriage Changein South India," *Population Studies*, pp. 37-343.

Chen, P. S. J. 1978. "Development Policies and Fertility Behaviour: The Singapore Experience of Social Disincentives", *Southeast Asian Affairs*, pp. 245-256.

Das, N. P and Pandhiyar, A. C. 1991. "A model to Study the Socio- Cultural Determinants of Fertility: An extension of Bongaarts Model", *The Journal of Family Welfare*, Vol.37, No. I, pp.30-41.

Davis, K and Blake, J. 1956. "Social Structure and Fertility: An Analytic Framework," *Economic Development and Cultural Change*, Vol. 4, No. 3, pp. 211-235.

Dharmalingam, A. 1996. "The Social Context of Family Size Preferences and Fertility Behaviour in a South Indian Village," Vol.52, No., <sup>1</sup>/<sub>2</sub>, pp. 83-103.

Foster, S. O. 1984. "Immunizable and Respiratory Diseases and Child Mortality," *Population and Development Review* 10(Supplement: Child Survival: Strategies for Research), pp. 119-40.

Fukuda et al,. 2012. "Buddhism and Childbearing in Asia," Available from: www.iussp.org. Accessed 2/03/2014

Government of India. *Primary Census Abstract, Census of India, Sikkim, 2011.* Directorate of Census Operations. Government of India. *Data Highlights: the Scheduled Tribes Census of India, Sikkim,* 2001. Directorate of Census Operations.

Government of India. *Data Highlights: the Scheduled Tribes Census of India, Sikkim,* 2011. Directorate of Census Operations.

Government of Sikkim. *City Development Plan*. Urban Development and Housing Department (UDHD).

Government of India. *District Level Household and Facility Survey (DLHS-3) 2007-*2008. Ministry of Health and Family Welfare.

Government of India. A Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) in India 2013. Ministry of Health and Family Welfare.

Grimes, S. 1994. "Fertility Decline in Western Europe", PRI Review, Vol.4, No. 1.

Loon, L. 1992. "Family Planning & Birth Control in Buddhist Perspective," *Bodhi Leaves No. 127*, pp. 1-2.

Murthy, M., Guio, A-C and Dreze, J. 1995. "Mortality, Fertility and Gender Bias in india: a District-Level Analysis," *Population and Development Review*, 21 (4), pp. 745-82.

McKay, A. 2004. "The Indigenisation of Western Medicine in Sikkim," *Bulletin of Tibetology*, pp. 25-48

Mutharayappa, R. 1994. "Factors Affecting Fertility Among Tribals", *Man & Development*, pp. 63-79.

Mutharayappa, R. 1998. "Fertility and Family Planning Among Jenu Kuruba and Kadu Kuruba Tribes of Karnataka," *Man in India*, 78(1-2), pp. 119-126.

Nag, M. 1954." A Demographic Study of the Kanikkar of Travancore," *Bulletin of the Dept. of Anthropology*, Vol.3 (2), pp. 95-115.

Nanda, S. and Tripathy, M. 2005. "Reproductive Morbidity, Treatment Seeking Behaviour and Fertility: A Study of Scheduled Caste and Tribe women," *J. Hum. Ecol.*, 18(1), pp. 77-83.

Niraula, B. B. and Lawoti, D. 1998. "Women's Autonomy and Reproductive Behaviour in Two Urban Areas of Nepal," *Contribution to Nepalese Studies*, 25(SPECIAL ISSUE), pp. 157-172.

National Family Health Survey (NFHS-III), India, International Institute for Population Sciences (IIPS) and Macro International.[Online]. 2007.Available from: http://www.nfhsindia.org. Accessed 3/03/2014

Otto-Brauner, S. R., Axinn, W. G. and Ghimire, D. J. 2007. "The Spread of Health Services and Fertility Transition,"*Population Studies Center*, Research Report 07-619, pp 1-32.

Parikh, K. S. and Gupta, C. 2001. "How effective is Female Literacy in Reducing Fertility?" *Economic and Political Weekly*, pp. 3391-98.

Pebley, A. R. 1984. "Intervention Projects and the Study of Socioeconomic Determinants of Mortality,"*Population and Development Review* 10(Supplement: Child Survival: Strategies for Research), pp. 281-305.

Phirangstone, K. 2013. "Determinants and Trends of Ideal Family Size in Matrilineal Set-up," *the NEHU Journal*, Vol. XI, No. 2, pp. 37-54.

Primary Census Abstract Scheduled Castes and Scheduled Tribes, Census of India, Registrar General & Census Commissioner.[Online]. 2011. Available from: www.censusindia.gov.in/2011/SCST%20Presentation%2028-10-2013.

Rele, J.R. 1987. "Fertility Levels and Trends in India," *Population and Development Review*, 13(3), 513-530.

Sharma, R. and Rani, M. 2009. Contraceptive Use Among Tribal Women of Central India: Experiences among DLHS-RCH-II Survey," *Research and Practice in Social Sciences*, Vol. 5, No.1, pp. 44-66.

Siddiqui, R. 1996. "The Impact of Socio-economic factors on Fertility Behaviour: A Cross- Country Analysis", *The Pakistan Development Review*, Vol. 35, No. 2, pp. 107-128.

Sujatha, D. S. and Reddy, G. B. 2009. "Women's Education, Autonomy and Fertility Behaviour," *Asia-Pacific Journal of Social Sciences*, Vol. I (1), pp. 35-50.

World Urbanisation Prospects: the 2007 Revision. UN. [Online]. 2007. Available from: www.un.org/esa/population/publication/wup2007. Accessed 3/03/2014

World Population Prospects: the 2008 Revision. UN. [Online]. 2008. Available from: <a href="http://www.un.org/esa/population/publication/wpp2008/wpp2008-highlights.pdf">www.un.org/esa/population/publication/wpp2008/wpp2008-highlights.pdf</a>. Accessed 3/03/2014

World Population Prospects: The 2012 Revision. UN.[Online]. 2012.Available from:<u>esa.un.org/unpd/opp/Documentation/pdf/WPP2012\_Press\_Release.pdf</u>. Accessed 2/03/2014

Williams, S. R. 2003. Energy Balance, Health and Fecundity Among Bhutia Women of Gangtok, Sikkim, India. [Online]. PhD, The Ohio State University. Available from:<u>https://etd.ohiolink.edu/rws\_etd/document/get/osu/06/295651/inline</u>.Accessed 2/03/2014

Zacharia, K. C. 1995. "Transition in the Determinants of Fertility Decline," *Demography India*, Vol. 24, No. 2, pp.157.