CHAPTER I
Introduction

1.1 General Background

In the few last decades the world's population is enormously increasing and it is being the challenging issue for most of the countries of the world. This rapidly increasing population is creating problems because it swallows up the increased income and lowers the capital per-head, savings, agricultural land, nutritious food, qualitative and technical education, employment opportunities, proper health facilities and so on. More-over it is creating problems of food supply, clothing, social services, water supply, resettlement and environmental degradation.

It is estimated that the world's population was 0.1 to 10 millions in 10,000 BC, 8 million in 8000 BC and 256 million in 1 AD. In those days the rate of population growth was very low or insignificant. After 1650 AD the world's population shows signs of significant increase and has increased rapidly following the industrial revolution of 1650. The world's population was about 545 million in 1650. It was estimated 2,519 million in 1950, and 6,071 million in 2000 AD. It became 6,454 million in 2005. Now it is estimated around 7000 million.

Population explosion is one of the major impediments to development, and thus it is not something to be welcomed and eulogized. Hence, attempts must be made to control... population explosion as much a social problem as it is an economic problem. Many of its causes are deep-rooted in the social life..... illiteracy, superstitions, orthodoxy, obscuratism and deplorable conditions of the women are social maladies and they all have contributed to population explosion. In order to bring down the birth rate, all these social evils must be removed.

Though the growth of population is a worldwide problem but it is more serious in developing countries. In most of the developing countries the growth of the population is stable. In some countries this phenomenon is seen, it is because in these countries the level of fertility is either slightly decreasing or more or less stable of higher level. The mortality rate has been decreasing continuously in the developing countries due to the use of modern medical facilities and sanitary care invented in developing countries. The result of high fertility and low mortality is causing a rapid increase in population in these countries. In these countries, education and health facilities are not adequate and the people are no well informed about contraceptives and use of it. Their lack of education and health facilities preference to have male child, the value of children in the form of labour force and a
low level of income of the people in these countries are causing a high fertility rate. In
developing countries a higher proportion of population live in rural areas without
adequate health, education, water supply, sanitary facilities, communication,
transportation and other modern facilities. Nepal is also a developing country. It is
also experiencing high population growth. The annual population growth rate was 1.16
in 1942, 2.27 in 1952, 1.64 in 1961, 2.07 in 1970, 2.62 in 1981, 2.1 in 1991 and 2.25
in 2001. The total fertility rate is 3.0 in Nepal which is higher than other South Asian
countries, besides Pakistan. The fertility rate of India, Bhutan, Pakistan, Bangladesh,
Sri Lanka and Maldives is 2.6, 2.9, 4, 2.4, 2.4 and 2.5 respectively.

Fertility is affected by various socio-economic factors like education, age at
marriage, duration of marriage, Mass poverty, level of income, occupation,
employment, knowledge and use of contraceptives, ethnicity, tradition and beliefs,
urbanization, gender equality, women empowerment, health facilities, mortality rate
etc. In Nepal fertility level is high due to high economic value of children, high infant
mortality rate, socio-economic traditions favoring sons, low socio-economic status of
women in society, low literacy rate etc. Besides, there early and child marriage
system, traditional type of occupation and joint family system are also responsible for
high fertility rate.

From the above analysis it is clear that the rapid population growth is one of
the important problem of developing countries. It is a great hindrance to the
economic development of developing countries. “With their low per capita incomes
and low rates of capital formation, it becomes difficult to them to support the increase
in population. And when output increase due to improved technology and capital
formation, it is swallowed up by the increase in numbers. As a result, there is no
improvement in the real growth rate of the economy.”

“In the process of economic development and growth the size of population is
not so important as their productivity. Kuznets has observed that the population has
increased five-fold in European developed countries during 1750-1950, but there was
ten-fold increase in their per capita income. Thus the per capita real income depends
ultimately on efficiency and development of human capital which leads to increase in
economic growth. The human capital formation includes the process of increasing
knowledge, education, skills and the capacities of all people of the country.”

“Denison’s estimates reveal that the expenditure incurred on education in the
USA between 1929 -1957 contributed 23% of its gross national output. According to
Soloman Fabricant, the increase in the total national product of the USA through
increase in physical capital between 1889 -1957 equaled the increase through higher labour productivity.” Thus the economic development of less developed countries is possible, if they control the rapid population growth and educate people to accommodate in the new environment.

The tremendous treasures of the mind could lie dormant if education is not given its due. Education acts as a stimulant for socio-economic prosperity of a nation.

Knowledge including information, attitude and skills is one of the fundamental capabilities a person need to make sense of oneself and of the world one lives in. It helps one to re-learn, re-assess, re -act and to change one-self and one’s world. It is through education that people develop knowledge, skills and habits that are essential to run successful life. Education is developed along with human civilization. John Dewey (1916) rightly says, “Education is not preparation of life, it is life itself.” Hence, education is the complete development of individually, so that he can make an original contribution to human life according to the best of his capacity.

Education is a cornerstone of economic and social development. It improves the productive capacity of societies and their political, economic and scientific institutions. It also helps reduce poverty by mitigating its effect on population, health by increasing the value and efficiency of labour offered by the poor. As economics worldwide are transformed by technological advances and new methods of production that depends on a well trained and intellectually flexible labour force, education becomes even more significant.

Education is viewed as a means for alleviating poverty and advance economic and social development. A diverse body of literature demonstrate that the adults in developing countries who have higher level of educational attainment have more paid employment, higher individual earning, greater agricultural productivity, lowers fertility, better health and nutritional status and more wider attitudes than adults who have lower educational attainment.

It is well recognized that education plays an important role in economic development through imparting cognitive abilities, technical skills and knowledge, increasing productive efficiency and enhancing productivity of individual workers and, as a consequence, raises their earnings and income levels. Changes and improvements in the quality of life that are brought about by education constitutes an important though often intangible source of economic development.
Without better educational attainment the living standard of the population is not increased and, all other developmental activities are not increased in acceptable range. There is an internal relationship between education and increasing population and social change. “Contribution of education in bringing down the birth rate is significant. It often changes the attitude of a person towards family, marriage and the number of children he have. Most educated people delay their marriage and prefer to have small family. Education by making a formal attack on orthodoxy and superstitions induces people to practice family planning. There is an added reason why education proves to be an effective instrument of population control. When education is wide spread, both boys and girls are sent to schools and colleges. This automatically delays marriage and this reduces reproductive span of women.”

Education, which is the main part of human life as a combined factor of all other activities. This can be illustrated by the help of following figure:

Schooling, particularly that of females, has beneficial effects, and more schooling brings more benefits to individuals, families, and society at large. A vast body of empirical evidence assembled by economists, demographers, epidemiologist, and other social scientists points to this conclusion. Observational research on childhood environments tends to support the idea that maternal schooling is beneficial to children’s development. Furthermore, the earlier declines in mortality, combined with rising fertility, had created high rates of population growth that threatened long-term survival. In this context, the findings concerning female schooling as a factor in reducing child mortality and fertility are of direct policy relevance.

However, widely replicated but less consistent patterns holds for fertility, which tends to be inversely related to women’s schooling when other socio-economic
factors are controlled for at the individual levels. At the level of cross-national variations, the average female schooling of national population is inversely related to its total fertility rate.\textsuperscript{15}

In Nepalese context 83\% (census 2011, CBS, Kathmandu) of total population live in rural areas. There is high fertility rate in those areas because of limited education, poverty, illiteracy etc. It is noticeable fact that as the educational status of marriage couple increases, the fertility rate decreases. In Nepal, average number of children ever born (CEB) per married women was 2.4 for no-schooling, 2.2 primary level, 1.9 for secondary level, 1.7 for SLC and equivalents, 1.6 for PCL level and 1.5 for higher level in 1981 and their corresponding CEB’s were 2.2, 1.9, 1.7, 1.6 and 1.6 respectively in 1991. Similarly the mean CEB of per married women was 4.8 for no schooling, 3.2 for primary level, 2.3 for secondary level and 2.1 for SLC+ in 2001.\textsuperscript{16}

Similar case was observed by Awasthi (2005) in his unpublished Ph. D. thesis, demographic and socio-economic characteristics of migrants in Tarai. He has found that the total fertility rate of eastern part of Nepal was 2.51, which is less than 2.87 of the western part of Nepal. In his research report, the average number of children ever born per married women for no schooling was 3.02, for primary level 2.53, for lower secondary level 2.27, for secondary level 2.5, for PCL level 2.5 and 2 for higher level in west. Similarly, 2.51 means ‘CEB’ was found in eastern part of Nepal in total. The child ever born per married women for no schooling was 2.64, for primary level 2.57, for lower secondary level 1.61, for secondary 2.11, for PCL 2.2 and 2 for graduate and above level.\textsuperscript{17}

From the above findings it is noted that there are regional variations in fertility with same level of education. The mean CEB of far western part of Nepal is higher than that of eastern one. And it is also noted that there is not always inverse relationship between the mean CEB and the level of education. The data shows that lower secondary and higher (more than PCL) levels have least mean CEB than those of secondary in the west. But the situation does not hold true in the east. This implies that, there are regional variations on the effect of education and fertility have.

The level of economic condition or income is also an important factor affecting in the fertility level in the society. It is mainly determined by the nature and type of work people do. In the context of Nepal, agriculture is the main source of income, as about 67\% of economically active populations are engaged in agriculture and it has contributed 40\% of GDP in 2001.\textsuperscript{18} but agriculture in Nepal is constrained by low use of improved agriculture technologies, traditional methods of farming, lack of irrigation
etc. which have depressed agricultural productivity and resulted low income generation among peasants.19

Higher growth of population and low level of socio-economic and technological growth are inter-related. The greater the concentration of population in less developed areas uncoupled by capito-technological resources, the poorer they get every year..... If these lagging economies are able to bring down their rate of population growth by even one percent, there investible resources shall go up, raising their income per capita.......If the population is increasing by one percent per year, a nation at a capital output ratio of 3:1 must save and invest at least 3% of its national income each year in order to merely maintain the existing level of the per capita income.20

The GDP per capita is 340 US Dollar in Nepal, while it is 39,210 in Switzerland, 46,790 in USA, 35,190 in Japan, 35,950 in Germany and 36,240 England.21 But the total fertility rate is 3 in Nepal, 1.5 in Switzerland, 2 in USA, 1.4 in Japan 1.3 in Germany and 1.9 in England.22

Income levels and development stages of individual countries, as well as people's residence in urban and rural areas, affect the impact of education on fertility with respect to residence. Schooling has been showing to have a more negative effect on fertility in urban than rural setting.23

The growth of population slackens the growth of per capita income and necessitates a greater proportion of national income to be saved and reinvested for raising per capita income. In an interesting study explaining this relationship, Jones (1962) found that, a nation seeking to raise per capita income by 50% in a decade will have to increase national income by 66% if its population grows at the rate of one percent per year.24

It shows that the income level of Nepalese people is significantly low and fertility level is higher than the developed countries. It also indicates that the level of fertility decreases as the level of income increases.

The above discussion indicates that, fertility is not determined by only one factor. Sociologists and demographers are of the opinion that a significant decline in fertility requires improvement in the quality life of the people through increasing level of income and education, improving the working status of the people, raising the age at marriage and accelerating the acceptance of family planning programmes with the socio-economic and cultural transformation of the society. “Besides education, it is also determined by family system, duration of marriage, social values and customs,
attitude towards children, use of contraceptives, occupation of couples, family income, health and medical facilities, ethnicity, political systems etc.\(^\text{25}\)

Hence, the question is, what is the effect of education and economic condition on fertility of different social groups people of Nepal.

1.2 Statement of the Problem

Education is a crucial social factor that initiates the process of social, economic and cultural development. It is one of the main sources of human resource development. It helps to overcome the social barriers and enhances earning potentials and productivity of people through acquisitions of knowledge and skill. Thus the education is a process of gaining knowledge from formal and informal institutional and non-formal devices. On the other hand fertility refers the actual birth performance of women. It is the chief active factor to increase the population. The societies with high growth rate of population are facing number of problems. Such as food shortage, unemployment, economic uncertainties, rising incidents of crime and social disorder, and environmental pollution etc. Thus the overpopulation presents a formidable threat to the survival of a vast segment of the world’s population.

It is well known fact that the high growth rate of population is associated with high level of fertility. High fertility is associated with the need to replace the society where they live. The major causes for the demand of children in individual level are the desire for sons, sources of income, old age security etc. Similarly, the difference in the socio-economic and demographic features such as education, occupation, income, marital status, caste, ethnicity, religion, employment of women, their status in the family and society are important factors affecting level of fertility of individuals.

Now a day the study of human fertility has a central position in socio-economic studies. It is responsible for biological replacement and for the maintenance of the human society. Many demographers, sociologists, economists and investigators have attempted to show the cause and effects relationship of fertility with demographic and socio-economic variables. Among these variables, education is considered as an important one. “The relationship between education and fertility has been a recurrent theme in the demographic literature.”\(^\text{26}\)

“The influence of education on fertility is assumed to derive from various dimensions of the education experience. Schooling provides literacy skills, enables pupils to process information, stimulates cognitive development and brings attitudinal change.”\(^\text{27}\)
Educations have often been cited as one of the major avenues through which reductions in fertility can be achieved. The cross-national studies have consistently found negative correlations between fertility and education. For example, using national data Adelman (1963), Heer (1966), Friedlander and Silver (1967) and Janowitz (1971), all found negative correlations between education and fertility. Most of the researchers of “Education and Fertility” have shown the relationship between the level of education and mean CEB. But there are very few or little evidences that have shown the relationship between education and economic conditions of different social groups and the fertility rate.

It is well known fact that Nepal is a country of multilingual, multi-religious, and multi-ethnic. A number of ethnic groups have been scattered over different part of Nepal. They have their own cultural traits, religion, social values and norms, which have a direct or indirect bearing on demographic behaviours.

So, the researcher wants to study the impact of level of education and economic condition on fertility of different social groups. In this context the research questions are the following:

i. Is there any relationship between educational status and fertility rate in the study area?

ii. What relationship does there exist between the educational status of different social groups and fertility rate?

iii. Is there are relationship between economic condition and fertility rate in the study area?

iv. What relationship does there exist between the economic condition of different social groups and fertility rate?

v. What type of differences are seen in the fertility of different social groups people of Baitadi and Kanchanpur district according to their economic status and educational attainment?

vi. Is the fertility differences seen in rural and urban areas?

vii. What are the sources of knowing about fertility and its means of control by different educational attainment groups?

viii. What are their ideas/ suggestions to control rapid population growth?
1.3 Significance of the Study

There are very few researches done on the relationship between fertility, economic condition and education in Nepal. They are mainly concerned with level wise educational attainment, level of income and mean CEB of the people and they have used education and income level as only determinants of fertility. They didn’t check the impact of education and economic condition on fertility of different social groups. In this regard the present study carries special importance. First of all this research tries to seek whether education and economic condition have worked as a determinant of fertility in study area. Secondly, the study will see the relationships in terms of educational and economic status of different social groups and fertility rate. Thirdly, this study tries to find out whether formal education has a role on knowing about fertility and means of its control. Fourthly, the study tries to find out female education’s role in fertility control and makes comparison of fertility of females of different social groups according to their educational attainment. Finally, this study has tried to see whether the fertility differences are seen in rural and urban areas ,developed and less developed areas and their suggestions to control rapid population growth. Hence, it is expected that the research will be of a substantial importance for planners, policy makers, social workers, researchers, demographers and other interested persons in making education as a driving force for fertility control and provide educational opportunities to all people and to inspire them to helps in increasing economic condition of the people. It also helps different government institutions in making proper policies to control fertility and enhancing educational facilities and job opportunities. Similarly, this study will be helpful for researchers who will be interested in the study area.

1.4 Objectives of the Study

This study is mainly concerned with the impact of education and economic condition on fertility of different social groups people. The following are the specific objectives of this study:

i. To study the existing pattern of fertility.
ii. To investigate the relationship between the educational status of different social groups and their fertility rate.
iii. To identify the sources from which the people of different social groups know about fertility and means of its control.
iv. To find the fertility differences of rural and urban respondents and respondents of developed and less developed areas.
v. To collect the suggestions for control rapid population growth.
vi. To investigate the relationship between economic condition and fertility.
vii. To make comparison between fertility of both districts according to level of education, economic condition and ethnicity.

1.5 Hypothesis of the Study

A hypothesis is a statement about the expected relationship between two or more variables. The following are the hypothesis of this study:
- Fertility rate does not differ according to the level of educational attainment.
- There is not any relationship between educational attainment and fertility.
- Fertility rate does not differ among various social groups.
- Income does not affect fertility rate.
- Fertility rate does not differ in rural and urban areas.
- Regional development does not effect fertility.

6. Limitations of the Study

This study has the following limitations:
- This study is confined to Kanchanpur district and Baitadi district of Nepal.
- This study is limited to 500 individual of different social groups of both district.
- The selected individuals are taken from the 35+ age group.
- The mean CEB is dependent, and level of education, ethnicity and level of income are taken as independent variables.

1.7 The definition of terms used in this study

The important terms used in this study are defined as follow:

i. Household or Family

It is a group of people related by blood, marriage etc, living together in the same house and sharing the same kitchen.

ii. Social groups

It refers different caste groups which are identified according to Hindu social classes. In this study, the social groups refers as:

**Brahmins:** It includes Pant, Bhatt, Joshi, Bokati, Pandey, Paneru, Kharel, Lekhak, Adhikari, Pathak, Awasthi, Koirala, Badu, Dahal etc.
**Chhetries:** It includes, Chand, Shahi, Singh, Malla, Bam, Pal, Rawal, Karki, Knuwar, Khadka, Bohara, Thagunna, Mahara, Dhami, Saud, Giri, Nath, Bisht, Pwali etc.

**Others:** It includes, Rana, Tharu, Chaudhary, Rai, Limbu, Shreshta, Sherpa, Tamang, Magar, Gurung, Yadav etc.

**Dalits or occupational:** It includes, Mahar, Tamta, Sunar, Sarki, Chunara, Koli, Damai, Dholi, Badi etc.

This division of social groups is based on Annual district development plan of Kanchanpur and CBS – Report 2062.

iii. **Educational Status**

It refers the formal educational attainment of the people. In this study, following terms are used for education:

- **Illiterate:** Those who have never attained school, non-formal literacy programme and those who have not completed primary education.
- **Literate:** It includes those individual who have completed primary level and not passed SLC examination.
- **Secondary Level:** It includes those individual who have passed SLC exam but not passed 10+2.
- **Higher Education:** It includes those individual who have passed 10+2 and above classes.

iv. **Fertility**

It refers the actual performance of birth by married couple.

v. **CEB**

Number of children ever born, it is the total of live birth plus death births of women life time.

vi. **Income**

Total amount of money earnings from different sources over the period of time is defined as income in this study. The Sources are occupational income, income from livestock, and income from agricultural product and so on.

vii. **Ethnicity**

It refers to the groups of people which is identified by common culture or caste, who have the common identity, i.e. common language, religion and place of residence etc.
VIII. Occupation: The work that provides the lion share of his/her income is defined as the occupation, in this study. The important occupations of the study area are:

Agriculture: All the economic activities which are related to cultivation and animal husbandry are included in it.

Service: All the government and private sectors permanent jobs which are related to provide service are included in it.

Business: In it all the business men are included.

Teaching: The person who are engaged in teaching and learning activities are included in it.

Others: It includes retired people, carpenters, part time job holders, mason, plumber and other people who are working in unorganized sector.
References:

11. IBID
15. IBID
24. Pandey, G.C. (1990), op. cit. p.77-78