CHAPTER I

INTRODUCTION

1.1 Background of the Study

The public expenditure plays a vital role in public finance. Before 20th century, economists paid very little attention to public expenditure, as there was no sound classification of the expenditure by central government, state government and local government. There were no exact principles for public expenditure. Basically, the functions of the government were limited to justice, police and arms. They was also of the confirmed belief that government expenditures are totally wage. Money can be best utilized by the private persons rather than government. With the passes of time, the situation has altogether changed and economic activities have become complex, which have forced the economists to pay a great attention to public expenditure. Thus, in modern times, the subject of public expenditure has earned great significance.

The expenditure incurred by public authorities like central, state and local governments to satisfy the collective social wants of the people is known as public expenditure. Public expenditure refers to the expenses, which the government incurs for its own maintenance as well as for the society and the economy as a whole. Those days, some governments are incurring expenditure to help other countries and that would also form a part of the total expenditure. With expanding state activities, it is becoming increasingly difficult to judge what portion of the public expenditure can be ascribed to the maintenance of the government itself and what portion to the benefit of the society and the economy. Goode defines public expenditure as a means to carry out essential functions of administrating justice and providing national defense and to supply certain additional goods and services that are advantageous to a great society but that would not be supplied by private enterprises because doing so would not be profitable. (Goode, 1984).

In any least developed country, where the basic infrastructures for economic development have not been created, it is no other than the act of public expenditure, which is responsible upon the means for it. Economic development demands cooperation from both private and public parts. Private cooperation for economic

development comes later on. Public expenditure may have direct and indirect impact on development. Directly, public expenditure on industry, commerce may aggregate economic development, whereas, indirectly it can feed up the economic development by its suitable policies and cooperating private participants by providing the transportation, communication, health, education and other social welfare program in the economy. The growing popularity of planning and budgeting, in underdeveloped on well the developed countries have given importance to public expenditure promoting and planning the pace of economic development.

Today the income disparity, between developed and developing nations, is continuously increasing. The development gap and the discrepancies between the haves and have not in every country, is quite severe and distinct. What is the solution left for them? As part of the solution to give momentum to economic development and lessening the income gap, public expenditure is to be quite essential. Realizing these importance, the public expenditure of every country of the globe, is increasing both in relative and absolute term.

Nepal although initiated its development activities only after the inception of democratic system in 1951, the advent of planning has led to tremendous increase in the size of the public expenditure in the past years. In spite of the phenomenal increases in its size, the actual performance of Nepalese economy has been below the expectation and has not been still able in advancing towards sustained growth (Khanal, 1988). From the very beginning of planned development, public expenditure polices have been mainly guided by the objectives of accelerating economic growth, better allocation of resources, achieving equitable distribution of income and maintaining price stability. However, the outcomes have not been realized as expected.

Public expenditure in Nepal since its planned development process has not only been increasing tremendously but they have mostly been concentrated to the development of socio-economic infrastructures. If such an investment and expenditure programs are not properly expanded, they have adverse impact on increasing resource gap, lack of resource, income disparities, etc. Such consequences may have adverse impact on long term objectives such as stability and growth.

Thus, the government of under developed countries like Nepal by increasing their expenditure on economic development and capital formation are making valuable

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contribution towards increasing income and opportunities of employment. Therefore, public expenditure plays a very important role in raising the level of income and employment.

1.2 Statement of the Problem

Since 1956, Nepal has started first five year planned process of economic development. But the basic issue of the country has remained the same. There are many causes to create the problems keeping the country in the poor condition like rapid population growth, massive poverty political instability agriculture, dominate economy etc. Growing population put pressure on the government for the provision of the greater social services and development (health, education, and sanitation, etc.). Though the budget speech comes every year, the government sets the goal of economic development and growth. After the first annual budget in 1952, this process has become a routing practice in Nepal. However even sixty-six year of experience in Nepal has not been able to achieve a satisfactory economic growth. They can be judged from various development indicators for instance, population below poverty line, illiteracy rate are still very high and thirty six percent of GDP is covered by agricultural, which is still depending on weather.

According to budget and the spending system of the government, there is a deviation in budget and the actual spending of the government. The actual public expenditure can be attributed to a few factors. Firstly, resources may not have been allocated realistically and at times, there seems to be very ambitious allocation of the resources. Secondly, the government has not been able to develop the mechanism to utilize the allocated resources to the extent desired on various programmers.

This study is primarily concerned on analyzing the trend and pattern of public expenditure rather than the management and efficiency issues. The problem found so far are basically efficiency issues oriented. The overall fiscal problems have been showed as: first, there has been increasing trend in public expenditure. The growth rate of public expenditure is higher than that of growth rate of gross domestic product (GDP). The GDP growth rate is not substantial while there has been high public expenditure growth rate. Public expenditure in Nepal has grown faster than the snational income; second, the reliance of development expenditure on foreign aid is mounting up continuously. Internal and external borrowings are the main sources to

fulfill the resource gap. The increasing reliance on foreign loan has led the requirement of large amount of resources for principal repayment and interest. Third, there has been increasing trend in resource gap in Nepal. In the third five-year plan (1965-70) for the first time, the concept of deficit financing was used. In the beginning of the planned development, there was no such problem to meet the required expenditure of the government. After second plan period, the increase in expenditure exceeded the increase in the revenue. Therefore, there exist the situation of resource gap which widening over years. In this context the study try to evaluate either there is significant effect of public expenditure or not. Thus, in light of these facts, the present study aims to answer some peculiar question or research problems relating to public expenditure and gross domestic product in Nepala.

    a.   What is the nexus between expenditure and economic growth in Nepal?

1.3 Objective of the Study

The specific objective is as follows:

    a.   To examine nexus between public expenditure andeconomic growth in Nepal.

1.4 Significance of the Study

Although many economists have under taken studies regarding the public expenditure situation in Nepal, the study mainly deals about the effects of public expenditure in GDP. Therefore in this study public expenditure shows how effective it is to generate the output (GDP). Hence, this study would help by different angles to the policy makers, planners, researches, university students, etc. for further study.

1.5 Limitations of the Study

This study is subject of following limitations:

    a.   This study mainly deals with public expenditure and economic growth in Nepal, but it does not study the organizational aspect and other aspects of government of Nepal.

    b.   This study is based on the secondary source of data; no test has been done for the check of reliability of those data.

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c. This study covers only period of FY2001/2002 to 2015/16, because the study aims to evaluate the effect of public expenditure after the republic system in Nepal.

1.6 Orgnization of the Study

There are five chapters in this study and each chapter is further divided into various subchapter. The first chapter, which is introductory portion, gives a general overview whole study. The second chapter attempts to literature review. Reviews of literatures deals with the theoretical context along with both the international and national context. The third chapter provides the methodology of the study, sources of data used in the study, methods of analysis and variables used in the study. Statistical and econometric models used to establish the relationship between variables are the core of this chapter. The fourth chapter explains the objective of the study that is, trend analysis of the public expenditure and gross domestic product. In detail, this chapter examined the trend and pattern, of public expenditure and economic growth in Nepal. And this chapter shows the relationship between public expenditure and gross domestic product. Where's the used economic variables. Finally the last or sixth chapter carries summary of findings, conclusion of study and recommendation for policy formulation.

CHAPTER II

REVIEW OF LITERATURE

2.1 Theoretical Concept

2.1.1 Classical Views on Public Expenditure

This classical economist 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 thus defined that area of public wants.

Government expenditure consists of spending on real goods and services purchased from outside suppliers, spending on employment in state services purchased form administration, defense and education, spending on transfers payments to pensioners, the unemployed and the disable spending on subsidies and grants to industries and payments of debts interest.

The normative orientation of public expenditure reached a higher stage through the seminal articles by Samuelson in the early 1950s. These articles viewed the concept of sure public goods as something which people desired but which could not be provided through the normal market mechanism. Because the way the goods and services are provided ensures 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 formulation 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.

2.1.2 Keynesian Views on Public Expenditure

After the great depression of 1930s, J.M. Keynes brought a new thought of economics. Keynes, in his General Theory propounded a new approach towards economic development challenging the desirability of maintaining pure capitalism, Keynes put forward a logical theory prove that in the interest of general people and

economy. He justified the role of public expenditure in achieving full employment and pausing up the rate of economic growth.

Keynesian contributions have influenced economy in more than one sphere and they may broadly be examined in terms of economy theory, as policy prescriptions to deal with unemployment and as a philosophy that minimize unemployment. Keynes pointed out that the fundamental causes of the depression was the lack of spending. The decision to save in the household sector didn't necessarily lead to a decision to invest and the government therefore had to step up its expenditures in order to "prime to pump" of the economy. It was recognized that public borrowing absorbed private saving, but such borrowing contributed to greater. Economic activity while money retained in the private sector would have more likely contributed to greater unemployment than to increase private investment. In Keynesian terms, budget deficits were viewed as positive instruments to shore up aggregate income to stimulate all vectors to spend more. Keynesian economics freed the thinking of the treasury from the narrow concept of balancing the budget to the wider role of balancing the whole economy. The Keynesian view of the state implied that it had both an obligation and an ability to control any instability in the economy and to restore functioning order (Premchand, 1983)

At the time of depression, Keynes favors higher public expenditure through deficit financing, which can increase effective demand. On the other hand, at the time of inflation, demand is high, hence it is better to reduce public expenditure by the government and also impose heavy tax though surplus budget.

2.1.3 Wagner's Hypothesis

The 19th century economists Adolf Wagner adds new dimension to the concept of public expenditure. Most of his works have been published in German language. 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 U.S. Germany, Japan and France.

As the economy is continuously expanding, government expenditure will also tend to continuously expand.

Among the factors making for charges in the private sector which influence public expenditure decision particular mention may be made of the four factor like as income effect, which factor to determine the where 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 straight forward higher income induced and increased demand. Second factor is the population effect 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. Third factor is the urbinazation effect which has 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 consequence of the increase in the size of the urban community. Fourth factor is the techinical effect which has been instrumental in bringing about increase in public sector activity is the nature and extends of technological innovations in public sector. Many of these innovations have been the cause of substantial increase in external effects necessitating there by increased expenditure by public sector institution.

2.1.4 Peacock Wiseman Hypothesis

Peacock and Wiseman analyzed the process of growth of public expenditure in terms of three separate but related concepts of the displacement, inspection and concentration effects.

Social disturbances create a "displacement effect" by which the previous lower tax and expenditure are replaced by new and higher budgetary levels. The increased expenditures are partly direct result of disturbance while other frequently involves the expansion of government into new areas of economic activity. For instance war and other social disturbances frequently force people and their government to find out the solution problems, which previously had been neglected. This is known as the "Inspection effect". And 'concentration effect' refers to the evaluation of expenditures under taken at different level of governments and their tendency to be concentrated in the central government.

2.1.5 Colin Clark Hypothesis

It is also called the "Central limit hypothesis". Clark uses on the interwar data of several western countries and argued that inflation inevitably occurs when government expenditure financed out of taxes and other receipts twenty-five percent of aggregate national income. To support this statement, Colin argues that when the government share of aggregate economic activity reaches the critical limit of twenty-five percent, the income earners are also affected by reduced incentives due to high tax incidence that their productivity suffers. Clark's analysis of the relation between public expenditure and inflation is only partial. Inflation so far as it brought about spending, relates to the equilibrium situation between supply and demand for scarce resources i.e. between the capacity output of the economy and the aggregate spending for such output (Musgrave & Musgrave, 1979).

2.1.6 Lindal - Johanson Theory of Public Expenditure

At the first Lindal developed the theory with some assumptions such as; people revel their preferences for public goods, individual has the fixed budget constraint, and the distribution of income as between individuals and group is given. Later on this theory was reformulated by Johansen.

This theory concerned only with the allocation of resources between the public and private sector against the background of a '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 maximize respectively, their utility and profit on the basis of prices which non-of them can alter, conditions necessary for Parato Optimality are satisfied. Such conditions do not prevail in the 'bilateral monopoly' discussed in the Lindal version (Mathew, 1972). However the reformulation of the Johansen theory which seems to have very close affinity to the theory developed by Samuelson satisfies the Pareto Optimality conditions.

2.2.7 Samuelson's Theory

Samuelson assumes that there a planner who is clairvoyant enough to know each man's preference function. The planner now derives for each man his demand functions for both public and private goods and solves or each of them his utility maximization conditions subject to the budget constrain. Having derived at the individual demand functions for both these categories of goods and maximized the

individual utility function, a "super clairvoyant planner". Now solves the general equilibrium problem in which all market are cleared in terms of supply and demand, keeping in mind however the peculiar quantity of the public good being consumed 'equally' by all (Mathew,1972).

2.2 International Context

Desmond, Titus, Timothy, and Odiche (2012) analyzed effects of the public expenditure on the economic growth of Nigeria. The objectives of the research are to carry out the relationship of the public expenditure and economic growth in Nigeria and to find out the causal relationship between them. The research has applied OLS multiple regression models specified on Perceived causal relationship between government expenditure and economic growth. It used time series data included in the model were those on gross domestic product (GDP), and various components of government expenditure. Results of the analysis showed that capital and recurrent expenditure on Economic services had insignificant negative effect on economic growth during the study Period. Also, capital expenditure on transfers had insignificant positive effect on growth. But, Capital and recurrent expenditures on social and community services and recurrent expenditure on transfers had significant positive effect on economic growth.

Alshahrani and Alsadiq (2014) examined the relationship between the economic growth and government spending in Saudi Arabia. The main objective of the paper is to find out the effect of the total as well as sectoral government expenditure in total production of the country and hence in the economic growth of the country. It used ADF technique to check whether the data set is stationary or not. After this it employed Johanson co−integration technique to see the long run relationship and used VECM to check the short run relationship between the variables. It employed annual data over the period 1969-2010. Findings of the papers indicated that private domestic and public investments, as well as healthcare expenditure, stimulate growth in the long-run, openness to trade and spending in the housing sector can also boost short-run production.

Oni and Ozemhoka (2014) studied the relationship between public expenditure and economic growth in Nigeria. The objectives of the research are to examine the impact of public expenditure on economic growth in Nigeria and to ascertain whether there is

a relationship between gross domestic product (GDP) and government expenditure in Nigeria. It used the data over the period of 1981- 2011 and the ordinary least square (OLS) method of the econometric technique was used after checking the stationary of the data by using ADF test. The major findings are there is a positive relationship between the economic growth and public expenditure. Le and Suruga (2005) have studied the effect of the FDI and public expenditure on the economic growth. The main objective of the paper is to examine linkages between FDI and public expenditure in determining the long term economic growth rate. It has used ADF technique to find out whether the data sets used in research are stationary or not, used co-integration technique to find out the long run relationship between the variables and used Granger causality test to find out the direction of causality among the different variables. The result showed that excessive spending in public expenditure can hinder the beneficial impact of the FDI. So, to achieve the desired growth rate in the economy balance between the FDI and public expenditure should be maintained.

Alexiou (2009) tried to explore the effect of the government spending on the economic growth of the South-Eastern Europe. The primary objective of the paper is to empirically evaluate the impact of government expenditure on economic growth for transition economies in south Eastern Europe. Two different panel data methodologies have been applied to seven transition economies in the South-Eastern Europe (SEE). This paper tested the effects of the 5 different variables on the economic growth that are government spending on capital formation, development assistance, private investment, trade openness and the population growth. And, the paper found that the population growth is insignificant to the growth of those countries. And, except the population growth other variables have positive and significant effect on economic growth.

Bin (2011) studied the association of the public expenditure and economic growth in Malaysia. The objectives of the research are to find out the association and effect of the government development expenditure in the economic growth of the country. It has used the data set for the year 1970 to 2007. It used ADF and PP to check the stationary of the data sets. And, it has used Johnason co−integration technique to find out the long run relationship between the variables. This study found that the rising of the total government development expenditure has a significant and negative relationship with economic growth. Similar results apply to the total government

development expenditure in economic services. However, this study found no relationship between total government development expenditure in social services and economic growth. In addition, it has found mix results for the association between government development expenditures by sectors and economic growth. Out of eleven sectors, only three sectors which are transport, Public utilities and health have positive and significant relationship towards economic growth.

Ketema (2006) examined the relationship between the public expenditure and economic growth in Ethiopia. The main objectives of the research are to find out the effect of the government expenditure, to find the trend and pattern of the public expenditure and the effects of the various components of the government expenditure in the economy of the Ethiopia. It has used data for the period 1960/61-2003/4. It has used ADF test to determine whether the data sets are stationary or not, used Engle - Granger two step procedure to check the co-integration among the variables and applied VECM technique to know the short run relationship between them. It found only expenditure on human capital have long-run significant positive impact. Investment, government spending displays a negative but insignificant impact on growth of real GDP, which again reveals the inefficiency and poor quality nature of public investment. In the short run, all components of government expenditure do not have significant meaning in explaining economic growth.

Mulamba (2009) examined the long run relationship between the public expenditure and economic growth in the SADC countries. The objectives of the study are to investigate the validity of the Wagner's law and the Keynesian perspective of a long run relationship and causality between the government expenditure and economic growth in SADC countries. This research used the data sets from 1998 to 2004. In order to determine the existence of the long-term relationship and causality, a univariate analysis is carried out to assess whether panel series are integrated in the same order or not. Co integration between the government expenditure and the economic growth has been carried out. This study applies two procedures of the panel co integration, namely, the periodic panel co-integration test and Kao panel co-integration test. Empirical analysis showed that the long run relationship exists between the government expenditure and the economic growth in the SADC countries. Also, there is unidirectional causality and economic growth Granger causes

government expenditure in both the short run and long run which is consistence with the Wagner's law than the Keynesian stance.

Kapunda and Topera (2013) suggested the relationship between the government expenditure and economic growth in Tanzania. The main objectives of the research are to find the trend and pattern of government expenditure composition and how it influences economic growth in Tanzania. It has used the data set between the periods of 1965-2010. It has used the simple OLS technique and the t-test as a methodological tool after checking whether the data sets are stationary or not. The study showed that factors which contribute positively and significantly to economic growth are capital expenditure and terms of trade. Other variables which influence growth positively, but not significantly, are expenditure on health, agriculture, public services, defense and infrastructure. Others are real exchange rate, real foreign interest rate and private policy measured by a dummy. Recurrent expenditure and few other factors have negative impact on growth.

Kweka and Morrissey (2000) studied the relationship between the government spending and economic growth in Tanzania. The objective of this paper is to investigate the impact of public expenditure on economic growth of Tanzania. The research has used the time series data set in between 1965-1996. It formulated the model by disaggregating the government expenditure on physical investment, consumption expenditure and human capital investment. Results of the research showed that the negative relationship between the physical investment and growth accounting in Tanzania. On the other hand, consumption expenditure has positive effect on the growth and the expenditure on the human capital is not insignificant in the study.

Deveranjan, Swaroop and Zou (1996) conducted the research to link the government expenditure to the economic growth of the country. The objectives of the paper are to find out the effect of composition of government expenditure on the economic growth of the country and the effect of the change in composition of government expenditure in the economic growth of the country. It has used the data from 43 different countries over the period of 20 years. It used ADF technique to check the unit root of the data and Johanson co-integration test to see the long run relationship between the variable. It found that the conditions not only depend just on the physical productivity of the different components of the public expenditure but also on the initial shares. And,

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concluded that an increase in the share of the current expenditure has positive and statistically significant effect on the economic growth of the country. On the other hand, they found that the relationship between the capital components of the public expenditure has negative effect on the per-capita growth and productive expenditure, when used in excess, could become unproductive.

Le and Suruga (2005) evaluated the effect of the FDI and public expenditure on the economic growth. The main objective of the paper is to examine linkages between FDI and public expenditure in determining the long term economic growth rate. It has used ADF technique to find out whether the data sets used in research are stationary or not, used co-Reintegration technique to find out the long run relationship between the variables and used Granger causality test to find out the direction of causality among the different variables. The result showed that excessive spending in public expenditure can hinder the beneficial impact of the FDI. So, to achieve the desired growth rate in the economy balance between the FDI and public expenditure should be maintained.

Rahman (2012) studied on the relationship between the economic growth and expenditure in Sudan. The primary objective of the paper is to test the Wagner hypothesis in Sudan over the period of 1970-2010. The methodology used by the paper to meet the objectives are co integration, causality and error correction model (ECM). After they have tested the Wagner hypothesis for the different countries the result was conflicting. The results for the Sudan indicate that the data for the periods support of the Wagner hypothesis.

Taylor (1961) explained the relevance of the public expenditure on the economic growth. The public expenditure stressed the expansion of government had often been characterized a movement in the direction of socialism that government obviously trended 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 situated to cushion the effects of the worst features of capitalism –its recurrent tendency to break down." "Pump-Priming" the injections of the public expenditures to fill a void left by deficient private expenditure in recession has as its goal the prevention of serious break down.

Imran (2013) evaluated the relationship between the public expenditure, economic growth and poverty in Bangladesh. The objectives of the thesis are to review and analyze the trends in government expenditure and its composition in a Bangladesh perspective, and to develop an analytical framework for determining differential impacts of various public investments on economic growth and poverty alleviation. It used 31 years' time-series data to see the impact of the various components of the government spending on poverty and GDP growth. It used ADF test to check the stationary of the data. It has used Granger causality test to check the causality between the public expenditure with economic growth and poverty alleviation and used Johanson co-integration test and VAR model to check the long run relationship and short run relationship between them respectively. It found there is not any significant impact of government spending on economic growth and poverty reduction in the Bangladesh. It found two layers' agency problem namely; between the citizens and politicians and between politicians and service providers; "appeared in the public expenditure management hierarchy.

Kim (1995) found a positive relationship between fiscal decentralization and economic growth using an international panel data set. Using data for 80 countries, Huther and Shah (1996) also found a positive correlation between fiscal decentralization and economic growth. Martinez-Vazquet and McNab (2001) reviewed the current knowledge on an issue of increasing policy interest and found that fiscal decentralization may indeed have a direct impact on economic growth. Akai and Sakata (2002) used the US states as their unit of analysis. They found a positive relation between fiscal decentralization within states and state economic growth.

2.3 Nepalese Context

Singh (1977) studied the expenditure pattern of Nepal government during the period of FY 1956/57 to 1976/77. He found that Nepal government budget show that between FY 1956/57 and 1962 / 63 (except 1961/62) revenue was not sufficient to meet even regular expenditure. Since 1963/64, there had been enough to meet development expenditure. Both regular and development expenditure had been rising fast. According to him, investment in the public sector establishment of regional growth centers and decentralizing of administration in a number of case maintenance expenditure social service expenditure increases in salary and dept. Similarly, he

found the volume of development expenditure was increasing rapidly though of the country and there by the standard living the per-capita income.

The reasercher analyzed the resource allocation practices and observed that large amount of public expenditure was centered to the development region in the study period of FY 1972/73 to 1977/78. He concluded that the resource allocation practices were only growth promoting rather than balanced regional development. He noticed the volume of development expenditure increased during his study period out contributing to low rate of economic growth. Consequently, the standard of living along with per capita income did not increase as per expectation. His finding was that government expenditure mainly was confined to the infrastructure of development rather than the basic needs of people.

Upreti (2002), emphasized on the performance of public expenditure of Nepalese economy ad 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 significance different between budgeted and actual public expenditure in practice, even if variation exists.

The author 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.

The researcher 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.

The author 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.

Gyanwaly (2014) analyzed the relationship between the financial development and economic growth in Nepal. The main objectives of the research are to find out the

relationship between the financial development and economic growth in Nepal. It has used the data for the period of 1975 to 2014. It has developed the financial index by taking the weighted average of the different indicators of the financial development. After this it has used ADF test to check the stationary of the variables and used johanson co-integration technique and error correction model (ECM) to check the long run relationship between the variables. The findings of the research are financial development, real stock of capital, real per capita capital, labor force, real export and government expenditure have significantly positive relationship with economic growth while inflation and trade openness have significantly negative relationship with economic growth.

Bhusal (2014）studied the relationship between the government spending and economic growth in Nepal. The objectives of the research are to test the Wagnerian hypothesis in Nepalese economy, to check the causality between the economic growth and government spending and to check the long run relationship between them. The research used the data set for the period of 1975-2012. It has used ADF test to check the unit root of the variable. Johanson co-integration test and error correction model (ECM) are used to check the long run and short run relationship between the variables respectively and Granger Causality test is used to check the direction of causality among the variables. The findings of the research are Wagnerian hypothesis do not exists in Nepalese economy, there exists both short run and long run relationship between the government spending and economic growth in Nepal and Granger causality test shows that Government Spending Granger Causes economic growth but economic growth does not Granger causes government spending.

Khanal (1988) discussed 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.

The World Bank (2000) concluded that Nepal is not facing a fiscal collapse rather than the fiscal situation is quite stable. This study, however, showed inefficiency and mismanagement on public spending. Deficiencies in the budget planning, resource allocation and expenditure management process has been found a major factor contributing to low productivity. This study pointed out the institutional weakness for the insensitiveness of public spending in Nepal. The report present number of suggestion to improve the effectiveness of public expenditure projection, good governance and transparency, decisive action to formulate an auto-corruption agenda greater local ownership of the public expenditure program, build a partnership between local and central and public and private are major.

Pyakuryal (2004) presented that Nepalese economy has lost its productive capital and sustained growth due to the government expenditure and revenue pattern. He found that ratio of regular expenditure of GDP in f FY 1996/97 was 8.6 percent but increased to 11.5 percent in 2001/02 on the other hand he found that ratio of development expenditure was decrease with 9.5 to 7.5 percent daring the same period. So, he recommended the explanatory fiscal policy is better that contract nary fiscal policy in war time.

Khadka (1998) made a remarkable study during the period of FY 1974/75 to 1994/95. The study had estimated the regression model using cross sectional data. The double log transformation model has been used in the study. During the period under consideration, the size of public expenditure has found to be extremely increasing. It has been observed that the internal revenue has mainly helped to increase recurrent and consumption type of expenditures. He has found the high dependence of development expenditure on external sources. The dependence of foreign aid adversely affects the growth rate of the economy through the sustainable increase in the capital output ratio. In the study period, the foreign aid covered 48.5 percent. Development expenditure is 31.6 percent of total expenditure on average. He has also

pointed out the weakness in both macro and sect oral planning due to the absence of regional cost benefits analysis and program budgeting. The donor agencies have predominantly influenced in determining the sect oral programs.

Adhikari (2004) stated that the trend and pattern of government expenditure during the time frame 1990/2000. He observed empirically that the determines of public expenditure during the period under review, both demands as well as supply side factors have contributed to rapid growth on the size of public expenditure. Under demand side factors that the public expenditure is highly responsive to GDP. He found that the elasticity coefficient of total expenditure, regular expenditure and development expenditure are 1.01, 1.45 and 0.64 respectively and concluded that the elasticity is grater then one in ease of total expenditure and GDP is the clear indication of the fact that not only demand side factors were influential in determining the size of public expenditure during 1990s. He observes that the overriding trend on the public expenditure reflects alarming situation with regard to fiscal discipline and the overall development program of the country. Following the restoration of multi - party democracy system on early 1990s, there was tremendous increase in the size of the public expenditure. The massive investment in each successive plan and annual budget for rapid expansion of economic and social infrastructure can be entitled for that increase. However, the massive public expenditure fails to aspirate the peoples' expectation to the country the country continuous to remain at low-level equilibrium trap.

Shrestha (2009 presented the relationship between the various composition of public expenditure and economic growth in Nepal. Objectives of the research are to determine the effect of the various composition of public expenditure on economic growth of Nepal. It has used the time series model with the application of the endogenous growth model to measure the effect of the public expenditure on the different headings in the economic growth of Nepal. It has applied ADF technique to test the unit root of the variables and run the OLS technique. The major findings of the research are so long as productivity of the expenditure is higher than the interest rate, increase in expenditure will increase the growth rate in the economy and physical infrastructure plays the very important role to enhance economic growth by promoting private market production.

Basnet (1983) studied the pattern of resources gap and analyzed the trend of public expenditure. The main objective of the research is to find out the trend of the public expenditure and resource gap. It has used the data set from 1964/65 to 1980/81. It has used the descriptive analysis to achieve the objective of the research. The major conclusion of the research is the growth rate of the regular expenditure is higher than the growth rate of the development expenditure, growth rate of total government expenditure is higher than the growth rate of the total government revenue and there was increasing trend in the budget deficit.

2.4 Research Gap

There is a gap between this research and previous research. Most of the previous researchers are mostly focused that the public expenditure and economic growth before sthe republic system in Nepal, productive capital and sustained growth, growth pattern and impact of public expenditure, Neplease econpomy has lost its productive capital and sustained growth, but this study try to focus that, the status, pattern and trend of public expenditure and economic growth after the republic system in Nepal and used in Ordinary Least Squre method.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

This study is based on the published secondary sources of data and information. In this study different techniques have been employed to achieve the above stated objectives. Quantitative technique is used mostly wherever possible. This study is based on certain research methodology consisting of simple regression analysis, tabular analysis, graphical analysis, etc. secondary data are used for the purpose of analysis.

3.2 Nature and Sources of Data

The nature of the study is descriptive as well as annalytical. This research study has based on the secondary data published by different governmental as well as non-governmental organizations. However some informal interviews and interactions with The secondary information and data have been collected from following sources:

Various publication of National Planning Commission(NPC), Central Bureau of Statistics(CBS), Nepal Rastra Bank(NRB), The Economic Survey of the Ministry of Finance and publications of other Ministries.

1. Various books and journals and previous research report published by different agencies and personal.

2. Information from international agencies such asThe World Bank, Asian Development Bank, United Nation Development Programe.

3.3 Period of the Study

This analysis is based on the time series data of 15 years covering period of FY 2001/02 to 2015/16. Rational of choosing this period is mainly availability of data itself.

3.4 Methods of Analysis

Quantitative method has been employed for the purpose of data analysis. However, uses of quantitative tools have been employed widely. Tabulation of data and graphical presentation of data are made to make the information visible as well as make them understandable easily.

Use of quantitative tools has been seen as the best method for the data analysis also to reach conclusion. Different statistical tools for both estimation and test have been employed as demanded by the objectives so specified above. In general, following models of analysis are used.

3.5 Regression Analysis

Regression Analysis is statistical technique which deals with the relationship between variables. The main objectives of this model is to predict or estimate the value of one variable corresponding to a given values of another variable. Thus regression analysis shows how the variables are selected. Here, regression equation has been used as:

$$Y_{TE} = \alpha + \beta \times \quad \dots\dots\dots\dots \text{(i)} \quad 0 \leq \beta \leq 1$$

$$Y_{RE} = \alpha + \beta \times \quad \dots\dots\dots\dots \text{(ii)} \quad 0 \leq \beta \leq 1$$

$$Y_{DE} = \alpha + \beta \times \quad \dots\dots\dots \text{(iii)} \quad 0 \leq 0 \leq 1$$

Where

Y_{TE} = Total Expenditure, Y_{RE} = Regular Expenditure

Y_{DE} = Development Expenditure,

X = Total Government Expenditure is independent variable.

Y = Total import is dependent variable.

β = Regression coefficient which is also known as slope of the regression line. It indicates the amount of change in value of the dependent variable for a unit change in the independent variables.

α = Constant, representing the Y intercept, it specific the value of the dependent variable when independent variable has zero value. When the zero value for the independent variable is possible then it has practical meaning.

3.6 Interpretation of Data

1. Coefficient of Determination (R^2)

The R- squared (R^2) statistic measure the success of regression in predicting the values of the dependent variable with in the sample. (R^2) is the fraction of the variance of the dependent variable explained by independent variables.

The statistics will equal one if the regression fits perfectly, and zero if it fits no better than the simple mean of the dependent variable. It can be negative if the regression does not have an intercept-or constant or if the estimation method is two stage least squares.

2. Adjusted Coefficient of Determination (R^2)

This measure will also be employed to get additional information about the goodness of fit. Our problem with using (R^2) and a measure of goodness of fit is that the (R^2) with never decrease as never repressors are added. In the extreme case, we can always obtain as (R^2) of one if you include as many independent repressors as there are sample observations

The adjusted, commonly denoted as (R^2) penalizes the (R^2) for the addition of repressors, which do most, contribute to the explanatory power of the model.

So, the adjusted R^2 is calculated to overcome this problem

$$\text{Adj. R2} = \frac{1 - \text{unexpected / variation / d. f. for unexpected variation}}{\text{Total variation / d. f. for total variation}}$$

$$= 1 - \frac{\sum e2 / n - k}{\sum Y2 / n - 1}$$

$= 1 - (1 - R^2)\frac{n-1}{n-k}$

Where, n = number of observations, k = number of parameter, and d.f. = degree of freedom.

3. Test of Significance of Parameter

It is applied for judging the statistical reliability of the estimates of the regression coefficients. Gujarati, defines test of significance is procedure by which sample result are used to verify the truth or falsity of a null hypothesis (Gujarati, 2004) in order to test the hypothesis, following test are performed.

4. t-Test

The t-test is based on the student's distribution. It is used to test the hypothesis about any individual partial regression coefficient. To compute t-statistic, the standard errors for each input are computed separately. The t-ratio is the significant test of the regression coefficient of the hypothesis broadly speaking. A test of significance is a

procedure by which sample results are used to verify the truth or falsity a null hypothesis. The decision to accept or reject null hypothesis is made on the basis of the value of the test statistic obtained from the data at hand. The t-statistic, which is computed as the ratio of an estimated coefficient to its standard error, is used to test the hypothesis that a coefficient is equal to zero.

$$t = \frac{itisdefinedby}{\overline{\beta_1}}$$

S.E.$(\overline{\beta_1})$

Where S.E $(\overline{\beta_1})$ = Standard error or $\overline{(\beta_1)}$

$$= \sqrt{Var(\overline{\beta_1})}$$

The t statistics has n-k degree of freedom

N = No. of observation, k = No. of parameters in the regression.

5. Durbin-Watson (DW) Test

The Durbin-Watson statistics is a test for first order serial correlation. More formally the DW test statistic Measures the linear association between adjacent residuals from a regression model.

The Durbin- Watson is a test of the hypothesis P=o in the specification the null and alternative hypotheses are formulated as:

Null hypothesis (P=o); there is no auto correlation on errors terms.

Alter hypothesis (P=1); there is autocorrelation on errors terms

It there is no serial correlation, the DW statistic will be around 2. The DW statistic will fall below 2 If there is positive serial correlation (In the worst case, It will be near zero). If there is negative correlation the statistic will lie somewhere between 2 and 4. Positive serial correlation is the most commonly observed phenomenon in time series data.

6. F-Test

For the purpose of the analysis of variance this test is employed. The F-Test statistic tests the hypothesis that all of the slope coefficients (excluding the constant, or

Internet) in a regression are zero. For ordinary least square models, the F-statistic is

computed as $F = \dfrac{R^2 / K - 1}{\left(1 - R^2\right)/ N - K}$

Under the null hypothesis with normally distributed errors. This statistic has an F distribution with K-1 numerator degrees of freedom and N-K denominator degrees of freedom.

The p-value denoted probability (F-statistic) is the marginal significance level of F-test. If the p value is less than the significance level is testing say 0.5, we regret the null hypothesis that all stop coefficient are equal to zero. For the example above, the p-value is essentially zero, so we reject the null hypothesis the all of the regression coefficients are zero. (F test is a joint test so that even if all that- statistic are insignificant the F-statistic can be highly significant).

3.7 Definition of Variables

In this study regression equations have been carried on different format assure specified under models title. The variables used in this study are as follows:

1. Total Expenditure (TE)

Total public Expenditure or government expenditure means the actual expenditure during the specified year. It has been taken about exclusively from the economic survey. Regular expenditure (RE): regular expenditure, one of the major components of total expenditure, is the current expenses. That is it is the government consumption type of expenditure.

Development expenditure (DE): It basically is the capital expedition it is the public investment and desirable also from the development perspective.

2. Total Revenue (TR)

It is the total Revenue of the government collected during year. It includes tax as well as non-tax revenue. At the same time both direct and indirect taxes are included. Internal borrowing (IB): This is in fact the internal loan for deficit financing. To some extent, this desirable as well for LDCS.

CHAPTER IV

AN ANALYSIS OF TREND AND PATTERN OF PUBLIC EXPENDITURE AND GROSS DOMESTIC PRODUCT

4.1 Introduction

There has been increasing trend in the public expenditure since the restoration of democracy in the country. Some support of notion of there being welfare state in democratic set up while some outshine the established norms in the fiscal practice. Today it is customary that the expenditure is also taken as a tool to implement fiscal policy. Implementation of fiscal policy in UDCs may approach the problem of reducing in equalities both from the point of view of redistributive public expenditure and redistributive tax policy. Likewise investment on human capital improves productivity and technology. Improvements in sanitation, health and educational services increasing the quality of manpower available for development. Such investment is great equalizers for opening up new opportunities to the low income groups and increasing their standard of living (Basyal, 2007).

Economic policies in general and budgetary policies in particular have emphasized over the past decade restraint on growth of total expenditure and restructuring on both recurrent and capital expenditure Regarding current expenditure there has been increasing emphases on fully meeting the recurrent cost requirements of completed public investment and on the minimization of the costly subsidy programs. capital expenditure has been increasingly directed to priority sectors such as physical and social infrastructure and to early completion of the ongoing development projects.

The output and price effects of a given level the public expenditure can vary a great deal, depending on the level of capacity utilization, the method of financing the expenditure and the composition of expenditure. The budget in Nepal is classified into regular and development categories the letter capital budget includes all project and programs financed by foreign loan and grants. Any program or project where expenditure are largely, recurring, rather than in the form of investment, is also considered to be developmental if it has a direct impact on output and productivity. Even subsidies teacher's salaries and operation and maintenance are included under the development grouping as it is considered that these expenditures contribute to development. Though there are some anomalies in making such a distinction between regular and development expenditures this classification broadly exhibits the level of plan and non-plan expenditures of the government.

4.2 Trend of Public Expenditure

The world economy has displaced encouraging growth despite some unfavorable developments and Nepal's immediate neighbors China and India have also showed impressive high economic growth. Despite such favorable situation, Nepal couldn't take benefit due to various factors. Nepalese economy which had exhibited a good performance during the early 1990s witnessed a setback in recent years and registered only the modest growth (NRB, 2016). The Nominal GDP has been continuously growing during the decade of 1990 s and first half of 2000. However the pace is not yet sound. GDP increased from430936.4 million in FY 2002/02 to 2,007,275 million in 2015/16, which is more than 5 times higher than that of base year.

Public expenditure figures, presented in the table 4.1 show the steady and increasing trend of expenditure programs during the period of 2001/02 to 2015/16. Although its capital expenditure has increased faster than its recurrent expenditure until 2009/10 then after recurrent expenditure exceeds. More over the recurrent expenditure has surpassed the capital expenditure as against the accepted fiscal norms. That is more resources have been devoted for recurrent expenses rather for accumulation of capital.

Table 4.1

Trend of Public Expenditure

(NRs. in Million)

Fiscal Year	Total Expenditure	Recurrent Expenditure	Capital Expenditure
2001/02	80072.2	48863.9	24773.4
2002/03	84006.1	52090.5	22356.1
2003/04	89442.6	55552.1	23095.6
2004/05	102560.5	61686.4	27340.8
2005/06	110889.2	67017.8	29606.6
2006/07	133604.6	77122.3	39729.9
2007/08	161349.9	91446.8	53516.1
2008/09	219661.9	32581.8	73088.8
2009/10	259689.106	186597.553	40509.769
2010/11	295363.427	210167.7	47327.681
2011 / 12	339167.5	243460	51390.1
2012 / 13	358638	247455.5	54598.4
2013 / 14	435052.3	303531.7	66694.7
2014 / 15	531334	339278	88754.7
2015 / 16	701171.7	434065.9	159089.2

Source: Economic Survey 2001/02, 2015/16

Figure 4.1

Trend of Public Expenditure

Figure showing bar chart of In Million (y-axis, 0 to 800000) vs Fiscal year (x-axis, 2001/02 to 2015/16) with series: Total Expenditure, Regular Expenditure, Development expenditure.
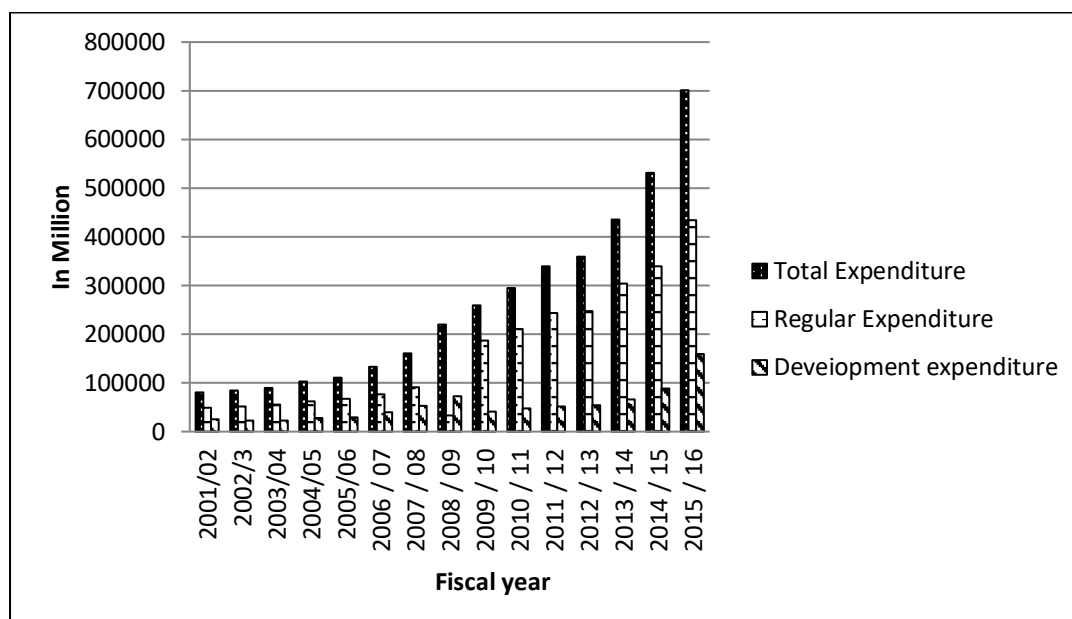
Source: Based on Table 4.1

Table 4.1 shows that the recurrent expenditure has revealed the continuously increasing trend. It was NRs. 48,863.9 million in 2001/02 and NRs.434065.9 million in 2015/16 increasing about 10 folds during review period. Capital expenditure however has maintained positive change all the times.Recurrent expenditure exceeds thecapital expenditure till FY 205/16. In FY 2006/07t0 2015/16 increased regurly not decreased any time or any fiscal year. In FY 2006/07 to 2008/09 increased the capital expenditure and then FY 2009/10 decreased in 2013/14 been decreased registering the negative change over previous years. This is so in FY 2008/09 and 2009/10 where capital expenditure has decreased by NRs. 32,579 million and RS. 32,579 million from previous year respectively. Although the capitalt expenditure grew in absolute term the pace remained low. Recurrent expenditure has been increasing at a higher pace mainly due to the responsibility of maintaining law and order, salary-hike and debt servicing obligation. Debt servicing is the faster growing expenditure and now forms the single largest head of recurrent expenditure. In order to meet the minimum needs of food, clothing, health, education, drinking water, transport, communication and other services, the rate of growing in capital expenditure should increase both in absolute as well as relative terms. However, the growth of capital expenditure remained lower than recurrent expenditure because of weak implementation of

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development projects resulting from political instability and lack of commitment. This indicated the public expenditure is rising faster than resource mobilization resulting in expanded government borrowing to match such expenditure. As much of the government expenditure is used for non-commercial purposes, and even commercial financing has not generated a surplus for the government, borrowing-led expenditure growths forebode a budgetary crisis.

Table 4.2

**Recurrent and Capital Expenditure as Percentage of Total Expenditure**

(NRs. in Million)

Fiscal Year	Total Expenditure	Recurrent Expenditure	Principal Repayment	Capital Expenditure	RE	CE	PR	TE
2001/02	80072.2	48863.9	6434.9	24773.4	61.02	30.95	8.03	100
2002/03	84006.1	52090.5	9559.5	22356.1	62	26.63	11.37	100
2003/04	89442.6	55552.1	10794.9	23095.6	62.1	25.3	12.06	100
2004/05	102560.5	61686.4	13533.3	27340.8	60.14	26.67	13.19	100
2005/06	110889.2	67017.8	14264.8	29606.6	60.43	26.71	12.86	100
2006/07	133604.6	77122.3	16752.3	39729.9	57.7	29.7	12.5	100
2007/08	161349.9	91446.8	16386.9	53516.1	56.7	33.2	10.2	100
2008/09	219661.9	32581.8	18834.1	73088.8	58.2	33.3	8.6	100
2009/10	259689.106	186597.553	32581.8	40509.769	58.2	34.7	7.1	100
2010/11	295363.427	210167.7	37868.1	47327.681	71.16	16.2	12.64	100
2011/12	339167.5	243460	44316.8	51390.1	71.78	15.15	13.07	100
2012/13	358638	247455.5	56584.1	54598.4	69	15.2	15.8	100
2013/14	435052.3	303531.7	64825.8	66694.7	69.82	15.94	14.24	100
2014/15	5313340	339278	103307.3	88754.7	61.72	24.52	19.44	100
2015/16	701171.7	434065.9	108016.6	159089.2	61.12	20.35	15.4	100

Source: Economic Survey 2001/02, 2015/16 MoF

Figure 4.2

Recurrent and Capital Expenditure as Percentage of Total Expenditure
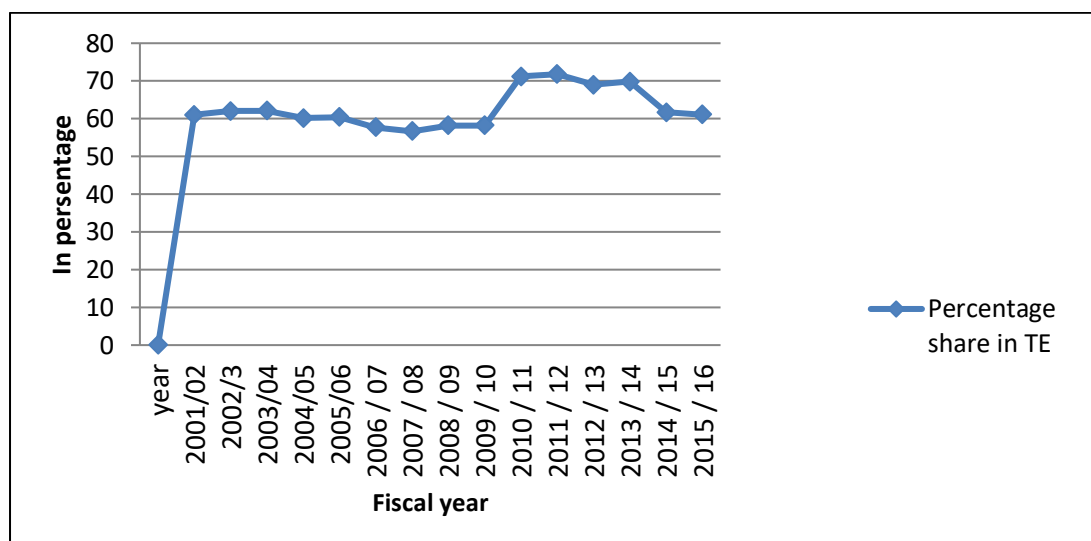
Source: Table Based on 4.2

The total expenditure has been classified as recurrent, capital and principle repayment expenditure after FY 2003/04, the expenditure on heads and sub-heads has been presented reclassifying as recurrent, capital and principle repayment.

Table 4.2 reflects the amount of recurrent, capital expenditure and total expenditure during the study period. In FY 2001/02 the total expenditure was only NRs.80,072.2 million that mounted up to NRs.259,689.106 million in 2009/10. Similarly it goes up to and in the FY 2015/16 it reaches NRs.701171.7 million of which 61.12 percent was current expenditure 20.35 percent was capital expenditure and 18.35 percent was expenses against principal repayment. This clearly depicts the steady and increasing trend in public expenditure in Nepal. Public expenditure trend is going up before and after the restoration of democracy and republic too.

Table 4.2 also shows about the percentage share of recurrent and capital expenditure in the total expenditure. The percentage distribution gives clear idea of the very structure of the public expenditure. In FY 2001/02 the percentage share of recurrent expenditure, capital expenditure and finincial principal repayment was 61.02 percent which were 30.95 percent and 8.03 percent. However, small fluctuations is seen in the share ofrecurrent expenditure to total expenditure and finincial principal repayment the average overall share during FY 2015/16 was around 63.5 percent of total expenditure. Hence, during the early 15 years period under consideration the average over all share of capital expenditure was 20.35 percent.

Nevertheless, in the second half of the study, the picture is reversed. The overall pattern shows decreasing capital expenditure and increasing recurrent expenditure. That is more resources have been devoted for recurrent expenses rather for accumulation of capital. In FY 2001/02 the share of recurrent expenditure to total expenditure was 61.02 percent. This reaches up to 61.12 percent in FY 2015/16 while the capitalexpenditure has decreased from share of 30.95 to 20.35 percent during the same period

In FY 2010/11 development expenditure decreased by 16 percent against that of FY 2011/12 totaling of NRs.210,167.7 million. In the ratio of recurrent and capital expenditure, tendency of recurrentexpenditure, principal repayment rising. In terms of ratios, recurrent expenditure and capital expenditure, principal repayment were 69 percent 15.2 percent and 158 respectively in FY 2012/13. In FY 2013/14, recurrent expenditure ratio increased to 69.82 percent while that capital expenditure increased to 15.94 percent and principal repayment is increasing in 14.24 percent. In FY 2014/15 recurrent expenditure is decreased in 61.72 percent, capital expenditure is increased in 24.52 percent and principal repayment is decreased in 13.76 percent.

Table 4.3

Total, Recurrent and Capital Expenditure as % of GDP

(**NRs. in Million**)

Fiscal Year	Total Expenditure	Recurrent Expenditure	Capital Expenditure
2001/02	17.43	10.64	5.39
2002/3	17.07	10.58	4.54
2003/04	16.66	10.35	4.3
2004/05	17.4	10.47	4.64
2005/06	16.95	10.25	4.53
2006/07	18.36	10.6	5.46
2007/08	19.78	11.21	6.56
2008/09	22.23	12.93	7.4
2009/10	21.77	15.64	3.4
2010/11	21.61	15.37	3.46
2011/12	22.21	15.94	3.36
2012/13	21.16	14.6	3.22
2013/14	22.15	15.45	3.39
2014/15	25.06	16	4.19
2015/16	31.18	19.3	7.07
Average	20.73	13.28	4.72

Source: Economic Survey 2001/02, 2015/16

Figure 4.3

Total, Recurrent and Capital Expenditure as % of GDP
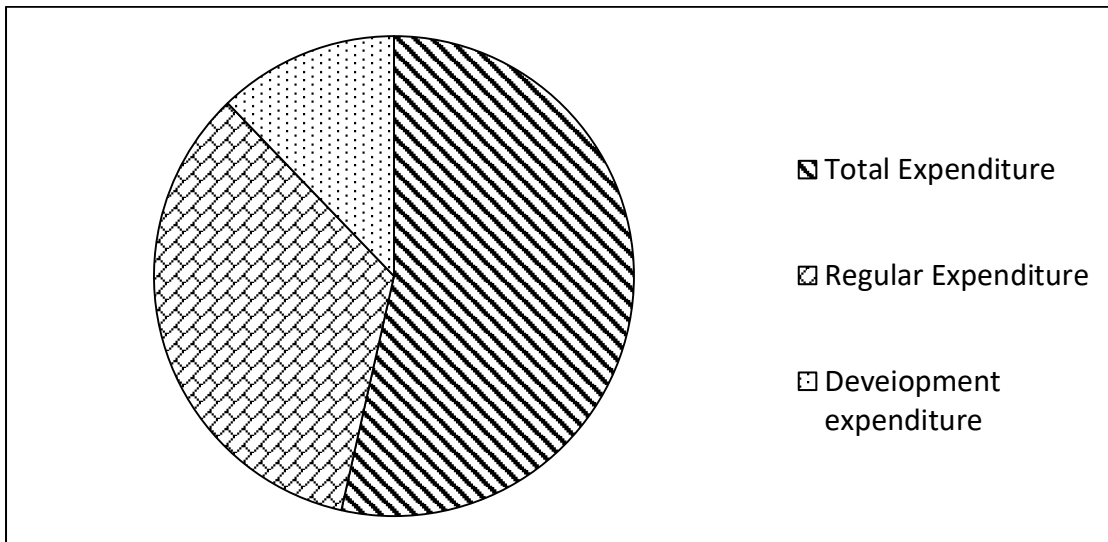
Source: Based on Table 4.3

Table 4.3 shows that total expenditure has not changed in relation to GDP from the early 2000s to early millennium. Total expenditure as a percentage of GDP) however fluctuates around 22 or 21 percent during the period under review. In FY 2001/02 the share was 17.43 percent and reached to 25.06 percent in 2014/15. In an average it remained 20.73 percent during those 15 years. However, remarkable changes are in case of recurrent expenditure as percent of GDP was just 10.64 percent which reached to 19.3 percent nearly two fold lower, in FY 2001/02 to 2015/16. The case of capital expenditure as percent of GDP is only 5.39 percent in the base year which increased to the figure of 7.07 percent, in FY 2015/16.

4.3 Pattern of Public Expenditure

Expenditure pattern shows the degree of priorities of the government regarding various issues/projects. To know the pattern of public expenditure the first attempt should be to go from the viewpoint of sectoral pattern of spending. However, it can be analyzed employing some other ways. It has important implications for the overall effectiveness of the public expenditure programmed. Apart from systematic factors which have contributed significantly too poor expenditure performance in Nepal, the effective of public expending also depends on how resources are allocated among and within sectors (inter and intra sectoral allocations) and how well the allocated resources are used in there sectors. If we look at the sectoral expenditure pattern

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during the review period, it is found that economic services sectors received the highest share of total expenditure in the beginning years But the share of economic services expenditure had been declining continuously and remained less than that of social services sector in the end period the share of economic service sector stood at 41.10 percent of total expenditure. After the FY 2009/10 the economic expenditure is divided into different group such as Social service and economic service. So table 4.4 is shows the total expenditure in social service sector and mainly in education to improve the indicator of high literacy rate and enrolment. IN social Service is divided into different categories such as general public service, economic affairs, defense, health, education, social protection and others. In others categories have included the Public Order and Safety Environmental Protection, Housing and Community amenities Recreation, Cultural and Religion.

Table 4.4

Total Expenditure of Social Service Sector

(**NRs. in Million**)

Fiscal Year	General Public Service	Economic Affairs	Defense	Health	Education	Social Protection	Others*	Total
2009/10	64388.8	65755	17814.7	17957.4	46211.5	9459.6	38102.1	186,595.50
2010/11	74676.7	75662.5	18993.7	19875.5	54987	9960.1	41207.9	210,166.60
2011/12	87527.8	80387	22657.5	22870.2	62053	10581.6	53090.3	243,460.00
2012/13	62619.9	72255	20899.2	2411.9	62429.8	11790	46604.7	279,010.50
2013/14	109531.3	110549	32366.2	3912.3	62429.8	12534.2	27792.8	303,531.00
2014/15	204878.2	170198.3	31358.6	3981.6	86034	16280.2	113779.9	398,951.00
2015/16	243956	289258.2	37493.1	4736.1	98642.7	22670.2	212490.3	484,265.80
average	847578.7	864065	181583	75745	472787.8	93275.9	533068	2,105,980.40
ave %	40.24	41	8.6	3.5	22.44	4.42	25.31	100.00

Source: Economic Survey 2009/10,2015/16 MOF

Figure 4.4

Total Expenditure of Social Service Sector
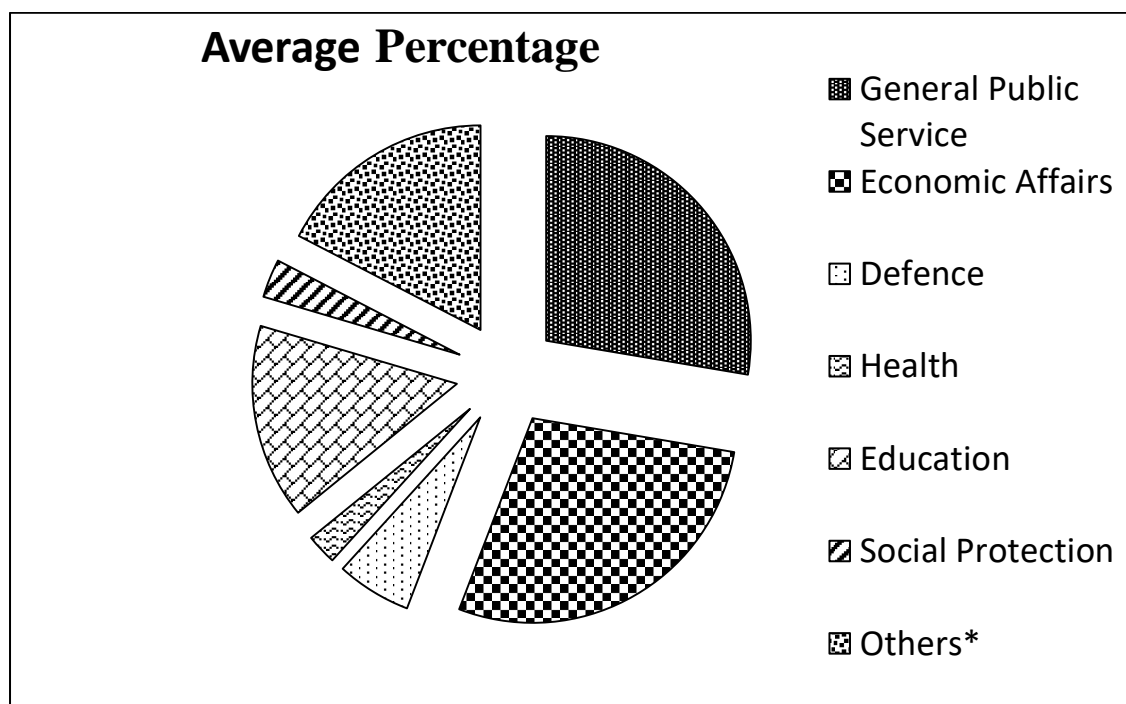
Source: Based on Table 4.4

Before the FY 2009/10 the expenditure divided diffrent headed but after the FY2009/10 the expenditure divided in diffren groupes so here shows the expenditure divided into social service and economic service. Table 4.4 shows total expenditure divided in social services. The shares of these social sectors in an average were 40.24, 41, 8.6, 3.5, 22.44, 4.42, and 25.31 percent of total expenditure respectively. which social servvices shows the like as genral public service, Economic affairs, Defence,Health, Education, Social Protection and others.

The share of general public service expenditure on total expenditure is going continuously from FY 2009/10 to 2011/12, then FY 2012/13 is decreased and then the FY 2013/10 to 2015/16 increased. The main reasons behind this increasing were extension of the activities of the government and increment in administrative cost as a result of insurgency. The expenditure on economic service sector was declining during those periods as the development projects were seriously hampered due to the internal conflict and their high dependency on foreign assistance. Expenditure on social service sectors was on the upward trend as the social sector remained less affected by conflict than other sectors.

4.3.1 Pattern of Recurrent Expenditure

The recurrent expenditure are appropriated and designated as the current out lays on public consumption and revenue expenditures, which create on productive assets such as salaries of employees It includes expenditures on goods and services like wages and salaries, Pensions, interest payments, subsidies, and other current transfer etc. it is made up of from various heads are constitutional organs, general administration revenue and judicial administration, defense, social services, economic services loan repayment and interest, loan and investment and miscellaneous. The pattern of regular expenditure has been presented in table 4.5 into social service component.

The recurrent expenditure has increasing trend. As the total recurrent expenditure increases, the amount of such expenditure distributed in to social service categories are also increases. More than one fourth, of total recurrent expenditure incurred with in the period, the height share of loan repayment and interest payments shows that bulk of resources is devoted for the maintenance of public enterprises. Ironically, these public institution have be suffering heavy loses every year adding extra burden to government. Next category with substantial amount is the expenditure on social services. Except some initial years, it has stood as one of the major category that claims a large share of total recurrent expenditure.

Table 4.5

Pattern of Recurrent Expenditure in Social Services

(NRs.in Million)

Fiscal Year	General Public Service	Economic Affairs	Defense	Health	Education	Social Protection	Others*	Total
2009/10	40913	29843	16727.7	15761	46110.7	9283.9	27955.5	186595.5
2010/11	46266.6	46266.6	17547.4	16732.3	54815.8	9749	30403.1	210166.6
2011/12	54550.4	34,736.80	20779.8	19495.4	61914.2	10344.7	41638.7	243460
2012/13	60,523.60	35,964.00	18,476.90	18,918.30	62,290.70	11,595.00	-	247,455.40
2013/14	62,685.50	50,680.80	25,778.20	23,362.00	77,699.30	12,297.70	-	303,531.80
2014/15	137,770.70	60,599.30	25,817.30	33,090.10	85,860.10	15,920.00	-	398,951.00
2015/16	149,917.80	101,831.90	29,323.40	37,920.00	98,473.90	22,338.40	-	484,265.80
average	552627.60	359922.4	154450.7	165279.1	487164.7	91528.7	-	2074426.1
average%	26.64	17.35	7.44	7.96	23.48	4.41	12.72	

Source:Economic Survey 2009/10,2015/16 MOF

Expenditure under social services heading on other hand remarkable bearing on total recurrent expenditure. In social services divided in different headed in general public service FY 2009/10 40913 million to increase in FY 2015/16 149,917.80 there is increases into four fold. All different headed are increases in same case. In the FY 2009/10 economic affairs in NRs.29,843 while that of defense in NRs.16727.7, health in NRs.15761, education in NRs.46110.7 and social protection NRs.9283.9 they all in increase in respectively.

Figure 4.5

Pattern of Recurrent Expenditure in Social Services
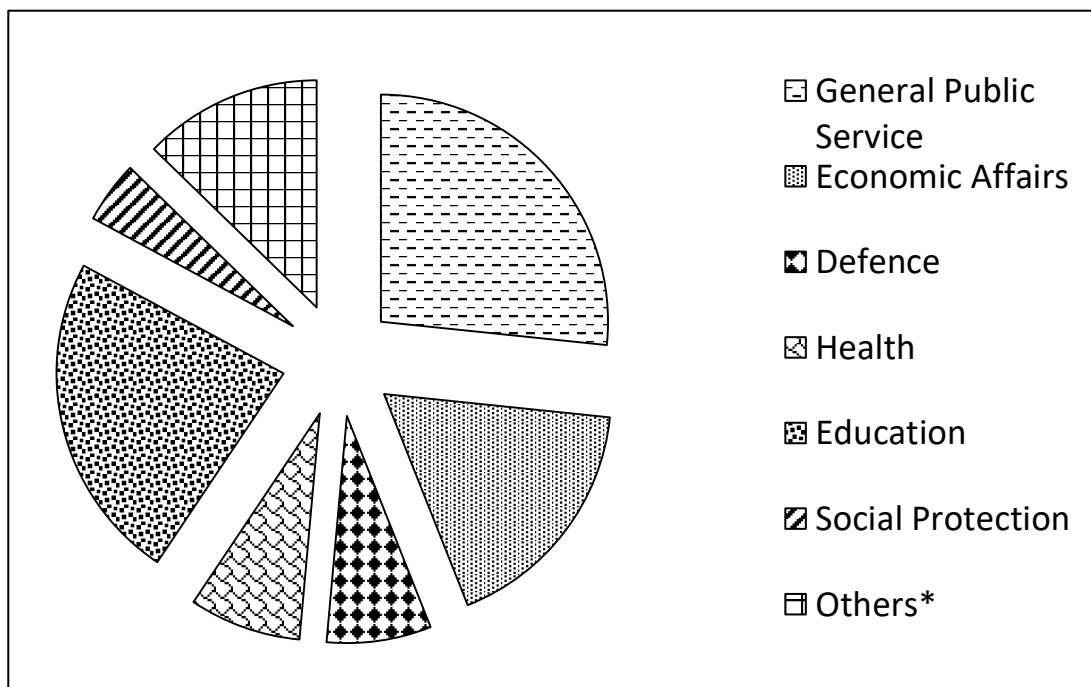
Source: Based on Table 4.5

4.3.2 Pattern of Capital Expenditure

Expenditure on capital refers to those development activities of the government, which are linked with the expansion of capital formation, social welfare, human resource development etc. It includes the expenditure on the capital of economic, social and other sector. The capital expenditures are appropriated and designated to add the productive capacity or the capital stock of the country which would raise the "Level of living" of the people expressed in dishes of health, food consumption and nutrition, education, employment and condition of works, housing, social security, clothing, recreation.

The main components of capital expenditure include general administration revenue and fiscal administration, economic administration and planning, social services, economic services and miscellaneous.

The capital expenditure pattern under different major component of capital expenditure has been presented in Table 4.6 it exhibits that the expenditure made under the head economic service is substantial; it's because this category comprises subcomponents which hold a substantial share of total capital expenditure. Next category is social services, which also command a noticeable share in the capital expenditure

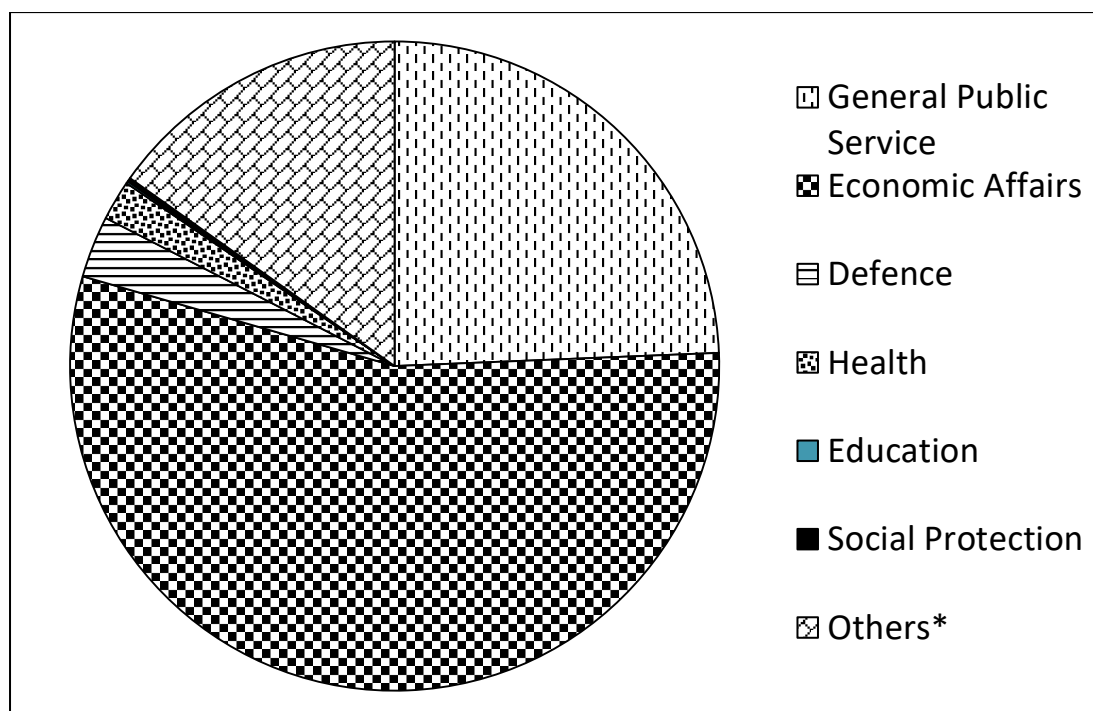**Table 4.6**

Pattern of Capital Expenditure of Social Services

(NRs.in Million)

Fiscal Year	General Public Service	Economic Affairs	Defense	Health	Education	Social Protection	Others*	Total
2009/10	1,723.10	26,311.40	1,087.00	2,195.90	100.5	176.4	8,914.80	40,509.10
2010/11	1,204.70	31,417.10	1,446.30	3,142.6 1	170.80	210.8	9,733.30	47,325.60
2011/12	1,254.40	33,879.20	1,877.70	3,374.70	138.80	236.9	10,628.90	51,390.60
2012/13	2,096.30	36,291.00	2,422.30	2,953.40	139.10	195.00	-	54,598.50
2013/14	46,845.80	59,868.20	6,588.00	3,156.40	126.40	236.50	-	131,520.40
2014/15	67,107.50	109,599.00	5,541.30	4,676.40	173.90	360.20	-	219,148.80
2015/16	94,038.20	187,426.30	8,169.70	3,418.40	168.80	331.80	-	335,202.20
Average	214,270.00	484,792.20	27,132.30	17,579.30	1018.3	1,747.60	-	879,695.20
Average %	24.35	55.10	3.08	1.99	0.11	0.19	15.17	-

Source: Economic Survey 2009/10, 2015/16 MoF

Figure 4.6

Pattern of Capital Expenditure of Social Services

Source: Based on Table 4.6

In FY 2009/10, the expenditure under social service was NRs.40509.10 million, which. But the reached a peak at NRs.335202.20 millions in FY 2015/16 and highest amount spent under this head is in FY 2015/16 amounted NRs.335202.20 million. Social services expenditure shows regularly increases in different fiscal years. In FY 2009/10, the share of social services was NRs.40509.10 million less than the expenditure on economic services by the amount NRs.26311.40 million on the same FY. In different headed of social services are such as defense, economic affairs and general public services increases in regularly In education FY 2009/10 capital expenditure in 100.5 million that are increase till FY2012/13 in NRs139.10 then that is decrease in FY 2013/14 in NRs.126.40 million. Except the FY 2009/10 to 2015/16, the amount allocated under this head is significantly higher than other categories like, general public services and economic affairs education, health, and social protection.

4.4 Inter Sectoral Eexpenditure Pattern

When considering the budget as a tool for socioeconomic development what matters most is the time pattern of sectoral allocations. Indeed the efficiency of a budget largely depends on inter and intra-sectoral consistency in allocations. This section

provides an over view of the inter-scrotal pattern of public resource allocations. It then briefly reviews intra-scrotal priorities and the effectiveness of use of resources with in key sectors. Social sectors (education, health and drinking water); decentralized local development, agriculture, irrigation, transportation and electricity.

An examination of the pattern of expenditure in the study period revealed that total sectoral expenditures, economic and social sectors combined, have had an impressive annual growth rate comparatively; the social sector has an edge over the growth of economic sector.

Table 4.7

Recurrent Expenditure and Respective Share of Sub-functional Group Economic Services

(NRs.in Million)

Fiscal Year	General Economic, Commercial and Lab (GE)	Agriculture, forestry, Fishing and Hunting (A)	Fuel and Energy (F)	Mining, Manufacturing and Construction (M)	Transport (T)	Communication ©	Other Industries (OI)	Others	Total	GE	A	F	M	T	C	OI
2009/10	7402.1	11025	3821.4	40.1	4412	2169	971.4	0	29844	24.8	36.9	12.8	0.13	14.8	7.2	3.3
2010/11	9264.9	13561.4	2217.8	41.5	6155.3	2107.4	1011.9	292.2	34652	26.73	39.1	6.39	0.11	17.8	6	2.9
2011/12	6705.2	16045.1	1717.5	51.6	6236.3	2671.6	914	395.6	34737	19.3	46.2	4.9	0.14	17.9	7.6	2.6
2012/13	7217.7	17183.8	1751.2	46.1	5800.5	2419.5	1215.6	330.5	35965	20	47.8	4.8	0.12	16.1	6.7	3.4
2013/14	8157.6	25499.1	3352.7	61.9	8107.4	3147.6	1817.4	537.1	50681	16.09	50.3	6.61	0.12	6.2	6.2	3.6
2014/15	9560.7	32343.3	4130.9	63.9	6914.9	3646.4	2585.7	1535.5	60599	15.77	53.4	6.8	0.1	6.01	6	4.3
2015/16	9295.8	36808.9	5874.4	86.5	6981.5	3669.2	3167.6	36011	1E+05	9.12	74	5.7	0.05	3.6	3.6	3.1
Average	8229.14	21780.94	3266.55	55.95	6372.55	2832.95	1669.08	4728.84	49759	-	-	-	-	-	-	-
Average %	16,53	43.77	6.56	0.1	12.8	5.6	3.3	9.5	-	-	-	-	-	-	-	-

Source: Economic Survey 2009/10, 2015/16 MoF

Table 4.7 takes into accounts only important of economic service. In the economic sector sector, economic affairs had the highest growth rate, followed by fuel and energy, mining manufacturing and construction, transport, communication and other industries. After FY 2009/10 highest share was of agriculture forestry fishing and hunting in capital expenditure. Though the transport and communication had good growth performances in the FY 2009/10 to 2015/16 the current allocation to these sectors is considered low in relation to the needs of the country and also as compared with other developing countries. There is an increasing trend in the education, health, drinking water and local development .In FY 2009/10 expenditure under transport and communication was NRs.15,833 million which rose to NRs.56,247.30 million in FY 2015/16. Similarly expenditure on mining, manufacturing and construction reaches to NRs.2532.30 million in 2007/08 from NRs.1.9 million of FY 2009/10 likewise expenditure on other industries was NRs.450.7 million in 2009/10 which rose to 7207.60 million in FY 2015/16. The highest increase is seen in the Mining, manufacturing and construction from NRs.1.9 million FY 2009/10 to amount NRs.,.30 million in FY 2015/16.

Table 4.7 while analyzing the average percentage share in 7 years study period of the selected components of social services to that of capital expenditure. It is observed that the highest average percent share is of transport and communication expenditure. The percentage share of local development in an average command 13.4 percent of the total capital expenditure. During the same period, the average share of education was 7.5 percent, while that of health and drinking water was of 3.9 percent and 6.6 percent respectively.

Table 4.8

Capital Expenditure and Respective Share of Economic Services

(NRs. in Million)

Fiscal Year	General Economic, Commercial and Lab (GE)	Agriculture, Forestry, Fishing and Hunting (A)	Fuel and Energy (F)	Mining, Manufacturing and Construction (M)	Transport and Communication (T)	Other Industries (OI)	Others	Total	GE	A	M	F	T	OI
2009/10	699.2	9,049.20	228.3	1.9	15,883.00	450.7	0	26,311.4	2.6	34.4	0.01	0.86	22.35	1.71
2010/11	3,139.70	8,950.80	104.8	0.8	18,617.40	603.2	0.3	31,417.1	9.93	28.5	0.25	0.33	59.25	1.91
2011/12	306.7	10,562.20	182.3	1.3	22,105.00	704.1	10.5	33,879.1	0.9	31.2	0	0.53	65.24	2.02
2012/13	256.2	11,670.10	224.4	1,480.20	22,084.10	536.7	39.3	36,291.	0.70	32.15	4.07	0.61	60.85	1.47
2013/14	435	14,963.70	14,861.9	1,365.80	26,955.20	995	291.6	59,868.2	0.72	24.99	2,28	24.00	45.02	1.66
2014/15	2,833.80	21,624.60	33,091.6	2,616.30	45,030.70	3,791.2	610.8	109,599.	4.73	19.73	2.30	30.19	41.08	3.45
2015/16	6,383.80	30,012.20	45,392.7	2,562.30	56,247.30	7,207.6	39,620.40	187,426.3	3.40	16.01	1.36	24.21	30.01	3.84
Average	14054.4	106,832.8	94086	8028.6	206,922.7	14288.5	40572.9	484,792.1	-	-	-	-	-	-
Average%	8-Feb	22.03	19.40	1.65	42.68	2.90	8.36	-	-	-	-	-	-	-

Source: Economic Survey 2009/10, 2015/16 MoF

Table 4.8 analyzed only four different important subcomponents agriculture, irrigation, transportation and electricity of capital expenditure and excluding other components have minor share. It is observed that the highest average percentage share is in transportation which takes average 16.6 percent of total capital expenditure the average share of electricity was 15.9 percent. Likewise, that of irrigation and agriculture was 9.9 and 5.8 percent respectively the low spending on agriculture reveals the fact that government is not been able to implement the agriculture perspective plan, which is the master plan of the agriculture development of the country.

In FY 2007/08, total expenditure under economic services head was 41.4 percent the total capital expenditure while social service shared 37.9 percent and rest of the category shared 20.7 percent under the assumption of infant private sector, domestic governmental set up justifies the need economic service. The real debate however, should be the productivity of such spending under the different components of social comparison to guarantee the higher field so that the society's major objective of poverty alleviation can be achieved with the desired period.

4.5 Growth of Public Eexpenditure

Growth of all total, recurrent and capital expenditure do not show any specific patterns rather are of random attribute. In some FY there are large upswing and in some FY there are large downswing in growth rate of all categories.

Table 4.9

Growth Rate of Total, Recurrent, and Capital Expenditure and GDP in%

(**NRs. in Million**)

Fiscal Year	Total Expenditure	Recurrent Expenditure	Capital Expenditure	Gross Domestic Product (GDP)
2001/02	0.3	6.6	-12.5	4.1
2002/03	4.9	6.6	-9.8	6.95
2003/04	6.5	6.6	3.3	8.77
2004/05	14.7	11	18.4	9.54
2005/06	8.1	8.6	8.3	11.42
2006/07	20.5	15.1	34.2	10.59
2007/08	20.8	18.6	34.7	11.75
2008/09	36.1	39.7	36.6	20.43
2009/10	18.2	46.1	-44.6	19.12
2010/11	13.7	12.6	16.8	15.24
2011/12	14.8	15.8	8.6	11.13
2012/13	5.7	1.6	6.2	9.93
2013/14	21.3	22.7	22.2	15.31
2014/15	22.1	11.8	33.1	7.43
2015/16	32	27.9	79.2	6.24

Source: Economic Survey 2001/02 to 2015/16 MoF

The growth rate of total public expenditure on the FY 2001/02 as 0.3 percent. There were maximum growth rate in 2008/09, which becomes 36.1 percent where as there is just 0.3 percent growth rate in 2001/02. Similarly recurrent expenditure in the beginning in the study period was 6.6 percent. It increased to ever highest growth rate in FY 2009/10 of 46.1 percent, which was substantially higher than the decade's average of 17.8 percent. Distinguishing feature of both total and recurrent expenditure from that of capital expenditure is that they negative growth rate during the study period. In an average, total expenditure increased by 20.52 prevent against 21.19 percent increase in recurrent expenditure.

The growth rate of capital expenditure in the early period of the study was high but there was negative growth rate in the capital expenditure in FY 2001//02 and 2009/10. In FY 2015/16 there was 79.2 percent of growth rate in capital expenditure is

occurred which was the highest growth rate achieved during the period of analysis. Similarly there was growth rate of 3.3 percent in FY 2003/04, which drastically has increased positive growth of 79.2 percent in FY 2015/16. The average growth rate of capitalexpenditure is 22.7 percent. The growth rate of GDP in FY 2001/02 was 4.1 percent, the growth rate of highest is in FY 2008/09 is 20.43 percent during the study period. The average growth rate of GDP is 6.24 percent.

It can be seen that there are random fluctuations in the all categories discussed so far. The trend, as we saw, falls beyond the established norms of public expenditure management. The increase in recurrent expenditure in the period under review had led to important consequence that it has preempted much of the limited growth rate in government revenue leaving only a small surplus for financing development activity, which seems to collapse in recent years. The decreasing trend on capital expenditure on the other hand is a clear threatens to the social objective of poverty alleviation. But in 2015/16 capital expenditure has jumped the splendid step establishing new record of almost 79.2 percent more than the top growth record it had made in 2008/09.

4.5.1 Growth of Recurrent Expenditure

The ever growing recurrent expense has the growth rate differing in different headings in different time schedules Trend of growth rates in each category are of very much eccentric nature.

Table 4.10

Growth rate of Recurrent Expenditure of Social service

(**NRs. in Million**)

Fiscal Year	General Public Service	Economic Affairs	Defense	Health	Education	Social Protection	Others*	Total
2009/10	-	-	-	-	-	-	-	-
2010/11	13.1	16.1	4.9	6.2	18.9	5	8.8	12.6
2011/12	17.9	0.2	18.4	16.5	12.9	6.1	37	15.8
2012/13	10.95	3.54	-11.08	-2.96	0.61	12.09	-	1.64
2013/14	3.57	40.92	39.52	23.49	24.74	6.06	-	22.66
2014/15	119.78	19.57	0.15	41.64	10.5	29.46	-	31.44
2015/16	8.82	68.04	13.58	14.6	14.69	40.32	-	21.38

Source: Economic Survey 2009/10, 2015/16

While analyzing the growth rate of various heads of recurrent expenditure, social services sectors social proyection has ever positive growth rate. However this rate fluctuates between 5 to 40.32 percent. The growth rate is negative at 2012/13 in defense. It may occur because of the completion of assembly election, partial settlement of vital rebellion parties, endogenous, ethnic groups and other who were raising the political issue and rights.

4.5.2 Growth Rate of Capital Expenditure

Manner of growth trend under Capital heading is similar to that of recurrent expenditure.

Table 4.11

Growth rate of Capital Expenditure Under Social Services

(NRs.in Million)

Fiscal Year	General Public Service	Economic Affairs	Defense	Health	Education	Social Protection	Others*	Total
2009/10	-	-	-	-	-	-	-	-
2010/11	-30.1	19.4	33.1	43.1	70	19.5	9.2	16.8
2011/12	4.1	7.8	29.1	7.4	-18.7	12.4	9.2	8.6
2012/13	67.12	7.12	29	-12.48	0.22	-17.69	-	6.24
2013/14	2134.69	64.97	171.97	6.87	-9.13	21.28	-	140.89
2014/15	43.25	83.07	-15.89	48.16	37.58	52.3	-	66.39
2015/16	40.13	71.01	47.43	-26.9	-2.93	-7.88	-	52.96
average	2259.19	-	-	-	-	-	-	-

Source: Economic Survey 2009/10, 2015/16

Among the capital expenditure in social service sector, the higher growth rate has been obtained for genral public service and economic affires keeping laggard to the genral public service which had the top growth rate in FY 2013/14.

Economic administration and planning records increment at the moderate rate. As shown in table, educationis rising faster rate (70 percent per annum) than other. Higher increase or decrease growth rate of education is because of not clear cut oblivious and flexibility of the expenses to avoid and adder any type of uncertainty and urgent issues forwarded by the government. When compared to the capital

expenditure of FY 2015/16, capital expenditure for genral public service is increased by40.13 percent, that for economic affaires by 71.01 percent defence increased by 47.43 percent health decreased by26.9 percent, education decreased by -2.39 percent and social protection decreased by -7.88 percent.

4.6 Trend of Public Expenditure, Gross Domestic Product and Revenue

4.6.1 Trend of Public Expenditureand Gross Domestic Product

In the initial stage of development, developing country generally faces the problem of supply constrains due to the massive participation of government in development and welfare activities. Due to the growing demand of public good and services, the public expenditure in absolute terms has been growing successively in each year. It has increased tremendously from NRs.80,072.2 million in FY 2001/02 to NRs.70,1171.7 million in FY2015/16. During the period, the government expenditure grew at an annual average of 0.3 percent with the highest growth rate of 32 percent in FY 2015/16.

Table4.12
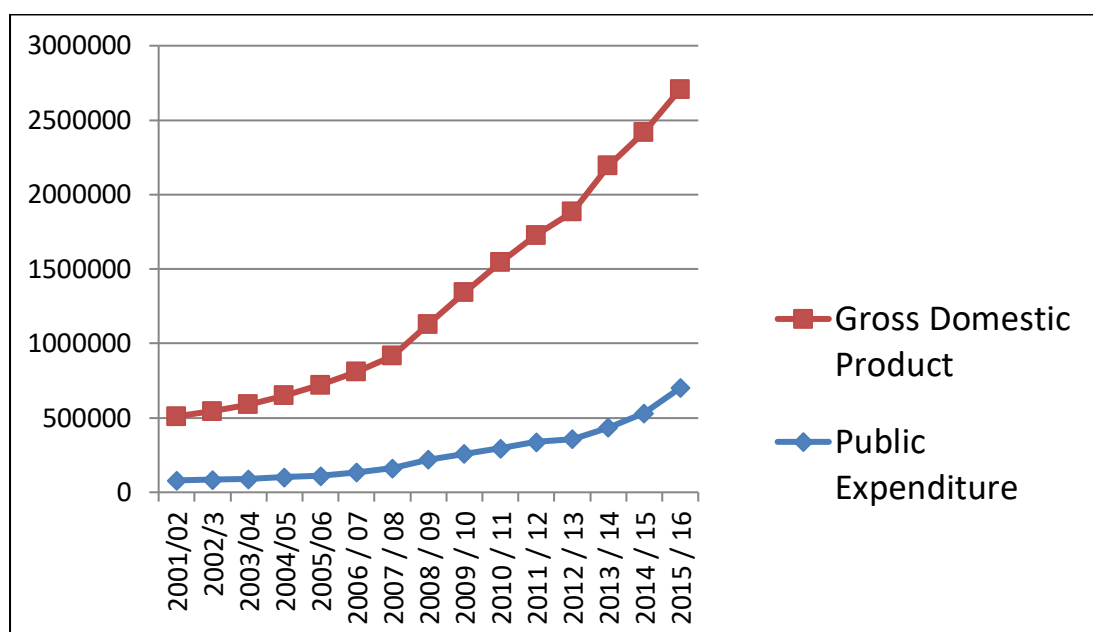
Trend of   Public Expenditure and Gross Domestic Product

(NRs.in Million)

Fiscal Year	Public Expenditure	Gross Domestic Product
2001/02	80072.2	430396.4
2002/03	84006.1	460324.8
2003/04	89442.6	500699.3
2004/05	102560.5	548484.7
2005/06	110889.2	611118.1
2006/07	133604.6	675859
2007/08	161349.9	755256.8
2008/09	219661.9	909528
2009/10	259689.106	1083451
2010/11	295363.427	1248481
2011/12	339167.5	1387481.7
2012/13	358638	1525220
2013/14	435052.3	1758738
2014/15	531334	1889408
2015/16	701171.7	2007274.6

Source: Economic Survey 2001/02, 2015/16 MOF

Figure 4.7

Trend of Public Expenditure and Gross Domestic Product

Source: Based on Table 4.12

Table 4.11 shows relationship between public expenditure and gross domestic product in Nepal. Here calculated in 15 sample size and 14 obeservation. GDP is the dependent variable and public expenditure is the independent variable. In this calculated table when we use one million public expenditure then there is 1.86 percent increases gross domestic product that is positive relationship of public expenditure and gross domestic product.

The R- squared (R^2) staistic measure the success of regression in predicting the values of the dependent variable with in the sample. Here, R^2 value is 0.40778 which shows the it fits no better then the simple mean of the dependent variable or GDP.

Adujusted R^2 is measure will also be employed to get additional information about the goodness of fit. Wheoras, the adjusted R^2 value is 0.358362 whioch contribute explanotry poewer of the model. Adjusted R^2 is always lessthen of R^2

4.6.2 Trend of Government Revenue

In the 15 years period from 2001/02 to 2015/16, government revenue reported an increasing trend but with the fluctuating growth rate, during the period, the government revenue grew at an annual average of 14.2 percent with the height growth rate of 33.31 percent in FY 2008/09 and the lowest of 3.1 percent in FY 2005/06. In

most of the review years, revenue recorded a double-digit growth rate while the snail-pace growth of the economy is one major reasons for low growth rate of revenue mobilization, the declaration in tax revenue especially customs revenue is the other.

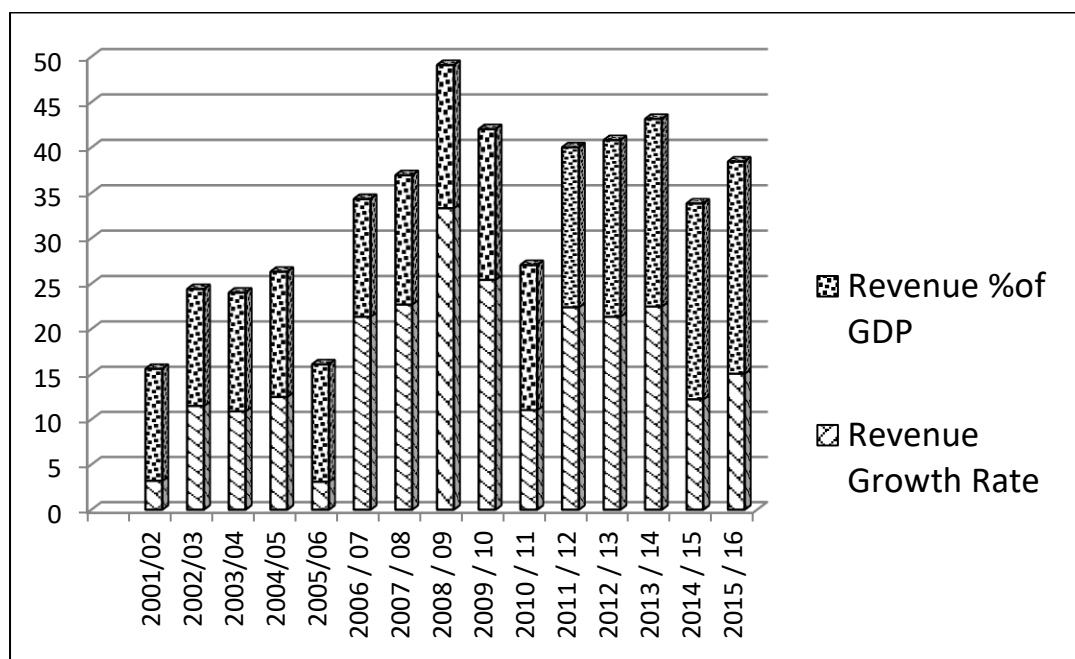**Table 4.13**

Trend of Government Revenue

(NRs. In Million)

Fiscal Year	GDP	Revenue			Revenue Growth Rate (%)	Revenue as % of TE	Revenue % of GDP
		Tax	Non-Tax	Total			
2001/02	430396.4	39,332.00	11114.9	50,445.60	3.2	63.00	12.4
2002/03	460324.8	42,587.00	13642.9	56,229.70	11.5	66.90	12.9
2003/04	500699.3	48,175.70	14155.3	62,331.00	10.9	69.70	13.1
2004/05	548484.7	54,106.10	16018	70,124.10	12.5	68.40	13.8
2005/06	611118.1	57,427	14855.1	72,282.10	3.1	65.20	13
2006/07	675859	71168	16543.6	87712.1	21.35	65.65	12.97
2007/08	755256.8	85147.1	22471.9	107622.7	22.7	66.7	14.24
2008/09	909528	117051.8	26422.6	143474.4	33.31	65.31	15.77
2009/10	1083451	159785.4	20160.5	179945.8	25.42	69.29	16.6
2010/11	1248481	177227.2	22591.9	199819	11.04	67.65	16
2011/12	1387482	211722.6	32838.5	244561.1	22.39	72.1	17.62
2012/13	1525220	259214.9	37561.5	296776.5	21.35	82.75	19.45
2013/14	1758738	321439.9	51053.5	363493.4	22.48	83.55	20.66
2014/15	188940.8	355955.5	51992.3	407947.7	12.23	76.77	21.59
2015/16	2007275	412424.4	57001.1	469425.5	15.07	66.94	23.38

Source: Economic Survey 2001/02, 2015/16 MOF

Figure 4.8

Trend of Government Revenue

Source: Based on Table 4.13

In FY 2001/02, the government revenue stood at NRs. 50,445.60, million, amongst which NRs.39332 million from tax revenue and the remaining NRs.11114.9 million collected from non-tax sources. In FY 2015/16, the government revenue increased to NRs.469425.5 million, with the contribution of tax revenue being NRs. 412,424.4 million. The share of non-tax revenue reached to NRs. 57,001.1 million. The proportion of government revenue was 12.4 percent of GDP in FY 2006/07, and in 2015/16, this was 23.38 percent of GDP. This indicates that though, the public receipt from revenue has been increasing, it has not been able to contribute significantly to the GDP.

4.7 Trend of Resource Gap

The massive governmental participation in developmental programmes demands huge amount of public expenditure. If the revenue for these activities is not sufficient to meet the amount of government expenditure, resource gap then comes into existence. There are two types of resource gap: a) Domestic resource gap and b) Overall resource gap. Domestic resource gap is the amount of net deficit of resource or revenue after meeting expenditure. Here we exclude the contribution made by the

foreign grants. But in overall resource gap, we include the contributions made by foreign grants in financing the public expenditure.

As we see on the table the amount of domestic resource gap has also been growing continuously. In the FY 2001/02, the gap was NRs.29629.6 million coming to the fiscal year of the study, the gap has grown to Rs.231746.5 million that is 3 times greater than the first year of review period, and the percentage of Domestic Resource Gap to GDP however shows a fluctuating trend. The percentage is as highest as 11.54 percent in the year 2015/16 and as lowest as 4.06 percent in the year 2012/13.
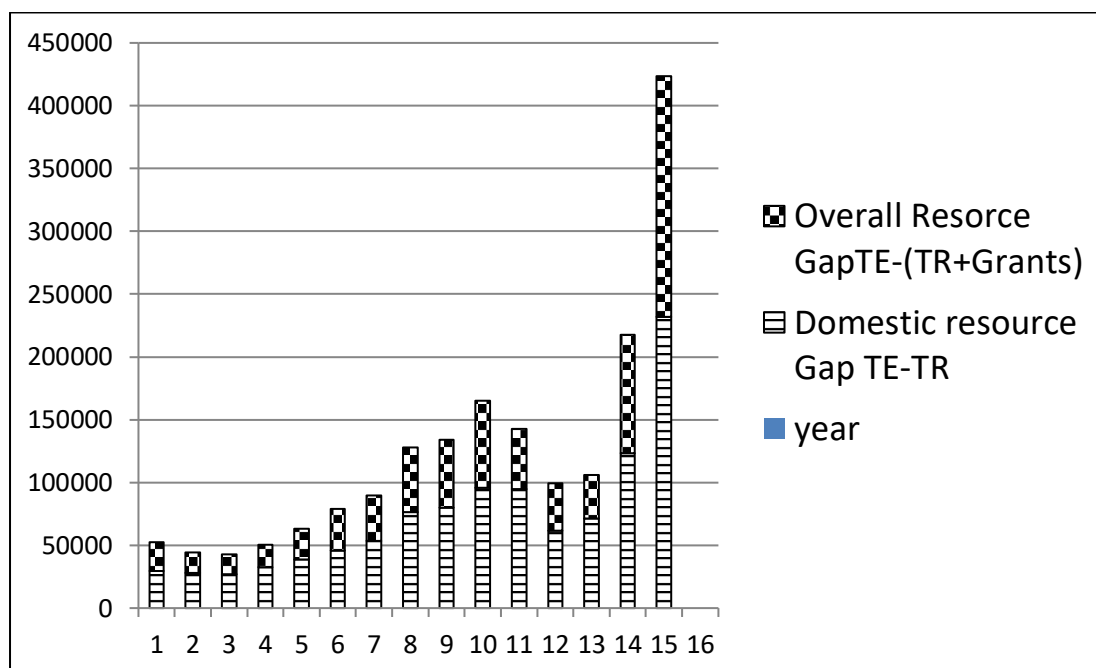
Table 4.14

Trend of Resource Gap

(NRs. In Million)

Fiscal Year	GDP	Domestic resource Gap TE-TR	Overall Resource Gap TE-(TR+ Grants)	Domestic resource Gap as% of GDP	Overall Resource Gap as % of GDP
2001/02	430396.4	29626.6	22940.5	8.97	5.33
2002/3	460324.8	27776.4	16437.3	6.03	3.57
2003/04	500699.3	27111.6	15828.2	5.41	3.16
2004/05	548484.7	32436.4	18045.4	5.91	3.29
2005/06	611118.1	38607.1	24780	6.31	4.05
2006/07	675859	45892.9	33098.1	6.7	4.89
2007/08	755256.8	53727.3	36196.7	7.11	4.79
2008/09	909528	76187.6	51787.1	8.37	5.6
2009/10	1083451	79743.2	54517.3	7.36	5.03
2010/11	1248481	95544	69336.4	7.65	5.55
2011/12	1387482	94606.9	48033.4	6.81	3.4
2012/13	1525220	61861.5	37433	4.05	2.45
2013/14	1758738	71558.6	34617.9	4.06	1.96
2014/15	188940.8	123386.3	94437.7	6.53	5
2015/16	2007275	231746.5	191963.26	11.54	9.56

Source: Economic Survey 2001/02 to 2015/16

Figure 4.9

Trend of Resource Gap

Source: Based on Table 4.14

The overall resource gap also shows the same trend as the domestic resource gap. In the FY 2015/16, the overall resource gap has increased by 2 times it as in the FY 2001/02. The percentage of GDP has declined during the review period however, smarginal increases during some years were noticed. In the FY 2015/16, the percentage has declined to 9.56 percent of GDP. The gap between fiscal and overall resource gap is of growing tendency.

Table 4.13 shows that, though the total revenue in absolute term is in increasing trend, at the same time the size & magnitude if total deficit has increased overtime. This increasing trend of resource gap resembles that ceteris paribus, either the resources have been diverted toward the non- productive type of recurrent expenditures or the pattern of investment has been such that due return could not come within a short span of tine in order to release the resources through the induce and spillover effect in the economy. True, foreign aid has helped considerably to overcome the problem of resource gap but from the broader economic perspective it seems that foreign aid, which constitutes major source of development expenditure, has not been highly helpful in sustaining the process of economic growth and development either.

Therefore, it pertinents to extend our discussion on the existing public expenditure policies and general repercussion on the economy.

4.8 Relationship Between Government Expenditure and Gross Domestic Product of Nepal

RGDP= 465113.2+1.86 public evpenditure.....................(1)

Dependent Variable: Real Gross Domestic Product

Independent Variable: Public Expenditure

Method: Least Squares

sample: 2001/1015

Included Observation:14

Explanatory Variable	Coefficient	Std. Error	t-Statistic	Probablity
C	465113.2	211719.8	2.196833	0.0484
Total Expenditure	1.864681	0.648781	2.874132	0.0140

R- Squared	0.407718
Adjusted R-Squared	0.358362
S.E. of Regression	435071.3
Sum Squared	2.27E+12
Log Likelihood	-200.5518
F-Statistic	8.260632
Prob(F-statistic)	0.013982
Durbin-Watson stat	2.542488

In table 4.11 shows relationship between public expenditure and gross domestic product in nepal. Here calculated in 15 sample size and 14 obeservation. GDP is the dependent variable and public expenditure is the independent variable. In this calculated table when we use one million public expenditure then there is 1.86 percent increases gross domestic product that is positive relationship of public expenditure and gross domestic product.

The R- squared (R^2) staistic measure the success of regression in predicting the values of the dependent variable with in the sample. Here, R^2 value is 0.40778 which shows the it fits no better then the simple mean of the dependent variable or GDP.

Adujusted R^2 is measure will also be employed to get additional information about the goodness of fit. Whearas, the adjusted R^2 value is 0.358362 whioch contribute explanotry poewer of the model. Adjusted R^2 is always lessthen of R^2. Adjusted R is shows the 35 percent but that is not good for observation. then, we are add the severals number of sample.

F-statistic is computed as F=

This statistic has an f distribution with k-1 numerator dgrees of freedom and N-K denominator degrees of freedom. F-statistic value is 8.26362.

The p-value denoted the probablity (F-statistic) is the marginal significance of F- test. Prob(F-statistic) value is 0.013982. If the p value is less than the sigficance level is testing say 0.5, For the testing above regression model where is p value is 0.013 so here the null hypothisis is reject.

CHAPTER IV

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary Major оf Findings

- Economists always have different arguments weather the public spending brings the positive or negative effect in the economy. This debate turned back to the Classical economist who are the supporters of the free economy without government intervention and Keynesian economists who are the supporters of the government intervention in the economy. This debate still exist in the current economy in the form of the new Classical economics and the new Keynesian economics. Thus, this study has tried to find out the effect of the public expenditure in the economic growth in case of Nepal.

- It has used descriptive analysis to check the nature and trend of the public expenditure and economic growth in Nepal. It has used government expenditure and GDP for the analysis. Total GDP is taken as the dependent variable and government expenditure is taken as the independent variable to find out the relationship between public expenditure and economic growth. The Study has used the regression analysis model to predict or estimate the value of one variable crossponding to a given values of another variable.

- Public expenditure programs are the main viable sources of expanding the production base of the economy. 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. This study is primarily confined to the analysis of trend and pattern of public expenditure and impact of public expenditure on GDP during the period 2001/02 to 2015/16.The trend and pattern of public expenditure threaten the fiscal discipline and management. There are many factors giving rise to the increasing trend of recurrent expenditure rather than capital expenditure. The impact of public expenditure on GDP is analyzed by establishing some models.

- Nepal's budgetary process has been highly unrealistic. In almost all the years in the review period, the budget targets have been set at unduly high levels, particularly for the revenue and foreign aid. This over estimation of resources has in turn enables the Government of Nepal to set similar unrealistic targets for the capital budget and to accommodate too many projects. However, actual budget outcome fell significantly short of the optimistic expectations every year. Among the expenditures, recurrent expenditure has been increasing rapidly due to the growing burden of debt service payments, maintaining law and order and providing salary to civil servants. Growing recurrent expenditure has been narrowing the revenue surplus necessary to finance capital expenditure.

5.2 Conclusions

Public service, economic affaires, defence, health. education, social protection, and others (in others include that is public order and safety, enviornmental protection,housing and commuity ammenities, and recreation cultural and recreation). However the threat to the social objectives of poverty alleviation has been caused from high burden of defense expenditures, general public service expenditure, and education expenditure. The rapid growth of recurrent expenditure on later years of study period can be attributed to the increasing expenses on general public services. Another The recurrent expenditure has surpassed thecapital expenditure as against the accepted fiscal norms. Capital expenditures is lesser than recurrent expenditure. The recurrent expenditure has increasing in all fiscal year it not lesser then capital expenditure. The pattern on public expenditure clearly justifies the fact that social service categories hold substantial amount of total public expenditure under capital expenditure and recurrent expenditure where as general important aspect is that a substantial amount is allocated for the salaries, wage categories (e.g. general administration, foreign services, constitutional organs, judicial administration etc.) which have left a little amount for other categories in social service expenditurelike as economic service expenditure and mainly for the health, education and social protection. In effect allocations for operations and maintenance activities in the regular budget have been higher inadequate. The overall pattern, thus, corresponds to the fact that public expenditure is mainly diverted to the consumption type only instead of capital expenditure.

Economic and social service expenditures hold a large share on total expenditure. The analyze of the different component of social service, which hold a large share in total expenditure lead to conclude that greater concentration have been provided to education followed by health,general public service,social protection and drinking water respectively. Among the economic service categories, it is found major chunk of resources has been devoted to general economic, commercial and lab sfollowed by agriculture, foresty, fishing, hunting, fuel and energy, mining, manufacturing, and costruction, transport and communication respectively.

The growth of public expenditure in Nepal is taking a rapid tempo. The growth rate of revenue is lower than that of government expenditure during the study period leading to widening resources gap. The overriding trend on the public expenditure reflects alarming situation with regard to fiscal discipline and the overall development program of the country. The massive investment in each successive plan and annual budget of rapid expansion of economic and social infrastructure leads to the increase in government expenditure. It leads the country to continue in the low level of equilibrium trap. With this background, the study of the trends and patterns of government expenditure, revenue and budget deficits leads us to conclude that the slow pace of revenue collection compared to expenditure growth has been creating fiscal imbalance for which the nation has to depend upon foreign assistance. Due to the tendency of declining foreign grants and increasing foreign loans, the debt burden of Nepal has been increasing, with almost one-third of the recurrent expenditure to be allocated for the debt service. If fiscal imbalances increase continuously over the coming years, or debt stock as well as debt service payments increase steadily emptying Nepal's narrow coffer, there would be problems for earmarking resources for productive projects while complying with the need for maintaining macroeconomic stability.

As the government has to resort to both foreign and international borrowing to finance fiscal deficit, higher fiscal deficit has many implications on the economy including creating a liability to the nation. The trend of sources of financing the deficits shows

that a major part of it has been financed through external sources but from FY 2000/01 to 20007/08 contribution of internal sources is higher. There is a haphazard flow and use of foreign aid. Such situation has been creating aid dependency syndrome in the Nepalese economy.

In a nutshell, the trend, structure and impact of public expenditure on GDP during the period under review show a miserable situation with regard to fiscal discipline and management. The regular expenditure is excessively increasing where the total revenue is unable to meet the recurrent expenditure. It is a clear threat to the nation's long term objective of poverty alleviation. Moreover, the exercise dependence on foreign aid especially foreign loan will certainly pull the country to debt trap in the long run. The important consideration in Nepalese resource allocation practice is the highly buoyant public expenditure with respect to foreign aid. Many projects are implemented with the funding of donor agencies. The donor agencies are too much involved in the decision making. So many difficulties are created in the implementation and completion of the projects.

5.3 Recommendations

Based upon above conclusion, some recommendations can be presented as:

1) The rapid growth in recurrent expenditure especially over few years can be attributed to the increase in defense expenditure. Though, peace is the necessary condition for economic growth and development for the country like Nepal which has lost its productive capacity to respond to the sustained economic growth, there must be cut in defense expenditure and should be allocated to social and economic sectors.

2) Social sector development is needed to upgrade the quality of life pattern and for rapid economic growth sub-section of social sectors such as basic education, health, safe drinking water, general public service should be accorded high priority because of their significant role in human capacity development and their determining position in human development which directly affect poverty alleviation.

3) It is found that a substantial part of internal resources are utilized in financing consumption type of expenditure under the recurrent expanses. In effect, it has very little recourses left to public investment especially in economic and social service front. Accordingly the dependence on foreign aid has increased for financing development activities. So it is necessary to reduce consumption type of public expenditure in order to promote the capital accumulation process. In over capital expenditure must be increased.

4) Budgetary deficit need to be reduced by mobilizing additional resources the government should take a number of measures such as strengthening the tax administration, increase tax base to promote revenue generation and control corruption similarly; unnecessary regular expenditure should be discouraged.

5) Government should choose major priority sector that generate income and should spend on those sectors on planned basis.

6) Public expenditure should be best allocated for the development of transpiration, communication and social service in order to reduce geographical fragmentation and increase the profitability of private investment as well as by extending the size of the market, skill and efficiency of labor.

7) Development projects should be screened based on cost-benefits analysis. To streamline the capital budget and minimize the waste of resources associated with over programming. It is essential to ensure greater realism in resource forecasting.

8) Administrative cost control systems through setting up of clear expenditure norms should be strengthened.

9) Financial management and internal auditing system should be improved.

10) Political stability

REFERENCES

Adhikari, D. (2004) *Nepal and budgetary exercise during the Nineties: An assessment. NRB Economic Review, 40 (4), 40-50.*

Adhikari, N. (2004) *Public expenditure in Nepal: Trend and determinants.* (Unpublished master's thesis). CEDECON, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

Alexiou, C. (2009) Government spending and economic growth: Economic evidence from the South Eastern Sudan. *Journal of Economic and Social Research, 11*(1): 1-16. Retrieved from https://www.citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.452. 6517&rep=rep1&type=

Alshahrani, S., & Alsadiq, A. J. (2014) Economic growth and Government spending in Saudi Arabia: An empirical investigation. *IMF Working Paper.* Retrieved from https://www.imf.org/external/pubs/ft/wp/2014/wp1403.pdf

BC, M. (2009)*An analysis of public expenditure in Nepal* (Unpublished master's thesis). CEDECON, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

Basnet, D. (2013). *A study of foreign aid with special reference to Japan.* (Unpublished master's thesis), Central Department of Economics, Tribhuvan University Kirtipur, Kathmandu, Nepal

Bhusal, T. P. (2014) Government spending and economic growth in Nepal. *Nepalese Journal of Economic studies, 1*(1):52-61.

Bin, K. (2011*) The Association between Government Expenditure and Economic Growth in Malaysia .*M.A. Thesis, Higher Degree Committee of Economics, Beppu, Japan, Ritsumeika Asia Pacific University.

Desmond, N. I., Titus, O. A., Timothy, O., & Odiche, N. L. (2012) Effects of public expenditure on economic growth in Nigeria: A disaggregated time series analysis. *International Journal of Management Sciences and Business Research, 1*(7). Retrieved from http://www.ijmsbr.com/Volume%201, Issue%207%20(6) %20Andy.pdf

Devarajan, S., Swaroop, V., & Zou, H. F. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics, 37*, 313-344. Retrieved from https://www.worldbank.org/publicsector/pe/pfma07/ShantaVinayHengfu.pdf

GoN (Government of Nepal) (2015).*Constitution of Nepal*, 2015. Kathmandu, Nepal: GON.

GoN (Government of Nepal) (2003).*Consolidated financial statement.* Kathmandu, Nepal: GoN.

GoN (Government of Nepal), (2010). *Consolidated financial statement.* Kathmandu, Nepal: GoN.

GoN (Government of Nepal), (2013). *Consolidated financial statement.* Kathmandu, Nepal: GoN.

GoN (Government of Nepal), (2017).*Consolidated financial statement.* Kathmandu, Nepal: GoN

Goode, R. (1984) *Government finance in developing countries*. New Delhi, India: Tata McGraw- Hill Publishing House Ltd.

Gujarati, D. (2003) *Basic econometrics* (4[th]ed.).New Delhi, India: McGraw Hill Publication.

Gyanwaly, R. P. (2014). Financial development and economics growth in Nepal. *Nepalese Journal of Economic Studies, 1*(1):14-26.

Kanel, N.R. (2003) *Guidelines to formal thesis and dissertations: A quick reference.* Kathmandu, Nepal: New Hira Books Enterprises.

Kapunda, S., & Topera, J. (2013). Public expenditure composition and economic growth in Tanzania: Socio-economic policy implications. *Asian Africian Journal of Economics and Econmectrics, 13*(1), 61-70. Retrieved from https://www.serialsjournals.com/serialjournalmanager/pdf/1436354018.pd

Ketema, T. (2006) *The Impact of Government Spending on Economic Growth: The Case of Ethiopia*. M.Sc. Thesis, Graduate School of Economics, Addis Ababa, Ethiopia, Addis Ababa University.

Khadka, P. (2002). *Public expenditure and economic development in Nepal* (Unpublished master's thesis). CEDECON, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

Khanal, D.R. (1988) *Public expenditure in Nepal: Growth, pattern and impact*. New Delhi, India: Sterling Publishers (P) Ltd.

Kweka, J. P., & Morrissey, O. (1997). Government spending and economic growth in Tanzania, 1965-1996. *Nottingham,England:Centre for Research in Economic Development and International Trade*. Retrieved from https://www.nottingham.ac.uk/credit/documents/papers/00-06.pdf

Lekhi, R.K. (2005) *Public finance*. (12th ed.). New Delhi, India: Kalyani Publishers.

Le, M.V., & Suruga, T. (2005). The effects of FDI and public expenditure on economic growth*:* From theoretical model to empirical evidence. *GIC Working Paper Series*, *2.Kobe, Japan, Kobe University*.

Mathew, T. (1972) *The Economics of public expenditure*. New Delhi, India: Vora& Co. Publisher Private Ltd.

Mulamba, K. C. (2009). Long run relationship between Government expenditure and economic rowth: Evidence from SADC countries. (Unpublished master's thesis), Central Department of Economics, Tribhuvan University Kirtipur, Kathmandu, Nepal

MoF/GoN (Minister of Finance/ Government of Nepal) (……….). *Economic Survey (various issues). Kathmandu, Nepal: MoF/ GoN*

Mulamba, KC (2009).*Long-Run Relationship between government expenditure and economic growth: Evidence from SADC countries.*

Musgrave, R.A., & Musgrave, PB. (1976) *Public finance theory and practices.* (2nd ed.). New Delhi, India, McGraw-Hill Kogakusha Ltd.

Ogbokor, C. A. (2015) Exploring co-integration and causality relationships between Government expenditure and economic performance in Namibia. *Developing Country Studies, 5*(9).

Retrieved from http://www.ir.nust.na/bitstream/handle/10628/523/Ogbokor.%20Exploring%20Cointegration%20and%20Causality%20Relationships%20between.pdf?sequence=1&isAllowed=y

Oni, A. A., & Ozemhoka, A. M. (2014) Impact of public expenditure on the growth of Nigerian economy. *European Scientific Journal, 10*(28). Retrieved from http://www.eujournal.org/index.php/esj/article/viewFile/4397/4194

Peacock, A.T., & Wiseman, J. (1961) *The growth of public expenditure in the United Kingdom.* London, England: Princeton University.

Pigou, A.C. (1947) *A study in public finance* (3rd ed.). New York, NY: MacMillan Company Ltd.

Premchand, A. (1983) *Government budgeting and expenditure controls: theory and practice.* Washington, DC: International Monetary Fund (IMF)

Premchand, A. (1990) *Government financial management issues and country studies.* Washington, DC: International Monetary Fund (IMF)

Pyakural, B. (1998). *Nepal's conflict economy: Cost, consequences & alternatives.* Kathmandu, Nepal Economic Association

Rahman, M. (2012). The relationship between economic growth and Government expenditure: Evidence from Sudan. *International Business Research, 5*(8). Retrieved from https/www.file:///C:/Users/carol/AppData/Local/Temp/18466-61378-1-PB-2.pdf

Raut, N. (2005).*An analysis of budget deficit, money supply and inflation:*

Sharma, V.P. (1999).The problems and prospects of regular and development budget of HMG/Nepal. *The Economic Journal of Nepal,* 22(1), 40-50.

Shigh, S.K. (1977) *The fiscal system of Nepal*. Kathmandu, Nepal; Ratna Pustak Bhandar.

Shrestha, P. K. (2009). The composition of public expenditure, physical infrastructure and economic growth in Nepal. *NRB Working Paper*.

Taylor, P.E. (1961). *The economics of public finance.*NewYork,NY: The MacMillian Publishing Corporation.

The World Bank. (2006) *World Development Indicators 2016*. Washington, DC: The World Bank.

United Nations (1993).The control and management of government expenditures: Issues and expenditure in Asian countries. *Discussion Paper No.13.*

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.

Upreti, B. (2002) A study on performance of public expenditure in Nepal. *The Economic Journal of Nepal,* 25(2):50-55.

Wagner, R.E., & Weber, W.E. (1977) Wager's Law: Fiscal institutions and the growth of Government. *National Tax Journal.*