

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Nepal is one of the land locked country in the south Asia. It is a least development country in the world, whose per capita income is only US\$ 1004. The population i.e. 21.6 present is below the poverty line (MoF, 2018). The living standards of the general people are deteriorating every year. Though large amount of money is spending from government sectors.

Public expenditure is the expense made by the public authority i.e. central government and other bodies under government to satisfy the wants of people it is for protecting the citizens economics and social welfare government expenditure for goods and services may be thought as a means of supplying services that decision makers desire to have provided in appreciable different quantities of qualities from what enterprises would supply through the market.

Public expenditure i.e. government should be invest properly in the field of income generation in Under-developed Countries (UDCs) like Nepal where the mixed economy is still alive and private sector is not much competent. The involvement of government is seen through the fiscal policy. Fiscal role of government involves the transfer of command over resources from private to public hands and their subsequent uses. The use of resource is done through public expenditure programs.

Public expenditure is one major dimension of fiscal policy. Total public expenditure is the sum of expenditure on current and capital accounts of the public sector and is by definition equal to the sum of consolidated public sector receipt. In other words public expenditure is that expenditure which is made by local and national government agencies as distinct from those of private individual's organization or firms.

The term of public expenditure refers to the investment of a state for overall development of the nation each and every nation tries to create a welfare state through its expenditure. The role and responsibility of a state greater in underdeveloped countries then is developed countries. In most of the developed countries private sector are performing the best economics activities.

In developing countries generally the private sector not reluctant to involve long term investment for building infrastructure, such as Road power, telecommunication and for the development of social sector, such as education health and drinking water because the return on such investment is not quick, so public expenditure is for such investment. The role of public expenditure is to increase the growth rate of economy more employment opportunities reducing inequalities in income and wealth and bringing regional in economy (Goode, 1984).

Education is the foundation stone for national development; it enables citizen to be self-sustained. Only literate and educated societies have achieved growth and prosperity. Nepal, having a small economy, has been focusing on developing its educational status. Central government, local governments, donor agencies, NGOs, INGOs and local communities are actively involved in education sector.

Education is a cornerstone of economic development and social development and a principle means of improving the welfare of individuals. Education increases the productive capacity of societies and their political economic and scientific institution. It helps reduce poverty increasing the value and efficiency of the labor offered by the poor and by mitigation the population health and nutritional consequences of poverty.

The main cause of poorer could not contribute in the growth is that they are deprived from the education. The World Bank report in 1980 has stressed that illiterate or scientifically unknown people not conscious about the world are untapped and unable to contribute fully in the national development education provides specific knowledge it develops the skill of logical thinking about the faiths and values and the vision.

The goal of investment in education is to utilize and accelerate the human potentiality or capability education is the major factor of human development it plays a prominent role in creating panoptic discipline and productive manpower(Aryal, 2011).

Rapid population growth is one of the fundamental characteristics of least developed countries like Nepal; growing population exerts pressure on the government for the provision of greater social services. In the education sector growth of the school going age population puts pressure first on the primary involvement and transfers to secondary and higher level education. As a result of the growth in enrolments more physical buildings more furniture etc. are to be appointed this calls for more public expenditure on education (Basnet D. B, 1983).

1.2 Statement of the Problem

Nepal has started the planning process of economic development since 1956 AD. Thus, it has crossed more than six decades of experiences but the basic issue of the country is not significantly addressed. Regarding education sector, government has been planning and investing a large amount of its annual budget even though expected results have not been achieved. So many issues in education sector have been arisen such as access in education for all parts of the society, quality of education, ambiguity in education system etc. With these brief statements, the study focuses to answer the following questions scientifically and pragmatically.

- What is the role of public expenditure in primary and secondary level education?
- How can the trend and pattern of public expenditure be analyzed in primary and secondary level education in Nepal?
- What is the trend and pattern of public expenditure in education to GDP ratio of Nepal?
- What is the share of recurrent and capital public expenditure in education?

1.3 Objectives of the Study

The overall objective of this study to analyze the trend and pattern of public expenditure in Nepal on education sector. Specific objectives are stated as follows:

- To examine the role of public expenditure in primary and secondary level education.
- to analyze the trend and pattern of public expenditure in primary and secondary education,
- to investigate the trend of PEE to GDP ratio, and
- to find out the share of recurrent public expenditure as well as capital expenditure in education.

1.4 Significance of the Study

Educational development is potentially a key factor in reducing the incidence of poverty, raising overall levels of labor productivity and economic growth and also improving the quality of life through empowering the population to take informed decisions across a wide range of activities. In Nepal, as elsewhere there is a strong

correspondence between educational attainment and individual and household earnings and between mothers' education and fertility rates, child nutritional status and morbidity. In Nepal most of the people are not yet getting educational facilities. There is great challenge to the nation to eliminate the illiteracy of the country. Only around 65 percent of people are literate out of total population above 5 years. Similarly only 69 percent of people have completed primary education but the budget allocation on education is 10.23 percent of total budget (MoF, 2018).

So, this study shows the government expenditure on primary as well as secondary level education drawing out the impact of the government efforts in education sector. This study also finds sources of public expenditure on education sector. Expressing information about public expenditure in education sector and effectiveness will be the advantage for those who are conducting their research in related topic. Academicians, professionals, and other stakeholders who are working in the field related to this topic can take benefit from this study report. So this study is different from other and occupies the greater importance. Finally, it may be helpful to the planners who are interested to design educational program of Nepal.

1.5 Limitations of the Study

The main limitations of the study are:

- This study covers a period of 12 years (FY 2005/06 to 2016/17).
- Due to time and budget constraints, detail and microscopic study couldn't be conducted properly.

1.6 Organization of the Study

This study has been organized in five different chapters as follows:

Chapter I: Introduction

This chapter deals with the subject matter consisting background of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study.

Chapter II: Review of Literature

This chapter includes a discussion on the theoretical as well as empirical aspects and evidences of public expenditure specializing in education sector.

Chapter III: Research Methodology

This chapter describes the research methodology adopted in carrying out the present research. It deals with research design, nature and sources of data, data collection procedure, tools and techniques of data collection and methods of data analysis which answers how the research has been conducted and what are the tools and techniques applied for presentation and analysis of data to draw the findings and conclusion.

Chapter IV: Data Presentation and Analysis

This chapter data with their presentation and interpretation with different statistical tools and techniques in order to draw required findings and conclusion.

Chapter V: Summary of Finding, Conclusion and Recommendations

This chapter is the final chapter which is concerned with the suggestive framework that consists of summary of finding, conclusion and recommendations of the study.

CHAPTER II

REVIEW OF LITERATURE

2.1 Theoretical Foundation

Many economists developed theory of public expenditure relating to those principles which govern the optimal provision of public goods. Mainly, “ability to pay” principle and “benefit” principles are considered in this context.

2.1.1 Pigou Approach: Ability to Pay Theory

The ability to pay theory to be used to determine the optimum level of public expenditure that has received must comprehensive treatment in hand of Pigou. Singh explains Pigou's view as goods and services which are provided by government which can be sold for fees so arranged as to cover cost of production pose no problem. The amount of resources that should be devoted to this purpose is determined automatically by public demand. Nevertheless, fees can cover neither bulk of non-transfer expenditure of government such defense, civil administration and so forth nor transfer expenditure. Hence, there is no automatic machinery to determine how far expenditure shall be carried and some other method has to be employed (Pigou, 1947).

The optimum amount of government expenditure is determined at the point at which the satisfaction obtained from last rupee spent is equal to the satisfaction lost in respect of the last rupee called upon by government service. Pigou states the condition when government expenditure would be larger. First, the greater the aggregate income of community, the larger will be the optimum amount of government expenditure. Second, under the circumstance, where new opportunities for expenditure through government are opened up with no corresponding opportunities for private expenditure, balance between marginal benefit of expenditure & marginal disutility of revenue will be struck at higher point. Third, given aggregate income and population, greater the concentration of income in hands of a few rich persons, higher the optimum level of public expenditure. It is because tax scheme can be framed as to rise revenue with lower marginal sacrifice

2.1.2 Samuelson Approach: A Benefit Principle

Samuelson developed a pure theory of public expenditure, which aimed for the optimal resource allocation in an economy in which there are two types of goods, private and public. The theory takes into account both allocation & distribution facets of the problem and thus presents a unified system of general equilibrium (Samuelson, 1955).

Samuelson considers the optimal choice between private consumption good like tea (X), and public consumption good like national defense (G), in a two-man economy (A&B). Since X is a normal private good, which is divisible in consumption; that is amount of X consumed by A cannot be consumed by B, & conversely. This can formally be stated by the condition that $X_a + X_b = X$; where, X_a and X_b represent the amount of private good X respectively consumed by A and B.

Since G is pure public good, it is not divisible in consumption. The amount of g is equally available for consumption by each person; the total amount of G is in a sense consumed equally by each. This can be stated formally by the condition that: $G_a = G_b = G$, where G_a & G_b represent the amount of Consumed by A and B respectively.

Samuelson further assumes that the tastes of A and B are constant and society's production possibility frontier as given. The condition needed for efficiency in a world of private and public good can be stated as follows:

For efficiency between private goods:

$$MRS^A = MRS^B = MRT$$

For efficiency between private good and public good:

$$MRS^A + MRS^B = MRT$$

Where,

MRT is marginal rate of transformation between X and G and MRS^A and MRS^B are the marginal rate of substitution between X and G for individuals A and B respectively.

In general case for an economy characterized by the existence of public goods, private goods and many individuals, the condition for the optimal supply of public goods.

Therefore, that the sum of the marginal rate of substitution must equal the marginal rate of transformation.

$$\sum_{i=1}^n MRS_{ijk} = MRT_{jk}$$

Where,

$i = 1, \dots, n$ (the number of individual consumers), and

$j, k = 1, \dots, m$ (the number of commodities)

So, the Samuelson's model for the optimum supply of pure public good is a general equilibrium model which determines the existence, uniqueness and stability of a set equilibrium prices of public and private goods.

2.1.3 Lindahl-Johansen (L-J) Approach: A Benefit Principle

At first Lindahl developed the theory and recently viewed by Johansen assumes a fixed distribution of income between individuals who consume a private good X and a public good G. L-J start off with the some assumptions that each individual has fixed budget constraint and the distribution of income as between individuals and group is given.

This theory concerned with the allocation of resources between the public and private sector against the background of 'state of income distribution already accepted by the community as just proper'. In the theory of welfare economics, under certain conditions when consumer and producers maximizes respectively, their utility & profit on the basis of prices which none of them can alter, conditions necessary for Pareto optimality are satisfied. Such conditions do not prevail in the 'bilateral monopoly' discussed in the Lindhal version (Methew, 1972).

2.1.4 Classical Views on Public Expenditure

Classical economists always believed in the existence of the full employment in the economy. They had a strong belief that if the resources are fully employed then the government intervention is not necessary. Thus, the classical economists developed arguments to justify the role of government and defined that areas of public wants.

Government expenditure consists of spending on real goods and services purchased from outside suppliers, spending on employment in state services purchased from administration, defense and education, spending on transfer of payments to

pensioners, the unemployed and the disable spending on subsidies and grants to industries and payments of debts and interests.

The normative orientation of public expenditure reached a higher stage through the seminal articles by Samuelson in the early 1950's. These articles viewed the concept of pure public goods something which people desired but which could not be provided through the normal market mechanism. The way the goods and services are provided insures that they will be equally consumed by citizens. That is no one can be excluded from enjoying service provided whether he pay for it or not. Samuelson work together with a larger independent formulating by Musgrave (1959) has given rise to the large and growing literature on the theory of public goods. In short, classical economists had no faith in the government activities. According to their view, the main theme of the public finance was simply to make the best of a bad lot and to allocate the burden of taxes as fairly as possible among the members of community (Musgrave, 1959).

2.1.5 Keynesian View on Public Expenditure

Keynesian theory shattered the basic foundation of the classical doctrine, when the former asserted that the competitive process of free enterprises economy does not necessarily ensure an effective demand such as to absorb all productive resources at full employment, supply doesn't operate its own demand and the economy may attain equilibrium at under-employment level.

Keynesian economics developed against the background of world depression of the 1930. The severity of decline in economic activity that occurred that time were unprecedented the unemployment rate rose from 3.2 percent of the labor force in 1929 to 25.2 percent in 1933, the low point for economic activity during the depression (Keynes, 1936).

Keynes regarded the inevitability of a positive fiscal policy. He emphasized the importance and place of fiscal policy in economic policy. At a level of an income corresponding to full employment, the gap between total income and total consumption is so high in mature economy that private investment is inadequate to fill it. If unemployment is to be avoided the gap must be filled either by government expenditure or by increasing the prosperity to consume. But, in a capitalized economy, which is characterized by wide inequalities in the distribution of income and institutional factors which make for a high propensity to save the propensity to

consume cannot easily be raised enough to have a significant effect upon employment falls on the public expenditure designed to narrow the gap between income and consumption at full employment. Further, in Keynesian view, a depression in an advanced industrial economy occurs due to the deficiency of aggregate demand. Thus, during a depression, when the aggregate spending is inadequate to achieve full employment, the government must increase spending directly by undertaking public works programs on a large scale and indirectly by inducing people to spend more (Goffman&Mahar, 1971).

2.1.6 Wagner's Hypothesis

The 19th century economists Adolf Wagner adds new dimension to the concept of public expenditure. His law was based upon historical facts. Wagner presented his former Law of Increasing State Activity pointed out the growing importance of government activity and expenditure as an inevitable feature of progressive state. He put his hypothesis on test by examining the industrialization process in various countries such as Britain, USA, Germany, Japan, and France.

The basic cause of the relative growth of government expenditure according to Wagner is Social Process. This factor necessitates in addition to the position of economic goods, including the provision of certain Social Products like communication and education. As real per capita income grow, investment in these Social Products tends to increase which helps to push up the magnitude of government expenditure. As the economy is continuously expanding, government expenditure will also tend to continuously expand (Wagner, 1890).

Among the factors making for charges in the private sector which influence public expenditure decision may be made of the four factors discussed below one by one as follow:

- **Income Effect**

One of the major factors which determine the demand for goods and services including public goods and public services is the magnitude of the flow of real income occurring to the members of the community. As this income increases the effective demand for all kind of goods and services are increases. No special problems arise in this relation between higher incomes and higher demand in the case of goods and services provided through the market mechanism. The relationship here is obvious

and straight forward higher income induced and increased demand for such kind of goods and services and the market responds to the increased demand through increase supply of goods and for increased process for these goods.

- **The Population Effect**

A second factor which has made increase public expenditure is the secular growth of population. With the growth of population and increased in the flow of real income occurring to individuals the place of urbanization has also increased at a rapid rate. This has necessitated and increasing rate of outlay on the provision of public services and urban amenities through public expenditure allocation.

- **The Urbanization Effect**

Increasing rate of urbanization, however is a major factor accounting for an ever growing rate of public expenditure. There is also the possibility of external effects of an expenditure becoming more and more widely diffused as consequences of the increase in the size of the urban community.

- **The Technical Effect**

Another development in the private sector of the economy which has been instrumental in bringing about increase in public sector activity is the nature and extends of technological innovations. Many of these innovations have been the cause of substantial increase in external effects necessitating there by increased expenditure.

Conclusion is that the increase in the real per income technological process, growth in population, rapid urbanization are the main cause of the rapid growth in the public expenditure for the provision of public goods and services in the economy.

2.1.7 Peacock-Wiseman Hypothesis

Peacock and Wiseman analyzed the process of growth of public expenditure in terms of 3 separate but related concepts of displacement, inspection and concentration effects (Peacock & Wiseman, 1961).

- **Displacement Effect**

It was during the period of emergencies or of major social disturbances such as war and depression effect by which the previous low level of expenditure were displaced by a new and higher level of expenditure during the emergencies.

- **Inspection Effect**

Association with his displacement effect is the inspections effect, which helps to review the higher levels of public expenditure forced on the public sector institutions. This effect refers to the phenomenon whereby as a direct consequence of the social emergency comes to encompass within economic and social activities which might have been the province of private sector concerning prior to period of crisis (Maddala, 2009)

- **Concentration Effect**

In the secular growth of public expenditure in Great Britain, Peacock and Wiseman discovered the influence of another factor which they call the concentration effect. It refers to the evolution of the expenditure undertaken at different level of the government and its tendency to be concentrated at the national or central level of government. The usually happens when a country is experiencing economic growth.(Rostow, 1971)

2.1.8 Colin Clark: A Critical Limit Hypothesis

Colin Clark put forth what he calls the ‘Critical Limit’ hypothesis regarding tax tolerance. Colin Clark based his hypothesis on the interwar data of several western countries. He has argued that inflation inevitably occurs when government expenditure financed out of taxed and other receipt exceeds 25 percent of the aggregate national income. This has been alleged to be true even under circumstances when the budget remains in balance. Public expenditure beyond the stipulated level will cause inflation only if there doesn’t exist initially sufficiently unused capacity of carter to the increased demand and if the additional public spending to release resources necessary to meet the requirement of increased public expenditure (Joseph & Mayer, 1992).

Theory holds that by increasing taxes and restricting credit, it is possible to cut down expenditure of the private sector and thereby to accommodate increased public expenditure by releasing sources from private use. Therefore when it is asserted the public expenditure beyond a specified limit will generate inflation it seems to imply that resolution of private expenditure and account of personal consumption and

private investment is either possible or undesirable. If any of these contentions is conceded, it will be true that additional public expenditure will cause inflation in the economy.

2.1.9 Productivity Lag Hypothesis

The Productivity Lag Hypothesis or sometimes called Baumol's *Disease* is based on the proposition of productivity differentials, while distinguishing progressive and non-progressive sectors in the economy, maintains that to keep the same output level in the non-progressive sectors in the economy, maintains that to keep the same output level in the non-productive public sectors, labor input has to be increased tremendously. As a result, public sector expansion takes place at the cost of private sector. Baumol's Cost Disease is often used to describe consequences of the lack of growth in productivity in the quaternary sector of the economy and public services, such as public hospitals and state colleges. Since many public administration activities are heavily labor-intensive, there is little growth in productivity over time because productivity gains come essentially from a better capital technology. It follows that productive gains are less likely to be experienced in the public sector than in private sector and hence there will be inherently greater labor intensity in the public sector compared with private sector (Baumol, 1967).

2.1.10 Stanly Peace Hypothesis

Stanley Please Hypothesis deals with the cause and sources of increasing government expenditure in Least Developed Countries (LDCs) with its effectiveness and overall impact on economy. According to Stanley Please public expenditure especially for consumption is driven by available resources rather than the other way around. His question is, is increasing government saving by taxation is reality or mirage? His conclusion is if government increase the tax, theoretically increases in national saving. But increasing in tax rate that implies to spend more: such expenditure is not only increased in investment but also increased in government consumption (Usman, 2014).

So, increase in national saving is mirage by the taxation. So, Please effect is relevant in developing countries. He suggested some policies in expenditure management.

- Government should be more rational and more self-disciplined in determining public expenditure policy.
- Expenditure on current activities and alternative uses of revenue should be calculated. Spending on education and health is taken as both current expenditure and capital expenditure as it provided benefit to the country after a lag of many years.
- In case of foreign loan, the productivity that it yields and the liability that the country has to pay later should be calculated and has to be used in beneficial project.

2.2 International Context

Educational expenditures to be associated with better educational outcomes such as higher enrollment rates and increased school completion. Spending more on teachers, buildings, textbooks, and other such materials might provide students with better quality facilities and learning opportunities. However, empirically vigorously debated the question of whether education expenditures do in fact improve educational outcomes (Iyer, 2009).

Ghosh and Gregoriov (2008) studied the impact of the composition of government spending on long run real growth on a panel data of 15 countries including India over the period between 1972 and 1999. They found that the current expenditure is more productive than capital expenditure because of non-optimum level of capital spending. The study concluded that the expenditure on health and education had a negative impact on the growth rate mainly by the distorted incentive structure, bureaucratic inefficiencies and corruption inherent in these economies. The study added that exiting project rather than new project are better to enhance the productivity with a given infrastructure.

In Pakistan, a study about public expenditure on education shows that the allocation funds to the education sector at various levels. At the provincial level allocations to the education sector as percentage of total budget stands between 20 to 30 percent. The major proportion of education budget is used to meet the recurring expenditures. The development expenditures, necessary to generate future national assets. The allocations of resources at the districts depict the similar picture as for the provincial level. There are no disparities between the districts on allocation of funds to the

education sector. It is, however, noticed that there is a positive correlation between the district's literacy rates and the district's allocation funds to education sector. It is recommended that to meet the EFA goals, allocations to the education sector, especially for development expenditures, needs to be enhanced (Pakistan Development Review, 2003).

Empirically public expenditure on education is more effective in improving educational outcomes in countries with good governance. Their education results are based on a sample that has 101 observations from 57 countries using annual data for 1990, 1997 and 2003. The authors capture the direct effects of governance on educational outcomes by using the governance variable, as independent regressors, and the indirect effects of Governance by interacting with the share of public primary education spending in GDP. The impact of spending on outcomes such as the primary school completion rate, and control for the level of corruption, and the bureaucratic quality of the government. In their regressions, the coefficient on primary education spending becomes significant only when the interaction term between spending and good governance is included. Thus, as the level of corruption falls or the quality of the bureaucracy rises, public spending on primary education becomes more effective in achieving primary education attainment. Overall, the public expenditure on education shows a mixed bag of results and both within and across countries (Kanel, 1988).

Theoretically, there are several reasons why such analysis may fail to detect a relationship between spending on primary education and improved outcomes. Parental investments of time or money, and a child's intrinsic motivation may be more influential than the effect of public expenditure. Also, higher expenditures may not translate into better educational outcomes in the absence of good governance or if the expenditures are used ineffectively. For increased spending to improve primary school attainment, it must be accompanied by good governance, detailed monitoring and evaluation projects, and supply-side interventions such as building new schools and classrooms within easy walking distance. Shifting educational responsibilities to lower and more localized levels, such as district level school-based management, can also improve educational outcomes. Activating community support and involving parent in primary school management can be advantageous as well (Jha&Swaroop, 2008).

Low priority according to the education sector, especially in development expenditures may cause variations in the literacy levels among various districts. It is possible that expenditures on education and literacy levels are interdependent with each other. The study shows that there exists large disparities in terms of literacy rates. Many districts which are highly illiterate and also allocates fewer budgets to education relative to others. Calculated rank correlation between the literacy level and the expenditure on education by districts came out 51 percent. Furthermore, the rank correlation test is significant at 5 percent for the two provinces. The positive and significant correlation between district's literacy rates and district's allocation of funds to education implies that without a significant increase in allocation of funds to education, for development, the attainment of EFA goals would be nightmare (Husain & Qasim, 2003).

John Black, in A Dictionary of Economist, defines Public Expenditure, *as* the amount of money spending by government at any level. It is necessary to note out payments by and levels of government to another for example central government grants to local authorities. Government expenditure consists of spending on real goods and services purchased from outside suppliers spending on employment in state services such as administration defense and education; spending on transfer payments to pensioners, unemployed, and disabled citizens, spending on subsidies and grants to industry and payment of debt interest (Black, 2002).

There are numerous factors for the education development. One of these factors is the massive investment given to education. The efforts to expand educational opportunity and upgrade its quantity will come to no avail if the process is not accompanied by a commensurate increase in investment. The share of government budget allocated for education was 20.9 percent in 1983. Putting together public and private costs of education, total expenditure on education accounts for 10 percent of GNP as compared with 6 percent given to the national defense budget that constitutes the supreme concern of the Korea. The percentage of school population to total population and that of education budget to GNP, education deserves recognition, as an industry there is a tendency to call it The Fourth Industry. This tendency is a global trend consequently; there is a growing concern for the accountability of education and its spillover effect on the society. So, scholars are increasingly interested in the effect of education on the economic analysis of a nation (Young, 1986).

The World Bank (WB) presented an estimation of public spending on education as a percent of gross national product (national effort cost indicator) and public spending on education as a percent of total government spending (fiscal effort cost indicator) of selected Asian countries i. e. Bangladesh, Bhutan, China, India, Indonesia, Korea, Malaysia, Nepal, Papua New Guinea, Philippines, Sri Lanka, and Thailand. This study found that the regional coverage of national effort cost indicator for all thirteen countries was 3.3 percent in 1985 and it had been rising over the years. Regarding fiscal effort cost indicator, a general observation was that no country in Asia had a value of more than 20 percent for the same year below this limit the indicator varied widely ranging from a low of 7.3 percent in Bhutan to 19.4 percent in Thailand (WB, 1992).

The World Bank about Nepal showed that total expenditure of Nepal on education ranged between 2 percent to 2.3 percent (average 2.1 percent) as a share of Gross Domestic Product (GDP) during the period 1988-1992. This study concluded this percentage value as a low one while compared with the average 3 percent for Asian countries and about 4 percent for developing countries during the same period. This study also estimated that education expenditure of Nepal averaged closes to 10 percent of government expenditure for the same period (WB, 1994).

In this context, the study expressed the view that this expenditure was somewhat lowest than the average standard of Asian countries 12.5 percent and much lower than average standard of developing countries. The study admitted that education sector was under funded in view of high illiteracy levels and the low enrolments rates (WB, 1994).

The World Bank accomplished the expenditure review of Nepal in five volumes. Third volume is concentrated to the social sector expenditure. The central purpose of this report is to assess the extent to which the government of Nepal is spending public money including development assistance in an appropriate and effective way to provide education and health services and to develop recommendation for increasing the benefits from these investments. The education system in Nepal is one of the youngest in the world and operates within a political democracy which has been established only recently overall which enrolments and access to all levels of the system have improved dramatically over the past four decades, there is a general concern over the quality of schooling, low participation and retention rates and higher

examination failure rates at each level evident in that the public education system (WB, 2000).

A study of public expenditure on education in India, found that the foreign participation in education, it is difficult to estimate the total size of foreign aid in education through the different budgets. It enters the flow of funds as a part of plan expenditure through the central budget and is provided both for state plan projects and for centrally sponsored schemes. For the former, central government receives foreign aid and transfers a part through Additional Central Assistance to the state budgets. There is also a significant portion of foreign aid which does not flow through the government budgets. These are funds both from foreign governments as well as from foreign private non-profit agencies (Oxfam, Action Aid, etc.). It is difficult to estimate the absolute size of this form of aid, this is not only limited to the Indian context only which is similar to our country (Nepal) also as these often do not exclusive fund education interventions, but rather a combination of interventions of which education aid an important component (De & Endow, 2008).

Goolsbee (1998) investigated the impact of government's research and development spending in the USA. He found that the major proportion of the Government research and development spending crowd out private spending by rising wages and reduction in the total labor force in this sector. The study concluded that research and development can be an inventive activity rather than a chance for windfall gains to the research and development workers.

Hong and Ahmad (2009) investigated the impact of public goods such as education on the per capita income and poverty reduction in India. The study results show that Government expenditure on education and health had a large and positive significant impact on per capita income with substantial reduction of poverty in India.

Tilak (2004) evaluated the impact of public subsidies on education in India. He found that the subsidization helped to create a large reservoir of scientific and technical personnel. He added that the fee subsidies and other specific subsidies are very effective but inadequate to meet the needs of poor people. The study concludes that the percentage of students receiving free education systematically declined at higher level of education.

Taylor (1961) discussed the significance of the public expenditure stressed the expansion of government had often been characterized a movement in the direction of socialism that government obviously tended to socialize through public expenditure. It helped to correct the disorder that had created by cyclical fluctuation which mostly appeared during the depression. "Public works projects and landing functions during the depression were in statute to cushion the effects of the worst feature of capitalism – its recurrent tendency to break down". "Pump-Priming" the injections of public expenditure to fill a void left by deficient private expenditure in recession has as its goal the prevention of serious break down.

Due and Friedlaender (1973) concerned with public expenditure of U.S. for the decade 1963 to 1973 analyzing the magnitudes of government activities. Defining the pure public goods, they suggested that activities relating to the provision of these goods should be exclusively handled by public sector. By their nature, these goods be can't provide by private enterprises, i.e. national defenses. On the other side, increasing demand social services such as education, health, drinking water, in both developed and developing countries, the government has to invest in law enforcement and justice, fiscal management and operation of the executive department which clearly lies in to the part of public goods; causes a great volume of expenditure to the government.

United Nations (1979) examined the patterns of government expenditure on social services in developing countries, developed market and centrally planned economies in the 1970's. The available data on public expenditure for education, health, social security and welfare and housing are analyzed. And the silent factors and policies shaping the evolving pattern of expenditure are reviewed. Patterns of government expenditure on social services in the developing countries and the policies are reflected to add fresh emphasis to the need for considering the provision of social services as a part of the integrated process of raising level of well-being. The attempts of several governments to provide primary education to everyone may not be hampered so much by the lack of resources in education school and teachers, discrimination against females and the absence of transport facilities or sufficient income in the family to buy necessary things and for a child to attend school. This concern is an integral part of the changing perceptions of development that have attracted the attention of governments in most of the developing countries.

Tait and Heller (1982) provided a comparable framework for comparison of both functional and economic expenditure pattern of countries having similar economic and demographic position. It further provided an implicit technological norm for predicting the economic characteristics of a country's expenditure pattern, based on its choice of priorities for functional expenditure. They concluded that, first many international cross section studies of government revenue and expenditure used per capita income as a proxy for most of the underlying demographic, social and economic differences, yet it is striking how uncertain per capita income is as an explanatory variable. Second, it is encouraging to note how plausible the modeled relationships are, it is also reassuring to see how most of the expenditure indicates for individual countries performances and attitudes. Third, the technical coefficients functional categories that determine economic categories of public expenditure are powerful and suggestive. Fourth, there appeared to be clear support for the hypothesis that the majority of governments spent excessive amounts on wages relative to amounts had spent on goods and services; some country do appear to overspend on wages relative to other goods and services – some do not. However, a clear bias was evident toward greater than expected current expenditure relative to capital expenditure in Africa and in industrial countries; the same regions spend more than expected on subsidies relative to wages.

Finally, without a doubt, this study has provided departure points for discussions and assessment of government expenditure policies in individual countries.

Basanti (1990) discussed some of the public expenditure management measures that were included fund supported structural adjustment. It had briefly outlined that the central role of the fiscal programs and their interaction with structural policies, the key area where measures were taken to strengthen public expenditure management in SAP programs. This paper also addressed the question of the degree of effectiveness on such system and process reforms in an attempt to highlight problem areas that may need to be taken into account in the design and implementation of PEM measures. He concluded that during programmer implementation, managing scarce resources in the public sector has often been the critical test to make or break programmers. Public expenditure management issues have usually been most pressing either because domestic resources have been slow to improve or because growth has not yet materialized; in which case, accommodating political pressures for expenditure may

be financially destabilizing and constituting a serious setback to the adjustment efforts.

Premchand (1990) emphasized to the importance of expenditure controls on the context of growing fiscal problems. And the study provided solution to current and future fiscal problems that it required a combination of policy measures and improvements in controlling techniques and procedures. Although, the exact combination of such policy measures and improvements depends on the scientific situation and type of expenditure, the study mainly devoted to considering the nature of expenditure controls, practices, current problems and future direction. Expenditure controls essentially reflect a managerial process that includes the political and administrative levels, horizontal and vertical relationships within government organization. This study illustrated the continuing need of a regular review of the strategic, institutional and systematic approaches to expenditure controls. Indeed their effective contribution depends upon updating their capability and on eliminating weakness. He concluded that there is an important aspect related to the balance between policy measures and control techniques. An absence of restrictions on subsidies or less specific policies for entitlement payments can hardly be expected to be compensated for by stringent controls. Pragmatic approaches to control should be realistic in policy measures, the role of control and techniques and their mutual complementarily.

Andrews (2005) concerned with introducing incentives for fiscal producing in developing countries through the budgeting process. He observed that, some governments have shown interest in reforms aimed at establishing result oriented budgeting approach. The emphasis on result of performance in the budgeting process has reflected a belief that public sector accountability should focus on what government does with the money it spends, rather than simply how it controls such expenditures. It is suggested that there are three reasons why reforms still has a way to go in establishing performance based accountability system in governments. First, even though performance based targets are now being developed, they are generally kept separate from the actual budget. Second, performance information suffers weakness commonly allowed to be in literature related to other settings. Outputs are confused with inputs and outcomes remain unconsidered. Third, the lack of rational construct in the budget itself. Even where effective performance based targets are

provided, this kind of system commonly fails to specify who should be accountable for results. He concluded that all countries intent to developing a performance based budgeting approach need to understand the sequences involved in introducing result based governance and to know general points for effective reform, because bad performance based reform is probably worse than a good line-item budget.

Schroeder (2007) reviewed the rationales for and techniques available to local government financial managers for forecasting revenues and expenditures in developing and transitional economics. It illustrated how the techniques can be used and buttresses that discussion with illustration of how they are actually used.

Several techniques have been used to forecast both revenues and expenditure. They range from simple judgmental approaches that rely on the knowledge of experts to more sophisticated multivariate statistical technique. For forecasts of revenues that are sensitive to economic conditions, statistical forecasting methods may be most appropriate. But statistical analysis requires considerably more data and forecaster expertise than the alternatives time trend analysis and deterministic approaches. This study revealed that the most commonly used approaches are deterministic approaches in which forecasts of revenues of expenditures are based on simple links to variables assumed to directly influence revenues and expenditure

2.3 Nepalese Context

High Level National Education Commission (UchchastariyaRastriyaShikshaAayog) showed the government increased resources allocation to basic and primary education from 45 percent in FY 1992/93 to 55 percent in FY 1996/97. For secondary education (grade 6 to 10), including vocational and higher education (grade 11 and 12), the government increased the financing resources from 18 percent to 24 percent during the same periods. However, the government decreased the percentage share of higher education over the same period from 28 percent to 19 percent (URSA).

Historically showed as the Nepal's education large numbers of the school are managed by general people. According to Education Act and Rules, it has been made provision of management committee to mobilize the members of related community by which they can collect he fund for suing the necessary management aspect of their school. But, this strategy of managing the school is fully dependent on the efficiency and effectiveness of the local community.

Policy and program of government of Nepal to encourage the communities for their involvement to strengthen the physical facilities of the schools. This policy is still being pursued and some contributions to rehabilitation and building of primary schools have also been made by the BPEP (Basic and Primary Education Program). The project has provided support (financial and technical) for 60 percent of the cost of rehabilitation. The local community mobilizes the remaining 40 percent of the cost. The BPEP program has made provision for supporting school rehabilitation on cost sharing basis (MoE, 2000).GoN has taken such type of policy to strengthen school level education.

Policy objectives for education has also focused on expanding and developing quality education and producing an internationally competitive human resource for supporting the national economy enhancing social development and contributing to poverty reduction and has also emphasized implementing program on literacy, post literacy, income oriented, and informal education useful for living will be conducted as a campaign focusing on the targeted groups in particular the women, dalits, adibasi-janajatis, madheshi community, people with disability and those affected by the conflict in increasing their living standard. More specifically, it is focusing on the basic and primary education (Three Year Plan, 2007/08 to 2009/10).

Adhikari analyzed the regional disparity in education and health facilities in Nepal. The study objectives include to identify the level of disparity in development regions referring to education and health facilities. He concludes that the main disadvantaged region is Far Western Development Region and Mid-western Development Region as compared to the Central Development Region. On the average the distribution difference of Far Western Development Region must be multiplied by 3.34 to reach to the distribution of Central Development Region. He gives the recommendations that regional imbalance must be reduced and new program strategy must be introduced for the disadvantaged region and promotes decentralization. He also suggested proper management of resources available (Adhikari, 2004).

Koirala (1979) found that public expenditure of Rs. 330 million in the first five-year plan has increased 30 times to Rs. 11404 million in the fifth five year plan. In the study period of 1956/57 to 1979/80, the growth rate of development expenditure was higher than the growth rate of regular expenditure despite the slower growth rate of country's GDP. He found that low per capita income due to the higher growth rate of

population had caused to low level of saving and investment. He also noticed the low corporation and personal saving.

Basnet (1983) figured out that amount of public expenditure had increased 100 times in between the first plan to sixth plan. In the study period of 1970/71 to 1981/82, the percentage of foreign grant decreased from the third plan to sixth plan period, but the percentage of foreign loan increased in relation to the total external assistance. His study of the period of ten years also showed the higher growth rate of development expenditure than the regular one.

Khadka (2002) concluded that the public expenditure has increased primarily due to increasing role of government. He found that the share of total expenditure in GDP was 9.1 percent in FY 1975/76, which increased to nearly 21 percent in FY 1994/95. He noticed the pattern that the regular expenditure covers 34.8 percent of the total expenditure and the remaining 65.2 percent in development expenditure on average of study period. On the empirical basis, there was found a strong relationship between total expenditure and country's GDP. In the same way, regular expenditure was quite strong with regard to total revenue while the development expenditure was found to be associated with foreign aid. He strongly suggested reducing the consumption type of expenditure to increase the amount of investment expenditure.

Upadhaya (1981) made a study regarding resource allocation practices, observed that large amount of public expenditure has centered on the central development region in the study period of FY 1972/73 to FY 1977/78. He found that the volume of development expenditure is increasing rapidly, though it has not affected for the overall economic growth of the country and thereby the standard of living the per capita income. He concluded that the resource allocation practice were only growth promoting rather than balanced regional development.

He also noticed increasing development expenditure during his study period but contributing to low rate of economic growth. Consequently, the standard of living along with per capita income did not increase as per expectation. His another finding was that government expenditure mainly confined to the infrastructure development rather than the basic needs of people.

B.C. (2009) confined to the analysis of trend and pattern of public expenditure and impact of public expenditure on GDP during the period 1991 to 2005. B.C. observed

that the trend and pattern of public expenditure threaten the fiscal discipline and management. The regular expenditure has surpassed the development expenditure as against the accepted fiscal norms. Development expenditure exceeds the regular expenditure until FY 1997, than after it is lesser than regular expenditure. The very slow process of structural change, low rate of capital accumulation and non-significant change in employment pattern indicate that Nepalese economy has not been still able in advancing towards sustained growth. B.C. also has presented the various conceptual ambiguities in classifying the budget. He has explained that public revenue is growing slower than expenditure leading to the widening resource gap. This gap is further extended by the weakness of government toward strong commitment, clear vision and sufficient assessment necessary to choose programs and to allocate budget for them in Nepal. He has given several suggestion to improve the performance of the public expenditure such as reduce consumption type of public expenditure in order to promote capital accumulation, to allocate scarce resources on core priority areas, ensure greater realism in resource forecasting to streamline the development budget.

Khanal (1988) examined and analyzed the growth pattern and impact of public expenditure on the basis of time series data of Nepal over the period of 1965 to 1981. He has analyzed public expenditure growth through both supply and demand oriented factors such as targeted income, internal revenue and foreign aid in order to reveal the likely impact on country's long term development. He found, between fiscal year 1965 to 1981 that public expenditure has increased many folds in relation to country's GDP. The public expenditure increased by 8.42 percent per annum on the average whereas the gross domestic product increased by only 2.04 percent during the same period. During the period, regular, development and public investment expenditure have increased by 8.66, 8.59 and 9.08 percent. Public expenditure share was 5.5 percent in 1966, whereas it rose to 15 percent in 1981. He concluded that the major expansion of the public expenditure had taken place only after 1970. He found that the elasticity coefficient for total expenditure development expenditure, economic services and social services with respect to per capita income being more than unity. At the same time, his findings was that the elasticity coefficient for the public investment being less than unity.

Upreti (2002) emphasized on the performance of public expenditure of Nepalese economy and also assisted in the preparation to develop further policies to reform fiscal weakness. For testing the performance of public expenditure t-test and f-test have been used. In the both tests he found that there is no significant difference between budgeted and actual public expenditure in practice, even if variation exists.

He regarded that input output Model is one of the appropriate Model for judging the performance of public expenditure, however, other to the data constraint, it is difficult to employ this model in assessing the degree of deviation in relationship between targeted and actual public expenditure of Nepal.

He has found both demand and supply side factors contributing to the rapid growth of public expenditure in Nepal. He has explained that public revenue is growing slower than expenditure leading to the widening resource gap. This gap is further extended by the weakness of government towards strong commitment, clear vision and sufficient assessment necessary to choose programs and to allocate budget for them in Nepal. This increases the share of foreign aid in development expenditure to bridge the resource gap.

He was given several suggestions to improve the performance of the public expenditure such as to allocate scarce resources on core priority areas, to promote local ownerships of the government expenditure program for improving the effectiveness of the government spending.

Lohani (1993) analyzed the trend of public expenditure, government revenue and problem of resource mobilization. He has concluded that the public sector is draining a private saving towards unproductive regular expenses instead of channelizing it towards productive investment in the study period of FY 1974/75 to 1990/91. In spite of a tremendous increase in the size of public sector, it has failed to generate surpluses required to finance, generate and sustained the process of development. Nepal's external dependence has risen alarmingly, he has argued that the continuous extend of budget without evolving medium and long-term investment planning and expenditure programming has delinked planning with annual budgeting for more resources have been allocated to capital items. Both macro and sectorial planning have been found to be weak due to absence of rigorous cost benefit analysis and programmed budgeting, three decade of planning have failed to substantiate a long

term perspective plan with the view to maintain consistency among macro and sectorial physical targets on the one hand and insure necessary to the sectorial programmed on the other hand.

Basyal (1994) carried out a research about growth of development expenditure of Nepal in different plan periods and sources of financing it. He has underscored the dominance of foreign capital in Nepal's plan financing. During the fifth (1976 to 1980), the sixth (1981 to 1985) and the seventh (1986 to 1990) plan periods, foreign grants and loan financed the total development expenditure of the extent of 47.3 percent, 48.1 percent and 59.5 percent respectively. This has clarified an upward trend in the reliance on foreign resources and consequently the downward share of revenue surplus in meeting the development expenditure.

NPC (2002) reviewed the 9th plan. During the ninth plan period, the government expenditure of Rs. 27846.8 corers over the targeted expenditure of Rs. 33729 corers at the constant price of 1996/97, created the expenditure gap of 17.4 percent. During the ninth plan period there has been annual average increase of 9.3 percent in the regular expenditure. During the plan period the development expenditure had been decelerating by 1.1 percent annually. The share of development expenditure force to limit it to 46.9 percent during the plan period. The targeted expenditure on economic services, infrastructure, and social services and miscellaneous was 29.4, 36.3, 33.4 and 0.9 percent of the development expenditure respectively. The actual figure turned out to be 22.7, 35.7, 39.9 and 1.7 percent respectively. The expenditure in productive sector especially on miscellaneous heading has exceeded the target, which the expenditure on productive sector like economic services and infrastructures has remained below the target.

Pyakuryal (2004) asserted that the Nepalese economy has lost its productive capacity to respond the sustained growth following the government expenditure pattern. He found the ratio of regular expenditure to GDP in FY 1996/97 was 8.6 percent but increased to 11.5 percent in 2001/02. The revenue during the same time period decreased from 7.3 in FY 1996/97 to 7 percent in 2001/02. Development expenditure also declined from 9.5 to 7.5 during the same period. Analyzing this pattern he recommended for contractionary fiscal policy rather than expansionary one during war period.

Karna (2007) emphasized on the performance of public expenditure of Nepalese economy. According to him, Nepal has completed more than fifty years of its budgetary history. This period is not sufficient to change the poor economic condition of this country but this period would be very significant to lead the economy into the progressive path of economic development. Though Nepal embarked on economic development very late, only in the 1950s and since the considerable public resources development with not worthy progress has been initiated in many years. Government spending on an average is high. Nevertheless, there is considerable evidence that a large amount of these resources has been misspent, which led the incidence poverty around 31 percent particularly in the rural areas where 85.80 percent of people live. In addition to poor use of public resources, Nepal has also been unable to implement a policy framework conducive to high level of economic growth. Although a brief period of economic reform led to a significant acceleration of the economic growth to about 5.6 percent in the early 1990s and since then the growth rate has decelerated to 3.9 percent in the mid-to-late 90s, 2.8 percent in Fiscal Year (FY) 1998/99, 0.6 percent in FY 2002/03, 3.4 percent in FY 2003/04 and 2.4 percent in FY 2004/05.

Shrestha (2009) asserted a mix of public spending could lead to a higher steady-state growth rate for the economy. Based on the model, the empirical model suggests that expenditure on physical infrastructure is productive in Nepal but its share is declining in slow growth of per capita income. In this context, it would be better to allocate more resources to develop physical infrastructure in Nepal, which not only facilitates private productive activities, but also generates employment in the economy for the mass unemployment.

Timilsina (2010) found that the trend of public expenditure is increasing manner. Development expenditure has increased faster than regular expenditure from 1987 to 1997. There after regular expenditure has increased more than its development expenditure. The major portion of regular expenditure made in debt service payments, maintaining law and order and providing salary to civil servants. He further examined the positive relationship between total import and total government expenditure.

Sharma (2013) examined the role of public expenditure in GDP growth. According to her, the share of development expenditure in total expenditure is in decreasing rate. The share of regular expenditure on the total expenditure at the beginning of the study period was 37.49 percent where development expenditure was 62.51 percent. But at

the end of the study period, the share of regular expenditure on total expenditure was 73.3 percent where development expenditure was only 26.7 percent of the total expenditure. It shows that there is very low share of development expenditure on total expenditure. She also argued that in Nepal, many development projects are conducted under the foreign aid. The donor agencies are also involved in the decision making process. On the other side, plans are made in ad-hoc basis. We have to depend upon foreigners for fund as well as skill work force too. Ad-hoc plan, political instability, lack of capital and geographic constraint are the major difficulties for the implementation and completion of the projects.

Subedi (2013) found that the trend and pattern of public expenditure threat on the fiscal deficit and management. The regular expenditure has increased faster than development expenditure after 1997/98. She also examined the regular expenditure is highly responsive to GDP. Whereas, development expenditure is least responsive to GDP implying that it does not grow at the pace as much as increase in GDP.

MoF (2014) examined the total government expenditure in FY 2013/14 is estimated at Rs.517.24 billion. Of this, 68.3 percent has been allocated to recurrent, 16.5 percent to capital and 8.1 percent for repayment of principal and the rest for share and credit investments. Government's actual expenditure in FY 2012/13 stood at 358.63 billion. Of this amount, 69 percent accounted for recurrent, 15.2 percent for capital, 9.8 percent for repayment of principal and the rest for share investment and loan. Expenditure trend and its structural analysis of past few years show that the share of recurrent expenditure to the total expenditure is on declining trend while capital expenditure recorded growth but not to significant level. The recurrent expenditure that hovered around 72 percent of the total expenditure in FY2009/10 declined in its succeeding years and got confined to 68.3 percent in the FY2013/14. In FY2011/12, about 6 percent of the total expenditure was spent on principal repayment against domestic and foreign loans while it grew to about 10 percent in FY2012/13. Its share in the total expenditure increased due to 216 percent increment in principal repayment of domestic borrowing in comparison to that of previous fiscal year. The average growth rate of aggregate expenditure between FY2010/11 and 2011/12 stood at 11.4 percent, while expenditure in the FY2013/14 recorded a higher growth rate.

Government of Nepal (GoN) conducted a report; Nepal Education Figure-2006: that indicates the last five years between the 1999/00 to 2003/04, percentage of the

national budget allocated to education has fluctuated from a low 13 percent to high 15.2 percent. The studies build on past studies and survey of selected all districts municipalities and Rural municipalities. This report shows there has been substantial increase are the years in total government expenditure on education.

In the case of Nepal, the expenditure on education is increasing gradually every year, but unitization of resources is very poor. According to budget speech FY 2009/10, government allocated 16.27 percent act of total budget which is huge amount of total budget. It shows that the government increased resources allocation to basic and primary education.

A study of University of Western Sydney has investigated the revenue and expenditure behavior of the Nepalese government in the presence of aid flows. Study found that per capita aid, per capita revenue, per capita development and non-development expenditure are all co-integrated. The results also show that aid positively affects both development and non-development budget in long run. However, since aid is mainly given for development expenditure may indicate aid fungibility. This is in line with findings for most developing countries. However, aid is positively related to revenue in the long-run. Relevant to this may be aid in the form of technical assistance to improve tax administration and the efficiency of tax system. That is, government expenditure programs influence aid disbursement, and aid is needed to cover the shortfall in revenue. This implies that aid is generally used as revenue I the government budget. That is, aid flows can relax government budget constraint, and there is no evidence that aid flows reduce revenue efforts. Finally, while foreign aid is an important source of revenue. Nepal should be able to improve and broaden its domestic sources of revenue. Aid can help in many ways. Most significantly, Nepal's aid dependency can be reduced through linking aid-financed projects to an improved domestic revenue mobilization capacity (Bhattarai, 2007).

2.4 Research Gap

Different theories have examined and analyzed the role of public expenditure in on economy. Classical economists say resources are fully employed. There should be no government intervention. Keynes say employment depends upon effective demand. Deficit could be on effective at the time of depression in lifting the economy upward. Pure theory says amount of resources are determined automatically by public demand.

Even classical economists did not give more emphasis on public expenditure but later on after the Great Depression of 1930s, it came on light. Many economists suggest that government spending is necessary in economy. After the Great Depression of 1930s many economists had laid more attention on the field of public expenditure.

The trend in public expenditure still has their relevancy with respect to their theoretical justification for the optimal provision of goods in the economy consisting both private and public goods. The hypotheses of different economists help the planners and the policy makers to observe the different effects of public expenditure in the economy in different sectors. They help the planners to know before what happens when public expenditure is low or high in the economy.

In conclusion, various finding have examined and analyzed different types of studies with their own limitations and scope. Some are concentrated mainly in social sectors, some are in the impact of public spending in various sectors and some are concentrated in pattern and growth of public expenditure. After reviewing relevant literature in the context of Nepal, this study is trying to fill the gap of unanswered questions about public expenditure in education sector with scientific way with different appropriate tools and techniques. It's a tiny work of research among total works under this issue that have been conducted till the date.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

This study follows the descriptive and analytical research design. That means, the research work tries to answer with facts and scientifically manipulated information after describing and analyzing those facts and information. So, the study tries to answer those research questions in simple way.

3.2 Nature and Sources of Data

The nature of the research study is descriptive as well as analytical. Secondary data have been used which have been collected from different concerned sources. Different sources of relevant data are listed below:

- Different published materials by Ministry of Finance (MoF)
- Different published materials by National Planning Commission (NPC)
- Different published materials by Central Bureau of Statistics (CBS)
- Different published materials by Ministry of Education (MoE)
- Different published materials by Department of Education (DoE)
- Different print medias
- Books, Journals, Research Articles of concerned issue
- Previous research works
- Previous theses on concerned topics

3.3 Data Collection Procedures

All required data have been gathered or collected from concerned authorities through visiting their respective websites and collecting some available hard copies of published materials. Additional data have been made available from relevant books, journal articles, print media, concerned previous research works etc.

3.4 Tools and Techniques of Data Collection

Tools and techniques of data collection of this study have been used various respective websites, relevant books, journal articles, print media, concerned previous research works and collecting some available hard copies of published materials.

3.5 Methods of Data Analysis

The study based on the secondary sources of data as stated above in data sources and information processing of obtained data will be done in computer using application programs like MS – word, MS – excel, etc. the data collection from various sources and analyzed by using various tools like percentage, pie chart, bar- diagrams, graphs, tables etc. according to the need of our study.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.1 Role of Public Expenditure in Primary and Secondary Education

Following analysis covers the role of public expenditure in primary and secondary education in Nepal.

4.1.1 Public Expenditure in Education and Number of Community Schools

GoN has been spending a large portion of its annual budget in education sector with keeping higher priority of educational development. In this study, impacts of public expenditure in education sector has been analyzed with some data or variable published by government and its organs and agencies concerning education. This sub-topic will make clear regarding public expenditure and number of community schools in duration of sampled period. Related data presentation and analysis has been made below:

Table 4.1: Public Expenditure in Education and Number of Community Schools

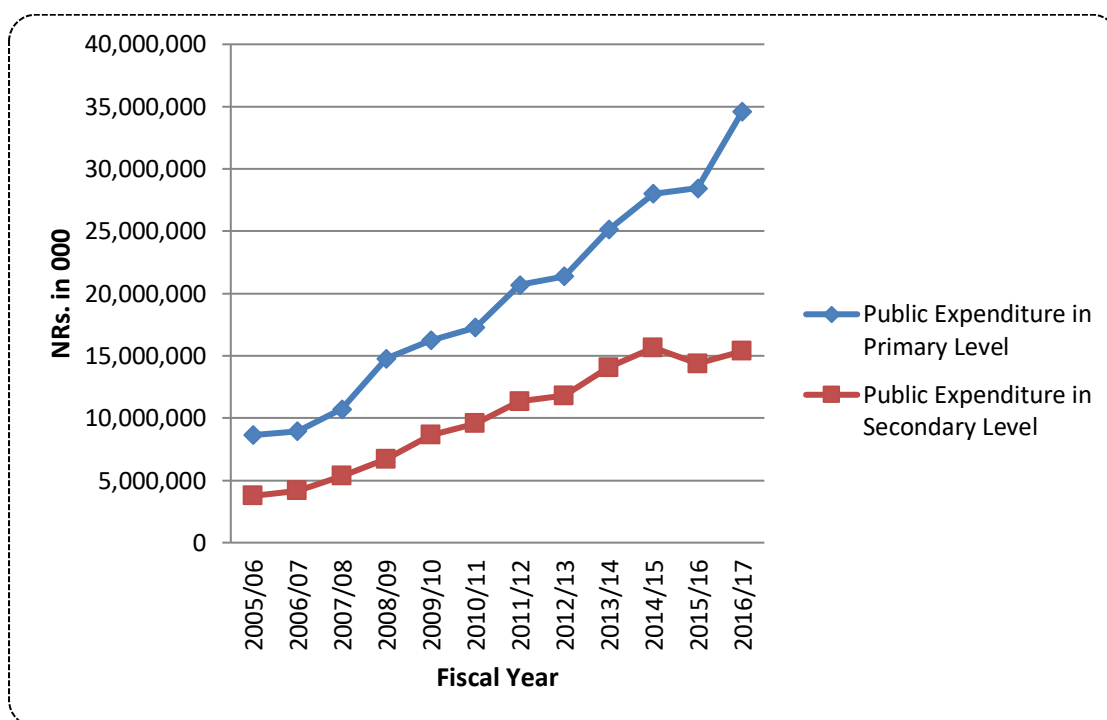
(NRs. in '000')

FY	Public Expenditure in		Number of Community Schools			
	Primary Level	Secondary Level	Primary Schools	Lower Secondary Schools	Secondary Schools	Higher Secondary Schools
2005/06	8,634,690	3,754,447	21,276	5,744	3,135	NA
2006/07	8,941,561	4,167,863	23,791	6,464	3,566	NA
2007/08	10,709,060	5,352,466	24,407	6,995	3,876	699
2008/09	14,773,926	6,701,234	26,799	8,147	4,428	1,336
2009/10	16,244,114	8,631,821	26,375	8,413	4,715	1,767
2010/11	17,273,173	9,565,832	27,093	8,823	4,946	1,878
2011/12	20,686,197	11,325,259	28,075	10,431	5,525	2,495
2012/13	21,372,222	11,790,045	28,300	10,809	5,790	2,643

2013/14	25,129,471	14,046,223	28,980	11,106	6,011	2,650
2014/15	28,007,953	15,645,538	28,098	11,056	5,990	2,664
2015/16	28,457,369	14,375,108	27,950	11,187	6,140	2,698
2016/17	34,578,200	15,362,700	27,792	11,293	6,230	2,719

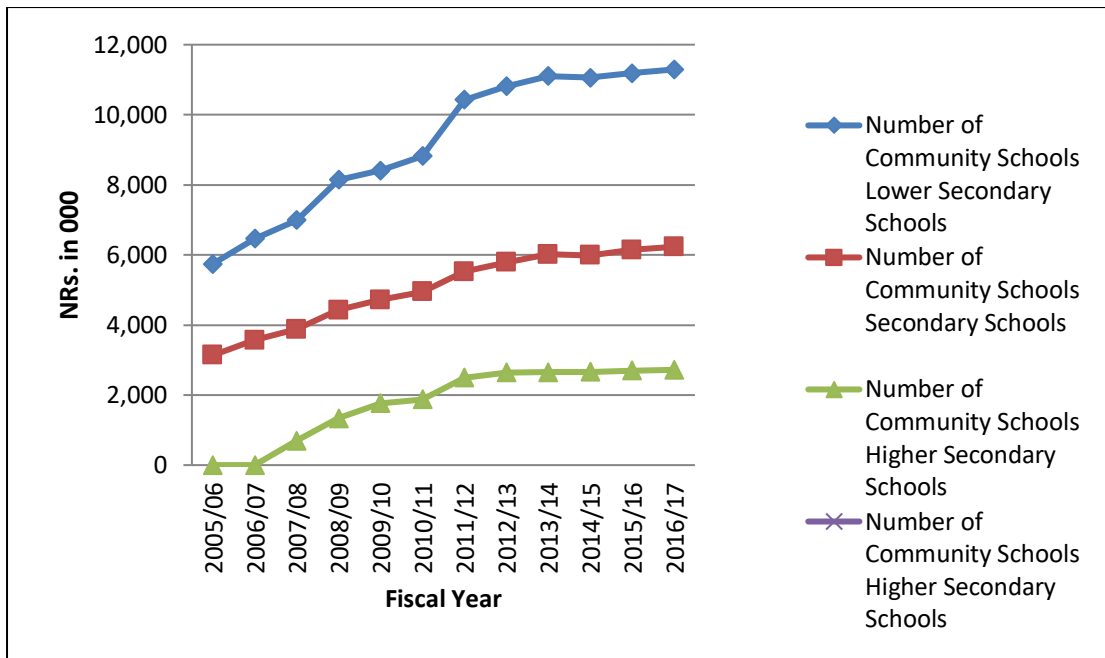
Source: Department of Education, (DoE, 2017)

Figure 4.1: Public Expenditure in Education



Source: Based on Table 4.1

Figure 4.2: Number of Community School



Source: Based on table 4.1

Table 4.1 and figure 4.1 show that public expenditure for primary level education has been growing in each fiscal year. In succeeding fiscal years after FY 2005/06 up to 2016/17, public expenditure has been growing as NRs. 8,941,561,000, NRs. 10,709,060,000, NRs. 14,773,926,000 NRs. 16,244,114,000, NRs. 17,273,173,000, NRs. 20,686,197,000, NRs. 21,372,222,000, NRs. 25,129,471,000, and NRs. 28,007,953,000 NRs.28,457,369,000,NRs. 34,578,200,000 respectively.

Table 4.1figures 4.1 and figure 4.2shows the government has been increasing public expenditure in primary education, number of community schools that provide primary level education has also been increasing gradually. In FY 2005/06 the number of primary schools is 21,276. For other three succeeding FY 2006/07, 2007/08, and 2008/09 the number is growing as 23,791, 24,407, and 26,799 respectively. In FY 2009/10, the number of primary schools has slightly decreased and become 26,375. Again, for further four succeeding FY of 2010/11, 2011/12, 2012/13, and 2013/14 it is growing as 27,093, 28,075, 28,300, and 28,980 respectively. But, in FY 2014/15, 2015\16, 2016\17 the number of primary schools seems to be decreased to 28, 098, 27, 950, and 27,792 due to merging process of schools.

Table 4.1 and figure 4.1shows that public expenditure for secondary level has also been growing in each FY. In succeeding FY after 2005/06 up to 2016/17, it has been growing as NRs. 4,167,863,000, NRs. 5,352,466,000, NRs. 6,701,234,000, NRs.

8,631,821,000, NRs. 9,565,832,000, NRs. 11,325,259,000, NRs. 11,790,045,000, NRs. 14,046,223,000, 15,645,538,000, 14,375,108000, and 15,362,700000, respectively.

Table 4.1, figure 4.1 and figure 4.2 show that the number of lower secondary schools has been increasing. In FY 2005/06, it was 5,744, similarly, growing for each succeeding fiscal years up to 2013/14 as 6,464, 6,995, 8,147, 8,412, 8,823, 10,431, 10,809, and 11,106 respectively. But, in FY 2014/15, number of lower secondary schools seems to be decreased to 11,056. Similarly growing for each succeeding FY 2015/16, 2016\17 as 11,187, 11,293 respectively.

Table 4.1 figures 4.1 and figure 4.2 shows that the number of secondary schools has also been increasing. In FY 2005/06, it was 3,135, in FY 2006/07; it became 3,566, similarly, growing for each succeeding FY up to 2013/14 as 3,876, 4,428, 4,715, 4,946, 5,525, 5,790, and 6,011 respectively. But, in FY 2014/15, number of secondary schools also seems to be decreased and reached 5,990. Similarly, growing for each succeeding FY up to 2015/16 and 2016/17 as 6,140, 6,230 respectively.

Table 4.1, figure 4.1 and figure 4.2 shows that the number of higher secondary schools has also been increasing for each fiscal year. Data for some FY 2005/06 and FY 2006/07 are not available. The number of higher secondary schools from FY 2007/08 to 2016/17 is 699, 1,336, 1,767, 1,878, 2,495, 2,643, 2,650, 2,664, 2,698 and 2719 respectively. Higher secondary schools are not fully funded by government.

4.1.2 Public Expenditure in Education and Number of Teachers in Community Schools

Following table and figure show government expenditure in primary and secondary education and number of teachers in primary level education and secondary (including lower secondary, secondary and higher secondary) level. As there are three types of community schools such as fully aided community schools, partially aided community schools and managed community schools, following data include all types of community school teachers but no teachers of institutional schools or private schools funded and managed by parents, trust, and institution itself.

Table 4.2: Public Expenditure in Education and Number of Teachers in Community Schools

(NRs. in '000')

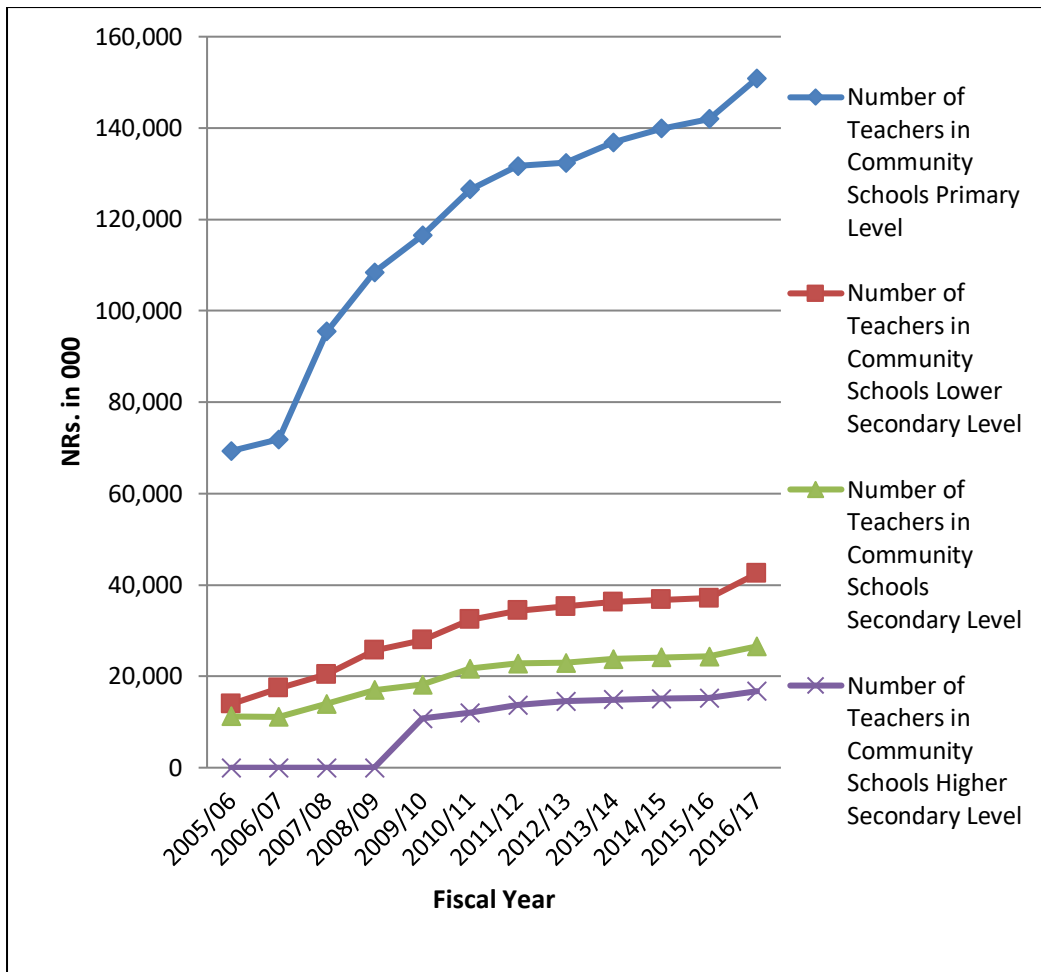
FY	Public Expenditure in		Number of Teachers in Community Schools			
	Primary Level	Secondary Level	Primary Level	Lower Secondary Level	Secondary Level	Higher Secondary Level
2005/06	8,634,690	3,754,447	69,316	13,910	11,219	NA
2006/07	8,941,561	4,167,863	71,851	17,417	11,113	NA
2007/08	10,709,060	5,352,466	95,454	20,455	13,979	NA
2008/09	14,773,926	6,701,234	108,453	25,652	16,970	NA
2009/10	16,244,114	8,631,821	116,471	27,936	18,186	10,784
2010/11	17,273,173	9,565,832	126,551	32,438	21,656	11,984
2011/12	20,686,197	11,325,259	131,671	34,400	22,825	13,698
2012/13	21,372,222	11,790,045	132,379	35,268	22,965	14,513
2013/14	25,129,471	14,046,223	136,863	36,295	23,822	14,904
2014/15	28,007,953	14,249,103	139,922	36,771	24,125	15,120
2015/16	28,457,369	14,375,108	141,973	37,085	24,334	15,241
2016/17	34,578,200	15,362,700	150,870	42,494	26,562	16,741

Source: Department of Education, (DoE, 2017)

Table 4.2 shows that government expenditure has been growing each fiscal year gradually. As public expenditure in primary and all levels of secondary education increases, the numbers of teachers working in all types of community schools are also increasing each fiscal year. Government is trying to fulfill the teacher requirement.

Following figure shows more clearly the scenario or trend of number of teachers increasing in each fiscal year.

Figure 4.3: Number of Teachers in Community School



Source: Based on Table 4.2

Table 4.2 and figure 4.3 show that numbers of primary level teachers in community schools is growing each fiscal year. From FY 2005/06 to 2016/17, it is just growing. In FY 2005/06, it is 69,316. Government has been able to add required teachers. Number of teachers reached 150,870 InFY 2016/17 in 12 year period.

Similarly, number of teachers in lower secondary level has reached 42,494 in FY 2016/17 with gradual increase in 12 year period from 13,910 (FY 2005/06). Number of teachers in secondary level has also been increasing each year. It was 11,219 in FY 2005/06. It reached 18,186 in FY 2009/10 and finally, it reached 26,562 in FY2016/17. Numbers of teachers of higher secondary level for some fiscal years are not available. In FY 2009/10, the report shows that 10,784 teachers were working in higher secondary schools. That reached 26,562 in FY2016/17.

4.1.3 Public Expenditure in Education and Number of Students in Community Schools

Public expenditure in primary and secondary level education and number of students in respective levels are presented in table and figure below:

Table 4.3: Public Expenditure in Education and Number of Students in Community Schools

(NRs. in '000')

FY	Public Expenditure in		Number of Students in Community Schools			
	Primary Level	Secondary Level	Primary Level	Lower Secondary Level	Secondary Level	Higher Secondary Level
2005/06	8,634,690	3,754,447	4,233,873	1,270,077	530,127	NA
2006/07	8,941,561	4,167,863	3,932,489	1,135,588	591,212	NA
2007/08	10,709,060	5,352,466	3,965,927	1,255,541	571,077	NA
2008/09	14,773,926	6,701,234	4,289,735	1,262,968	603,064	NA
2009/10	16,244,114	8,631,821	4,256,010	1,366,348	656,424	231,730
2010/11	17,273,173	9,565,832	4,363,443	1,469,133	679,854	277,112
2011/12	20,686,197	11,325,259	4,111,679	1,546,647	708,154	311,070
2012/13	21,372,222	11,790,045	3,885,449	1,537,167	722,145	302,334
2013/14	25,129,471	14,046,223	3,724,043	1,544,658	727,014	297,397
2014/15	28,007,953	15,645,538	3,665,659	1,544,239	728,456	296,559
2015/16	28,457,369	14,375,108	3,611,426	1,561,616	757,720	320,175
2016/17	34,578,200	15,362,700	3,312,062	1,544,661	778,822	427,261

Source: Department of Education, (DoF, 2017)

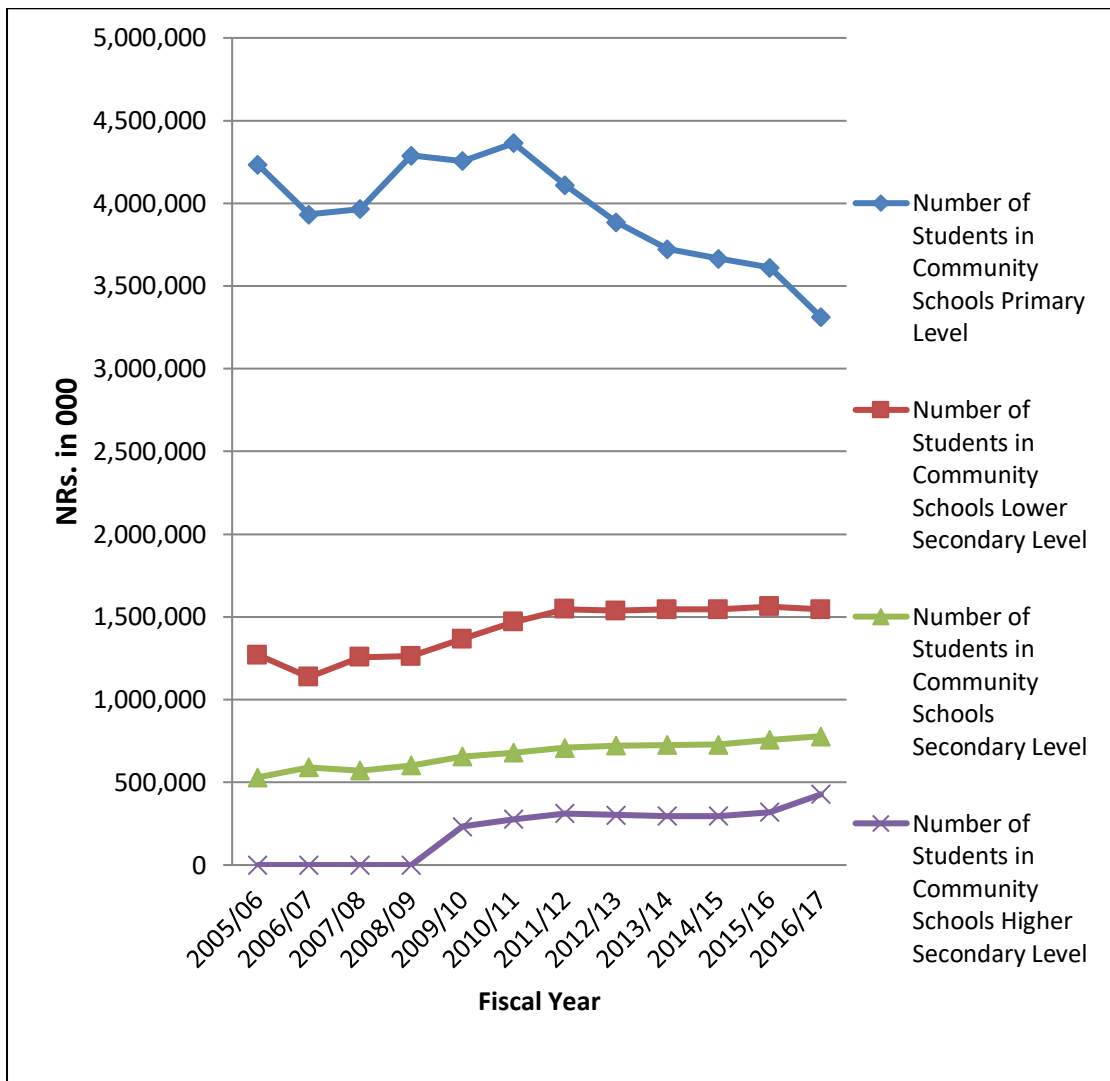
Above 4.3 shows that public expenditure has been growing each fiscal year but the number of students in primary level has been fluctuations. In FY 2005/06, the number of students in primary level is 4,233,873. But next year, it decreased to 3,932,489, and again, it has grown slightly up to further couple of FY 2007/08 and 2008/09 such as 3,965,927 and 4,289,735 respectively. In FY 2009/10, the data shows only 4,256,010,

for further year 4,363,443 which is greater than previous fiscal year. After FY 2010/11, number of students in primary level has been decreasing up to the FY2016/17 as 4,111,679, 3,885,449, 3,724,043, and 3, 611, 426, and 3,312,062 respectively. Decreasing due to enrollment in institutional schools.

Similarly, in lower secondary level, number of students has some ups and downs. In FY 2005/06, 1,270,077 students were attending lower secondary level. In FY 2006/07, it reached 1,135,588; decreased. In FY 2007/08 1,255,541; again increased and continue up to FY 2011/12. For that year number of students was 1,546,647. Again decreased in FY2012/13. Total number of students studying lower secondary level in community schools in FY 2016/17 was 1,544,661; greater than initial year of 12 -year period.

Regarding secondary and higher secondary level, numbers of students are not increasing only. There are ups and downs, too. In FY 2005/06 530,127 students were in secondary level whereas after 5 years, in FY 2009/10 it reached 656,424. For the same year 231,730 students were studying in higher secondary level. In FY 2016/17 there were 778,822 in secondary level and 427,261 in higher secondary level. Following graph depicts more clearly for this data related to students in respective levels.

Figure 4.4: Number of Students in Community School



Source: Based on table 4.3

Data presented in the table 4.3 and figure 4.4 shows that GoN has been trying to address increasing number of Nepalese children for their enrollment in school.

4.1.4 Teacher Student Ratio (TSR) in Community Schools

Teacher student Ratio (TSR) stands for number of students per teacher available. More pragmatically, this is the ratio of students to teacher. If this ratio is more, that cannot be taken as good sign of educational attainment. That's why expectation on TSR is small number of students per teacher; large number is not preferable. Following table and figure present the TSR for sampled period for different levels of schools in community schools.

Table 4.4: Teacher Student Ratio (TSR) in Community School

FY	Teacher-student Ratio			
	Primary Level	Lower Secondary Level	Secondary Level	Higher Secondary Level
2005/06	61.08	91.31	47.25	NA
2006/07	54.73	65.20	53.20	NA
2007/08	41.55	61.38	40.85	NA
2008/09	39.55	49.23	35.54	NA
2009/10	36.54	48.91	36.10	21.49
2010/11	34.47	45.29	31.39	23.12
2011/12	31.23	44.96	31.03	22.71
2012/13	29.35	43.59	31.45	20.83
2013/14	27.21	42.56	30.52	19.95
2014/15	26.20	42.00	30.20	19.61
2015/16	25.44	42.11	31.14	21.00
2016/17	21.96	36.35	29.32	25.52
Average	38.19	53.44	39.96	21.29

Source: Department of Education, (DoF, 2017)

Table shows that TSR of primary level community school, lower secondary level community school, secondary level community school and higher secondary level community schools.

Regarding primary level, in FY 2005/06, TSR was 61.08 that is for that year, 61 students come under responsibility of single primary teacher. For further succeeding FY up to 2016/17 STRs are 54.73, 41.55, 39.55, 36.54, 34.47, 31.23, 29.35, 27.21, 26.20, 25.44 and 21.96 respectively. Every year it is decreasing; good sign for government.

Regarding lower secondary level, from FY 2005/06 to FY 2016/17, teacher student ratios are as 91.31, 65.20, 61.38, 49.23, 48.91, 45.29, 44.96, 43.59, 42.56, 42.00, 42.11 and 36.35 respectively. This is also good sign for government attainment in education. Each fiscal year has even a small achievement.

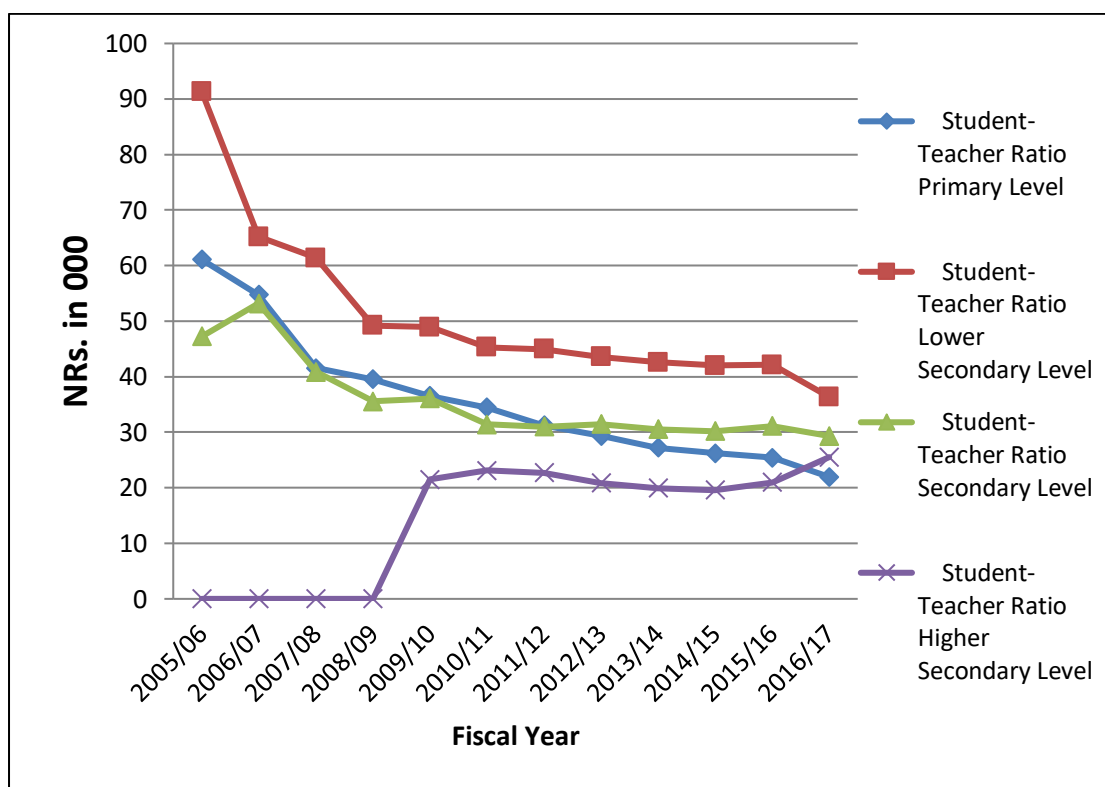
Regarding secondary level, TSR was 47.25 in initial year of sampled period i. e. 2005/06. TSR, unfortunately, increases to 53.20 by next year of FY 2006/07. In FY

2007/08, an important improvement has been seen i. e. TSR figure of 40.85. That was a fine jump. Then, TSR for this level decreases with some ups and downs. In FY 2016/17, it became 29.32.

Regarding higher secondary level, TSR was 21.49 in 2009/10, 23.12 in 2010/11, in FY 2011/12 22.71, 20.83 in FY 2012/13, 19.95 in FY 2013/14, 19.61 in FY 2014/15 21.00 in FY 2015/16, and 25.52 2016/17. That is tiny achievement.

Trends of TSR for all levels can be further cleared by following graph:

Figure 4.5: TeacherStudent Ratio in Community School



Source: Based on table 4.4

4.2 Trend and Pattern Analysis of Public Expenditure in Primary and Secondary Education

Government of Nepal (GoN) has been spending a huge portion of its annual budget in education sector so that Nepalese people could contribute to overall development of society and the whole nation. From pre-school to higher education, the GoN has been taken a big responsibility to manage and develop a world class education system. The GoN had identified the main priority in the major eight sub-sectors as the holistic development of the country, especially economic, social, political, human resource,

educational and infrastructural development. Among them, education, health, drinking water and sanitation fell within the 4th priority of the national budget in FY 2013/14 (Annual Educational Status Report, 2013/14). Here, in this study, major focus is on school level education including primary and secondary level. This study covers 12 different FY from 2005/06 to 2016/17. Following table tries to show the related data for sample period.

Table 4.5: Public Expenditure in Primary and Secondary Education

(NRs. In '000')

Fiscal Years	Public Expenditure in Education	Public Expenditure in			
		Primary Education		Secondary Education	
		Amount	%	Amount	%
2005/06	19,420,639	8,634,690	44.46	3,754,447	19.33
2006/07	21,500,962	8,941,561	41.59	4,167,863	19.38
2007/08	27,060,918	10,709,060	39.57	5,352,466	19.78
2008/09	35,478,172	14,773,926	41.64	6,701,234	18.89
2009/10	46,211,487	16,244,114	35.15	8,631,821	18.68
2010/11	54,986,600	17,273,173	31.41	9,565,832	17.40
2011/12	62,053,016	20,686,197	33.34	11,325,259	18.25
2012/13	62,429,779	21,372,222	34.23	11,790,045	18.89
2013/14	77,825,687	25,129,471	32.29	14,046,223	18.05
2014/15	79,840,816	28,007,953	35.08	15,645,538	19.60
2015/16	90,689,488	28,457,369	31.38	14,375,108	15.85
2016/17	109,444,700	34,578,200	31.60	15,362,700	14.04

Source: Ministry of Finance, (MoF, 2017)

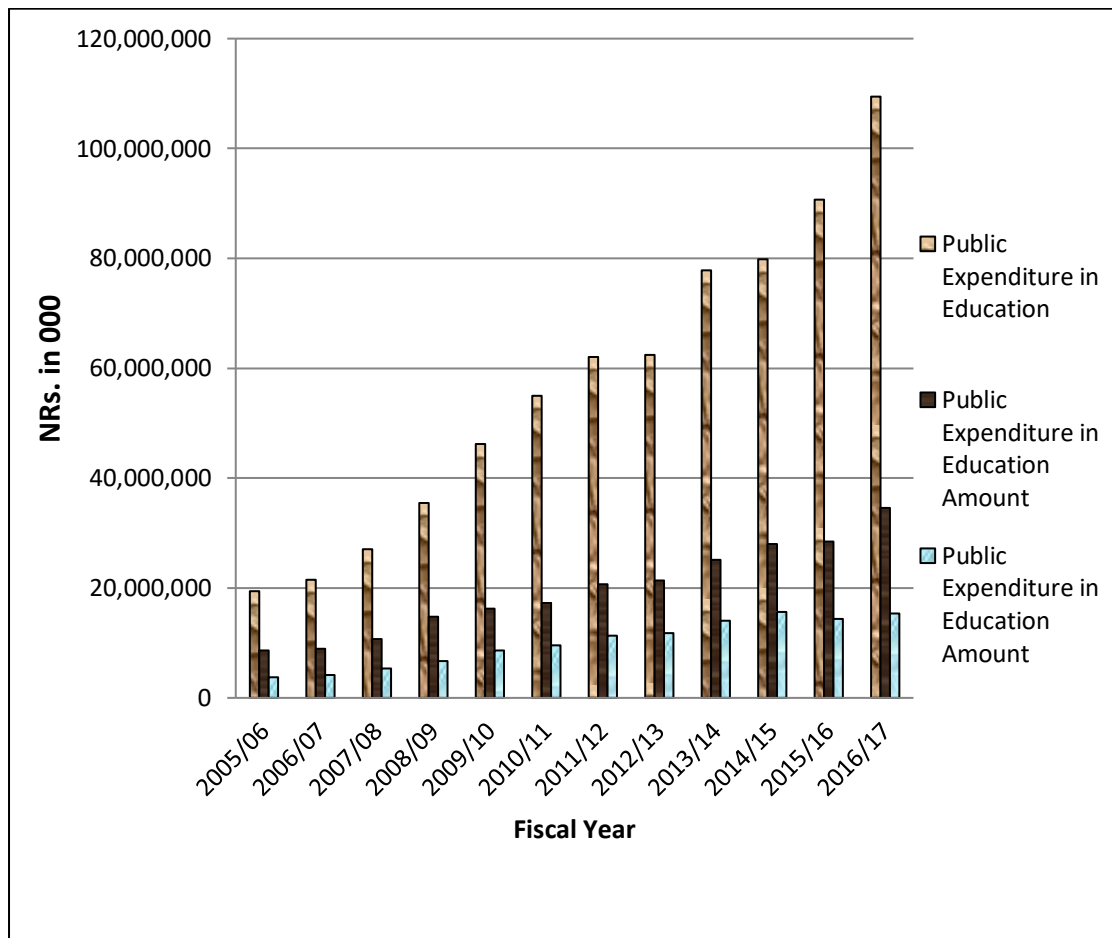
- Table 4.5 is the precise presentation of data concerning public expenditure in education sector comprising primary and secondary education level. Table shows that GoN has spent NRs. 19,420,639,000 in education sector for the FY2005/06 that comprises 44.46 percenti. e. NRs. 8,634,690,000 as expenditure for primary education and 19.33 percenti. e. NRs. 3,754,447,000 for secondary education (includes lower and higher secondary levels, too).

- For the FY of 2006/07, GoN made NRs. 21,500,962,000 expenditure in education sector. Out of which 41.59 percent and 19.38 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2007/08, GoN made NRs. 27,060,918,000 expenditure in education sector. Out of which 39.57 percent and 19.78 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2008/09, GoN made NRs. 35,478,172,000 expenditure in education sector. Out of which 41.64 percent and 18.89 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2009/10, GoN made NRs. 46,211,487,000 expenditure in education sector. Out of which 35.15 percent and 18.68 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2010/11, GoN made NRs. 54,986,600,000 expenditure in education sector. Out of which 31.41 percent and 17.40 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2011/12, GoN made NRs. 62,053,016,000 expenditure in education sector. Out of which 33.34 percent and 18.25 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2012/13, GoN made NRs. 62,429,779,000 expenditure in education sector. Out of which 34.23 percent and 18.89 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2013/14, GoN made NRs. 77,825,687,000 expenditure in education sector. Out of which 32.29 percent and 18.05 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2014/15, GoN made NRs. 79,840,816,000 expenditure in education sector. Out of which 35.08 percent and 19.60 percent education expenditure has been made for primary and secondary education respectively.
- For the FY of 2015/16, GoN made NRs. 90,689,488,000 expenditure in education sector. Out of which 31.35 percent and 15.85 percent education expenditure has been made for primary and secondary education respectively.

- For the FY of 2016/17, GoN made NRs. 109,444,700,000 expenditure in education sector. Out of which 31.60 percent and 14.05 percent education expenditure has been made for primary and secondary education respectively

For more clarity, concerned data have been presented through following bar chart:

Figure 4.6: Trend and Pattern of Public Expenditure in Primary and Secondary Education

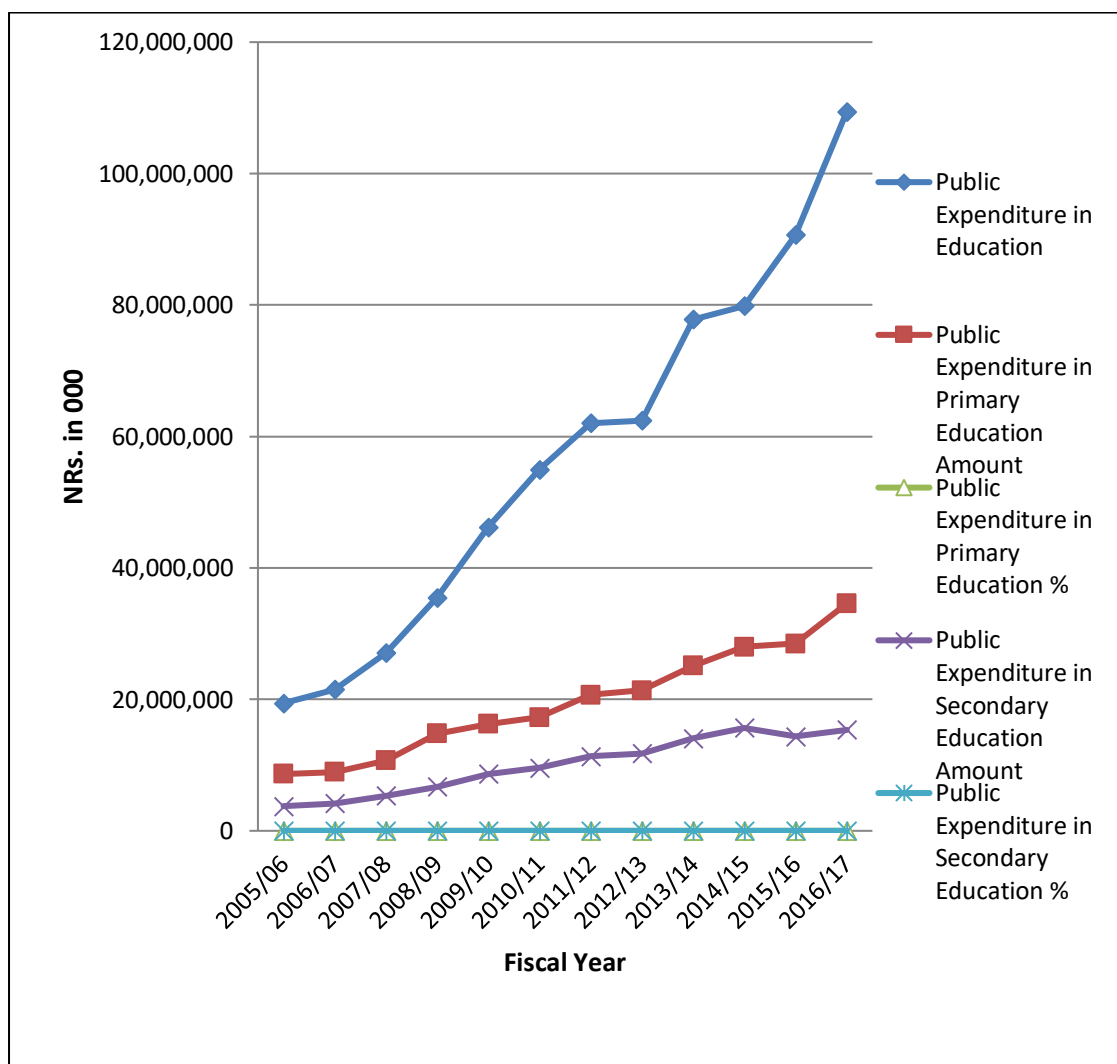


Source: Based on table 4.5

In figure 4.6 public expenditure has been measured in billion (NRs.) figure horizontally. Fiscal years has been shown vertically. Comparatively, expenditure in primary level is higher than secondary level education for all fiscal years. However, talking about monetary figure, every succeeding fiscal year carries larger figure of expenditure. Data has not been adjusted with inflation or price level. Expenditure for every head seems to be growing every fiscal year. GoN has been assigning a bigger budget in primary education than secondary level.

For trend analysis, following figure is presented:

Figure 4.7: Trend of Public Expenditure in Primary and Secondary Education



Source: Based on table 4.5

In figure 4.7 amount has been measured along Y-axis in billion (NRs.) and fiscal years along X-axis.

- Total expenditure in education sector in FY2005/06 is NRs. 19.42 billion. Expenditure in education sector continually grows year by year. NRs. 21.5, 27.06, 35.48, 46.21, 54.99, 62.05, 62.43, through 77.83 upto 79.84 billions, 90.68, 109.44 of figures have been seen for FY2006/07, 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, through 2013/14 upto FY2016/17 respectively. Obviously, FY2016/17 has largest figure and FY2005/06 has smallest.

- Primary education sector seems to get high priority that has got larger budget and expenditure, too. In FY2005/06, NRs. 8.63 billions seems to be spent by GoN for this level. From FY2006/07, through 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14 upto 2016/17, public expenditure takes from NRs. 8.94, through 10.71, 14.77, 16.24, 17.27, 20.69, 21.37, 25.13 upto 28.01 billions. Every successive fiscal year has larger expenditure figure.
- For secondary level education (including lower secondary and higher secondary), there seems to be increasing trend of public expenditure from FY2005/06 through other successive years upto FY2014/15. For FY 2005/06, GoN has spent NRs. 3.75 billions. Similarly, in FY 2006/07, NRs. 4.17 billion which is bigger amount than 3.75 billion. This is the increasing trend of public expenditure in secondary level education. For other remaining FY of 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15 public expenditure made are NRs. 10.71, 14.77, 16.24, 17.27, 20.69, 21.37, 25.13, and 28.01 billions respectively.
- In this way, all head expenditures has growing trend in monetary value. Total expenditure has higher growth rate due to steepest line chart than other two head expenditure line charts for primary and secondary level education. But, line chart for primary education expenditure and secondary education expenditure have moderate steepness. If comparison is made between these two, primary education expenditure chart seems to be a little bit steeper than another.
- Thus, in conclusion, GoN has growing trend of public expenditure in education sector but that grown component of public expenditure is not only the effect of growing trend of primary and secondary education expenditure. There may be other reasons but we are not concern with those reasons in this study.

4.3 Educational Public Expenditure on GDP Ratio

Following analysis deals about education expenditure to GDP ratio in Nepal from 2005/06 to 2016/17

Table 4.6: Education Expenditure to GDP Ratio

(NRs. in '000')

Fiscal Years	Public Expenditure on Education	Gross Domestic Product (GDP) at Current Price	PEE/GDP (Ratio in %)
2005/06	19,420,639	654,084,100	2.97
2006/07	21,500,962	727,827,000	2.95
2007/08	27,060,918	815,658,200	3.32
2008/09	35,478,172	988,272,000	3.59
2009/10	46,211,487	1,192,774,000	3.87
2010/11	54,986,600	1,366,953,000	4.02
2011/12	62,053,016	1,527,344,000	4.06
2012/13	62,429,779	1,695,011,000	3.68
2013/14	77,825,687	1,964,540,000	3.96
2014/15	79,840,816	2,120,470,000	3.77
2015/16	90,689,488	2,308,000,000	3.92
2016/17	109,444,700	2,609,000,000	4.19

Source: Ministry of Education and Ministry of Finance, MoE&MoF(2017)

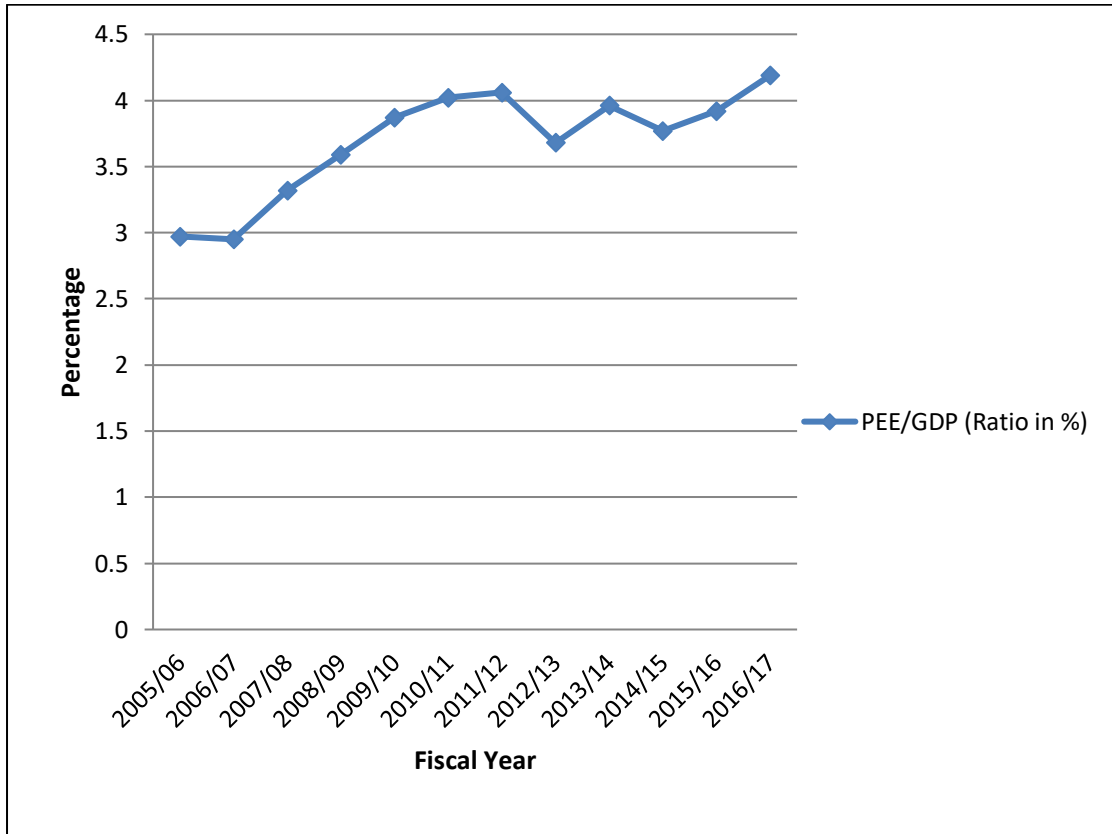
- In the table presented above, public expenditure for education varies and grows every year by year. Expenditure in education, from FY2005/06 through 2007/08, 2008/09,2009/10, 2010/11, 2011/12, 2012/13, 2013/14 2014/15, 2015\16, up to 2016\17 are NRs. 19,420,639 thousands, 21,500,962 thousands, 27,060,918 thousands, 35,478,172 thousands, 46,211,487 thousands, 54,986,600 thousands , 62,053,016 thousands, 62,429,779 thousands, 77,825,687 thousands up to 79,840,816 thousands90,689,488 thousands, 109,444,700 thousands respectively.
- GDP from FY 2005/06 up to 2016/17 appears to be 654,084,100 thousands, 727,827,000 thousands, 815,658,200 thousands, 988,272,000 thousands, 1,192,774,000 thousands, 1,366,953,000 thousands, 1,527,344,000 thousands,

1,695,011,000 thousands, 1,964,540,000 thousands and 2,120,470,000 thousands, 2,308,000,000 thousands, 2,609,000,000 thousands respectively.

- PEE/GPD ratio for sampled FY from 2005/06 up to FY 2016/17 is 2.97, 2.95, 3.32, 3.59, 3.87, 4.02, 4.06, 3.68, 3.96, 3.77, 3.92, and 4.19 respectively.

With the help of following diagram, it can be further cleared:

Figure4.8: Trend of Education Expenditure to GDP Ratio



Source: Based on table 4.6

Figure 4.8 depicts the trend of public expenditure to GDP ratio (PEE/GDP).

- In the first fiscal year of sampled decade, i. e. 2005/06, PEE/GDP ratio is 2.97 % that means GoN spent 2.97 percent of its GDP (for same year) in education sector. The ratio seems to be decreased to 2.95 % in FY 2006/07 after that the ratio has increasing trend through FY2007/08 up to 2011/12 i. e. 3.32 %, 3.59 %, 3.87 %, 4.02 % and 4.06 % respectively. Again it has decreasing-increasing trend. For FY 2012/13, the ratio decreases to 3.68 % but again increases to 3.96 % in next FY i.e. 2013/14 again it reaches 3.77 % by decreasing. Again2015\16, 2016\17 increasing to 3.92%, 4.19%.

- Although PEE/GDP ratio has some fluctuations in some fiscal years, it seems that the ratio is tried to be kept between 3 to 4 % by GoN, regardless to some fluctuations.

4.4 Share of Capital and Recurrent Public Expenditure in Education

GoN has been spending a big amount of annual budget in education sector and this expenditure not only covers recurrent expenditure but also capital expenditure. Recurrent expenditure includes salary to teachers plus operation expenses while capital expenditure includes infrastructural development for education sector like construction of school buildings, furniture, computers, library establishment expenses and other fixed assets etc. That means, every fiscal year, GoN has to allot appropriate budget for both wings of expenditure for education sector development. Following table presents expenditure (capital and recurrent) that have been for education sector for different fiscal years within sampled decade from FY2005/06 to 2016/17.

Table 4.7: Share of Recurrent and Capital Expenditure in Education Expenditure

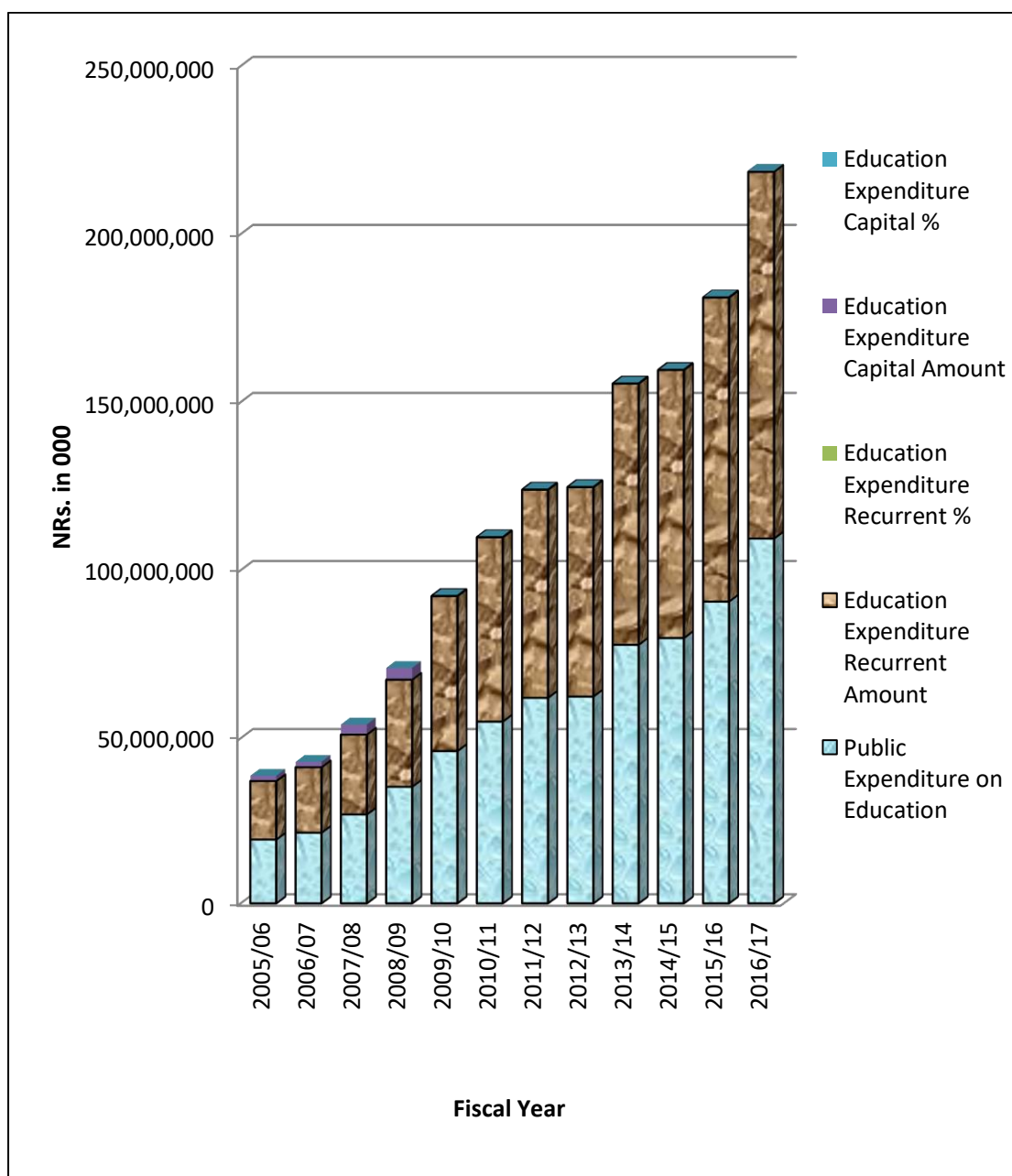
(NRs. in '000)

Fiscal Years	Public Expenditure on Education	Education Expenditure			
		Recurrent		Capital	
		Amount	%	Amount	%
2005/06	19,420,639	17,801,269	91.66	1,619,370	8.34
2006/07	21,500,962	19,891,151	92.51	1,609,811	7.49
2007/08	27,060,918	24,042,868	88.85	3,018,050	11.15
2008/09	35,478,172	31,955,182	90.07	3,522,990	9.03
2009/10	46,211,487	46,110,843	99.78	100,644	0.22
2010/11	54,986,600	54,815,800	99.69	170,800	0.31
2011/12	62,053,016	61,914,207	99.78	138,809	0.22
2012/13	62,429,779	62,290,719	99.78	139,060	0.22
2013/14	77,825,687	77,699,263	99.84	126,424	0.16
2014/15	79,840,816	79,744,772	99.88	96,044	0.12
2015/16	90,689,488	90,456,232	99.74	233,256	0.26
2016/17	109,444,700	109,100,600	99.69	344,100	0.30

Source: Ministry of Finance (MoF, 2017)

Table 4.7 communicates with data of public expenditure in education sector consisting capital and recurrent expenditure with their respective percentage share in total expenditure made for education sector in different fiscal years (sampled) from FY 2005/06 to FY2016/17. The data can be made more communicative with the help of following bar diagram presenting below:

Figure4.9: Share of Recurrent and Capital Expenditure in Educational Expenditure



Source: Based on Table 4.7

- In FY2005/06, GoN made NRs. 19,420,639,000 of total expenditure in education sector that comprises NRs. 17,801,269,000 i. e. 91.66 % as recurrent expenditure and NRs. 1,619,370,000 i. e. 8.34 % as capital expenditure. Obviously, recurrent expenditure is about 11 times larger than capital expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation.
- In FY2006/07, GoN made NRs. 21,500,962,000 of total expenditure in education sector that comprises NRs. 19,891,151,000 i. e. 92.51 % as recurrent expenditure and NRs. 1,609,811,000 i.e. 7.49 % as capital expenditure. Recurrent expenditure is more than 11 times larger than capital expenditure that shows larger burden of operational expenditure for existing schools.
- In FY2007/08, GoN made NRs. 27,060,918,000 of total expenditure in education sector that comprises NRs. 24,042,868,000 i. e. 88.85 % as recurrent expenditure and NRs. 3,018,050,000 i.e. 11.15 % as capital expenditure. Recurrent expenditure is about 8 times larger (burden) than capital expenditure.
- In FY2008/09, GoN made NRs. 35,478,172,000 of total expenditure in education sector that comprises NRs. 31,955,182,000 i. e. 90.07 % as recurrent expenditure and NRs. 3,522,990,000 i.e. 9.03 % as capital expenditure. Recurrent expenditure is about 10 times larger than capital expenditure that shows larger burden of recurrent expenditure for existing schools.
- In FY2009/10, GoN made NRs. 46,211,487,000 of total expenditure in education sector that comprises NRs. 46,110,843,000 i. e. 99.78 % as recurrent expenditure and NRs. 100,644,000 i.e. 0.22 % as capital expenditure. Obviously, recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new infrastructure.
- In FY2010/11, GoN made NRs. 54,986,600,000 of total expenditure in education sector that comprises NRs. 54,815,800,000 i. e. 99.69 % as recurrent expenditure and NRs. 170,800,000 i.e. 0.31 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational

expenditure for existing schools and limited new academic infrastructural projects implementation.

- In FY 2011/12, GoN made NRs. 62,053,016,000 of total expenditure in education sector that comprises NRs. 61,914,207,000 that becomes 99.78 % as recurrent expenditure and NRs. 138,809,000 that becomes 0.22 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation.
- In FY 2012/13, GoN made NRs. 62,429,779,000 of total expenditure in education sector that comprises NRs. 62,290,719,000 which becomes 99.78 % as recurrent expenditure and NRs. 139,060,000 which becomes 0.22 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation.
- In FY 2013/14, GoN made NRs. 77,825,687,000 of total expenditure in education sector that comprises NRs. 77,699,263,000 which exactly becomes 99.84 % as recurrent expenditure and NRs. 126,424,000 that becomes 0.16 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation.
- In FY 2014/15, GoN made NRs. 79,840,816,000 of total expenditure in education sector that comprises NRs. 79,744,772,000 which becomes 99.88 % as recurrent expenditure and NRs. 96,044,000 that becomes 0.12 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation. GoN has been spending less and less as capital expenditure.

- In FY 2015/16, GoN made NRs.90,689,488,000 of total expenditure in education sector that comprises NRs.90,456,232,000 which becomes 99.74 % as recurrent expenditure and NRs.233,256,000 that becomes 0.26 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation. GoN has been spending less and less as capital expenditure.
- In FY 2016/17, GoN made NRs.109,444,700,000 of total expenditure in education sector that comprises NRs.109,100,600,000 which becomes 99.69 % as recurrent expenditure and NRs.344,100,000 that becomes 0.31 % as capital expenditure. Recurrent expenditure covers most of the total education expenditure leaving less than 1% of total expenditure that shows larger burden of operational expenditure for existing schools and limited new academic infrastructural projects implementation. GoN has been spending less and less as capital expenditure
- In the early fiscal years of sampled time series, GoN spent a larger amount as capital expenditure for the development of education sector. That shows GoN has been continuing those infrastructural projects. But, from FY2009/10 and onwards, capital expenditure seems decreasing in percentage comparison.

CHAPTER V

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings

As mentioned the above objectives of analyzing the analysis of public expenditure on education sector in Nepal during the period of 2005/06 to 2016/17. This study has also thrown the light on some important and interesting fact of analysis of public expenditure on education in Nepal. The analysis of public expenditure on the education threat on the fiscal deficit and management. There are many factors giving to rights the increasing regular expenditure rather than development expenditure. The regular expenditure has surpassed the accepted fiscal normal development expenditure exceeds the regular expenditure.

Summary of Findings are as follows:

- There is nominal increase in total expenditure in relation to GDP form the FY 2005/06 to 2016/17. During this period, the regular expenditure has increased as percentage of GDP whereas development expenditure reveals the opposite.
- Regarding secondary and higher secondary level, numbers of students are not increasing only. There are ups and downs, too. In 2005/06 530,127 students were in secondary level whereas after 5 years, in FY 2009/10 it reached 656,424. For the same year 231,730 students were studying in higher secondary level. In 2016/17 there were 778,822in secondary level and 427,261in higher secondary level. Following graph depicts more clearly for this data related to students in respective levels.
- GoN has growing trend of public expenditure in education sector but that grown component of public expenditure is not only the effect of growing trend of primary and secondary education expenditure. There may be other reasons but we are not concern with those reasons in this study.
- PEE/GDP ratio has some fluctuations in some fiscal years, it seems that the ratio is tried to be kept between 3 to 4 % by GoN, regardless to some fluctuations.
- Public expenditure in education sector consisting capital and recurrent expenditure with their respective percentage share in total expenditure made

for education sector in different fiscal years (sampled) from 2005/06 to 2016/17.

- In the early fiscal years of sampled time series, GoN spent a larger amount as capital expenditure for the development of education sector. That shows GoN has been continuing those infrastructural projects. But, from FY2009/10 and onwards, capital expenditure seems decreasing in percentage comparison.
- The education expenditure also increased in the GDP of Nepal. But it is not relatively increased because in the period other countries spent more in the education. Consequently, they achieved more improvement in the education sector.

5.2 Conclusion

Education being an important component of human capital has always attracted the interests of researchers and policy makers. Governments across the globe in general and in Nepal particularly trying to improve the human capital by pumping more investments in education. But the issue that whether investing and spending more in education have been resulting satisfying improvement in educational attainment for economic development is still controversial. Some researchers or scholars have kept their view that it is bi-directional relation between government investment and spending in education and economic growth while it has also been suggested that it is the economic growth and development that stimulates government expenditure more in education, not the other way.

GoN has been spending a large amount of budget in education sector for overall development of nation. Many schools in Nepal are running with government support. So, most of the school students cover the public school. The increasing realization among education planners and managers to enhance decentralization for extending greater decision-making powers to local levels, especially to community, has also given a new dimension in education. In Nepal there are three types of schools; community schools (fully funded and managed by government), community managed schools (fully funded by government and managed by community) and private schools (funded and managed by parents).

Based upon the above premises, both public expenditure in primary and secondary education have been found increasing every fiscal year. The expenditure of secondary

level has been dominated by primary level education expenditure. The study shows that GoN has been giving higher attention to primary level education. Total education expenditure in the ratio of GDP has been increasing during first 7 years out of 12 fiscal years sampled then it has little down and ups. It seems that government has made some changes in her policy. Recurrent expenditure in education has been increasing but capital expenditure is decreasing. This shows that GoN has higher burden of recurrent expenditure.

5.3 Recommendations

- After observing educational attainment report, it has been found that GoN has given higher priority to education sector. However, aspired targets relating to education sector has not been met. It seems that GoN should further work on her education policy.
- Government expenditure in education has been found fluctuating due to many seen and unseen reasons. It seems that GoN should maintain between recurrent and capital expenditure in education with appropriate allocation of needy budget for education sector attainment.
- While the amount of expenditure on education is important, the focus should be on educational outcomes.
- The main problem in Nepalese education sector is lack of effective management after going through related research works. Only expenditure is not the single way of targeted educational attainment. Lack of effective management, lack of effective co-ordination with community, lack of efficient manpower etc. It seems that GoN should pay higher attention to this dimension, too.
- The rapid growth in the regular expenditure should be reduced and development expenditure should be increased to increase its revenue.
- To maintain the balance between the capital educational expenditure and recurrent educational expenditure.
- To improve the foreign aid in educational Nepal Government careful to implementation the committed program

REFERENCES

- Adhikari, N. (2004). *Public expenditure in Nepal: Trends and determinants*(Unpublished master's thesis). Kirtipur, Kathmandu; Central Department of Economics. Tribhuvan University.
- Andrew, M. (2005). Performance- based budgeting reform: Progress, problems and pointers. *Public Sector Government and Accountability Series*. Washington, DC: The World Bank
- Aryal, T. K., (2011). *The Relationship between Public Expenditure and Economic Growth*. MA Thesis, Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- B.C. Mahendra, (2009) *An analysis of public expenditure in Nepal* (Unpublished master's thesis). Kirtipur, Kathmandu; Central Department of Economics.Tribhuvan University.
- Basanti, K. R. (1990). *Role of public expenditure management in structural adjustment programs*. Washington, DC: IMF.
- Basnet, D.B. (1983). *Analysis of Public Expenditure and Economic Development in Nepal*.(Unpublished master's thesis).Kirtipur Kathmandu; CEDECON, Tribhuvan University,
- Basnet, D. B. (1983). *Analysis of public expenditure and economic development in Nepal*(Unpublished master's thesis).Kirtipur, Kathmandu; Central Department of Economics.Tribhuvan University.
- Basyal, T. R. (1994). Development in domestic saving mobilization in Nepal: A overview, *Economic Review*, Occasional Paper, 14-41.
- Baumol, W. J. (1967). Macroeconomics of unbalanced growth: The anatomy of urban crisis. *American Economic Review*. 57 (30), 415-426.
- Bhattarai, B.P. (2007) *Foreign aids government's fiscal behavior in Nepal: An empirical analysis* (Unpublished master's thesis).Kirtipur, Kathmandu; Central Department of Economics.Tribhuvan University.
- Black, J. (2002). *Oxford Dictionary of Economics*. New York, NY: Oxford University Press.
- De, A., & Endow, T. (2008). *Public expenditure in education in India: Recent trends and outcomes*. Delhi, India: Collaborative Research and Dissemination (CORD). Delhi, India: Tata McGraw- Hill Publishing House Ltd.

- Department of Education (DoE), 2017. *Flash Reports*. Kathmandu: Author
- Due, J. F., & Friedlaender, A. F. (1973). *Government finance: Economics of public sector* (5thed.). Washington, DC: IMF.
- Ghosh S., & Gregoriou A, (2008). *The composition of government spending and growth: The role of corruption*. London, England: Brunel University.
- Goffman, I. & Mahar, D. (1971) *Public expenditure in selected developing nations: Six Caribbean countries*. *Public finance* 26:57-74.
- Goode, R. (1984) *Government Finance in Developing Countries*. New York.
- Goolsbe, A. (1998). Does government research and development policy mainly benefit scientists and engineers? *American Economic Review*, 18 (2). 298-302.
- Hong, H. & Ahmad, S., (2009). Government spending on public goods: Evidence on growth and poverty. *Economic and Political Weekly*, 44 (31).
- Husain, F., & Qasim, M. A. (2003). *Analysis of public expenditure on education in Pakistan*. Islamabad, Pakistan: Pakistan Institute of Development Economics.
- Iyer, T. (2009). *Is public expenditure on primary education effective? Evidence from district across India* (Unpublished master's thesis). Durham, North Carolina:
- Jha, S. R., & Swaroop, V., (2008). Fiscal effects of foreign aid in a federal system of governance: The case of India. *Journal of Public Economics*, 77 (200). 307-330.
- Joseph A, & Mayer T. (1992) the review of economics and statistics *The Mit press journals*, USA. 34, (3), 232-242.
- Karna, B. (2007). *Trend and structure of public expenditure of Nepal* (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Keynes, J.M., (1936). *The General Theory of Employment, Interest and Money*. Cambridge: Macmillan Cambridge University.
- Khadka, P. (2002). *Public expenditure and economic development in Nepal*. (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Khanal, D.R. (1988). *Public expenditure in Nepal: Growth, pattern and impact*. New Delhi, India: Sterling Publishers (P) Ltd.

- Koirala, S.P. (1979). *Public expenditure: A tool for economic development of Nepal*. (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Lohani. K. P. (1993). *Public expenditure management in Nepal* (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Maddala, G. (2009). *Introduction to Econometrics*. Delhi: MC Graw Hill.
- Methew, T. (1972). *The economics of public expenditure*. New Delhi, India: Vora & Co. Publisher Private Limited.
- Ministry of Education (MoE) (2000). *Nepal education in figures*. Kathmandu, Nepal: MoE.
- Ministry of Finance (MoF) 2017. *Economic Surveys*. Kathmandu, Nepal: MoF.
- Musgrave, R. A. (1959). *The theory of public finance*. New York, NY: McGraw Hill.
- National Planning Commission (NPC) (2002). *The Tenth Plan (2002-2007)*. Kathmandu, Nepal: NPC.
- Pakistan Development Economics, (2003). *The Pakistan development review*, Islamabad: Pakistan Institute of development economics.
- Peacock, A. T., & Wiseman, J. (1961). *The growth of public expenditure in United Kingdom*. Princeton, England: Princeton University.
- Pigou, A. C. (1947). *A study in public finance*. New York, NY: MacMillan Co. Ltd.
- Premchand, A. (1990). *Government financial management issues and country studies*. Washington, DC: IMF.
- Pyakural, B. (2004). *Nepalese conflict economy: Costs, consequences and alternatives*. Kathmandu, Nepal: Nepal Economic Association.
- Rostow, W.W., (1971). *Politics and stages of Growth*. Cambridge: Cambridge University.
- Samuelson, P. A. (1955). Diagrammatic exposition of a theory of a public expenditure. *Review of Economics and Statistics*, 37 (14).
- Schoreder, L. (2007). *Forecasting local revenue and expenditure in local budgeting* Washington, DC: The World Bank
- Sharma, V. P. (1999). The problems and prospects of regular and development budget of HMG/Nepal, *The Economic Journal of Nepal*, 22 (1)44.

- Shrestha, P. K. (2009). The composition of public expenditure, physical infrastructure and economic growth in Nepal. *The Economic Review*: 21,79-98,2009.
- Subedi, S. (2013). *Trend of public expenditure and its relation with gross domestic product, import money supply* (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Tait A.A., & Heller, P. S. (1982). *International comparison of government expenditure*. Washington, DC: IMF.
- Taylor, P. E. (1961). *The economics of public finance*. New York, NY: The MacMillan Publishing
- The World Bank (WB). (1992, 1994, 2000). *World development report*. Washington, D C: WB.
- Tilak, J. B. G. (2004). Public subsidies in education in India. *Economic and Political Weekly*, 39 (40). 343-359.
- Timilsina, B. R. (2010). *An analysis of trend of public expenditure in Nepal* (Unpublished master's thesis). Kirtipur, Kathmandu; CEDECON, Tribhuvan University.
- Uchchastariya Rastriya Shiksha Aayog (URSA), (1998). Report of the high level national education commission 2055 BS. Kathmandu, Nepal: URSA.
- UN (1979). *Patterns of government expenditure on social services, supplement to the 1978 on the world social situation*.
- Upadhaya, P.P. (1981) *Public expenditure and regional development in Nepal; A macro case study* (Unpublished master's thesis). CEDECON, Tribhuvan University, Kirtipur, Kathmandu, Nepal.
- Upereti, B. P. (2002). A case study on performance of public expenditure in Nepal. *The Economic Journal of Nepal*, 25(2),40-50
- Usman, R.D., 2014. *Analysis of the relationship between government expenditure and other determinants of economic growth: (An unpublished PH.D Thesis, Usman Danfodio, University, Sokoto, Nigeria*.
- Wagner, A., 1890. *The classic in the theory of public finance*. 3rd Edition., London: Macmillan.
- Young, K. C. (1986). *Educational contribution to the economic development in Korea*. Cheongju, South Korea: Korean Educational Development Institute.