

Chapter-I

INTRODUCTION

1.1. Introduction

In the wake of fiscal crisis in recent years, most of the state Governments have increasingly began to restructure their tax system to seek higher revenue or to improve the taxable capacity or tax efforts to counterbalance the ever increasing public expenditures. Further it is generally felt that to a large extent, the financial problems of the state arise from its lack of tax efforts, i.e. its failure to mobilise adequate resources to meet its increasing demand for various developmental public expenditure programmes. Much of the theoretical as well as applied work has been concentrated on finding out the factors accounted for major variations in the share of tax revenue and public expenditures in the aggregate National/State income (hence forth called as tax and expenditure ratios) and to identify and specify the nature of relationship between the structure of taxation and Public expenditures with the level of economic development. In working out a developmental plan which implicitly takes into account both the tax and public expenditure ratios ; a major question that always arises is how much tax and non-tax revenues

can a country/ state reasonably expect to raise and what sources should be tapped in order to meet the ever increasing demand for public expenditures so as to bridge up the widening fiscal gap ? No doubt, the fiscal philosophy of the government to mobilise a certain amount of resources in order to meet the ever increasing public expenditures, depends on the political ideology and the political leanings of the political party/ies in power. Because formulation of economic policies (taxation and public expenditures) do not emerge in vacuum. They are largely influenced by the political bias of the political party/ies in power. So, to what extent political ideologies or leanings of the political party/ies in power have been responsible for determining the absolute level of public expenditures and taxation in the states is an open question. Therefore, by taking into account political dimensions, a systematic analysis of tax and expenditure determinants and comparisons may be illuminating for identifying the factors responsible for the explosive cycles of fiscal growth. We believe that the determinants' study would enable us not only to make more scientific projections of the tax revenues and public expenditures, but also to have a better understanding of the mechanism of changes that take place in tax revenues and expenditures of the state.

1.2. Background of the Study

Most of the State Governments in Indian Federation face severe budgetary pressures with rising demand for expenditures. Further, it is generally felt that largely, the financial problems of the States arise from their lack of tax efforts, i.e. their failure to mobilize adequate resources from sources within their own jurisdiction. As a result of which, the financial dependence of the States on the Union Government has been on the increase in recent years. Further, it is felt that, the resources available to the States under present dispensation are not adequate for meeting their requirements. We intend to accomplish this by analyzing fiscal position of Nagaland.

Nagaland is comparatively a backward state, where agriculture is the predominant sector, providing means of livelihood to more than 85 percent of the population. Though significant development has taken place in some sphere since Independence, access to opportunities for a 'reasonably minimum' standard of living, Nagaland is one of the lowest in the country. The fiscal health of the state is by no means encouraging at all, where the State's Own Tax Revenue contributes hardly 8 percent of the total tax receipts of the state. Further, the tax revenue constitutes near about 4 percent of the aggregate revenue of the state. It is a fact that the

contribution of the state's own tax revenue is no more than 2 percent of the state's income but ~~the~~ aggregate Government expenditures constitutes about 110 percent of the state's income. It is, therefore, worthwhile to study the various aspects of the effects of state taxation and expenditures on equity, revenue and efficiency in production and distribution. However, our study has not gone into some of these aspects of fiscal policy, as its primary aim is specific to the analysis of the determinants of taxation and expenditures.

Thus, the overall picture that emerges is that, the tax generating capacity of the state of Nagaland does not cope up with its increased public expenditure programmes, for achieving a desirable rate of economic progress. This clearly exhibits the low level of tax effort measures on the part of the state government in the overall scheme of resource mobilization for developmental purposes. As a result of which, economic backwardness has been the resultant outcome.

1.3. Problem Formulation

The phenomenal changes in Nagaland's socio-economic scene have aroused considerable interest in the study of both the determinants of public expenditures and tax revenue. With regard to political scenario

there has been drastic change in the state political scene since the inception of the state. Before 1982, non-congress parties had a monopoly power nevertheless; there were various regional parties in the fray for capturing the power. After 1982, there was a competition between non-congress and congress parties to capture the vote bank, which led to a drastic change in their expenditure policy i.e. from economic principle to populist measures. Alternatively, in order to meet the mounting pressure of public expenditures, mobilisation of adequate resources is becoming a Herculean task on the part of the state government. The failures on the part of the government to mobilise adequate resources for the purpose may be attributed to the fact that raising taxation creates displeasures among the citizens and it may have chances of losing vote bank. Therefore, the effects of ideological leanings of the parties in power is sought to be quantified in the framework of public expenditures and tax determinants analysis. Wherein, the effects of economic and political variables would be segregated since one of the major objectives of the study is to quantify the effects of ideological leanings of the parties in power on the changes of public expenditures and taxation over time. Ultimately, we believe that, it is the size of public expenditures and taxation that the community looks to. No doubt, Political passion about

the level of public expenditures and taxation run high. But underneath the policy controversies, a vital question about the actual behaviours of the quantum of public expenditures and taxation awaits dispassionate analysis. This is what has set out in this study.

All those points noted above provide a solid ground for the necessity and the desirability of undertaking an anatomy of political economy of public expenditure and taxation for the state of Nagaland. This besides being essential for arriving at a proper assessments of the overall impact of the economic and political ideology on the level of public expenditures and taxation, would enable us to ascertain whether these factors have played any role in shaping and reshaping the trends and quantum of public expenditures and taxation over a period of time in the state. The present study is an attempt in this direction. The two major research questions that we have touched upon in this context are:

- 1) to what extent the political ideology have got an impact on each item of public expenditure and taxation at different point of time in the state of Nagaland and,
- 2) to what extent the economic factors have influenced each item of expenditure and taxation in the state.

1.4. Scope and Objectives

The study covered a period of 38 years from 1963 to 2001. This is a period during which the state economy has passed through phases of both upswing and downswing owing to wide fluctuations in its agricultural sector. Further, this entire period witnessed political instability and social tensions leading to substantial changes both in its expenditure and taxation policies in the States. Keeping these general problems in view, an attempt has been made in this work to study in detail the following aspects of state's public expenditure and taxation.

1. An assessment of the overall success of government measures to increase revenue.
2. Analysis of the growth of tax and expenditure consequent on the growth of NSDP and to determine the extent to which Nagaland fiscal system is responsive to a change in state income over time.
3. To measure the extent to which the revenue capacity of Nagaland tax system have been realized.

However the main focus of our study as mentioned earlier will be the analysis of determinant of public expenditure and taxation as a whole and each item of public expenditure and taxation.

1.5. Sources and Limitation of Data

The study has been based primarily on the secondary sources of data. The main sources of data are; Annual budgets/Finance account of state government including their memorandum submitted to the various finance commissions for the period covered by our study. Whenever possible, the budgetary data relating to India published in CMIE and RBI annual reports on Currency and Finance were used and consulted by us. Information on political variables has been collected from the various issues of electoral statistics of Nagaland published by the Directorate of Economics and Statistics of Nagaland. We have used the actual figures from the above sources for the 38 years period covered by our study. The actual figures have been further compared and verified by us from the corresponding data available in the statistical abstract of the North-Eastern region and the Economic survey for the above mention period published by North Eastern Council.

We must note here that there exist great discrepancies and differences in the actual figures of expenditure and revenue under certain heads in the different official sources, even though all these are published by the government of Nagaland and it's various official agencies. Therefore, before the analyses of data, we have corrected these

discrepancies and differences by reconciling them with our primary sources of data viz; annual budgets and their memorandum. In some cases where the discrepancy could not be reconciled and the differences could not be detected we have pointed it out in the relevant table.

1.6 Hypotheses

The study intend to test the following hypotheses:

- i) Sectoral income of the economy causes variation in public expenditure and in turn influences variation in tax revenue.
- ii) Changes in per capita income and ^{Inflation} Consumer Price Index tend to change taxable capacity and hence, tax revenue.
- iii) The political factor may have greater impact on expenditure than on the tax revenue of the State.

1.7 Methodology

The data has been analyzed with the help of suitable statistical techniques and the results obtained have been subjected to relevant economic logic.

Simple regression equations are fitted to the data (by the method of least square) to estimate the trends and fluctuations in revenues and

expenditures of the Government of Nagaland for the period under study. The different items or broad heads of revenues and expenditures having thus regressed on time, the variations explained by the time factor have been found out. The other factor responsible for residual or unexplained variations has been enquired into as far as possible. The analysis is so made as to find out the trends and fluctuation patterns in both revenue and expenditure patterns of Government of Nagaland during the period 1962-63 to 2000-2001. To study the shifts in the relative shares of various taxes and non-tax sources in state's own revenue, we have made use of the statistical technique of time series analysis. Specific techniques and measures are described fully as and when used. To analyze the relative growth of different sources of tax and non-tax revenues, compound growth rates were calculated by using the formula :

$$Y = ae^{rt}$$

where, Y is the revenue from a particular tax or non-tax source and t is the time period and r is the growth rate. The least square estimate of the above formula has been worked out to arrive at the growth rate figures.

As the main focus of our study is on the analysis of determinants of State's taxation and public expenditures, the proposed method has been geared to that purpose. The methodology adopted to study the

determinants of taxation and public expenditures is described in details in Chapter-III.

1.8. Chapter Plan

The topical analysis of the thesis is as follows. For the purpose of expositional covering and systematic analysis, the thesis has been divided in to seven chapters.

The first chapter is an introduction in nature. In this chapter, we have addressed ourselves to the problem and issues involved in the state finance. Besides, this chapter also incorporate a descriptions and limitation of the data.

The second chapter is devoted to the review of some important works done on the subject. An attempt has been made in this chapter to give the major conceptual and empirical issues relating to the determinants of public expenditure and taxation. This chapter is divided into four sections. Section-I is an introduction and Section-II of this chapter concentrates on a brief assessment of the major studies on expenditure and taxation determinants at international level focusing on the relative significance of the factors analyzed. And in section-III, an

attempt has been made to give a comprehensive account of the major works relating to the analysis and determinants of taxation and expenditure at the national level. In section-IV, we have presented the summary of the findings of the review in terms of their determining aspects.

In Chapter-III, an attempt is made to develop an alternative model of estimating public expenditure and taxation in order to ascertain the impact/effect of economic and political ideologies of the same. Section-I is an introduction of this Chapter and Section-II deals with the theoretical aspects of formulating the models. We have specified the dependent—variables and arguments for selection of dependent variables in the ^{determinant} ~~brief~~ context of our present study in section-III. In section -IV, we presented the final version of our empirical equations for estimating *PE* and taxation of Nagaland.

Chapter-IV is concerned with the critical analysis of public expenditure and public revenue where we made an attempt to assess the overall budgetary policies of the state for the entire 38 years covered by our study. We have also carried out a brief analysis of the growth of public expenditure and taxation consequent upon the growth of Gross

State Domestic Product in order to know the extent to which Nagaland fiscal system is responsive to state income.

Chapter-V is an attempt to examine the problems and prospects of resources of the state. The purpose of this is to present an over view of all the state finance for determining the degree of financial dependency of the state on the Union government. An attempt has also been made in this Chapter to determine the extent to which Nagaland is financially self-reliance in mobilizing adequate resources from sources within its own jurisdiction. Chapter-V thus covers the following issues: Constraints of internal revenue mobilization, tax effort in terms of State income, Average and Marginal Tax Rates, Composition of tax revenue, Compositional pattern of tax revenue, Ratio of individual taxes to state income and the role of Federal transfers in state finance.

Chapter-VI is the empirical analysis of public expenditure and taxation determinants of Nagaland. By employing the specified variables we employed multivariate regression equation to estimate the public expenditure and tax revenue of the state. This chapter is divided into two sections. The results obtained from multivariate regression analysis for Public Expenditures in terms of aggregate and sector-wise expenditures are analyzed and presented in Section-II. Similarly, the results obtained

for aggregate tax and individual taxes are duly analyzed and presented in Section-III.

In Chapter-VII, the summary of our study have been reported and conclusion following from it. We have also made an evaluation of the impact of the explanatory variables including political leanings on public expenditure and taxation and their implication in the light of our study.

Chapter-VII *expenditure in the state*

CONCLUSION AND SUMMARY OF THE FINDINGS

accompanied by increased activities of non-

In the foregoing chapters, we have sought to spotlight the various aspects of Nagaland's fiscal system and have also indicated the spheres in which problems have arisen and solutions are necessary. In doing this, we have refrained from an elaborate study of each of the aspects nor have we gone, in great detail, into the considerable statistical material we have presented in the tables. The reason is that our object has been to emphasize on the determinant study of Nagaland's public expenditures and tax system and keep away from exercises, which will confuse the scheme of the present work. To this extent our study can be said to be exhaustive in ^a rising of the issues but not exhaustive in treating them.

With these limitations in mind, an attempt is made in the following paragraphs to present a comprehensive account of the major findings of our study. The important findings of the study are as follows: *mobilizing*

Chapter-I is introductory in nature where we have addressed ourselves to the problems and issues involved in the state finance. The foregoing discussions in the chapter revealed that there has been a

tremendous increase in the developmental expenditure in the state over the years covered by our study. And the increased developmental expenditure is ultimately accompanied by increased activities of non-developmental services as they go side by side. This in turn has led to an explosive cycle expenditure growth in the state in the recent years. This explosive cycle of Public Expenditures have been further aggravated in the wake of emerging political instability and ideological differences of the different parties in power in the State. The political uncertainty and political differences have greatly affected the expenditure policies of the Governments, i.e. from economic principle to populist measures with a view to capturing the vote bank. On the other hand, the tax policies did not seem to have changed much on account of the recent development in economic and political scenario. Eventually, it has created a situation of fiscal crisis in the State.

Further, the study reveals that the State of Nagaland has been plagued by an acute resource crunch since the inception of its statehood, i.e. 1963. Though the State Government with a view to mobilizing additional resources to finance the mounting pressure of Public Expenditure has initiated various measures, the State continues to suffer from resource inadequacy in all the fronts. Thus, massive fiscal deficits

has become a regular feature of the State finance particularly in the recent years. This background of the state's fiscal scenario no doubt provides a solid ground to examine the intricacies of state finances from various angles.

As a preliminary exercise to these ends, in chapter-II , an extensive review of the earlier research works on the related subjects have been made both at national and international level. It has been observed that researchers have different ideologies with regard to the specification of independent variables in explaining the determinants of Public Expenditure and taxation. And, researchers ultimately choose those variables, which appeared to them more suitable with the given economic background of the choice of study area. Thus, exogenous variables range from economic, socio-economic, demographic and political variables. Consequently, the findings are diverse in nature across the studies.

It was also observed that the most common variables used by the researchers and found to be significant in explaining variation of expenditure and taxation are: per capita income, prices, degree of monetization, degree of openness, density of population and degree of urbanization, etc. On the other hand, many researchers ignored political factor in explaining the variation of expenditure and taxation though

fiscal outcomes of the States are greatly affected by the ideological leanings of the political party in power

Comparatively, almost all the past studies have employed the regression analysis approach to explain the functional relationship between the determinant variables and the *PE*/taxation as the case might be. The variables used in the past studies include economic, socio-economic, demographic and political. But the degree of influence of the variables differs widely across the studies. As far as political factor is concerned, the change of political party in power is reported to have exhibited significant influence only on the size of public expenditure but not on the size of tax revenue.

The studies reviewed have made a substantial contribution in identifying some important variable affecting the growth of tax revenue and public expenditure in terms of its determinants. However, in majority of the cases, no attempt has been made to specify the reason for selection of the variables in their analysis.

Therefore, we have made an attempt to develop an alternative determinant model for estimating the variations of Public Expenditure and taxation of Nagaland in chapter-III. Our model, therefore, is based on the assumption that the level of Public Expenditure depends on the ability

of the economy to spend which means, the quantum of Public Expenditure is determined by the level of income generated in a society, i.e. income from various sectors of the economy.

Having examined various alternatives, we have finally decided to estimate PE of Nagaland as a function of sectoral incomes of the economy as given by:

$$PE = a_0 + a_1AY + a_2MY + a_3SY + a_4OY + u$$

where AY denotes income from agricultural sector, MY represents income from manufacturing sector, SY is income from service sector and income from the remaining sectors is represented by OY . The empirical equation may be either linear or log linear.

We also introduced a trend variable of PE with one time lag as an additional independent variable, which would probably explain the partial influence of the omitted variable, i.e.

$$PE_t = a_0 + a_1PE_{t-1} + a_2AY_t + a_3MY_t + a_4SY_t + a_5OY_t + u$$

And to assess the impact of political factor, we introduced a dummy variable in the empirical equations.

In addition to sectoral incomes, other factors that may be highly correlated to tax revenue are per capita income, changes in prices and

state income. We have, therefore, three stages of estimation of tax revenue of Nagaland. Say

$$T = a_0 + a_1MY + a_2SY + a_3OY + u$$

i.e. while tax revenue is the endogenous variable, sectoral incomes of the economy are the independent variables.

$$T = a_0 + a_1Y_c + a_2CPI + u$$

where Y_c is the per capita income and CPI is the consumer price index.

$$T = a_0 + NSDP + u$$

The independent variable taken into consideration here is Net State Domestic Product. Then, dummy variable (political factor) is introduced in all the three empirical equations to quantify the impact of political leanings to the growth of state tax revenue.

It may appear that all the empirical equations may not be necessary for prediction or for using forecasting models of Nagaland economy. We may see later on that some of these models may be redundant when empirically tested after all the general nature of assumption for PE/T may not hold or may not be logically sound. This could be affirmed only after the empirical analysis is done.

For the purpose of a systematic approach to the given problem, an attempt has also been made to analyze the budgetary trends of the State during the last thirty-eight years of economic planning in chapter-IV. It has been observed that both revenue receipts and revenue expenditures taken separately have increased phenomenally over the years. However, the analysis of average annual rates of increase as well as estimate of the compound growth rate suggest that there is relative inflexibility in the growth of revenue receipts as compared to the relative growth of revenue expenditure in the State. That is when the average annual rate of increase of revenue expenditure is reported to be 1370 per cent; it was 1024 per cent in the case of revenue receipts. Likewise, the compound growth rate of revenue expenditure (i.e. 15 per cent approximately) is higher than the compound growth rate of revenue receipts (i.e. 14 per cent approximately) by one per cent. One of the most distinguishing features that emerges from our study being the massive and regular deficits under revenue budgets beginning from 1990's, the reason of which is attributed to mounting non-developmental expenditures in the State. Evidently, the percentage share of non-developmental service to total revenue expenditure works out to be about 40 per cent, whereas, the percentage share of revenue expenditures on social and economic services to total

services to total revenue expenditure are 30 per cent each. Likewise, the compound growth rate of revenue expenditure on non-developmental services (i.e. 15 per cent) is comparatively higher than the compound growth rate of revenue expenditure on social and economic services, i.e. approximately 14 per cent in both the cases. These findings clearly imply that though social welfare services and economic services remained the important policies of the State, the growing non-developmental expenditure continues to strain the public exchequer over the years.

Like in the case of revenue budgets, tremendous increase in capital receipts and expenditures have also been observed over the years. However, the average annual rate of increase of capital expenditure, i.e. 1405 per cent as well as compound growth rate of the same, i.e. 7 per cent, undoubtedly outpaced the average annual rate of increase of capital receipts, i.e. 1026 per cent and its compound growth rate, i.e. 6 per cent. These results imply the relative inflexibility of capital receipts in the State like that of revenue receipts, as a result of which, the overall capital budgets come to a close with deficit budget amounting to Rs.281.45 crores.

The study of capital budgets further reveals that in absolute term, the capital outlay on economic services being accorded with highest

priority followed by social services. However, the estimates of compound growth rate of capital investment on economic services being the least, i.e. 11 per cent approximately, whereas, the compound growth rate of capital investment on social revenues and general services works out to be 17 per cent approximately in both the cases.

The overall budgetary view of Nagaland during the period from 1963-64 to 2000-01 further reveals the relative inflexibility of aggregate receipts when compare to aggregate expenditure of the State both in absolute and relative terms, thus the cumulative deficit budget of the State amounts to Rs.91.12 crores.

We have also attempted to estimate the responsiveness of revenue receipts and revenue expenditure to a change in State income taking the entire period. The results clearly indicate the relative inflexibility of income elasticity of both the revenue receipts and revenue expenditure, that is, the income elasticity works out to be 0.90089 for revenue receipts and 0.93772 for revenue receipt. [?] *expenditure*

Consequent upon the continued outpacing of public receipts by Public Expenditures over the years, an attempt has been made to examine the constraints and prospects of internal resource mobilization of the State in Chapter-V. This has been explained in terms of different taxes (current

revenue) by reflecting their share in the Net State Domestic Product (NSDP) and compositional structural character of different taxes on the basis of ratios and trends as well. For this purpose, the combined yield of State own tax revenue and the shared taxes (from the Union) in relation to State income, was examined firstly, with a view to assess the relative tax efforts of the State Government. And the study found that the increasing State income has been outpaced by the increasing State own tax revenue and more so by total tax revenue of the State over the years. It was also found that the growth of State's Own Tax revenue did not move in the direction of likely drive for additional taxation as source of revenue for the State. The observation further indicates that the State has been relying more and more on-shared taxes for the purpose of resource mobilization to finance the explosive growth of Public Expenditures over the years.

The study of relative importance of shared taxes and State's Own Tax and non-tax revenues to total revenue of the State have evidently substantiated these observations. In other words, the percentage share of shared taxes to total tax revenue increased from 13.64 per cent in the year 1963-64 to 80.77 per cent in the year 2000-01. This clearly implies that the dependence of the State of Nagaland on its own tax and non-tax as a source of revenues has been more than offset by the shared taxes. On the

other hand, the share of State's Own Tax revenue, which was 27.27 per cent in the year 1963-64, has been reduced to 11.77 per cent only during 2000-01. These findings clearly indicate the dismal performance of the State in its efforts to raise more resources from its own in comparison to other source, i.e. shared taxes.

An attempt, therefore, has been made to study the average and marginal tax rates of total tax revenue, State's Own Tax and shared taxes with a view to assess the appropriateness of the disposition of additional national income among several uses and the degree of variations in the tax revenue with respect to changes in tax base. And the study found that where the average rate of State's Own Tax increased from 1.00 per cent to 2.60 per cent from the year 1963-64 to 1998-99, the average tax rate of shared taxes increased from 0.50 per cent to 18.80 per cent during the same period of time. This implies that the 21.60 per cent of the State income taken away as taxes in the year 1998-99, the Union has collected about 87 per cent of the total tax revenue and the contribution of the State itself was only 13 per cent. It was also observed that the marginal tax rate for the aggregate tax for the entire period covered by our study is 20.22 per cent. This means that the State of Nagaland, starting an average tax rate of 4.50 per cent in the mid 1970's, had an average taxed away about

20 per cent of the additional income. Of which, a substantial part of the variation in the marginal tax rate has been accounted for central Government. All these findings suggest the meager tax-efforts of the State Government to meet its growing developmental needs.

With a view to make an in-depth assessment, an attempt has also been made to study the trends of composition of State's Own Tax revenue and their relative importance. And the study found that though both direct and indirect taxes of the State have reported tremendous increase over the years, major part of the increase in State's own total tax receipts has come through indirect taxes. One of the reasons of this lesser reliance on direct taxes in Nagaland being, the income of the people are not taxable under the provision of the Constitution. Likewise, except in Dimapur Mauza area, the question of taxes on land its property does not arise in the State.

The study of composition of tax revenue, however, did not cover the related issues of changes in the structure of the State's Own Tax income in terms of individual taxes and their relative place in the tax system of the State over the years. Therefore, an attempt has also been made in this direction and found that on account of frequent upward revision of the rates and expansion of tax base and coverage a sizeable increase in individual taxes has been reported over the years. Among the

increase in individual taxes has been reported over the years. Among the direct taxes, income and expenditure tax emerged to be the chief contributor sharing about 68 per cent of the total direct taxes of the State for the entire period, whereas, land revenue being the least important source of direct tax sharing about one per cent only due to a typical land tenure system in the State. Thus, the compound growth rate of income and expenditure tax was reported to be 16 per cent and 0.36 per cent and 0.26 per cent in case of Stamp and Registration and Land Revenue, respectively.

On the other hand, sales tax, being the chief component, shares 81 per cent of the total indirect taxes of the State. This is followed by State Excise Duty but due to total prohibition policy of the State it became the second least component beginning from the year 1989-90. It was also found that tax on vehicle played a great role in contributing revenue to the State. The estimated compound growth rates are reported to be 18 per cent for sales tax, 0.09 per cent for State excise, 15 per cent and 5 per cent for vehicle tax and entertainment taxes, respectively.

However, the trend of State's taxes is not at all warranted from the point of view of a healthy fiscal economy. This argument has been substantiated by the disproportionate growth of the individual taxes in

relation to an increase in income as observed in our study. This has generated a need for increasing transfers of funds from the Centre to the State in the form of shared taxes, grants-in-aid and loan and advances. We, therefore, carried out a study of trends and direction of central transfers to the State for the entire period of thirty-eight years. And on the whole, the study found that about 78 per cent of the total expenditures of the State is accounted for federal transfers. Of which, 43 per cent being accounted for statutory transfers and the balance 57 per cent is in the form of non-statutory transfers made either on grants or loans through the Planning Commission. The increasing reliance of the State on central transfers, once again substantiate the low degree of financial self-reliance of the State of Nagaland.

Thus, a reappraisal of the determinants of the constituent of tax instrument has become all the more current significance. And for that matter the determinant study of both Public Expenditure and tax revenue of Nagaland have been undertaken by us during the last near about four decades of planning, i.e. from 1963-64 to 1998-99 in chapter-VI. The study found the following results:

That the growth of Public Expenditures of the State is joint effect of all the sectoral incomes, viz., income from Agricultural Sector, income

from the remaining other Sectors. The estimates of parameters are all positive and about 79 per cent of the total variance is explained by the Model. The result further showed that when Public Expenditure with one period lag is used as an additional explanatory variable, negative association emerged between the growth of Public Expenditure and income from Manufacturing Sector as well as Service Sector of the economy. This result implies the pre-dominant agrarian structure of the economy of Nagaland.

In a separate analysis where political variable was introduced in the equation it was found that income from Agricultural Sector and Service Sector exhibited negative association with the growth of Public Expenditure of the State. This is a clear indication of the shift of impact from Agricultural and Service Sectors to political influence on the growth of Public Expenditure of the State.

We have also experimented the estimation of Public Expenditure by using log linear regression model with the same combination of explanatory variables and found that the results are statistically more reliable than that of linear version. However, the signs of estimates of parameters suggest that there existed negative association between agricultural income and the growth of Public Expenditures, thereby

indicating a structural change in the economy from agrarian to non-agrarian. The estimates of sector-wise Public Expenditures have also been carried out and we have also segregated the period of non-Congress regime (1963-64 to 1981-82) and Congress regime (1982-83 to 1998-99) with a view to assess the impact of each regime on the growth of sectoral expenditures in the State. Thus the data with regard to non-developmental expenditures are well fitted to the equation explaining about 98 per cent of the total variance. In other words, all the sectoral incomes of the economy are positive determinants of the growth of non-developmental expenditure in the State. The result further revealed that both non-Congress regime and Congress regime are responsible for the growth of non-developmental expenditures over the years. Whereas, the negative impact of both the non-Congress and Congress regime on the growth of expenditure on social welfare and economic services implies that the decision to invest on these services are free from political pressure, irrespective of the different parties in power. It was also found that during non-Congress regime income from Agriculture and Service Sectors has negative impact on the growth of expenditures on economic services. Contrary to this, manufacturing sector and other sectors has negative impact on the growth of economic services during Congress regime. This

finding once again implies that the change of structure of the economy from agrarian to non-agrarian is evident between the periods 1963-64 to 1981-82. Then the second phase of structural change occurred during the period 1982-83 to 1998-99 in favour of agrarian structure.

An estimate of aggregate State's Own Tax as well as the constituent of State's tax revenue have also been carried out for the same period of time. All the explanatory variables employed in our analysis such as per capita income, consumer price index, income from Manufacturing Sector, income from Service Sector, income from other Sector, which is inclusive of Agricultural Sector and Net State Domestic Product, are found to be positive determinants of the variations of tax revenue of the State. Of all, per capita income emerge to be the more dominant determinants of the variation of tax revenue of the State. This follows our assumption that the increase in income enhances the taxable capacity and hence, taxes revenue. On the other hand, political variables have negative impact on the growth of tax revenue of the State. This finding further strengthened the inadequate measures of the State Government in order to raise resources to finance the developmental activities of the State over the years.

The estimates of the constituent of tax revenue of the State by using the same combination of explanatory variables reveals that except income from other sector all other variables positively determined the tax on income and expenditure. Once again, per capita income is found to be the most dominant determinant of the same. On the other hand, Congress regime seemed to have contributed positively on the growth of tax on income and expenditure; whereas, non-Congress regime has negative impact on the variations on the same source of revenue. This result probably follows the stability consideration of the Government whereby Congress regime provided with more stable Government than the regional parties. The study found that per capita income continues to be the major determinant of State Excise Duty. Except Manufacturing Sector all other factors such as Per Capita Income, Consumer Price Index, Service Sector, other sector and Net State Domestic Product, contributed positively of State Excise Duty. The role of Congress regime, however, is found to be negative towards the growth of State Excise, most probably due to implementation of total prohibition policy beginning from 1990-91.

The estimates of professional tax reveals that income from Manufacturing Sector is the only factor that determined positively the growth of

professional tax during non-Congress regime. During Congress regime, however, except per capita income all other variables employed by us have positive impact on professional tax and of all, Consumer Price Index emerged to be the more dominant determinant. Likewise, Consumer Price Index emerged to be the major determinant of land revenue during Congress regime, whereas, except income from Service Sector all other explanatory variables influenced positively the growth of land revenue during non-Congress regime. With regard to Stamps and Registration, Consumer Price Index once again exhibited its major role on the variation of the same source of tax during Congress regime, but Per Capita Income emerged as the most dominant determinant of Stamps and Registration during non-Congress regime. It was also found that there existed a negative association between income from other sectors (including Agricultural Sector) and Stamps and Registration during Congress regime. As far as political variables are concerned, the study found that both the non-Congress and Congress regimes have insignificant role on the variation of Stamps and Registration in the State. Further, all the explanatory variables employed by us are equally responsible for the growth of sales tax in the State during non-Congress regime. However, per capita, income from income from Manufacturing Sector and Net State

Product are found to be negative determinants of Sales Tax during Congress regime. Once again, the different political parties in power have negative role in explaining the variation of Sales Tax in the State. However, Congress regime showed a slight impact on the growth of Sales Tax when dummy (Congress) is introduced along with Net State Domestic Product as explanatory variables.

It is to be noted that due to inadequacy of the Models we could not present the results of regression analysis of the estimation of vehicle tax during non-Congress regime. The estimate of vehicle tax during Congress regime thus showed negative association between Vehicle Tax and Per Capita Income, Income from Manufacturing Sector, Service Sector and Net State Domestic Product. In other words, a change in prices seemed to have contributed more on the growth of Vehicle Tax in the State during Congress regime. The study also found negative role of Congress Ministry in raising additional resources through Vehicle Tax.

The estimates of Excise Duty for the whole period revealed that Per Capita Income is the most dominant determinant. On the other hand, a negative relationship between State Excise and Income from Manufacturing Sector was reported in the study. The estimate of State Excise with the introduction of political dummy showed that except

income from the Manufacturing Sector all other explanatory variables contributed positively towards the growth of State Excise including non-Congress regime. The estimate of State Excise during the Congress regime, however, could not be presented due to lack of statistical reliability of the analysis. The study further found that the contribution of income from other sectors in the variation of Entertainment Tax was negative during non-Congress regime, but during Congress regime change in prices and income from other sectors are reported to be negative in explaining the variation of Entertainment Tax. Once again, the role of political parties (both Congress and non-Congress) is negative in determining Entertainment Tax in the State of Nagaland.

Policy Implications

In the light of the extensive findings of our study, we would like to make few suggestions having policy implications.

In the wake of the unabated mounting pressure of Public Expenditure both on developmental and non-developmental services, it is felt that there is a need to have expenditure administrative policy reforms which may give way to rationalizing and controlling wasteful Public Expenditure (if any). Such a step would also help in diverting resources from less productive sector to more productive sector of the State's

economy. At this juncture, the role of Expenditure Committee and Action Taken Committee of the State becomes a model task.

Firstly, a State like Nagaland, which is relatively backward, must keep higher priority to productive capital expenditure so long as it does not affect the efficiency of public administration. Similarly, in view of the rising expenditure on Social Welfare Services, i.e., Populist policies, the above-mentioned Committee must see that the concept of growth with 'Social Welfare and Justice' is ensured to the people in general.

Secondly, Economists are normally in favour of a shift in structural economy from agrarian to non-agrarian. But in our opinion, a balance growth is more advisable for a State like Nagaland. In other words, Nagaland has a comparative advantage in agro-based industries for which, the State Government is also implementing various programmes for improving the production of horticulture and agricultural products. In tune with this emphasis, the State Government must continue to give priority to agro-based industries, which not only further strengthened the agricultural sector of the State, but also enhance employment opportunities. This would further ensure the efficiency of Service Sector and thus appropriate balance growth is maintained. To achieve this end, a unified and common approach to an over-all development of the State

irrespective of ideological differences and stability consideration of the policy makers should be the investment policy of the State Government.

Thirdly, Public Sector is considered as an important agency to promote social justice and balance ^dgrowth. However, in the context of the on-going changes in the policy of the Government of India, the need for mitigating the growing unemployment and constraints on budgetary resources, the State Government may welcome Private Sector investment to accelerate industrial growth in the State. To encourage these lines, the Government may provide need-based budgetary support where required.

In pursuance of this policy, the State may identify sick units of public undertaking that can be either made viable and provide a comprehensive package of assistance for their survival and assist in conducting a diagnostic studies to enable a view to be taken within a specific time frame regarding the future of such units. Or the Government may examine the feasibility of privatization or corporatization of such sick units. This measure would definitely rationalize Public Expenditure of the State and would enable to divert resources in other productive lines.

The success of these ambitious measures, however, will be determined to a great extent by the ability of resources at the disposal of

the State Government. The next related issue of concern, therefore, being the resource inadequacy of the State, which in turn has led to fiscal imbalances in the State over the years. The inadequate State's Own Tax Revenue on the other hand, as pointed earlier, is the result of twin factors such as inadequate tax effort on the part of the State Government and the relative inelastic nature of State's Own Tax. In spite of these constraints, the State Government is expected to raise more and more internal resources from sources other than internal debts to successfully implement the planned targets. Thus, rationalization of the tax system would serve to resolve the problem and should be carried out wholeheartedly by the government.

To begin with there has been a huge loss of Government revenue each year in the form of Excise Duty due to total prohibition being imposed in the State with effect April 1990-91. Also to ensure effective implementation of the law the State Government has been spending huge amount of public money in strengthening the law enforcing agencies in the State. It is also true that the ground reality of the effect of such a policy has proved to be counter-productive in favour of handful of individual. Hence, the socio-economic justification of the policy is remote as of today. We, therefore, suggest that for economic reason, the

Bill may be reconsidered to restore the resource potential of tax in due time.

Secondly, with a view to simplify the indirect taxes and reduction in evasion of tax as well as to ensure tax transparency, the Government of India has initiated a policy to replace Central Excise and the State's Value Added Tax system by a unified Value Added Tax Scheme by April 2003. To this end at least twelve states of the country have already agreed to introduce a Value Added Tax System in place of Sales Tax. This system would indeed reform over-tax system to the extent that it would do away with the confusion of tax on intra-state transaction. We, therefore, suggest to the State Government to set up a committee to examine the feasibility of such policy of tax system in Nagaland at the earliest possible time.

Thirdly, apart from relative inelastic source of State's Own Tax, laxity of tax efforts and limited source of tax revenue has been the causes of resource inadequacy in the State. Greater effort, therefore, is called for to plough back the increment resulting from economic growth. This can be achieved from a sustained increase in the tax-base, which would entail an expansion of coverage, a regular adjustment in the rates of inflation and minimization of collection lags.

Lastly, to avoid erratic economic fluctuations an accurate assessment and forecast of prospects and resource potential of the State, what we require is obviously the rational approach as it is being done in most of the States. For this purpose, establishment of a research cell with all the basic facilities is of utmost importance. And while formulating tax and expenditure budgeting the policy makers must take into account the statistical method of economic forecasting at least for a period of five years.

We believe that the above suggested measures would definitely improve the efficiency of public spending as well as tax system of the State, and gradually these measures would usher into a transformed economy: an economy of self-sufficiency and self-reliance to fulfill the aspirations of the people in general. The fate of these measures, however, will be determined by strong political will that ultimately decides the fiscal outcome of the State.