CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Economic development has been one of the most popular slogans in almost all the developing countries all over the world. Similarly, achievement of high rate of economic growth, reduction of income disparities and poverty and improvement of living standard of people are some of the development strategies towards which most of the government efforts have been directed in developing countries.

It is known that government needs more revenue for overall economic development and state welfare. Besides this, for meeting day-to-day expenditure, government also requires some sources of income, which is called revenue. These are the challenging tasks, which demand increasing necessity of regular expenditure in general and development expenditure in particular. However, resource mobilization is very low compelling the government to depend on foreign assistance heavily. Development expenditure has been relied on entirely on foreign aid. We know, external assistance is uncertain, inconvenient and not good for healthy development .Foreign aids are not bad for economic development of the nation peruses. But the experience of the most of the developing countries shows that there are negative effects of increasing international grants and loans to finance the public development activities. Thus, the government should depend on its own resources for generating revenue to spend these regular as well as development activities.

Government collects revenue from taxable and not taxable sources. Tax is a key source for revenue mobilization. Tax is compulsory contribution, as prescribed by law, to the government for a common benefit upon the residents of the state. Taxes are major fiscal policy instruments and important government policy tools, have an important role in increasing the rate of capital formation and thereby a high rate of economic growth can be achieved. Increase in taxes may be directed to increase in saving through the postponement of consumption. The increase in saving means a higher volume of resource is available for making useful and productive investments. Taxation may also play a dual role. On the one hand, taxation may be used to make the maximum volume of resource available to the public sector. On the other hand, taxation may be used to promote useful investment in the private sector and to prevent the resource from being dissipated over speculative and unproductive investment as well as over lavish and luxurious consumption. Thus, taxes in developing countries are the severe means of raising revenue.

There are two ways to raise tax either by indirect tax or by direct tax in the field of taxation. A tax is a direct one when the incidence and impact are on the same person, e.g. Income tax. Indirect tax simply implies that a tax in which the burden or incidence of tax does not directly fall on the taxpayers but shifts towards other persons and the real income are affected indirectly e.g. value added tax, custom duties.

In least developed countries like Nepal, role of indirect tax is seen to be more important. And VAT is the most important innovation of the second half of the twentieth century, which is considered as an effective means to collect revenue as a reformed sales tax of indirect tax system.

The value added tax is of recent origin in the field of taxation. the concept of VAT was developed by the first time by Dr.Wilhelm V.Siemens in Germany in 1919.the concept of VAT was developed further in 1949 by a tax mission in Japan headed by Prof..Charls S.Shop ,the tax however remain as only a topic of academic interest until 1953.In 1954 France introduced VAT covering the industrial sector. The tax was however limited up to the wholesale level. By the end of 1960s only eight countries including France, Brazil, Germany, Netherlands, Sweden etc. had introduced VAT. Since then VAT has been introduced by at least one country each year.

The concept of VAT in Nepal was introduced in early 1990s.Nepal government indicated its intention to introduce VAT in the eighth plan subsequently the finance minister declared to introduced a two -tier sales tax system to make the base of implementing VAT from the fiscal year 1992/93.A VAT task force was created in 1993 under the financial assistance of USAID in order to make necessary preparation for the introduction of VAT. The VAT task force prepared the draft of VAT legislation.

The parliament of Nepal enacted “value added tax act 1995{2052}”, subsequently VAT regulation was made in 1996; although the act was passed in 1995 its implementation was delayed due to political instability and strong opposition from business community. VAT with single rate of 10% has been fully implemented with effect from 16 November 1997.It has replaced sales tax, hotel tax, contract tax and entertainment tax. VAT is a new tax system for Nepal, VAT has been justified in the light of government fiscal imbalance and need for extra revenue mobilization through an efficient tax system. The government of Nepal has been increased VAT to 13% with its effect from 15 February 2004 (Magh ,1 ,2061).the value added tax its name implies a tax in the value added to a commodity or service. Its special characteristics being that it falls on the value added at each stage of production and distribution.

1.2 Statement of the Problem

Nepal is a developing country where most of the people live under poverty line. Despite more than 50 years of planned development the Nepalese economy is persistently suffering from general poverty and stagnation. The per-capita GDP of Nepal is just $ 390(Economic survey 2064/65) and more than 30% of the population survive on less than one dollar a day. Similarly the economic performance of the country in major area is also disappointing. The economic growth rate is not going to support the increasing population. The basic macro economic indicator of countries shows that Nepal’s economic performance is not satisfactory. The widening resource gaps such as: revenue – expenditure gap, saving- investment gap, imports – exports gap of the country have further affected the economic stability of the country.

The ever increasing government expenditure and limited sources of revenues have leaded the country to several fiscal crises over many years. The share of foreign aids in development expenditure is more than 50 percent. The burden of foreign debt is increasing year by year. The persisting budgetary defects and increasing dependency on foreign assistance for financing deficits present a dismal picture of country's fiscal prospects.

The major cause of persisting fiscal deficits in Nepal is inadequate resource mobilization due to poorly designed defective tax structure. The design of taxes in Nepal is so poor and defective that revenue raising instruments have very disappointing performance. The weak performance of taxes in raising revenue is already reflected in Nepal's low Tax GDP ration, Nepal's tax structure is less productive less responsive as the elasticity and buoyancy coefficient are not satisfactory. The major defects of Nepal's tax system is very narrow base, mainly because the larger proportion of GDP originating from the agricultural sector remains out of tax net. Similarly other problems are low contribution of direct taxes, low voluntary tax compliance, very weak tax administration, wide spread tax evasion burdensome legal and administrative procedures etc.

The scope of direct taxes via: income taxes, property taxes, are rather limited because of the low income of the people. Further direct taxes are very difficult to collect effectively because of low administrative expertise and large scale of tax evasion. On the other hard the rates of indirect taxes like import tax excise duties are also gradually being lowered because of trade liberalization policy. In this situation, only revenue –rising device may be tax on internal transaction of goods and services. It is therefore, there is a strong need for reforming existing taxing

In this situation there is no alternate of VAT in place of existing sales tax system, which is less productive and narrow base. The VAT would broaden the base and increase revenue elasticity. But the problem is that most of the general public don't know the concept of VAT even the businessman have not clearly understood it, in such situation government should abolish such problems and make VAT remarkable.

1.3 Objectives of the Study

The general objectives of the Study are;

a. To study the contribution of VAT in revenue collection in Nepal.

b. To study the trend of revenue collection before and after the implementation of VAT.

c. To study the relationship of VAT with Total Revenue, Total Tax Revenue and Total Indirect Tax Revenue.

1.4 Significance of the Study

VAT can play an important role in the process of development. Developing countries like Nepal need higher revenue to fulfill various responsibilities. VAT provides various financial needs, if it is properly implemented. More revenue is possible through VAT by broadening the tax base, introducing new area, reducing tax evasion through good management. For the successful implementation of VAT co-ordination between government and business community is must, but experience shows that government department are not responsible and business are against VAT system in Nepal.

VAT is the newest form of sales taxation. It has implemented since 1997 in Nepal. There is need of deeper and wider study about VAT in Nepal. In this context many empirical and theoretical studies has been conducted to examine the various problems, prospect of VAT in Nepal. Many studies that have been undertaken at different period of time will be direly beneficial to policy maker, private sector, researcher, and general people. Policy makers will be able to identity the areas needed for improvement and it will provide a clear idea and knowledge to those persons. Similarly it will help the researcher to carry out their research a step ahead about VAT. For such stand points the studies have great significance about VAT.

1.5 Limitation of the Study

The following are the main limitations of the study,

a) The study is mainly based on the published secondary data and information and no attempts have been made to examine the reliability of the data.

b) The methodology followed in the study is not designed by the advanced and sophisticated techniques.

c) The study is very specific on VAT.

d) The study only covers the time period form 1990/91 to 2006/07

e) The study has been performed with in limited time and resources.

1.6 Methodology of the Study

The study is mainly based on the secondary data. The data and information are applied in a simple way considering analytical and descriptive research design method.

Simple statistical tools and technique are used for the analysis of data and information.

1.7 Organization of the study.

The thesis consists of six chapters in total. The first chapter of the thesis summarizes the background of information relating to the view of VAT. It also covers statement of problems, significance of the study, objectives, limitation and finally the report organization of the study. The second chapter includes the theoretical aspect of VAT or conceptual framework of VAT. The third chapter covers review of literature of VAT. Research methodology is in fourth chapter.

The fifth chapter of this study includes analysis of revenue structure of Nepalese tax system. And finally, chapter six contains the summary, conclusion and recommendation of the study and this is closed with bibliography and appendices at the end.

CHAPTER TWO

THEORETICAL ANALYSIS OF VAT

2.1 Introduction

This chapter is devoted to the theoretical analysis of VAT. It has been divided into ten sub-headings. They are: Introduction of VAT; Types of VAT; Methods of Computation of VAT; Principles of VAT; Characteristics of VAT; Historical background of Evolution of VAT in Nepal; Need of Tax Reform; Structure of VAT in Nepal; Operation of VAT; Problems of VAT with respective to Revenue Mobilization in Nepal

2. 2 Introduction of VAT

Value added Tax (VAT) is the most recent innovation in the field of taxation. It is considered as one of the most powerful tool of the fiscal policy. Form the experience of VAT in several countries, many economist and policy makers have agreed on or VAT is probably the best indirect tax. It is outstanding that it gained such as a remarkable popularity in such a short span of time.

VAT replaces old sales Tax, contract tax, hotel tax, and entertainment tax. It has been deigned to collect the same revere as the four taxes it replaced. Since the collection of both customs duties and income tax depends, to a great extent, upon the effectiveness of VAT, it is expected to help enhance revenue collection.

VAT is broad based tax as it also covers the value added to each commodity by a firm during all stages of production and distribution. It is a modern tax system to improve the collection of taxes, to increase efficiency and to lessen tax evasion. It is also regarded as the backbone of income tax system in Nepal.

VAT is a multiple sales tax, which has grown on a hybrid of turnover tax and detail level sales tax. It is similar to turnover tax in the sense that both these taxes are imposed at each stage in the production and distribution process. VAT; however differ from the turnover tax as the later is imposed on total value at each stage while the former is imposed only on value added at that stage. VAT is similar to the retails stage sales tax because the tax base of VAT (consumption type VAT) and of the retails level sales tax on consumer goods and services are identical. VAT, however varies from retails level sales tax in the sense that the former is imposed at each stage of production and distribution while the latter is imposed only of one stage, which is the final stage. Theoretically, VAT is broad-based as it covers the value added to each commodity by form during all stages of production and distribution. There is the presumption that VAT is shifted forward completely to the consumers. (Khdka: 2001:1)

2.3 Types of VAT

Where there is discussion about value added tax, we normally bear in mind the broad based consumption type VAT. However the value added tax can be basically classified into three categories namely consumption types VAT, income type VAT and production type VAT. The difference among the types of VAT depends upon the treatment of capital goods purchased from other firms and the treatment of depreciation for the purpose of tax base (value added). That is why discussion is concentrated within the treatment of these two items for all types of VAT.

2.3.1 Consumption Type VAT

If all capital goods (investments) brought from other firms are excluded from the tax base (value added) in the year of purchase but the depreciation is included in the tax base, it is known as consumption type VAT. It can be expressed in the following equation:

Value-added = wages + Interest + Rents + Depreciation + Profit - capital

Goods purchased from outside (in the year of purchase)

The above equation clearly shows that the tax base is consumption because investments are free from taxation. Under this type of VAT investment are encouraged because it excluded from tax base. Similarly, imports are taxed whereas exports are relieved from tax. Thus, tax base for the nation under this type is equal to the domestic consumption the country. Nepal has adopted it with tax credit mechanics from very beginning.

2.3.2 Income Type VAT

Under the income type VAT, capital goods purchased from the outside suppliers are included in the tax base in the years of purchase but depreciation is excluded from the tax base. The following equation may be presented to make clear ideas about the tax base under it

Value added = wages + interests + profits + capital goods purchased from

Outside (in the years of purchase)

Or,

Value added (Tax base) = Sales – purchase (Excluding purchase of capital goods from outside in the year of purchase) – Depreciation.

The above equation clearly shows that the value added is equal to the consumption plus net investment. It means the tax base for the nation is the net National income that comprises the consumption and net investment of all firms with in the country.

2.3.3 Production Type VAT

The production type VAT includes capital goods purchase form the other firm in the tax base in the year of purchase and also includes depreciation in the tax base. It can be expressed in the following equation.

Value added = wages + interests + Rent + Depreciations + Profits + capital goods purchased from outside (in the year of purchase).

Or,

Value added (tax base) = sales - purchases (excluding purchase of capital goods from outside in the years of purchase)

The above mentioned equation obviously shows that the tax is imposed both on consumption and gross investment. This means that value added by all forms with in the country constitute the Gross National Product (GNP). That is why; the tax base of this type of VAT is conceptually equal to the GNP. Thus, this type of VAT is also termed as Gross national product type VAT.

2.4 Methods of Computation of VAT

VAT can be computed by following three methods,

2.4.1 Addition Method

In this method, the tax base is calculated by adding the payments made by the firm to the factors of production employed in turning out the production such as wages, interest, rent, royalties and profits. This method is very close to income type of VAT that includes the rewards to all the factor of production in its base. Because all the payments made for the factors of production have to be added, it creates complexities in calculating them in practice. Virtually no country has based the additive method, however, Argentina and Israel have used it in selected economic activities, such as banking and finances, where value of imputes and outputs are difficult to measure.

2.4.2 Subtraction Method

Under this method, cost of production is deducted from the sales. In other words, value added is determined as net turnover that is obtained by subtracting the cost of materials from sales proceeds. It is much closed to consumption type VAT. Theoretically, it looks simple and early but it is very difficulty to compute especially where multiple rates of VAT exist. Problems like ascertaining tax value in an accounting period may also arise.

Above two methods are called direct methods because value added is computed directly either by adding the payments made by the firms to the factors of production or by subtracting the cost of production from sales.

2.4.3 Tax credit Method

Tax credit method is known as indirect subtraction method or invoice method. Under this method Input tax is credited from output tax and passed into next stage up to consumption level. Tax credit method is similar, to some extent, to subtraction method but the major difference among two are:

a. In the earlier methods, the tax base is levied in the 'difference amount' of tax on sales and tax on purchase, where as in the latter method; the tax is levied on the 'difference amount' of sales value and purchase value.
b. Earlier method requires invoices, while latter does not require.

If the tax rates are same throughout the production and distribution method, all three methods, give the same result. Among the three methods of computation of VAT, the tax credit method is widely used in the world. This is because this method has several advantages over the other two methods, which are:

1 The tax liability in this method is attached to the transaction that makes it technically and legally for superior to others methods.
2 The tax calculation of value added, which is a difficulty tasks, is not necessary.
3 The tax credit method creators a good audit trial making the crosschecking possible.
4 It provides an effective way to completely free any product such as exports form tax and makes boarder tax adjustment easier and possible.
5 Due its 'catch up effect', undervaluation and evasion at some stages are not possible.

6 There will be no revenue loss but to exemptions granted to small firms or products.

7 Rate differentiation at different stages for administrative or other reason becomes possible under this system without reducing the total tax paid. If tax rate is reduced at earlier stages; this similarly gives rise to unequally increased tax of later stages.

Thus, the tax credit method is desirable for several remains and has to be adopted by many countries of the world. Nepal has also adopted this method to calculate VAT payable calculation of VAT revenue can be expressed as follow for the above -mentioned different types,

Addition method (T) = t (wages + Rent + profits)

Substation method (T) = t (sales value - purchased value)

Tax predict method (T) = t (tax on Sale) - t (tax on purchased)

Where,

T = VAT percentage rate

The example can be easily understandable by the following imaginary figures:

Table 2.1

Computation of VAT Liabilities under Three Different Methods

(VAT rate.13%)

Detail	Stages of production; and distribution			
A. Addition method	**Manufacture**	**Wholesaler**	**Retailer**	**Total**
a. Wages	2400	400	200	3000
b. Rent	800	600	400	1800
c. Interest	200	100	100	400
d. Profit	600	200	100	900
e. Value added (a+b+c+d)	4000	1300	800	6100
f. VAT liability (13% of e)	520	169	104	793
B. Subtraction method				
a. Sales	10000	11300	12100	33400
b. Purchase	6000	10000	11300	27300
c. Value added (a-b)	4000	1300	800	6100
d. VAT liability(13% of e)	520	169	104	793
C. Tax credit method				
a. Sales	10000	11300	12100	33400
b. Tax on sales	1300	1469	1573	4342
c. Purchase	6000	10000	11300	27300
d. Tax on purchase	780	1300	1469	3549
e. net VAT liability(b-d)	520	169	104	793

Source: Arbitrary estimated figures

2.5 Principles of VAT

While considering the international trade, the principles of VAT have great significance. Whenever international trade between two countries is considered, cross boarder adjustment is necessary. For the purpose of imposing VAT, principle of Vat can be divided into origin and destination principle. Choice between those two principles largely depends on the goods and the policy of nation, accession of international trade, computing methods and types of VAT.

2.5.1 Origin Principle

Under this principle, goods and services are taxed at the place where they are produced or rendered irrespectively, whether they are consumed or not. It implies that all exports are taxable and all imports are non-taxable. Where there is border and cross country trade, this principle gives performance to imported goods and services over domestic production. Countries with international boundaries don't prefer to have this principle while taxiing. But these sorts of principle may be beneficial where common trade is existed like European Union. Otherwise rests of the countries do not prefer this principle.

2.5.2 Destination Principle

Under this principle goods and services are not taxed at the place where they are produced or rendered but the place where they are consumed. Alternatively all imports are taxed while all kind of exports are exempted from tax. The main benefit arising out of this is non-discrimination between import and internal production.

This is the most popular form of principle of VAT, Adopted by large number of countries. This principle supports for export and many countries are eager to be best exporter, therefore they follow this principle. The equal treatment is provided for imports and domestic production, which fulfills the criterion of tax being neutral.

2.6 Characteristic of VAT

The main characteristics of VAT are it is a form of indirect taxation; It is broad based tax as it covers the value adds at each commodity by a firm during all stages of production and distribution. It substitutes sales tax, hotel tax, contract tax and entertainment tax. It avoids cascading effect existed in sales tax and contains catch up effects. It is based on self- assessment system and provides the facility of tax credit and tax refunds.

2.7 Historical background of Evolution of VAT in Nepal

The concept of value added tax is originated from Germany in 1919. At the mean time, Dr. Wilhem Von simens developed the philosophy and principle of value added tax by recommending it for Germany to replace to turnover tax (multistage sales tax) to avoid the problems of cascading effect. Professor Thomas S. Adams recommended value added tax for the USA in 1921. A detailed structure of value added tax was designed for Japan in 1949 to replace the existing enterprises and to turnover taxes. Due to new concept and fear of its complicated nature, these countries could not introduce value added tax immediately. France introduced value added tax for the first time in 1954. Ivory cost introduced the value added tax in 1960, while Senegal adopted it in 1961. Denmark and Brazil implemented it in 1967.

Among the SAARC countries, India introduced MODVAT (Modified Value added tax) in 1986 for manufacturing products in order to correct excise duty Pakistan, Bangladesh and Sri-Lanka adopted value added tax in 1990, 1991 and 1998 respectively.

In Nepal the concept of introducing value added tax was developed along with the eighth plain (1992-1997) when the government indicated its intention to converts the import/manufacturing level sales tax into value added tax in that document of plan. Preparation of VAT was initiated in September 1993 when 'VAT Task Force' was created in the sales Tax and Excise Department in order to make the necessary preparation for the introduction of value added tax. A VAT steering committee was also formed to evaluate and monitor VAT preparatory activities. After the depth study on various aspects relating to the structure an operation of VAT, the task force prepared the draft of VAT law in 1994. It was discussed in depth at several stages with in the taskforce with concerned parties. After reviewed by the steering committee, the draft was sent to various business groups for their comments. Although the business community did not provide and written comment on the draft VAT law, the private sector opposed to the implantation of value added tax.

Due to the disagreement of private sector and political instability in those days, the government did not indicate its commitment to introduce value added tax. They expressed the argument that the infrastructure and preparation where insufficient to implement the value added tax effectively. In September 1995, along with the formation of coalition government, it committed to introduce value added tax in the same fiscal year 1995/96. The VAT bill was presented to the parliament on December 1995. As per parliamentary process, it was referred to the finance committees (a parliamentary committee) and the committee returns the bill to the parliament on same month together with its report for amendments to a few provisions. The lower house of parliament passed the VAT bill on same mouth while upper house of parliament passed it on January 1996. The royal seal was provided to 'Value Added Tax Act, 1995 (2052)' on 21 march 1996. For the effective implementation and administration of VAT, the government established, one VAT department in center and seventeen VAT offices in different districts by changing the name of sales Tax and excise department and its offices as value added tax department and value added tax office respectively in 16th July 1996. The government has issued value Added Tax Rules, 1997 in 24th march 1997.

Since the strong opposition from the business community and from the oppositions of political parties the government could not enacted VAT laws immediately and has made a provision in section 1.2 of Act and section 1.2 of the Rules that the VAT laws shall come into force on such date as Government may specify by notification published in the Nepal Gazette. In this way the implementation of value added tax has been postponed for some time although the Act has already been provided royal Seal. The Act, finally has come to force as the government specified the date of implementation of VAT by publishing in the Nepal Gazette on 16 November 1997 (1st Marga 2054). However, it could not be implemented in full phase until the fiscal year 1998/99 due to political instability and strong opposition from the business community after the compromiser with buries community; the government has implemented value added tax in full phase since 17th July, 1998. It has been introduced as an improved indirect tax for the replacement of the sales tax. It also replaces hotel tax, entertainment tax and contract tax and has been supported to collect the same revenue as the four taxes it replaced. Now a day, value tax is administered through Inland Revenue Deportment and Inland Revenue Offices as department of value added tax and department of taxation are merged as Inland Revenue Department since17th July 2001.

Nepal has adopted broad based consumption type value added tax with credit method. This means the tax base is domestic consumption only. Some social or political grounds including exports goods or services are zero rated. Some goods and services like goods or services of basic needs, agricultural products, social welfare services, educational goods and services, cultural goods and services etc. are exempted from tax. VAT with single rate of 10 percent has been increase to 13 percent with its effect from 15 Jan, 2004 (Magh, 1, 2061).

2.8 Need of Tax Reform

Nepal introduces VAT in 1997 for several reasons. One of the important reasons is to develop a stable source of revenue by broadening the tax base. Nepal has been generating bulk of its tax revenue from import duties. However, due to the opening up of the Indian economy since the early 1990s there has been drastic reduction in the import tariffs, quantitative restriction and licensing system in India since 1991. Further Nepal has reduced its import tariff inline with the liberal economic policies adopted since 1992-93 and in line with the customs duties reform taking place around the world. Consequently, import duties will be less important in the future than they were in the past. The process has already begun as the relative position of import duties decreased from 37 percent in 1990-91 to 34 percent in 1996-97. Furthermore, Nepal will not be in position to levy import duties on trade that takes place within the south Asian Association for Regional Cooperation (SAARC) region after the implantation of the south Asian Free Trade Agreement (SAFTA). This means that Nepal will have to become less dependent on international trade taxes for its revenue; this is also desirable from and economic resource allocation point of view.

The base of the domestic trade taxes has been narrow as well since the share of the total economy that flows through market channels is relatively small. The potential tax base become even smaller as sales tax used to be collected at the import/manufacturing point.

The large numbers of exemptions granted on socio-political grounds and weak tax administration only aggravated the problem. The narrow tax based has been eroded further due to compliance weaknesses that have tolerated the understatement of import value/ex factory prince and /or Smuggling. Since the sale tax was not levied at stage beyond the import/ manufacturing point, there was no possibility of capturing the evaded tax at a point further down the trade channels. It has also been necessary to transfer some of the national level taxes, such as land revenue, house and land tax, vehicle tax, to the local bodies in order to make them financially more autonomous. This means that there is no choice but to introduce VAT in Nepal to generate the revenue required to improve its deteriorating macro-economic performance.

A VAT system is needed for revenue purpose as an attentive tax system to import tariffs. At the same time, the VAT system promotes the interchanges of information between the other tax systems, particularly trade taxes, as customs information is require to determine the validity of input tax credit claimed. VAT should not only be an effective instrument to generate substantial revenue at customs points, but also help streamline tax policy in general. VAT has a natural link with the income tax. Currently the main basis of the income tax assessment in the case of importers is the information supplied by the customs. But only a fraction of such information reaches the tax administration. VAT will provide the information on imports, local sales and input costs that can be used to assist in the effective implementation of the income tax.

Besides, it is necessary to introduce VAT for several other reasons. The import/manufacturing level sales tax discriminated against the domestic products Vis-a –vis imports because the profit margins of the manufactures were included under the base of this tax but not the profit margin of the importers. Further, there was chronic under valuation in the case of imports. This means that the effective rate of import manufacturing level sales tax become higher on domestic products that on imports although the nominal tax rate was the same for both sets of goods. A VAT system puts an equal burden on both imports and domestic products since the burden of this tax depends upon the final price, irrespective of the promotion of value added at different stages in the process of import/production and distribution. Further, VAT can be applied anywhere in the economy with out leading to a cascading/pyramiding because it employs a credit mechanism. It also relieves exports completely free from the burden of taxation through the Zero-rating of exports and the refund system for excess credit.

The implementation of a VAT in Nepal is also expected to establish an account based modern transparent tax system. The import/manufacturing level sales tax is not levied on the actual selling price but on the national sale value, which included the ex-factory price/ import value and the amount of excises/ import duties. This means that the determination of the sales tax base invited the problems associated with the determination of the base of the excise or import duties. In the case of domestic products, sales-tax-registered manufacturers were required to get their prices approved by the tax officials. In the case of excisable items, manufacturers has not only to get their ex-factory prices but also dealer, wholesale and retail level prices approved by the excise authorities . There is a possibility of either collusion or harassment prices negotiated between tax official and taxpayers. There is a general lack of administrative capability to determine the taxable value in realistic way.

Thus, on the condition of diminishing rate of revenue incensement from direct taxes i.e. income advertising land tax, heavily dependant on indirect taxes following a falling condition of severe from excise and custom duty and very insignificant contribution of domestic taxes i.e. hotel tax, entertainment tax etc. and very narrowly based sales tax only on import/manufacturing level and in the condition of extremely low elasticity and buoyancy of the whole tax structure there is no other alternative to improve sales tax as a part of tax reform in Nepal.

2.9 Structure of VAT in Nepal

2.9.1 Coverage

Nepal has adopted a broad-based consumption type VAT using the tax credit method. Under this system tax is levied on all types of goods and services, both imported and domestically produced except those specifically exempted by law. It is desirable to make the commodity coverage of VAT as wide as possible. So, all goods and services should be brought into the VAT net unless there is strong justification for their exclusion. In the general practice in the international arena, is to tax all goods, except those specifically exempt. In the case of services, there are different practices, however in a developing country like Nepal the service sector is rather unorganized and not many services seem to be attractive from the revenue point of view. That is why some economist recommended a selective approach rather than an integrated approach in the cases of service.

2.9.2 Exemption

While it is desirable to make the coverage of VAT as broad as possible, there are reasons to exempt some transactions from this tax, particularly on administrative grounds. For example, it is not desirable to waste scare administrative resources in chasing after very small vendors who are unorganized, seasonal and illiterate and do not keep any records of their business. They are scattered all over the mountainous country and in number, dominate the business sector of Nepal. It will be extremely difficult to bring than in to VAT net and the revenue gain may not be substantial. So, small vendors having on annual turn over up to the level of threshold may be exempted from the VAT.

The exempted goods and services in the context of Nepal are:

a. Basic agricultural products.
b. Goods of Basic necessity
c. Livestock and their products
d. Agricultural related equipment
e. Medicine, Medical treatment and other health services.
f. Education
g. Books, newspaper, printed materials, and printing and publishing
h. Culture, arts and craftsmanship related services etc.

2.9.3 Zero Rating

Zero rated areas consist of certain goods and services that are taxed at the rate of zero percent. The objective behind the introduction of zero rates is to relieve some goods and services completely from taxation. It means that VAT is not levied on zero rated goods or services but they are otherwise regarded as taxable goods or services. Zero rating is definitely a better method than exemption. It is generally levied in the case of exports, which need to be free completely from internal commodity taxation.

Zero rating however, increases the burden considerably on the part of both tax payer and tax administration due to the requirement of maintaining books of accounts, submitting returns and refunding the tax levied on the inputs of zero rated items. So in Nepal, zero rating should be limited to the exports and some international services only.

2.9.4 Rates

VAT can be levied both with single positive rate or multiple rates. Generally VAT with single positive rate is desirable in order to make VAT system simpler, because multiple rates makes tax administration more complicated, under this system there is a need to classify commodities into different groups according to their rates. Moreover, in a developing country like Nepal many small vendors, who may not be sufficiently literate, sell a number of commodities. They may not be able to apply properly the different rates to various goods they sell.

Multiple rates make the tax system inefficient from the economic point of view. It gives incentive to producers to divert their resources from higher - rated to lower rated industries to save on tax payment. The multiple rates create scope for tax evasion that may result in considerable revenue loss.

On the other hand single rates makes VAT less costly, easy to comply and easy to administer.

2.10 Operation of VAT

2.10.1 Registration

The provision of registration is mentioned in the section 10 of value added tax Act, 2052. According to this section every person (vendor already engaged in any transactions of the time of commencement of value added tax is enquired to apply for the registration within 90 days from the commencement of the Act. Similarly, every person wishing to engage into a transaction after the commencement of the act is leaguered to apply for registration prior to beginning to engage in such transactions. However vendors involving in business of goods and services that are free from value added tax need not register for the purpose of this tax. It means vendors have in taxable goods and services are required register their transaction to Inland Revenue Development. .But small vendors failing below the prescribed transactions are not compulsorily required to register for value added tax. For this purpose value added tax laws have prescribed the level of registration threshold. The existing level of registration threshold is Rs. 2 million of annual transactions.

2.10.2 Tax invoice

A VAT registrant must issue VAT bill while selling or supplying goods or services. Such bill is known as tax invoice. The tax invoice require the name an address of the seller and the purchaser, the seller's PAN number and invoice number, the date of transaction and description of the sale including the number of items purchased, the unit cost of any item and mention of any discounts given. The tax invoice is a crucial document for VAT as it establishes the seller's liability for tax and the purchase entitlement to credit. It is however, not necessary to specify the format and content of the tax invoice, taxpayers may be allowed to prepare format of tax invoice according to their requirement.

The tax invoice must be prepared in three copies the first copy should be clearly identified as tax invoice. The original copy is to be given to the purchaser, the second copy for audit purposes while the last copy is for use by the seller in preparing record of the transaction.

Tax officers may grant permission for a VAT registrant to issue an abbreviated invoice for retail sales below the value of Rs.5000. The chief difference between the two tax invoices is that on abbreviated invoice does not require the name and address of the purchaser. The registrants have the right to request detailed tax invoice, as they will not be able to claim input tax credits with abbreviated invoices. Inland Revenue Department may order tax payer to issue invoices by using cash machine or computer. The procedure in such case shall be as prescribed by the Director General of IRD. IRD will have anytime access to the database of the taxpayer.

2.10.3 Accounting

Value added tax is levied on value added at each stage of selling and distribution activities of taxable goods or services. It is taxed on the basis of transaction of taxable goods and services. The effectiveness of VAT depends upon the record and accounting of the transactions. So the VAT registrant are required to keep clear accounts of their transactions of purchase the registrar exemption for this purpose the registrants person has to maintain records of the Following information, document and details

a. Information as per VAT account.
b. Records relating to trade accounts cash, receipts and payments.
c. Tax invoices and abbreviated tax invoices issued by registrants.
d. Tax invoices and abbreviated tax invoices received by registrants.
e. All document relating to his imports and exports.
f. Books of purchase and Sales

The VAT account is a monthly summary showing the course of the figures of viewed in the VAT return. All the roistered taxpayers are required to maintain following accounts.

a. A purchase book
b. A sales book
c. A VAT accounts

a. Purchase Book

Vat registrants are required to maintain an account of their business purchase to VAT purpose. They have to record of Purchase by invoice. At the end of each accounting period VAT registrant must total the amount of taxable purchase/ imports tax, exempt purchase / imports and the tax paid on purchase / imports

b. Sales Book

Similarly, VAT registrants are required to maintain account of their sales for VAT purpose like purchase; sales are also to be record per invoice basis. At the end of each accounting periods VAT registrants are required to total the amount of taxable purchase and tax collect on sales. If they make both taxable and exempted purchase and sales they are then required to calculate the proportion of input tax they are entitled to the tax period.

c. VAT Account

It is a monthly summary of taxable purchase and sales and VAT paid on purchase and changed or sales.

2.10.4 Refund of VAT

Tax refund is the basic essences of VAT, so it must function properly. It input tax of registered person exceeds his output tax for month the person is allowed to adjust this excess amount of tax against any outstanding amount in allowed to adjust this excess of input tax may be available to adjust for the next month. The remainder of the excess of input tax may be available to adjust for the next month. A registered person may claim, for refund amount of remaining excess after adjusting for a continuous period if six months. However any registered person whose export sales is 50 percent or more of the person's total sales for a month may claim for the refund of the amount remaining excess after adjusting any outstanding amount of the period. In the course of refunding the amount of tax, the tax official is required to investigate immediately the evidence submitted by the taxpayers and to refund the tax within 30 days of the date of registration of the claim. If it is necessary to reinvestigate the evidence so received, it is done without delay and refunded with in 15 days. If it is not refunded within 60 days from the receipt of refund claim; the government has to pay back the amount of the refund along with the interest at the rate of 15 percent on the amount that is due.

The VAT laws has made the provision for tax refund in the case of purchase of goods and services by foreign diplomats, international organization and those purchased through literal and multilateral agreements and in the case of wrongly paid tax. To obtain tax refund, foreign diplomats are specified organizations can directly submit a claim each month of the Inland Revenue Department. In order to get a tax refund bilateral and multilateral projects and the person who has wrongly paid tax have to submit their claims within three years.

2.11 Problems of VAT with Respective to Revenue Mobilization in Nepal

2.11.1 Structural Problems

VAT can be levied on single rate or multiple rates. The choice may depend upon economic nature of a country such as: Revenue requirement, Equity consideration, and position of foreign trade etc. VAT with a single positive rate is desirable in a developing country like Nepal. Because multiple rates make tax administration more complicated since: there is a need to classify commodities into different groups according to their rates. Moreover businessman has to kept separate records and information. In a country like Nepal, many small vendors who may not be literate may not be able to apply properly the different rates to various goods they sell.

VAT is considered as broad based tax, but all goods and services cannot be brought within tax net. Various issues play important role in determining the tax base, so timely revision of different VAT act regarding tax base is necessary so as to increase the revenue mobilization.

The exclusion of certain goods and services from tax jurisdiction is known as exemption. There are three major areas which has brought some troubles in administration in adopting the VAT is given as:

i. The goods and services of basic needs such as medical and health services, milk, not processed food stuffs, vegetable, etc are exempted with the equity consideration but this provision increases their demand and the relative prices and the fool impact of such exemption will not be felt by the poor.

ii. Some goods and services are exempted because of the administrative complexity, under this provision the small trades farmers and special service firms are excluded form VAT, farmers are exempted for its difficulties of proper records and financial fragility as well as to avoid the negatively effects on primary products.

iii. The exemption technique might be used for selected goods and services to encourage their production and consumption such as educational and medical services, cultural activities, public transport, sports etc.

Zero percent tax on gods and services is given to relieve some selected goods and services completely form taxation, but such items are technically supposed to be remaining within the tax net. Zero rating technique is applied for the purpose of social welfare, to make export promotion and to support economic growth.

2.11.2 Administrative problems

Effective and efficient tax administrative from is necessary for the proper mobilization of revenue. The value added tax is directly administrated by the Inland Revenue Administration, the Ministry of Finance; customs Administration, Revenue Investigation Administration. The Ministry of Finance is the apex body of the tax administration.

Therefore effective implementation qualified intelligent, trained manpower is necessary and on the other hand effective monitoring is essential, but their exists traditional culture of tax administration, corruption, lack of proper training, political interference so their is big gap between legal system and its active operation

2.11.3 Problems Related with Tax laws and Regulation

There is no clear provision to take legal action against the person who does transaction without PAN. So the attitude of general public toward tax administration is negative. The tax officials have to work in co- operation; there is no possibility of run away the defaulter. Next tax payer provide improper bill to customers and evade tax in a large scale.

2.11.4 Problems relating to open boarder and unauthorized trade.

The other important problem is unauthorized trade and open boarder .People of both countries Nepal and India are free to enter into each other's boarder, any goods and no paying customs for personal use. Beside that unauthorized trade is very systematic in the border area. There are may organized groups active in the both sides of the brooder and these groups are responsible for illegal supplying of goods from India to Nepal and Nepal to India

CHAPTER THREE

REVIEW OF LITERATURE

3.1 Introduction

In the course of the study, various books, articles, dissertations and other reference materials were reviewed. This chapter includes the review of existing empirical literature briefly in the subject of various developing countries including Nepal. The reviewed materials are classified into two sub- headings: International context and Nepalese context.

3.2 International Context

In this part, various books, articles and other reference materials related to VAT published by international renowned persons and organization were reviewed.

Carl S .Soup (1669), in his book "public Finance" considered value added tax as the latest and probably the final stage in a historical development of general sales tax, imposed on the values added by business firms. He explained VAT on the difference between sales proceeds and the cost of material purchased from other firms which is the tax base of a VAT. The firm further added value by proceeding or handling these purchased items with its labor forces, machinery building and capital goods.

VAT had eliminated the uneven impact of turnover tax and the manufactures and whole- sales taxes. Considering both closed and open economy he had classified the following three types of value added tax

i) Grass product value added tax (In closed economy.

ii) Income type of VAT (In closed economy)

iii) Capital Exemption types of VAT

   a. Wage types of VAT

   b. Consumption type of VAT

After distinguishing the type of VAT he stated the superiority of consumption type in practice, his main statement about VAT;

1 VAT is very fast growing tax in the field of taxation.

2 It is revenue productive and neutral but some what regressive and complex, so challenging for developing countries.

3 Discussing the incidence of VAT in an open economy "if demand is not inelastic, there remain the possibility of exporting some of tax to non-resident factor owner".

4 Differentiate incidence of income type of value added tax is presumably progressive, since the tax includes in base the net return from investment, but "incidence of VAT itself without reference to some other tax is meaningless."

He concluded that "VAT is superior even than retail sales tax for benefiting consumer in depressed area by differential tax rates."

George E. Lent, Milka Casanevra and Michele Guerard (1993), held a study on "value added tax in developing countries", following the adoption of value added taxes by western European countries many developing countries had been giving increased attention to this form of tax as a means of rationalizing their sales taxes and improving their revenue.

A VAT applies only through the manufacturing stage or the wholesale stage does not offer the advantage of non interference with market process to the some extent as one that covers all sectors of economy including retailing and services. The tax by a business is computed by applying the relevant tax rate to total sales during a given period and deducting from the resulting figure, the amount of tax paid by the firm on its purchase of intermediate product and capital equipment (in the consumption variant). This procedure requires that invoices show the amount of tax paid on the value added at earlier stage.

The study was proposed "to examine the applicability of VAT in developing countries. After the empirical study of VAT structure of seven developing countries i.e. Brazil, Equador, Ivory cost, Morocco, Senegal and Uruguay in 1973 and drown the principle feature of VAT's in developing countries. Applying comparative analytical methodology and covering the issues such as, revenue importance of VAT, problem of administration, comparison of VAT with other forms of sales tax, they consider VAT, "only with a tax". As is usually true of broadly based general sales tax, the VAT makes a substantial contribution to government more elastic and revenue productive by a lower rate, ease in cross-checking or but in control and superior even then retailer sales tax on the ground of neutrality and to reduce tax evasion but to few extent it is regressive and its complexity in administration are its chronic problems.

Lastly the conclusions derived from above grounds are:

i. VAT system in Brazil, Equator, Ivory cost, Morocco, Senegal and Uruguay are representative of various forms that, this type of tax has taken.

ii. VAT system in developing countries differ in some respect from the European model of a comprehensive neutral and uniform tax on the consumption good and services there by showing the adoptability of tax structure to different economic and social condition.

Analysis show mainly:

a. On the basis of laws enacted in those seven countries, it is not possible to construct a model of value added tax in developing countries.
b. Developing countries are apt to limit the range of VAT by excluding the most troublesome sector (farmer's retailers etc) because they pose difficult problems.
c. As with sales tax revenue generally VAT revenue in developing countries can be expected to increase at faster rate than the rate of growth of the economy.
d. Fundamental difficulty in administrating VAT in developing countries is the problem of coping with 'small tax payers which include large number of retailer's service enterprises and farmers.'
e. In comparing other types of sales tax value added technology permit greater precision in elimination of 'cascading' including the remission of taxes on export and is less subject to tax evasion.

Recommendation made on the ground of the study as the condition of adoption of a retail VAT on developing countries are:

- Size of retail unit: only sales tax carried to the retail level can be truly neutral in their effects on the organization of production and distribution and on the current price.
- Adequacy of record maintains and bookkeeping by firms is in dispensable.
- Unless administrative service is strong or can be strengthened it will not be advisable to take additional burden which VAT poses.

- Previous experience: inadvisable for any developing country to adopt a VAT at retail level without previous experience with a sales tax.
- Level of tax rate: that would justify introduction of VAT rather than alternative form of sales tax.

The degree fulfillment of above condition determines the comparative success of implementation of VAT against other sales tax.

IMF staff (1973), undertook a study in developing countries at the time when the introduction of VAT was gaining a pace in developed as well as in developing countries. The study examine the applicability of VAT is seven developing countries. Which have adopted the VAT considering the fact that many uncertainties a rise in the introduction of any major new tax especially with which developing countries have limited experience? According to the study "The most important feature of VAT in developing countries is its conceptual basis such as taxable base exemption treatment of small trader's etc. problem of implementing a VAT in developing countries depends largely upon the ability in those countries to administer it. The administrative efficiency is also influence by the structure of VAT employed and the economy's social and economic environment.

Although the study shows the VAT as a revenue raiser, the key problem should also be viewed from the angle of taxpayer's compliance, as the cost of during business tend to increase with VAT because of the need to adopt new accounting procedures.

Finally, the study assures that VAT produces between 10 to 30 percent of government revenue of the seven developing countries and the VAT revenue in these countries is expected to increase at fast rate than the rate of the growth of the economy.

Musgrave and Musgrave (1976), in their book "Public Finance in Theory and Practice" had preferred the latest type of VAT as more applicable and reliable one for both efficiency and quality, which was similar to the retail sales tax and seemed to be more practical for poor countries. Likewise the invoice method for calculation was more preferable and did have the advantage of the value added approach.

Regarding, the problem of VAT, Musgrave and Musgrave remarked "A sales tax may be imposed on either single or multiple form. If the later one is implemented in the value added (rather than turnover) sense, it turns to be equivalent to a corresponding single tax. At each and every stage the value of product is increased and this price rises accordingly, which is the 'Value added' the tax base.

"Due and Friender Lander (1977), in their book" Government Finance: Economics of public sector" showed that among indirect taxes, VAT is the best one, as the latest form of sales tax.. It usages has expanded rapidly because of boarder coverage.

This tax offers much greater revenue potentiality as compared to other type of sales taxes. The base of tax being value added. It is defined as the difference between the sales of firm's product and the some of the amount paid by the firms for produced goods parched during the period and which is equal to the some of factor payments made by the firm. VAT is subjected to objections common to all consumption related sales taxes mainly on the ground of equity e.g. regressively. On the other hand advantages or good features of VAT are a major source of revenue it can be used as a supplement to income tax and especially in underdeveloped countries where effective operation of high income tax is difficult. It may be the key element to raise revenue. But its administrative complexities are burdensome in developing countries. The tax credit method is a simple method which facilitates cross checking in auditing.

Evaluating VAT as a form of sales tax, its merits are outlined as:

i) VAT produces no economic disturbance or distortion or loss of efficiency, if properly designed.

ii) There is greater ease in excluding producer's goods from tax.

iii) Cross check audit is easier. As a sales tax, the optimal form of VAT;

   a. Must not create the negative effect in consumer's choice and purchase

   b. Should equitable i.e. proportional level of burden for all income groups.

c. Cost of both administration and compliance must be minimized.

d. Must be neutral among various method of organization and conduct of production and distribution.

e. More revenue productive considering on the above ground.

The author accepted that the main visualized problem of VAT in developing countries is "the administrative complexity". However, they conclude, "it is undoubted that the idea of VAT from sales tax in many countries."

Choi (1983), examined and evaluated the value added tax in Korea from its introduction to its effects on the economy in his paper, "value added tax in the Republic of Korea, "VAT, in people Republic of Korea, was introduced in 1977 as a part of large tax reform with the objective of the simplifications of tax structure and its administration. Introduction of VAT was also guided by revenue consideration. The characteristics of Korean VAT were of general type as had been adopted by European countries. The effect of VAT on the economy had been lesser than its supports had claimed in its favor or its opponents had feared would result from its introduction. The VAT didn't have a major impact on the price increase that, it should a good impact on the investment and VAT encouraged exporter more than the previous tax system. One of the most controversial issues of VAT was its regressive ness. Studies found that the VAT in Korea was more or less regressive with respect to income. In its overall evaluation, VAT in Korea has worked relatively well, in some cases much better than its designers and tax payers had anticipated. The VAT has broadened tax base, reduced evasion, increases revenue and solved many problems associated with previous taxes.

However, the VAT may be simple in theory. The Korean experience with VAT during past seven years had made it clear that it was not so simple in practice. It created a host of problems that gave rise to voluminous paper work more or less arbitrary distortion in trade and consumption and equalities in the distribution of Tax burden. The proper assessment of several problem areas relating to VAT including coverage rate structure, special tax payers, co-ordination with direct taxation etc. will help other countries to learn from Korean experience.

Due and Meyer (1988), in their research Bulletin "Dominican Republic value Added Tax" examined the VAT in Dominican Republic, Ignoring the hostile reactions of business sector, labor union and even political parties VAT was introduced in 1983 in Dominican Republic. The increased record- keeping requirement became the main issue in the medium and small sizes business dominated economy of Dominican also the belief that VAT was responsible for inflation become another obstacle, but the inflation was due to other reasons. There was general agreement that the enforcement of the tax hadn't been adequate mainly because of lack of personal, evasion was wide speared, many firms failed to register. The overall evolution of the tax in the country, therefore remained rather negative while the tax has brought additional revenue, the inadequate enforcement and failure to extend it to the commercial sector as planned, and the use to making shift, distorting system in the latter have resulted in serious failure to attain the advantage of complete value added tax. The experience of the country with the tax provides a warning to other developing countries not to attempt to use a value added tax expending beyond to import and manufacturing sectors without careful consideration of the ability of the wholesale and retail sector to operate the tax and general attitude of these sectors toward the tax.

Wallow Ahmnadand (1989), in their research working paper, 'Tax reform package on VAT for Pakistan" analyzed and compared the consequences of different options such as the single rate VAT with selective exercise and some exemptions (or Zero rating) and multiple VAT rate. The authors used their own methods for the tax reform analysis. In the first step they described the existing taxes and then, examined the consequences of the tax changes on households, resulting government revenue and also implications for production. The work showed that instrument can be designed to increase revenue and at the same time, protect the poor. A value added tax supplemented with selective excise would have made Pakistan's tax system more buoyant and reduced the production distortions inherent in Pakistan's current tax system and no at the expense of the poor.

An IMF occasional paper (1991), entitled "value added tax; Administrative and policy issues", edited by Alan A Trait brought out the beauty of the VAT and briefly reviewed the reasons why the VAT is chosen as the main sales tax. The study was concentrated on the policy concerns on the basic illustration of some theoretical as well as empirical proofs.

The study clearly depicts three main groups of reason to adopt a VAT: revenue, neutrality and efficiency.

Revenue

VAT would generate more revenue with less cost than taxes it replaces "Traditional income and sales tax have been meeting public resistance and the VAT provides a new buoyant revenue base, typically yielding more than initial estimates at the case of Indonesia, Korea, New Zealand, Portugal and Tunisia shows". Because of broad coverage this tax offers much greater revenue potentiality as compared to other types of taxes. According to the study the VAT contributes 12 to 30 percent of revenues in most countries.

Neutrality

"The VAT is non distortion provided there are little exemption and little zero rating. VAT on investment should be fully credited and this frequently is an improvement over the taxes replaced that often taxed capital goods. "VAT is a neutral with respect to the choice of methods of production and distribution. Since the taxes are levied only on the value added at each stage in the system, tax liability remains the same regardless of the system of production and distribution. Total tax paid on given commodity depends on the rate of the tax and on the total value added (i.e. the final price) of that commodity but not on the number of stages through which it has passed so the tax is considered vertically neutral except for a negligible element of discrimination. It also does not discriminate the production whether it is capital intensive or labor.

Efficiency

A significant characteristic of an ideal tax system is efficiency. An efficient tax system is one that doesn't cause any distortion in production and consumption in other words such a tax system doesn't bring any unintended and undesirable effect in the methods of production and distribution or in consumption. Rather it avoids probable distortion of the optimum allocation of resources.

In this connection Editor Alan A. Tait writes "The VAT has often replaced inefficient distortion and badly administrated taxes".

The introduction of VAT provides an opportunity to sweep away the cobwebs and revamp a substantial part of the tax administration.

John F. Due and Fransis Greony (1991), wrote successful story of VAT in their paper, "Trinida and Tabago: The Development of VAT; development of VAT was carefully planned and it went through the several phases from 1986 to 1989. The tax performance committee was established in 1987. The first task of the committee was to review the current tax system and develop a preliminary recommendation in direction of reform. The studies showed that the existing tax system was an urgent need of revision for several aspects. The value added tax was put forward as an alternative. Further the issues such as choice of rate structure, exemption, tax administration etc, were resolved or the final adoption of VAT. The structure of VAT was drafted in final paper after the careful examination of several issues including revenue and equity with development of analytical models. After so many detailed works, it was finally drafted and passed by the legislation in 1989.

The VAT was well received and also welcomed by the business community. One year's experience showed that the operation was reasonably satisfactory. It yielded the previously expected and forecasted results. For its success, there were several reasons such as careful planning of tax structure and administration, a close co-operation between the government and business sector, the extensive publishing programme, the coordinated reform in purchased tax and income tax, and selection of competent persons. There were several things can be taken as suggestion from Trinidad and Tobago for the introduction and operation of VAT in other developing countries as well.

World Bank Staff (Bogetic and Hasson 1993) undertook a cross-section analysis on "Determinants of value added tax Revenue" using data from 34 countries to answer certain key question: what empirical relationship emerges from existing data on VAT revenue and VAT rates for countries with a single VAT rate? How much on average can one percent increase in the VAT rate be expected to raise VAT revenue as measure by VAT to GDP ratio? What key determinants of VAT revenue emerge from a cross-country analysis of the full sample of countries? Is there a statistically significant difference in VAT revenue performance between countries with a single VAT rate and multiple VAT rates?

The result of their regressions generally confirm the conventional views on the key variables influencing VAT revenue performances the rates, the base and rate dispersion. The rate and base coefficients are significant and with the expected positive sign in all of the estimated versions of the model. An estimated model is used with appropriate caveats to predict VAT revenue potential in countries (such as Bulgaria) that are thinking of introducing a single rare VAT. They also find that other thinks being constant VAT generates higher revenue in countries with a single VAT rate than in countries with multiple VAT rates. The difference in the estimated models for the two country groups is statistically significant, indicating a structure/change. However this change in the pattern of VAT revenues can't be explained exclusively in terms of differences in rate structure. A satisfactory explanation must include other factors such as the base and tax administration capacity. The suggestions of that analysis are: to provide superior revenues, VAT should be levied in a single rate on as broad base as possible. And tax administration and enforcement must be tough to ensure compliance.

3.3 Nepalese Context

In this part, various books, dissertations, articles and other reference materials related to VAT published at national context were reviewed for researcher purpose.

Dr. Rup Bahadur Khadka (1989), an expert of Nepalese tax system in his book entitled "VAT in Asia and the Pacific Region" wrote that VAT is the most recent innovation in the field of taxation . It levied on the value added of good and services. The tax is broad based on it cover the value added to each commodity by a firm during all stage of production and distribution.

This book had covered all aspects of VAT including the nature of VAT, reasons for the growing popularity of VAT, development of VAT etc. This apart, the report examines all structure and operation of VAT in Asia Pacific Region which also explores the possibility of introducing VAT in Nepal. Probably he is the person observer of VAT aboard and the firstly proposed VAT for Nepal with micro studied of Nepalese economy and system.

Ministry of Finance (1995), conducted a study by preparing a 'Task Force' headed by Prof. Madhan K. Dahal reviewed the Nepalease tax system. It mainly analyzed the magnitude of the Nepalese tax system and recommended various measures for the tax reforms.

The study was depended on theoretical base and the study reached the conclusion that "There is no possibility of any other great measure to introduce a tax rather than introducing VAT in Nepal".

The major findings of the study are:

i. The necessity of VAT in Nepal

    a. To increase the revenue collection by boarding the tax base.
    b. To make the tax system more buoyant
    c. To discourse the tendency of tax evasion
    d. To make the system efficient
    e. To promote the export.

ii. The existing tax system of Nepal generates less amount of revenue, so alternatives for the system should be searched. In this context the VAT appears as the best alternatives.

iii. Some aspects for consideration of VAT are price level, equity, the condition of tax payers and small vendor.

iv. IV A special consumption tax on luxuries goods sold be introduce as a supplementary tax for the VAT.

v. There most be fully and detailed preparation before implying VAT.

Dr. Khadka (1996), in his paper "A VAT for Nepal" had focused on the purposed structure, operation and administrative setup of a VAT for Nepal and necessary steps to be taken for its early introduction. In its purposed structure the coverage of VAT should be made as broad as possible covering all business transactions. Exemption should not be granted unless there is a specific reason to do so, such as administration and equity. Zero rating should be limited to exports and tax rates should be single in order to avoid complications and inefficiency in collection.

The purposed operation of VAT requires that the tax payers above a threshold limit should be registers. The vendor should issue an invoice for each sale, keep a clear account of his purchased and sales (separate accounts for zero rated, exempted and positives rated goods) and VAT liability should be calculated of its taxable sales. Tax credit method should be used as a method of computation of the tax, and tax payment and refund period should be within one month. Then sales tax and excise department should be restructured drastically to administer a VAT. Officer level post should be increased considerably and extensive training should be provided including the operation of computer system. A VAT implementation team including experts and persons from every field should be set up. A detailed preparation should be considered as a prerequisite for introduction of VAT. A comprehensive VAT education programme must be launched to educate the taxpayers.

Nepal Chamber of Commerce (1997) made a study to analyze the possible effects of VAT on Nepalese economy makes some observation. The observations are:

a. Adverse effect on price level.
b. Increase in the price of imported goods would hit the import business and re-export of imported goods leading to a decline in the revenue from import tax.
c. The account keeping requirement of the VAT would increase the tax compliance cost and cost of doing business, it would adversely affect the small traders.
d. Adverse effects on domestic production due to the abolition of protection policy under VAT
e. VAT would be unjustifiable on social ground; it would aggravate the income distribution.
f. Negative effects in revenue collection and
g. Changes of failure of a VAT in Nepal are great because the present administration is incapable for handling a VAT.

The study concluded that VAT in Nepal should not be implanted in haste. A partial VAT on some commodities should be implemented on experimental basis to know its pros and cons and after that a full VAT might be considered.

Nepal chamber of commerce organized a nationwide discussion programme on VAT. According to a report of the discussion programme, various views expressed about VAT in Nepal may be summarized on follows,

i. Government machine is not capable for implementing a VAT
ii. The business community has no confidence in the administration because it has failed to Implement many other taxes effectively and fulfill its own commitments even previously.

iii. VAT will hamper genuine trade and as consequence illegal trade will prosper. Rise in the price of domestic products will make them less competitive. Import and re-export of imported goods will get a negative impact leading to decline in government revenue.

iv. VAT will inhibit the growth of newly developing trade activities in the country.

v. The modern account or keeping system is required but difficult due to the raise in costs of doing business.

vi. There will be a sharp price rise if a VAT is introduced, consumer will be badly affected due to price rise. Nepalese markets in boarder area will dry up die to VAT.

It is concluded that it is not possible to implement a VAT in Nepal and if implemented it will have adverse effect on the economy.

Babu Ram Subedi (1998), in his Thesis; "Applicability of value added tax in Nepal," showed that the sales tax however is providing a considerable bulk of revenue but it has suffered from narrow base and cascading and pyramiding effects are creating distortion without generating potential amount of revenue. Nepal's tax effort ratio of 10.8 percent is perhaps the lowest in the world, next to Bangladesh. Elasticity and buoyancy elements of Nepalese Structure are very low.

The existing Nepalese sales tax system is not efficient, generates less of the potential amount of revenue and it is far from equality norms. Cascading pyramiding are overall problems making room for vertical integration, distortion and tax evasion. To reduce such inefficiencies it is necessary to move towards VAT system and initiate administrative reforms. VAT is considered neutral among the factors of production and will be helpful to enhance investment.

He analyzed that the most serious problems for implementing VAT in Nepal is the administrative inefficiencies, non-qualified intelligent, low trained man power, non-standard accounting systems etc. But above that VAT is considered in a broad based tax. Potential advantage of it can not be attained fully if the tax is not extended retail level. Nepal has a grain economy where a large number of small retailers are spread over the kingdom without proper accounting habits.

He concluded rate structure plays prominent role for efficiency and the success and failure of a tax. Multiple rates seem complex and less effective Since it reduces regressively of the VAT and the single rates proves highly simple to handily but to high degree of regressively, a dual rate may prove moderate way to solve both problems.

Narayan P. Silwal (1999), in his book " Value Added Tax: A Nepalese Experience" had expressed his practical experience about VAT. The book covers all the aspect of VAT. In writer's word "VAT is an all stages non cascading tax system. It extends to all levels of production and distribution. Similarly, it covers all stages and services. Any discrimination in taxing goods or services or exempting any of them renders VAT ineffective." The book gives main focus on Nepalese tax system. The book clearly analyze why the government of Nepal introduced VAT. Government of Nepal announced retail level sales tax of the rate if 10 percent covers a whole range of goods and services. There was no procedural law to administer it. When retail sales Tax introduced in Nepal, literacy level was just manger and billing and record keeping was fanciful. In this situation, required revenue could not take place, which in turn into the development expenditure. So that a modern efficient and neutral tax likes VAT was therefore preferred to get rid of past anomalies.

The writer expressed a version by borrowing government declaration that “The government of Nepal does not have the option of doing nothing. Major changes must he make in order to make tax administration fair efficient and effective. The hostility, harassment and corruption that currently exist between the taxes efface and the business community must end if Nepal is to have a modern tax system. The business wants the system changed and willing to pay reasonable tax but they want the system transparent and fair."

Narayan Silwal suggested that factors affecting VAT design should also take into consideration. A poorly designed VAT accompanied by weak administration would just drain the treasury. So, utmost care is necessary while designing VAT. According to him the following fact were considered while deriving a VAT in Nepal.

1 Tax base issues
2 Rate structure issues
3 Exemption issues
4 Threshold issues

Finally, the author reached in conclusion that the introduction of VAT provides an opportunity to sweep away the cobwebs and revamp a substantial part of the tax administration. In every country where it has been implanted properly, the VAT has proved itself as revenue productive tax. However the benefits from VAT depend upon its coverage.

Dr. Khadka (2000),in his latest book." The Nepalese Tax System" explained about the necessity to introduce VAT in Nepal. There are several reasons to introduce VAT in Nepal. One of the important reasons was to develop as table source of revenue by broadening the tax base; moreover it will help to become less dependent on international trade taxed for its revenue in the future. Since, it will not be in a position to levy import duties on trade that take place with in the South Asian Association for Regional Co-operation (SAARC) region after the implementation of the South Asian Free Trade Arrangement (SAFTA). Nepal has been the member of world Trade Organization (WTO) which will also have to be considered in this context.

Dr. Puspa Raj Kandel (2004), in his book "Tax laws and Tax Planning in Nepal" stated that VAT is a sales tax in advanced form. It is imposed on different stages. It is the tax imposed on added value of goods and services. The value is added in the form of profit, rent, wages, salary etc. In his book he pointed out the following characteristics of a full- fledged VAT system:

1 It is an indirect tax.

2 It is based on added value.

3 It is a broad- based tax.

4 It is based on self-assessment system.

5 It avoids cascading and pyramiding.

6 It has the self-policing and catching up benefit

Iswor Kumar Shrestha (2004). In his article" Appeal system in VAT ACT 2052" published in the journal "Rajaswa" identified the problem of VAT Act System; taxpayers do not want to show the transparency in their transactions. They do not want to keep the accounts; they all want to register the firm under small-scale business. Taxpayers generally show the low productivity and high wastage ratio. Likewise they show the large amount of discount allowed to customers. Issue of billing is the serious problem of VAT system in Nepal. Shortcoming of VAT implementation indicated in his study was, not giving the information of preliminary tax assessment, not examining the accuracy of data faulty explanation of act. No adopting the administration circular, not verifying the stock and not conducting link audit, he further suggested what is to be done for correcting the mistake. Billing procedure should be developed scientifically through the help of computer. Taxpayer should be provided education for keeping accounts to make a ware about billing procedures. An equal punishment standard should be made in the field of tax administration and judicial administration. Consumer should be provided education for their right and duties.

Amrit P. Shrestha (2006), in his Thesis "Assessment of VAT in Nepal" stated that;

1 The primary objective of VAT implementation was to avoid the problems inherent to manufacture's sales or cascading turnover.

The system has been universally accepted because of its growing popularity, catch-up effect, self policing, free of cascading and pyramiding and being a broad based tax.

2 VAT is broad based tax that is directly related to the list of exemption and

threshold. The list of exemption in Nepal is so long that it narrows the tax base.

3 Refund process mechanism is to attract investment and to promote exports.

4 In Nepal compliance rate is very low compared to registration figure, which means revenue is not being collected significantly.

5 Excise duty is an important source for VAT but it has not been effectively administered.

6 Widespread leakages are normal practices due to lack of professionalism, integrity, technically competent and international orientation.

In this way, various books, dissertations, reports, articles and other reference materials have been reviewed while preparing this dissertation. But there are not sufficient study/reports conducted in such particular topic that VAT as a tool of revenue mobilization in Nepal. A few works have done earlier but they are not able to explain explicitly the real picture of revenue collection from VAT, its trend and its relation with total revenue, total tax revenue and total indirect tax revenue. This study is unique and original.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter is devoted to the research methodology applied in the study to achieve the goal setout. The study is based on secondary sources of data. Different statistical tools are used to analyze the data. In this study Simple Percentage, Analysis of Time Series and Coefficient of Correlation methods are used to analyze the data. This chapter is divided into four sub-headings: research design; nature and sources of data; data processing and tools for analysis.

4.2 Research Design

The analytical research design is used for analyzing and interpreting the data acquired from the secondary sources and descriptive research design also has been applied for the conceptualization and description of the problem.

4.3 Nature and Sources of Data

The study is based on secondary data and the source of secondary data is as follows:

a) Published document from ministry of finance as economic survey.
b) Publication of ministry of finance, Budget speech.
c) Publication of Inland Revenue Department, Annual Report.
d) Other relevant data for the study are Economic journal, Rajaswa Bajar, Abstracts Article, Newspaper etc.
e) Dissertation related to VAT available at central library of TU.

4.4 Data Processing

The data collected from above mentioned various sources have been tabulated so as to obtain desired outcome. The collected information has compiled and tabulated in different headings. Hence, the data are processed by using relevant statistical tools.

4.5 Tools for Analysis

To make research objective practicable, to find accurate result different statistical tools are used. The different statistical tools in the process of analysis are:

a) Simple percentage.
b) Trend line and Pie charts.
c) Analysis of time series and Coefficient of Correlation

Under the Analysis of Time Series effort has been made to analyze trends in composition of VAT in Nepal. On the basis of 10 years of data, the revenue amount of VAT from domestic product and import has been forecasted.

Let the trend line be,

$$y_c = a + bx$$

Where,

yc = Total amount of domestic product/import product of VAT

b = Constant which is the change in y corresponding to the change in x by one unit

a = Constant which is computed y value when x = 0

x = Time in the case of time series analysis

Formula to be used:

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum y^2}$$

The coefficient of correlation 'r' deals with the statistical technique which measures the degree of relationship or association between the variables. This analysis will reflect the relationship between VAT and total revenue, VAT and total tax revenue and VAT and total indirect tax revenue to show the contribution of VAT in this particular term. Karl Pearson's correlation coefficient 'r' is used to find out the relationship among these mentioned variables. The following formula is used to calculate 'r'

$$r = \frac{N.\sum dx.dy - \sum dx.\sum dy}{\sqrt{N\sum dx^2 - (\sum dx)^2}\sqrt{N\sum dy^2 - (\sum dy)^2}}$$

CHAPTER FIVE

ANALYSIS OF REVENUE SUCTURE OF NEPLEASE TAX SYSTEM

5.1 Introduction

This chapter is devoted to the analysis and presentation of secondary data. Data obtained from various sources have been tabulated and presented in graphs and charts and analyzed to reach at some findings. This chapter has been divided into two sub-headings. They are: analysis of revenue structure of Nepal and Trend and Correlation analysis of VAT.

5.2 Analysis of Revenue Structure of Nepal

Nepal has been facing growing resource gap rapidly. Despite over five decades of planned development efforts, Nepal has been suffering from resource constraint, massive poverty, rapid population growth, increasing frictional seasonal and educational unemployment, aggressive dependence on agriculture, subsistence living standard and poor infrastructure. Most of the national economic activities are dependent upon agriculture and large portion of GDP originating from agricultural sector remains out of the tax net.

To solve the above mentioned problems Nepalese government has practiced deficit budget. Government deficit budget is defined as the excess of spending over its revenues. Fiscal deficit has been increasing continuously due to growing expenditure and low revenue performance in Nepal. In addition, the country has also been facing the increasing burden of foreign loan.

Table-5.1
Trends of Resource Gap in Nepal

(Rs.In million)

Fiscal Year	Total Expenditure	Total Revenue	Resource Gap (A)	Foreign Grants	Resource Gap (B)	Foreign Loan	Resource Gap (c)
(1)	(2)	(3)	(4)= (3-2)	(5)	6=(4+5)	(7)	8=7+6
1990/91	23549.8	10729.9	-12819.9	2164.8	-10654.6	6256.7	-4397.9
1991/92	26418.2	13512.7	-12905.5	1643.8	-11261.7	6816.9	-4444.8
1992/93	30897.7	15148.4	-15749.3	3793.3	-21956.0	6920.9	-15035.1
1993/94	33597.4	19580.8	-14016.6	2393.6	-11653.0	9163.6	-2459.4
1994/95	39060.0	24575.2	-14484.8	3937.1	-10547.7	7312.3	-3235.4
1995/96	46542.4	27893.1	-18649.3	4825.1	-13824.2	9463.9	-4360.3
1996/97	50723.7	30373.5	-20350.2	5988.3	-14361.9	9043.6	-5318.3
1997/98	56118.3	32937.9	-23180.4	5402.6	-17777.8	11054.5	-6723.3
1998/99	59579.0	37251.0	-22328.0	4336.6	-17991.4	11852.4	-6139.0
1999/2000	66272.5	42893.8	-23378.7	5711.7	-17667.0	11812.5	-5854.8
2000/01	79835.1	48893.6	-30941.5	6753.4	-24188.1	12044.0	-12144.1
2001/02	80072.2	50445.5	-29626.7	6686.1	-22940.6	7698.7	-15241.9
2002/03	84006.1	56229.8	-27776.3	11339.1	-16437.2	4546.4	-11890.8
2003/04	89442.6	62331.0	-27111.6	11283.4	-15828.2	7629.0	-8199.2
2004/05	102560.4	70122.7	-32437.7	14391.2	-18046.5	9266.1	-8780.4
2005/06	110889.2	72282.1	-38607.1	13827.4	-24779.7	8214.3	-16565.4
2006/07	133604.6	87712.1	-45892.5	15946.0	-29946.5	10331.0	-19615.5

Source: Budget Speech of Various Years, MOF, GON

The table shows that the resource Gap (A) has reached to 45892.5 million in F/y 2006/07. Up to F/y 2002/03 the gap trend is fluctuating but afterwards, it has been increased rapidly. At the beginning of the study the share of foreign loan was greater than foreign grants, but after F/y 2001/02 the share of grants has been increased and share of loans has been diminished. The overall resource gap is being increased in recent years.

5.2.1 Share of Tax and non-Tax Revenue in Total Revenue

The composition and magnitude of total revenue as well as tax revenue and non-tax revenue is visualized in the following table and Graph.

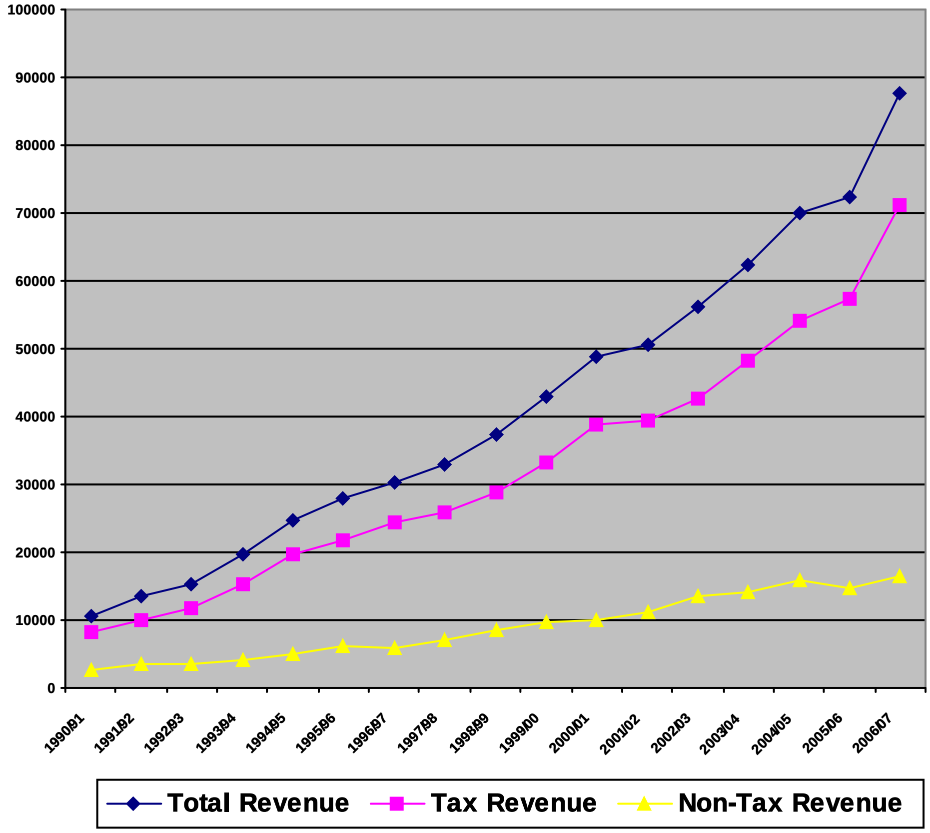
Table 5.2
Share of Tax Revenue and non-Tax Revenue in Total Revenue

(Rs. In million)

	Tax Revenue		Non-Tax Revenue		Total Revenue	
	Amount	**%**	**Amount**	**%**	**Amount**	**%**
1990/91	8176.4	76.2	2553.5	23.8	10729.9	100
1991/92	9875.6	73.1	3637.1	26.9	13512.7	100
1992/93	11662.5	77.0	3485.9	23.0	15148.4	100
1993/94	15371.4	78.5	4209.4	21.5	19580.8	100
1994/95	19660.0	79.99	4945.2	20.01	24575.2	100
1995/96	21668.0	77.7	6225.1	22.3	27893.1	100
1996/97	24424.3	80.4	5949.2	19.6	30373.5	100
1997/98	25939.8	78.8	6998.1	21.2	32937.9	100
1998/99	28753.0	77.19	8498.0	22.81	37251.0	100
1999/2000	33152.2	77.29	9741.6	22.71	42893.8	100
2000/01	38865.1	79.49	10028.58	20.51	48893.6	100
2001/02	39330.6	78.0	11114.9	22.0	50445.5	100
2002/03	42587.0	75.7	13642.8	22.3	56229.8	100
2003/04	48173.0	77.3	14158.0	22.7	62331.0	100
2004/05	54104.7	77.2	16018.0	22.8	70122.7	100
2005/06	57430.4	79.43	14851.7	20.57	72282.1	100
2006/07	71127.0	81.09	16585.1	18.91	87712.1	100

Source: Economic Survey of Various Years, MOF, GON

Figure: 5.1 Composition of Total Revenue



It is clearly known form the above table that the share of tax revenue is more than the share of non tax revenue in every year. In average the tax revenue contribute about 79 percent and 21 percent is contributed by non-tax revenue.

5.2.2 Composition of Tax Revenue

Tax revenue constitutes of two components i.e. direct tax and indirect tax. "Generally the tax on consumption is known as indirect taxes where as taxes on income and capitals are known as direct taxes. Tax structure of any country is composed of both directs well as indirect taxes". (Agrawal: 1978:245)

In Nepalese context indirect tax structure constitute; custom duty, excise duty, sales Tax/VAT etc. Similarly, direct taxes constitute; land tax, Income tax, properly tax vehicle tax etc.

5.2.2.1Structure of Direct Tax

Direct tax is actually paid by the person on whom it is imposed legally. The impact or money burden and the incidence are on the one and same person. The magnitude of direct tax on the economy depends upon the economic development and economic growth, it means as the economic growth increases, per capita income of the country's people automatically raises and the magnitude of direct tax goes up.

The contribution of direct in total tax revenue is lesser than the contribution of indirect tax in Nepal, because of slower economic development. The table 5.3 shows the composition of direct tax to the total GDP, to the total revenue, to the total tax revenue and its percent-based contribution on those above mentioned economic parameters.

Table 5.3

Trend and Composition of Direct Tax Revenue

(Rs. In Million)

				Direct TAX			
				Amount	**As% of GDP**	**As % of TR**	**As% of TTR**
1990/91	120370	10729.9	8176.4	1369.7	1.13	12.76	16.75
1991/92	149487	13512.7	9875.6	1595.2	1.06	11.80	16.15
1992/93	171474	15148.4	11662.5	2036.2	1.18	13.44	17.45

1993/94	199272	19580.8	15371.4	2855.3	1.43	14.58	18.57
1994/95	218175	24575.2	19660.0	3849.3	1.76	15.66	19.57
1995/96	248913	27893.1	21668.0	4585.0	1.84	16.43	21.16
1996/97	280513	30373.5	24424.3	5234.0	1.86	17.23	21.42
1997/98	300845	32937.9	25939.8	6013.0	1.99	18.25	23.18
1998/99	342036	37251.0	28753.0	7297.0	2.13	19.58	25.37
1999/2000	379488	42893.8	33152.2	8555.0	2.25	19.94	25.80
2000/01	411275	48893.6	38865.1	10159.4	2.47	20.77	26.14
2001/02	422807	50445.5	39330.6	10597.5	2.50	21.07	26.94
2002/03	456675	56229.8	42587.0	10105.8	2.21	17.97	23.72
2003/04	495589	62331.0	48173.0	11912.6	2.40	19.11	24.72
2004/05	548484	70122.7	54104.7	12265.4	2.23	17.49	22.66
2005/06	61108	72282.1	57430.4	14399.6	2.35	19.92	26.07
2006/07	675484	87712.1	71127.0	16727.0	2.47	19.07	23.51

Source: Budget Speech of Various Years, MOF, GON

The table 5.3 shows that, the contribution of direct tax to GDP has been increasing in each fiscal year. At the beginning the study the contribution was about 1.13 percent, but towards the end of the study it increased to about 2.50 percent. This increasing trend of direct tax is not somehow satisfactory as it increases very slowly. Similarly direct tax contributes approximately one-fifth to total revenue and one-fourth to the total tax revenue.

5.2.2.2 Structure of Indirect Tax

Indirect tax is imposed on one person but it is paid either partly or wholly by another person. In the case of indirect taxes, the impact and incidence of tax are on different persons. Before the implementation of VAT, sales tax, contract tax, hotel tax, entertainment tax wee indirect taxes, but the VAT came into existence having merged all these four types of taxes in case of Nepal. The contribution of indirect tax has always been very high and significant. The following table shows the contribution of indirect tax to total GDP, to the total revenue, to total tax revenue and its percent based contribution to those above mentioned economic parameters.

Table 5.4
Trend and composition of Indirect Tax

(Rs. In Million)

				Indirect Tax			
				Amount	**As % of GDP**	**As % of TR**	**As % of TTR**
1990/91	120370	10729.9	8176.4	6806.6	5.65	63.43	83.25
1991/92	149487	13512.7	9875.6	8280.4	5.53	61.27	83.85
1992/93	171474	15148.4	11662.5	9626.3	5.61	63.54	82.55
1993/94	199272	19580.8	15371.4	12516.0	6.28	63.91	81.43
1994/95	218175	24575.2	19660.0	15865.0	7.27	64.55	80.43

1995/96	248913	27893.1	21668.0	17083.0	6.86	61.24	78.84
1996/97	280513	30373.5	24424.3	19191.0	6.84	63.18	78.58
1997/98	300845	32937.9	25939.8	19927.0	6.62	60.50	76.82
1998/99	342036	37251.0	28753.0	21456.0	6.27	57.60	74.63
1999/2000	379488	42893.8	33152.2	24597.0	6.48	57.34	74.20
2000/01	411275	48893.6	38865.1	28705.7	6.98	58.71	73.86
2001/02	422807	50445.5	39330.6	28733.1	6.79	56.95	73.06
2002/03	456675	56229.8	42587.0	32481.2	7.11	57.76	76.28
2003/04	495589	62331.0	48173.0	36260.4	7.31	58.17	75.28
2004/05	548484	70122.7	54104.7	41839.3	7.62	59.66	77.34
2005/06	61108	72282.1	57430.4	45563.8	7.45	63.03	74.93
2006/07	675484	87712.1	71127.0	52146.4	7.71	59.45	76.49

Source: Economic Survey of Various Years, MOF, GON

Budget Speech of Various Years MOF, GON

The table 5.4 shows that the economy is heavily depends upon the indirect takes, which contributes about 6 to 8 percent of total country's GDP and three-fourth of total tax revenue.

5.2.3 Tax/GDP Ratio

The relationship between total revenue and GDP is known as revenue effort ratio. Similarly, the relationship between tax and GDP is known as a tax effort ration. The tax/GDP ratio is the indicator which shows the utilization of taxable capacity, which depends upon the ability of people to pay or the ability of the government to collect. In Nepal the tax/GDP ratio is very low and it is marginally increasing. The tax/GDP ratio is shown in the following table 5.5.

Table 5.5
Tax/GDP Ratio

(Rs. In million)

Fiscal Year	GDP	Total Revenue	Total Tax Revenue	Tax Effort Ration
1990/91	120370	10729.9	8176.4	6.8
1991/92	149487	13512.7	9875.6	6.6
1992/93	171474	15148.4	11662.5	6.8
1993/94	199272	19580.8	15371.4	7.7
1994/95	218175	24575.2	19660.0	9.0
1995/96	248913	27893.1	21668.0	8.7
1996/97	280513	30373.5	24424.3	8.7
1997/98	300845	32937.9	25939.8	8.6
1998/99	342036	37251.0	28753.0	8.4
1999/2000	379488	42893.8	33152.2	8.7
2000/01	411275	48893.6	38865.1	9.4
2001/02	422807	50445.5	39330.6	9.3
2002/03	456675	56229.8	42587.0	9.3
2003/04	495589	62331.0	48173.0	9.7
2004/05	548484	70122.7	54104.7	9.8
2005/06	61108	72282.1	57430.4	9.3
2006/07	675484	87712.1	71127.0	10.5

Source: Economic Survey of Various Years, MOF, GON

Tax/GDP ratio is increasing each study period. Initially it was 6.8 percent, which increases about 10.52 percent at the end of study period, but the increasing trend is not satisfactory.

5.2.4 Composition of VAT Revenue

Nepalese VAT is of consumption type and method used for deduction is tax credit method. Further VAT is subjected to destination principle, current threshed limit is 2 million and it is subjected to flat rat of 13 percent with zero percent rates on exports. Some selected goods are completely out of VAT net base, basically due to the administrative complexity and equity consideration. More than 60 percent of total VAT revenue comes from import and remaining is from other components.

The biggest virtue of VAT is that it is revenue buoyant and highly instrumental for resource mobilization especially an economy with an acute shortage of resources. VAT has been adopted in Nepalese economy including entertainment tax, hotel tax, contract tax and sales tax, since 1997 and has been established itself as a best instrument of resource mobilization.

5.2.4.1Contribution of Sales Tax/VAT in Total Revenue

It means the portion of sales tax/VAT revenue to the total revenue collected by the government. The share of Sales tax/VAT to total revenue is shown in following table 5.6

Table 5.6

Contribution of Sales Tax/VAT in Total Revenue

(Rs. in Million)

Fiscal Year	Total Revenue	Sales Tax/VAT	% of VAT Revenue in Total Revenue

1990/91	10729.9	2026.1	18.88
1991/92	13512.7	2840.7	21.02
1992/93	15148.4	3438.2	22.69
1993/94	19580.8	4693.1	23.96
1994/95	24575.2	6031.7	24.54
1995/96	27893.1	6431.3	23.05
1996/97	30373.5	7126.5	23.46
1997/98	32937.9	7122.6	21.62
1998/99	37251.0	7882.2	21.15
1999/2000	42893.8	9854.9	22.97
2000/01	48893.6	12382.4	25.32
2001/02	50445.5	12267.3	24.31
2002/03	56229.8	13459.7	23.93
2003/04	62331.0	14478.9	23.22
2004/05	70122.7	18885.4	26.93
2005/06	72282.1	21610.7	29.90
2006/07	87712.1	26095.6	29.75

Source: Economic Survey of Various Years, MOF, GON

As indicated in above table 5.6, sales tax revenue was14.77 percent of total tax revenue in F/Y 1990/91. It in increased to 27.45 percent in fiscal year 1997/98,but when VAT is introduced the contribution of VAT to total tax revenue increases more rapidly than of sales tax, as with in the period of 9/10 years it has been increased about more than 9 percent. In the F/y 2006/07 the contribution of VAT in total tax revenue is about 36.68 percent.

5.2.4.2 Share of Sales Tax/VAT in Total Tax Revenue

The percentage contribution of Sales tax/VAT revenue in total tax revenue is presented in following Table.

Table 5.7

Share of Sales Tax/VAT in Total Tax Revenue

(Rs. Million)

Fiscal Year	Total Tax Revenue	Sales Tax/VAT	% of VAT Revenue in Total Tax Revenue
1990/91	8176.4	2026.1	24.77
1991/92	9875.6	2840.7	28.76
1992/93	11662.5	3438.2	29.48
1993/94	15371.4	4693.1	30.53
1994/95	19660.0	6031.7	30.68
1995/96	21668.0	6431.3	29.68
1996/97	24424.3	7126.5	29.17
1997/98	25939.8	7122.6	27.45
1998/99	28753.0	7882.2	27.41
1999/2000	33152.2	9854.9	29.72
2000/01	38865.1	12382.4	31.85
2001/02	39330.6	12267.3	31.19
2002/03	42587.0	13459.7	31.60
2003/04	48173.0	14478.9	30.05
2004/05	54104.7	18885.4	34.90
2005/06	57430.4	21610.7	37.62
2006/07	71127.0	26095.6	36.68

Source: Economic Survey of various Years, MOF, GON

As indicated in above table 5.7, sales tax revenue was 14.77 percent of total tax revenue in F/y 1990/91. It increased to 27.45 percent in fiscal year 1997/98, but when VAT is introduced the contribution of VAT to total tax revenue increases more rapidly than of sales tax, as with in the period of 9/10 years it has been increased about more than

9 percent. In the F/y 2006/07 the contribution of VAT in total tax revenue is about 36.68 percent.

5.2.4.3 Share of Sales Tax/VAT in Total Indirect Tax

The following Table shows the share of Sales tax/VAT in total indirect tax.

Table 5.8

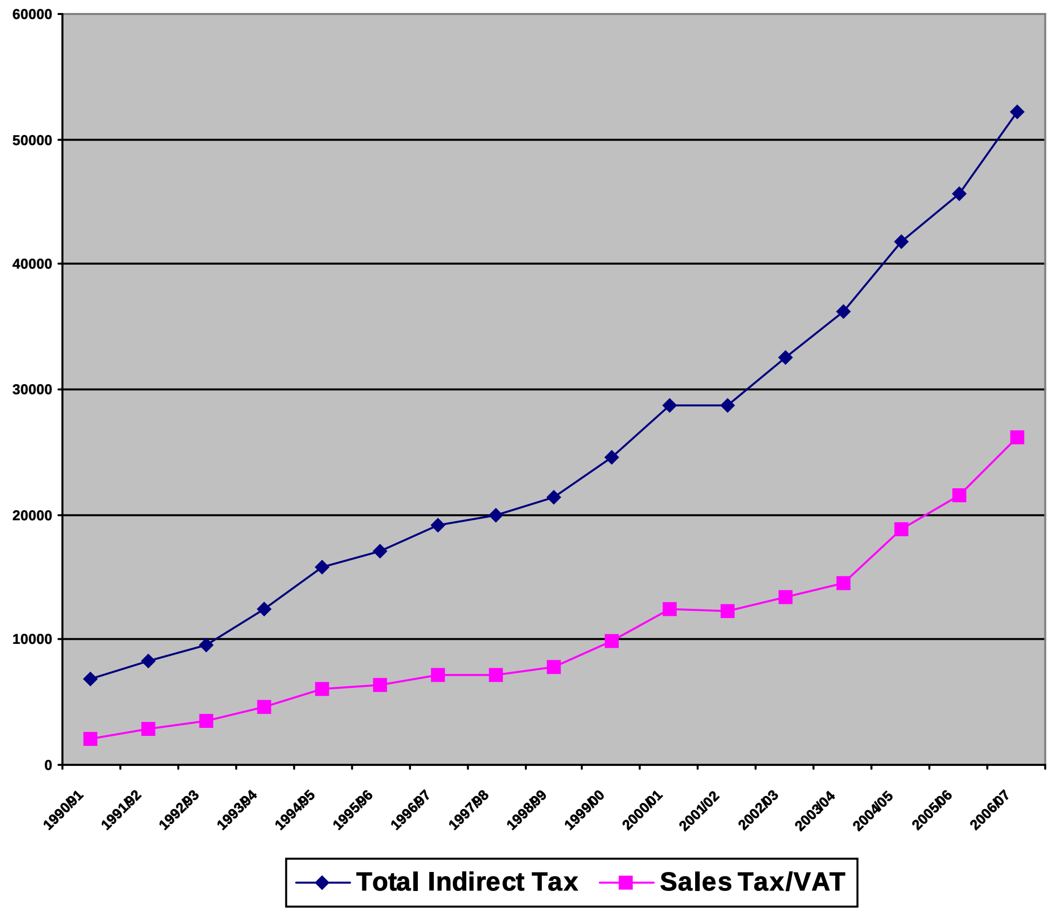
Share of Sales Tax/VAT in Total Indirect Tax

(Rs in million)

Fiscal Year	Total indirect Tax	Sales Tax/VAT	% of VAT Revenue n Total Indirect Tax
1990/91	6806.6	2026.1	29.76
1991/92	8280.4	2840.7	34.30
1992/93	9626.3	3438.2	35.71
1993/94	12516.0	4693.1	37.49
1994/95	15865.0	6031.7	38.01
1995/96	17083.0	6431.3	37.64
1996/97	19191.0	7126.5	37.13
1997/98	19927.0	7122.6	35.74
1998/99	21456.0	7882.2	36.73
1999/2000	24597.0	9854.9	40.06
2000/01	28705.7	12382.4	43.13
2001/02	28733.1	12267.3	42.69
2002/03	32481.2	13459.7	41.43
2003/04	36260.4	14478.9	39.93
2004/05	41839.3	18885.4	45.13
2005/06	45563.8	21610.7	47.42
2006/07	52146.4	26095.6	50.07

Source: Economic Survey of Various Years, MOF, GON

Figure: 5.2 Shares of Sales tax/ VAT in Total Indirect Tax



According to figure provided in table 5.8 the contribution of sales tax/VAT in total indirect tax is reasonable as the increasing trend is satisfactory.

5.2.4.4 Share of Sales Tax/VAT in Total GDP

As shown in Table 5.9, the share of sales tax in total GDP is 1.68 in the year 1990/91 and the VAT is 2.36 in the FY 1997/98. It is slightly increasing and reaches up to 3.86 in the year 2006/07.

Table5. 9
Share of Sales Tax/VAT in Total GDP

(Rs in Million)

Fiscal Year	GDP	Sales Tax/VAT Revenue	% of VAT Revenue in total GDP
1990/91	120370	2026.1	1.68
1991/92	149487	2840.7	1.90
1992/93	171474	3438.2	2.00
1993/94	199272	4693.1	2.35
1994/95	218175	6031.7	2.76
1995/96	248913	6431.3	2.58

1996/97	280513	7126.5	2.54
1997/98	300845	7122.6	2.36
1998/99	342036	7882.2	2.30
1999/2000	379488	9854.9	2.59
2000/01	411275	12382.4	3.01
2001/02	422807	12267.3	2.90
2002/03	456675	13459.7	2.94
2003/04	495589	14478.9	2.92
2004/05	548484	18885.4	3.44
2005/06	61108	21610.7	3.53
2006/07	675484	26095.6	3.86

Source: Economic Survey of Various Years MOF, GON

Budget Speech of Various Years MOF, GON

5.2.5 The Structure of VAT Revenue

The revenue collection from VAT can be divided into two major components as domestic and imports. The following table shows the trend in composition of VAT revenue.

Table 5.10

Structure of VAT Revenue

(Rs. in Million)

		Domestic Product		Imports	
		Amount	**%**	**Amount**	**%**
1997/98	7122.6	2100.9	29.49	5021.7	70.51
1998/99	7882.2	2812.7	35.68	5069.5	64.32

1999/2000	9854.9	3725.7	37.80	6129.2	62.20
2000/01	12382.4	4744.7	38.31	7637.7	61.69
2001/02	12267.3	4609.07	37.57	7658.23	62.43
2002/03	13459.7	4831.1	35.89	8628.6	64.11
2003/04	14478.9	5604.1	38.70	8874.8	61.30
2004/05	18885.7	6614.9	35.02	12270.5	64.98
2005/06	21610.7	8150.5	37.71	13460.2	62.29
2006/07	26095.6	9689.5	37.13	16405.7	62.87

Source: Annual Report of IRD, 2006

The above table shows that about one third of total VAT revenue comes through domestic product and two third from imports. Thus, we can say that our VAT revenue is highly depends upon the import. But for the healthy economic development in this era of globalization we should have more domestic VAT revenue.

5.2.5.1 The Status of Revenue Collection of Inland Revenue Department

The tax revenue collected by IRD in FY 2006/07 under different headings is depicted in table 5.11.

Table 5.11

The Status of Revenue Collection of Inland Revenue Department (in FY 2006/07)

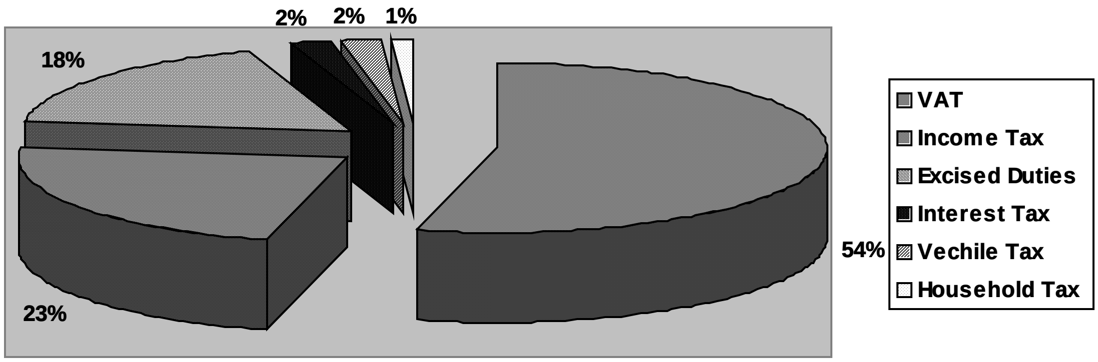
(Rs in million)

Types of revenue	Target	Actual	percentage
Tax revenue	48817.0	51541.4	105.58%
Direct tax	12710.5	15621.4	122.90%
Income tax	11182.3	14025.9	125.43%
Household tax	560.04	599.37	107.02%
Interest tax	967.77	996.14	102.93%
Indirect tax	36106.5	35920.0	99.48%
Vat	26463.0	26704.18	100.91%
Excise duties	8637.5	8533.8	98.80%
Vehicles tax	1006.0	681.99	67.79%

Source: Inland Revenue Department, 2006/07.

Figure 5.3

The status of revenue collection of IRD (FY 2006/07) in Pie Chart



The given diagram 5.3 shows the revenue contributed from six different sources of tax revenue. Out of total revenue more than 50 % is covered by VAT i.e. 54%. And the second largest revenue is collected is collected from income tax which has got the share of 23% in total. Excise duty has also contributed slightly lesser than income tax but interest and vehicle tax have got the equal share of contribution where as the least contribution is made by household i.e. 1%.

5.2.5.2 VAT collection (Domestic only) in Fiscal Year 2006/07

VAT collection from domestic activity talks about the income of Govt. through VAT. The percentage contribution of different sub headings under the domestic economic activity to the total domestic VAT collection is shown in table 5.12

Table 5.12

VAT Collection (Domestic Only)

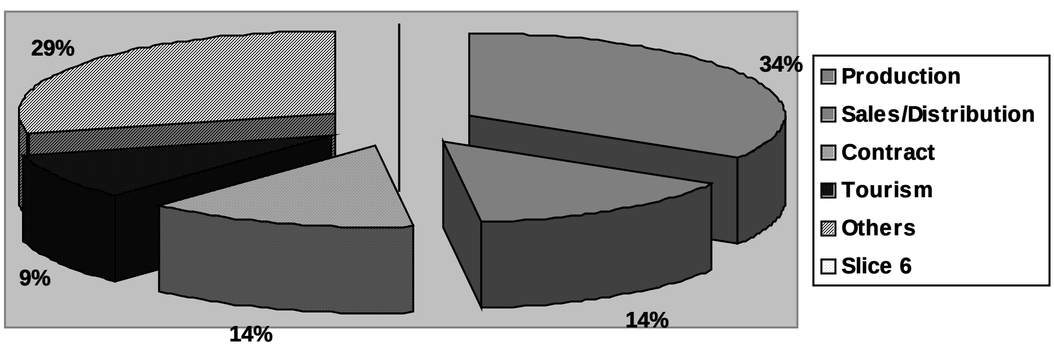
(Rs. in Million)

Headings	Amount	Percentage
production	3247.61	33.51%
sales/distribution	1581.13	14.60%
contract	1415.4	14.60%
tourism	595.75	9.11%
others	2849.9	29.41%
Total	9689.97	100%

Source: Inland revenue Department 2006/07

Figure 5.4

VAT collection (Domestic only) in FY 2006/07 in pie chart



The above figure 5.4 reveals the share of contribution to total domestic VAT revenue. In the figure, five different sources have their own percentage value. The greater portion of VAT is collected from production activity where as least contribution is made by tourism industry and its share is 9%. Sales and contract have got equal lot i.e. 14% but second biggest contribution made by is others activity. In conclusion production sector has prominent role in VAT revenue collection and it should be increased.

5.2.5.3VAT Registered Tax Payers

All the tax payers of production, import, wholesale and retail level whose transaction is above the threshold and whose do the transaction of VAT imposed goods and services, are compulsorily required to register in VAT. The number of registrants was 2045 at the time of introduction of VAT in 1997, but in F/y 2006/07 the number of registrants reaches to 52965. The trend of VAT registration is shown in following table 5.13

Table 5.13

The Trend of VAT Registration

S.N.	Fiscal Year	VAT Registrant	Percentage Increment
1.	2001/02	25149	-
2.	2002/03	29872	18%
3.	2003/04	31174	14%
4.	2004/05	39776	16%
5.	2005/06	46831	18%
6.	2006/07	52965	13%

Source: Annual Report of IRD, 2006/07.

5.2.6 Prospects for Revenue Mobilization

5.2.6.1 Existing Situation on Revenue Mobilization

VAT is desired to achieve the goals of neutrality, revenue productivity, fairness and transparency etc. It is modern and effective tax system which checks the loopholes, such as under valuation, non- recording and unauthorized trade. It discourages such issues and problems existing in the sales tax system. That's why VAT is considered to be the best fiscal tool for revenue mobilization, especially in an economy with acute shortage of resources.

As Nepal is a member of the WTO network, the collection of custom revenue as a major source of revenue is low.

On the other hand, there is less possibility of collecting huge amount of income tax because of low per capita income of the Nepalese people; therefore VAT is only one alternate. Because of all these factors Nepal has already adopted broad based consumption type VAT, using tax credit method. Despite the preliminary resistance, VAT is currently well received by customers as well as the business and industrial communities. There has been made a progress in revenue mobilization .The following table 5.14 provides the glimpse of Nepalese structure of taxation and contribution of VAT in revenue mobilization.

Table No 5.14

Structure of Nepalese Taxation and Contribution of VAT in Revenue Mobilization

(Rs in million)

F/Y	Total Revenue	Total Tax Revenue	Total Non-tax Revenue	Direct Tax	Indirect Tax	VAT Revenue	% increase in VAT	% share of VAT in TR	% share of VAT in TTR	% share of VAT in TIT
1997/98	32937.9	25939.8	6998.1	6013.0	19927.0	7122.6	-0.05	21.62	27.45	35.74
1998/99	37251.0	28753.0	8498.0	7297.0	21456.0	7882.2	10.63	21.15	27.41	36.73
1999/00	42893.8	33152.2	9741.6	8555.0	24597.0	9854.9	25.0	22.97	29.72	40.06
2000/01	48893.6	38865.1	10028.5	10159.4	28705.7	12382.4	25.6	25.32	31.85	43.13
2001/02	50445.5	39330.6	11114.9	10597.5	28733.1	12267.3	-0.93	24.31	31.19	42.69
2002/03	56229.8	42587.0	13642.8	10105.8	32481.2	13459.7	9.7	23.93	31.60	41.43
2003/04	62331.0	48173.0	14158.0	11912.6	36260.4	14478.9	7.6	23.22	30.05	39.93
2004/05	70122.7	54104.7	16018.0	12265.4	41839	18885.4	30.4	26.93	34.90	45.13
2005/06	72282.1	57430.4	14851.7	14399.6	45563	21610.7	14.4	29.93	37.62	47.42
2006/07	87712.1	71157.0	16585.1	16727.0	52146	26095.6	20.7	29.75	36.38	50.04

Source: Budget Speech of Various Years, MOF, GON,

According to the table 5.14, in the initial period of VAT implementation, i.e. in Fy 1997/98, total collected VAT revenue was Rs. 7122.6 million. Due to the lack of proper cooperation of private sector, and because of misunderstanding about VAT, the percentage increased in VAT in comparison of previous fiscal year remained negative.

However the share of VAT in total revenue, total tax revenue and total indirect tax remained 21.62, 27.45 and 35.74 percentage respectively. In Fy1998/99, 1999/2000and 2000/01 the VAT revenue increases by 10.63, 25.0 and 25.6 percent respectively but in fiscal year 2001/02 it decreases by 0.93 percent, However, the increment in VAT revenue thereafter remained 9.7, 7.6, 30.4, 14.4, 20.7 in following fiscal years respectively. The share of VAT revenue in total revenue, total tax revenue and total indirect tax in Fy 2006/07 remained 29.75, 36.68 and 50.04 percent respectively.

From above analysis, we can conclude that VAT has been playing a significant role in revenue mobilization .The contribution of VAT revenue in total revenue, total tax revenue and total indirect tax is in increasing trend and there is significant progress in Revenue mobilization.

5.3 Trend and Correlation Analysis of VAT

The analysis with the help of statistical tool is performed in this part taking 10 years data (1997/98 to 2006/07) includes the following statistical tools.

a. Trend analysis

b. Coefficient of Correlation

5.3.1 Trend Analysis (To Estimate the Trends in Composition of VAT Revenue)

Under this topic effort has been made to analyze trends in composition of VAT in Nepal. On the basis of 10 years of data, the revenue amount of VAT from domestic product and import has been forecasted.

Here, in case of this study, each domestic VAT and import VAT at a time is considered as the main variable and denoted by y, x is 't' base year, here all the years are denoted by t. The following table shows the trend values of domestic product VAT and import VAT from FY 1997/98 to 2006/07.

Table No. 5.15

Trend Value of Domestic Product VAT and Import VAT

Year (t)	**Yc = a + bx (trend value of domestic product VAT)**	**Yc = a +bx (Trend value of import VAT)**
1997/98	1936.2742	3754.3622
1998/99	2681.1726	4945.7506
1999/00	3426.071	6137.139
2000/01	4170.9694	7328.5274
2001/02	4915.8678	8519.9158
2002/03	5660.7662	9711.3042
2003/04	6405.6646	10902.6926
2004/05	7150.563	12094.081
2005/06	7895.4614	13285.4694
2006/07	8640.3598	14476.8578

Source: Appendix 1 and 2.

Therefore by the help of trend analysis we find the value of domestic product VAT and import VAT for past ten years. By adopting same formula of trend we can get the future trend value of domestic product and import product VAT which will reflect the trends in composition of VAT. Following table reveals the trend value of domestic and import VAT for next 8 years.

Table No. 5.16

Trend of Domestic Product VAT Revenue and Import VAT Revenue for Next 8 Years

Fy	Trend value of domestic product VAT	Trend value of import VAT	Total VAT*	% share of domestic product VAT on total	% share of import VAT on total VAT
2007/08	9385.2582	15668.24462	25053.50282	37.4608	62.5392
2008/09	10130.1566	16859.6346	26989.7912	37.53329	62.46671
2009/10	10875.055	18051.023	28926.078	37.59602	62.40398
2010/11	11619.9534	19242.4114	30862.3648	37.65088	62.34912
2011/12	12364.8518	20433.7998	32798.6516	37.69927	62.30073
2012/13	13109.7502	21625.1882	34734.9384	37.74226	62.25774
2013/14	13854.6486	22816.5766	36671.2252	37.78071	62.21929
2014/15	14599.547	24007.965	38607.512	37.8153	62.1847

Source: Appendix No. 1 and 2.

* = Obtained by addition of Column 2 and 3.

From the above computation we can conclude that both total VAT revenue and its composition component are in increasing trend, however, share of revenue from domestic product in total VAT is continuously increasing, in contrary the share of VAT revenue from import is continuously decreasing in total VAT revenue.

In the above table we can see that the trend value of total VAT revenue is Rs. 25053.50282 which has been calculated by adding domestic trend value and import trend value. The contribution of domestic VAT revenue in total VAT revenue is 37.46 % where the contribution of import is 62.54. The share of import in total VAT revenue is continuously decreasing and in Fy 2014/15 it is estimated to be 62.18% where share of revenue from domestic product will be 37.81%.

5.3.2 Correlation Analysis

The coefficient of correlation 'r' deals with the statistical technique which measures the degree of relationship or association between the variables. To fulfill the purpose of this study, this statistical tool has been used. This analysis will reflect the relationship between VAT and total revenue, VAT and total tax revenue and VAT and total indirect tax revenue to show the contribution of VAT in this particular term.

Under this chapter, Karl Pearson's correlation coefficient 'r' is used to find out the relationship among these mentioned variable. The value of coefficient of correlation is calculated in between –1 to +1. The negative value of 'r' signifies negative relationship between the variables i.e., increase in one variable, causes decrease in another and vice-versa.

5.3.2.1 Correlation between VAT and Total Revenue

The coefficient of correlation 'r' between VAT and total revenue measures the degree and relationships between these two variables. The purpose of computing coefficient of correlation between VAT and total revenue is to find out whether VAT is significantly contributed in total revenue or not.

To find out the Karl Pearson's correlation 'r' between VAT and total revenue, VAT (y) is assumed to be independent variable and total revenue (x) is assumed to be dependent variable. The assumption is made that total revenue will decrease or increase as increase or decrease in VAT. The correlation between VAT and total revenue is shown in the appendix No. 3. The value of r is calculated in between –1 and +1. The negative value of r'' signifies the opposite relationship between the variable i.e. increase in VAT will lead decrease in total revenue and vice-versa. While positive value of 'r' shows the positive/similar relationship between the variables. The value of r, r^2, PEr and 6PEr between VAT and total revenue is given below:

r = 0.99

r^2 = 0.9801

PEr = 0.0042

6PEr = 0.0252

From the above value of r', r2, PEr and 6PEr, it is found that the coefficient of correlation 'r' between VAT and total revenue is 0.99. This shows the highly positive relationship between VAT and total revenue. The value of coefficient determination r^2 = 0.9801. It means that there will be the variation in total revenue 98.01% due to VAT and remaining 1.99% by other factors, moreover r higher than the probable error (6PEr). Therefore the value of r is significant. It can be concluded that there is a significant relationship between VAT and total revenue. In another words, VAT has contributed a significant amount in total revenue of Nepal.

5.3.2.2 Correlation between VAT and Total Tax Revenue

To identify the impact and contribution of VAT in total tax revenue, correlation between these two variables should be calculated. To find out the Karl Pearson's coefficient of correlation 'r' between VAT and total tax revenue, VAT (y) is assumed as independent variable and total tax revenue (x) is taken as a dependent variable. The correlation between VAT and total tax revenue is shown in appendix No. 4. The value of r is calculated between +1 to –1. The negative value of r signifies the opposite relationship between the variables and vice-versa.

$r = 0.99$
$r^2 = 0.9801$
PEr = 0.0042
6PEr = 0.0252

Here, the coefficient of correlation between VAT and total tax revenue is 0.99. It seems to be near +1. This shows that there is highly positive relationship between VAT and total tax revenue. The value of coefficient determination (r^2) is equal to 0.9801 which implies that there will be the variation in total revenue 98.01% due to VAT and remaining due to by other factor. Similarly 'r' is for higher than 6PE so that it can be made conclusion that the value of r is significant. VAT has large contribution on total tax revenue.

5.3.2.3 Correlation between VAT and Total Indirect Tax

Correlation between VAT and total indirect tax reflects the contribution of value added tax on total indirect tax. The value of correlation coefficient along with other necessary instrument of correlation shown in the appendix No. 5

The following are the respective value of :
$r = 0.99$
$r^2 = 0.9801$
PEr = 0.0042
6PEr = 6 x 0.0042
= 0.0252

Here, the coefficient of correlation between total indirect tax and VAT is 0.99, which is near to +1. Then it shows the positive relationship and if VAT increases total indirect tax will also increase. The value of coefficient of determination is $r^2 = 0.9801$, it means that there will be the variation of 98.01% in total indirect tax due to VAT and remaining is due to other factors. However, the value of 6PEr is less than r so value of r is significant. It can be said that VAT has major contribution on total indirect tax.

5.3.3 Conclusion of Trend and Correlation Analysis of VAT

Through the analysis of time series, we can conclude that there will be higher potentiality in VAT revenue. So government must pay higher attention in VAT for effective resource mobilization. After analyzing the coefficient of correlation between VAT and total revenue, VAT and total tax revenue and VAT and indirect tax, we can conclude that VAT has contributed a significant percentage in total revenue, total tax revenue and total indirect tax. Because they have higher positive relationship (near about one) similarly, there is more than 90% variation due to VAT in total revenue, total tax revenue and total indirect tax revenue. And all these relationship are significant as r > 6PEr everywhere. So VAT has significant contribution in government revenue. And all these relationship are significant as r > 6PEr everywhere. So VAT has significant contribution in government revenue.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

VAT is most recent innovation in the field of taxation system. VAT is tax based on goods and services. The base of VAT is the value addition that takes place during process of production and distribution. Since this tax is based on consumption the burden of this tax has to be borne by the consumer. VAT is based on self- assessment system. Under the self assessment system a taxpayer is required to keep a proper account of his all business transaction. Therefore, the returns files by the taxpayers by assessing their tax liability have to be accepted by the tax administration not only in principle but also in practice. VAT has done away with administrative procedures such as taking approval of price for purpose of sales tax, submission of annual statement of accounts tax assessment by the tax officers stamping of invoices, submission of invoices to the tax office along with the tax returns etc.

VAT is transparent tax system that is based on taxpayer's transaction. VAT is not only transparent in itself but also demands transparency in other tax system as well unless even such an environment is created ,VAT can not be implemented effectively. In order to make VAT effective, it is essential to create an environment in which invoice are issued properly, accounts are maintained accurately ,tax is based on transaction, there is acceptance of the taxpayers correct account and competition among industrialist and businessman is established with respect to tax. Until and unless such situation is not created, VAT implementation will not be easy and pressure will be created in some or another way.

Comparing VAT with other forms of Tax it is so far superior on many grounds Such as economic efficiency, revenue productivity and administrative simplicity. However retail level and wholesale level both will generate equal revenue with similar coverage and rates if VAT can be implemented effectively along with Its different provisions like exemption, threshold, Zero-rating. Avoidance of pyramiding and cascading effects and providing cross auditing, Self policing and catch up effects are the most favorable features of VAT which make it superior even than retails sales tax. VAT has crossed its tenth years of implementation. At the beginning of its implementation the political instability and frequent change in government, VAT could not fully implemented where the tax awareness is minimal, improper tax accounting system, smuggling, under valuation etc tax leakages take place.

Nepalese VAT is a consumption type and method used for calculation is tax credit method. The VAT is subjected to destination principle, the current threshold limit is two million and it is subject to flat rate of 13 percent with zero percent rates on exports. Some special selected goods are totally out off VAT net, basically due to the administrative complexity and equity consideration.

The overview of Nepalese VAT system shows that VAT contributes about 4 percent to total GDP, about 30 percent to total revenue, about 37 percent to total tax revenue, and about 50 percent to total indirect tax. VAT a premier indirect tax to Nepalese tax Structure is composed of two components: domestic and import. About 63% of VAT revenue is generated from import and rest is generated by domestic product. The number of VAT registrants has been increasing gradually and it reaches 52,965 in FY 2006/07.

Naturally, to introduce new system replacing old one would be surrounded by many complications and opposition, even if the new one is improved one. Because of many other reasons before introduce any new system it will be better if it is implemented after adequate preparation, and the implementation of VAT does not seem effective in Nepal till now as the gap between the potential and actual VAT is large and widening every year. Lack of proper practice of invoicing, the inefficiency of tax authorities, lack of conscious consumer, effective implementation of threshold, Lack of co- ordination between custom and VAT offices, corruption, lack of transparency are the threat for effective implementation of VAT. Due to lack of expert manpower, administrative difficulties, poor auditing system are creating negative impact on VAT. Very low level of public consciousness not issuing proper bills is other problems faced by the Nepalese government in the process of VAT implementation. It is expected that after the implementation of VAT, problems of tax evasion, undervaluation will be automatically abolished as it is transparent and all transactions would be recorded in computer.

If the agriculture is brought under VAT net and if the provision of zero rates is removed than adequate revenue could be mobilized through VAT which helps for economy and the Nepal could be independent for development activities.

6.2 Conclusion

Value added tax puts greater significance in revenue mobilization in Nepal. Generating revenue means collecting taxes. There are various forms of tax system in Nepal. The decision to introduce VAT seems to be best for the country.

Introducing of VAT in Nepal is both compulsion and necessity. It can not curtail its development projects for which more revenue required. The narrow tax base of the previous sales tax failed to generate the minimum required amount because it included only the import and manufacturing unit. Income tax however has some potentiality for revenue generation; the rates of income tax are slowly increasing because the Nepalese per capital income is very low. As Nepal has entered in to the WTO, shall need to reduce the custom duties drastically so the only one alternate is the introduction of VAT.

VAT was introduced in Nepal as the part of the national tax reform. VAT is supposed to be moving toward its goal. The biggest virtue of VAT is that it is revenue buoyant and highly instrumental for revenue mobilization especially in an economy with acute shortage of resources.

The trend of overall revenue in Nepal shows the continuous increase over the period as well the resource gap of the government seems to be increasing terribly. The share of tax revenue is significantly higher 81.10 percent of total revenue as against the non tax revenue 18.90 percent of total revenue in fiscal year 2006/07. The share of indirect Tax is always dominant from the very beginning. At present the share of direct tax and indirect tax are 23.50 percent and 76.50 percent of total tax revenue respectively. Indirect tax is composed of custom duty, excise duty, Sales tax/VAT etc. But among them the share of VAT is more. In FY 2006/07 it contributes 50.04 percent of total indirect tax.

Through the analysis of time series, we can conclude that there will be higher potentiality in VAT revenue. So government must pay higher attention in VAT for effective resource mobilization. After analyzing the coefficient of correlation between VAT and total revenue, VAT and total tax revenue and VAT and indirect tax revenue, we can conclude that VAT has contributed a significant percentage in total revenue, total tax revenue and total indirect tax revenue because they have higher positive relationship (near about one). Similarly, there is more than 90% variation due to VAT in total revenue, total tax revenue and total indirect tax revenue. And all these relationship are significant as r > 6PEr everywhere. So VAT has significant contribution in government revenue. And all these relationship are significant as r > 6PEr everywhere. So VAT has significant contribution in government revenue.

It can not be concluded that the revenue collection trend is satisfactory, through VAT in Nepal as it is found that the percentage of VAT on Total GDP is almost constant. The single positive rate of 13 percent should be changed into multiple rates to collect more revenue. Further the successful implementation depends on the strong, fair, capable administration.

Thus, VAT can be entrenched as an integral part of the Nepalese tax structure in the long run if the issues mentioned above are taken seriously and solved accordingly.

6.3 Recommendation

Nepal has implemented VAT since 1997. VAT act, rules and regulations have been setup in the line of international standard. Since the implementation of VAT is a great jump from the traditional tax system to a modern one, several things are still lacking to be done for the successful implementation of VAT in Nepal. The following recommendations have been made to make VAT effective and more efficient.

1. There should be close cooperation between the private sector and government sectors for the successful implantation of VAT system.
2. VAT collection from import is remarkably higher than domestic production; such high dependency on import is not good therefore the government should take an effective step to encourage domestic production.
3. Special incentives should be provided to small business person to increase registration trend.
4. A restorable threshold limit should be maintained and exemption and zero rating in VAT system most be avoided from tax act.
5. VAT training programs especially for small traders, who have no knowledge about accounting system, invoice and reporting system as well as personnel should be kept at the top most priority.
6. The tax administration should be very watchful to prevent any kind of fraud and the evasion.
7. Border should be effectively controlled to prevent illegal trade.
8. Most of the national economic activities are dependent upon agriculture and large portion of GDP originating from agricultural sector remains out of tax net thus VAT should be levied on agriculture sector.
9. The government should published tax related information regularly through

   Radio, Television, Magazines, Newspapers, journals etc.
10. Tax system can be rationalized by lowering the tax rates and extension of tax base.
11. Providing various facilities to VAT registrants can increase VAT compliance .The tax administration should reward the genuine man and punish the fraud

businessman.

12 Focus should be given on transparency and accountability.

Appendix-1

Trend Value of Domestic Product of VAT

1997/98 – 2006//07

Year (t)	**Domestic product (y)**	**x = t - 2002.5**	**x^2**	**xy**	**$y_c = a + bx$**
1997/98	2100.9	-4.5	20.25	-9454.05	5288.317+744.8984 x (-4.5) = 1936.2742
1998/99	2812.7	-3.5	12.25	-9844.45	5288.317+744.8984 (-3.5) = 2681.1726
1999/00	3725.7	-2.5	6.25	-9314.25	5288.317 + 744.8984 x (-2.5) = 3426.071
2000/01	4744.7	-1.5	2.25	-7117.05	5288.317 + 744.8984 x (-1.5) = 4170.9694
2001/02	4609.07	-0.5	0.25	-2304.53	5288.317 + 744.8984 x (-0.5) = 4915.8678
2002/03	4831.1	0.5	0.25	2415.55	5288.317 + 744.8984 x 0.5 = 5660.7662
2003/04	5604.1	1.5	2.25	8406.15	5288.317 + 744.8984 x 1.5 = 6405.6646
2004/05	6614.9	2.5	6.25	16537.25	5288.317 + 744.8984 x 2.5 = 7150.563
2005/06	8150.5	3.5	12.25	28526.75	5288.317 +744.8984 x 3.5 = 7895.4614
2006/07	9689.5	4.5	20.25	43602.75	5288.317+744.8984 x 4.5 =8640.3598
	$\sum y$ = 52883.17	$\sum x = 0$	$\sum x^2$ =82.5	$\sum xy$ = 61454.12	

Here, the trend line is supposed to be:

yc = a + bx

Where,

y = Dependent variable

x = Derivation from source convenient time periods

b = Slope of trend line

a = y-intercept

And,

$$a = \frac{\sum y}{n} = \frac{52883.17}{10} \qquad b = \frac{\sum xy}{\sum x^2} = \frac{61454.12}{82.5}$$

$$= 5288.317 \qquad = 744.8984$$

Then, we can easily compute the trend value for each year by putting appropriate amount in the formula. The value of x is computed in the table.

Estimated trend value of domestic product VAT 2007/08 – 2014/15

Year (t)	**x = t – 2002.5**	**y_c = a + bx**
2007/08	5.5	5288.317+744.8984x5.5 =9385.2582
2008/09	6.5	5288.317+744.8984x6.5 = 10130.1566
2009/10	7.5	5288.317+744.8984x7.5 = 10875.055
2010/11	8.5	5288.317+744.8984x8.5 = 11619.9534
2011/12	9.5	5288.317+744.8984x9.5 = 12364.8518
2012/13	10.5	5288.317+744.8984x10.5 = 13109.7502
2013/14	11.5	5288.317+744.8984x11.5 = 13854.6486
2014/15	12.5	5288.317+744.8984x12.5 = 14599.547

Appenedix-2

Trend Value of Import on VAT

Fy	Import y	x = t - 2002.5	x^2	xy	yc = a +bx
1997/98	5021.7	-4.5	20.25	-22597.65	9115.61+1191.3884x(-4.5) = 3754.3622
1998/99	5069.5	-3.5	12.25	-17743.25	9115.61+1191.3884 x (-3.5) =4945.7506
1999/00	6129.2	-2.5	6.25	-15323	9115.61+1191.3884 x (-2.5) = 6137.139
2000/01	7637.7	-1.5	2.25	-11456.55	9115.61+1191.3884 x(-1.5) = 7328.5274
2001/02	7658.2	-0.5	0.25	-3829.1	9115.61+1191.3884x(-0.5) = 8519.9158
2002/03	8628.6	0.5	0.25	4314.3	9115.61 + 1191.3884x0.5 = 9711.3042
2003/04	8874.8	1.5	2.25	13312.2	9115.61+1191.3884x 1.5 = 10902.6926
2004/05	12270.5	2.5	6.25	30676.25	9115.61 +1191.3884x2.5 = 12094.081
2005/06	13460.2	3.5	12.25	47110.7	9115.61+1191.3884x 3.5 = 13285.4694
2006/07	16405.7	4.5	20.25	73825.65	9115.61+1191.3884x4.5= 14476.8578
	$\sum y$ 91156.1	$\sum x = 0$	$\sum x^2 = 82.5$	$\sum xy = 98289.55$	

Estimated Trend Value of Import

2007/08 – 2014/15

Year (t)	**x = t - 2002.5**	**$y_c = a + bx$**
2007/08	5.5	9115.61+1191.3884 x 5.5 = 15668.24462
2008/09	6.5	9115.61+1191.3884 x6.5 = 16859.6346
2009/10	7.5	9115.61+1191.3884 x 7.5 = 18051.023
2010/11	8.5	9115.61+1191.3884 x8.5 = 19242.4114
2011/12	9.5	9115.61+1191.3884 x 9.5 = 20433.7998
2012/13	10.5	9115.61+1191.3884 x 10.5 = 21625.1882
2013/14	11.5	9115.61+1191.3884 x 11.5 = 22816.5766
2014/15	12.5	9115.61+1191.3884 x 12.5 = 24007.965

So, here to identify the trend line, least square method of time series analysis has been used, as per the formula of trend line:

Where, a = $\frac{\sum y}{n} = \frac{91156.1}{10}$ = 9115.61

b = $\frac{\sum xy}{\sum x^2} = \frac{98289.55}{82.5}$ = 1191.3884

Then, can easily compute the value of trend for each year by putting appropriate value for each which has been done in the above table.

Appendix-3

Calculation of Correlation Coefficient between VAT and Total Revenue

Fy	Total revenue (x)	dx = x – 50445.5	dx^2	VAT (y)	dy = y – 12267.3	
1997/98	32937.9	-17,507.60	306,516,057.76	7122.6	-5,144.70	26
1998/99	37251.03	-13,194.47	174,094,038.58	7882.2	-4,385.10	19

1999/00	42893.8	-7,551.70	57,028,172.89	9854.9	-2,412.40	5
2000/01	48893.6	-1,551.90	2,408,393.61	12382.4	115.10	
2001/02	50445.5	0.00	0.00	12267.3	0.00	
2002/03	56229.8	5,784.30	33,458,126.49	13459.7	1,192.40	1
2003/04	62331	11,885.50	141,265,110.25	14478.9	2,211.60	4
2004/05	70122.8	19,677.30	387,196,135.29	18885.4	6,618.10	43
2005/06	72282.08	21,836.58	476,836,226.10	21610.7	9,343.40	87
2006/07	87712.1	37,266.60	1,388,799,475.56	26095.6	13,828.30	191
	$\sum x=$ 561,099.61	$\sum dx=$ 56,644.61	$\sum dx^2=$ 2,967,601,736.53	$\sum y=$ 144,039.70	$\sum dy=$ 21,366.70	380

This table provides us following necessary calculations to find out correlation coefficient between VAT and total revenue.

$\sum x$ =561,099.61 $\sum dy$ = 21,366.70 N = 10 Years

$\sum dx$ = 56,644.61 $\sum dy^2$ = 380,163,206.25

$\sum dx^2$ =2,967,601,736.53 $\sum dx.dy$ = 1,048,740,654.11

$\sum y$ = 144,039.70

$$r = \frac{N.\sum dx.dy - \sum dx.\sum dy}{\sqrt{N\sum dx^2 - (\sum dx)^2}\sqrt{N\sum dy^2 - (\sum dy)^2}}$$

=

$$= \frac{9277098152.60}{162688.06 \times 57836.81}$$

r = 0.99

r^2 = 0.9801

$$P.E. = \frac{0.6745(1-r^2)}{\sqrt{n}}$$

=

P.E. = 0.0042

6 x P.E. = 0.0252

Appendix –4

Correlation between VAT and Total Tax Revenue

Rs. in million

Fy	Total tax revenue (x)	dx = x – 39331	dx^2	VAT (y)	dy = y – 12267.3	
1997/98	25940	-13,391	179,318,881	7122.6	-5,144.70	26,4
1998/99	28753	-10,578	111,894,084	7882.2	-4,385.10	19,2
1999/00	33152	-6,179	38,180,041	9854.9	-2,412.40	5,8
2000/01	38865	-466	217,156	12382.4	115.10	
2001/02	39331	0	0	12267.3	0.00	
2002/03	42587	3,256	10,601,536	13459.7	1,192.40	1,4
2003/04	48173	8,842	78,180,964	14478.9	2,211.60	4,8
2004/05	54105	14,774	218,271,076	18885.4	6,618.10	43,7
2005/06	57430	18,099	327,573,801	21610.7	9,343.40	87,2
2006/07	71127	31,796	1,010,985,616	26095.6	13,828.30	191,2
	∑x= 439,463.00	∑dx= 46,153.00	$\sum dx^2$= 1,975,223,155.00	∑y = 144,039.70	∑dy= 21,366.70	380,1

This table provides us following necessary calculations to find out correlation between VAT and total tax revenue:

N = 10 years ∑y = 144,039.70 ∑dx.dy = 860,134,902.90

∑x = 439,463 ∑dy = 21366.70

∑dx = 46,153 $\sum dy^2$ = 380,163,206.25

$\sum dx^2$ = 1,975,223,155.00

As we know,

$$r = \frac{N.\sum dx.dy - \sum dx.\sum dy}{\sqrt{N\sum dx^2 - (\sum dx)^2}\sqrt{N\sum dy^2 - (\sum dy)^2}}$$

$$= \frac{10 \times 860134902.90 - 46153 \times 21366.70}{\sqrt{10 \times 1975223155 - (46153)^2}\sqrt{10 \times 380163206 - (21366.70)^2}}$$

$$= \frac{7615211723.90}{132748.38 \times 57836.81}$$

r = 0.99

r^2= 0.9801

$$\text{P.E.} = 0.6745 \text{ x } \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \text{ x } \frac{1 - 0.9801}{\sqrt{10}} = 0.0042$$

6PE = 0.0252

Appendix-5

Correlation between VAT and Indirect Tax

Rs. in million

Fy	Total ind. tax (x)	dx = x – 28733.1	dx^2	VAT (y)	dy = y – 12267.3	
1997/98	19927	-8,806.10	77,547,397.21	7122.6	-5,144.70	26,4
1998/99	21456	-7,277.10	52,956,184.41	7882.2	-4,385.10	19,2
1999/00	24597	-4,136.10	17,107,323.21	9854.9	-2,412.40	5,8
2000/01	28705.7	-27.40	750.76	12382.4	115.10	
2001/02	28733.1	0.00	0.00	12267.3	0.00	
2002/03	32481.7	3,748.60	14,052,001.96	13459.7	1,192.40	1,4
2003/04	36260.4	7,527.30	56,660,245.29	14478.9	2,211.60	4,8
2004/05	41839.3	13,106.20	171,772,478.44	18885.4	6,618.10	43,7
2005/06	45563.8	16,830.70	283,272,462.49	21610.7	9,343.40	87,2
2006/07	52146.4	23,413.30	548,182,616.89	26095.6	13,828.30	191,2
	$\sum x$= 331,710.40	$\sum dx$= 44,379.40	$\sum dx^2$= 1,221,551,460.66	$\sum y$ = 144,039.70	$\sum dy$= 21,366.70	$\sum$ 380,1

From the above calculation we find, the following necessary data to calculate Karl Pearson's correlation coefficient (r)

N = 10 Years $\sum y$ = 144,039.70 $\sum dx.dy$ = 676,067,776.09

$\sum x$ =331,710.40 $\sum dy$ = 21,366.70

$\sum dx$ = 44,379.40 $\sum dy^2$ = 380,163,206.25

$\sum dx^2$ = 1,221,551,460.66

As we know,

$$r = \frac{N.\sum dx.dy - \sum dx.\sum dy}{\sqrt{N\sum dx^2 - (\sum dx)^2}\sqrt{N\sum dy^2 - (\sum dy)^2}}$$

=

$$= \frac{5812436434.92}{101222.45 \times 57836.81}$$

= 0.99

r^2 = 0.9801

Calculation of P.E.

P.E = 0.6745 x $\frac{1-r^2}{\sqrt{N}}$ = 0.6745x

P.E. = 0.0042

6PE = 6 x 0.0042 = 0.0252

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