# An Analysis of Public Expenditure on Elementary Education in North-Eastern States of India: In Post Reform Era

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for award of the degree of

#### MASTER OF PHILOSOPHY

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**CERTIFICATE** 

I declare that the dissertation entitled "An Analysis of Public Expenditure on

Elementary Education in North-Eastern States of India: In Post Reform

Era" submitted by me in partial fulfillment of the requirements for the award of

the degree of Master of Philosophy of this University is my own work and has

not been previously submitted for any other degree of this or any other University.

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We recommend that this dissertation be placed before the examiners for

evaluation.

Ashok

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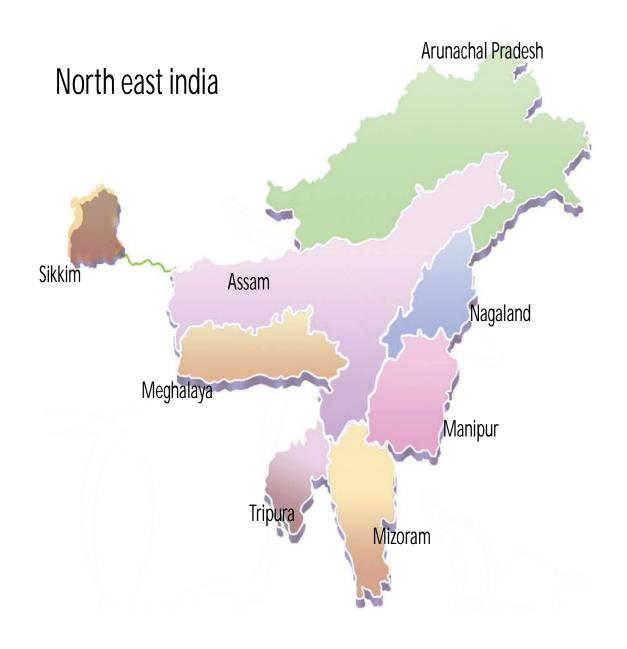
I own responsibility for all the errors and omissions that might have crept in the

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## CHAPTER1

## INTRODUCTION

#### 1.1 Introduction

"In our national perception, education is essentially for all. This is fundamental to our all-round development, material and spiritual. Education has an acculturating role. It refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit – thus furthering the goals of socialism, secularism and democracy enshrined in our Constitution. Education develops manpower for different levels of the economy. It is also the substrate on which research and development flourish, being the ultimate guarantee of national self-reliance. In sum, Education is a unique investment in the present and the future. This cardinal principle is the key to the National Policy on Education." (National Policy on Education, 1986)

The role of education in facilitating social and economic progress is well recognized. It opens up opportunities leading to both individual and group entitlements. Education, in its broadest sense of development of youth, is the most crucial input for empowering people with skills and knowledge and giving them access to productive employment in future. Improvements in education are not only expected to enhance efficiency but also augment the overall quality of life. Elementary education, that is, Classes I–VIII consisting of primary (I–V) and upper primary (VI–VIII) is the foundation of the pyramid in the education system and has received a major push in the Tenth Plan through the Sarva Shiksha Abhiyan (SSA). Public spending on elementary education is the focused area of present study.

The Government of India had recognized the importance of elementary education and had made a provision in the Constitution of India as long ago as in 1950: The State shall endeavour to provide within a period of 10 years from the commencement of the

Constitution for free and compulsory education for all children until they complete the age of 14 years (Article 45).' By resolving to provide elementary education 'free' to all by Right to Education Act of 2005, the Government of India has also implicitly recognized the 'public good' and 'merit good' nature of elementary education.

Elementary education is basic and most important part of education system. It is the part where the basic thought of a student gets shape. It is the stage where moral and ethics of a student develop. The age of a student till elementary education level is such that whatever taught to him/her become the basics of future life of a student. On the basis of which that person can become a respectable person in the society. Thus, elementary education is the most crucial stage of education system.

Elementary education is, in fact, recognized by many as a 'pure public good' as the benefits from elementary education are immense; they are not confined only to the individuals who get the education; and the rest of the society also benefits considerably. In fact, the neighbourhood or externality benefits of elementary education are believed to outweigh the direct private benefits. Besides, it is a 'merit good,' as the state knows better than individuals availing the benefits of education. Hence, it is necessary that provision of elementary education should be completely made by the government.

"Not only the economic returns to primary education estimated to be positive and high, but they are also estimated to be higher than alternative rates of return. And returns to primary education are higher than returns to secondary and higher education. Returns to primary education of weaker sections (e.g., backward castes and girls) are also found to be sizeable and, in fact, higher than returns to their respective counterparts (viz., non-backward castes and boys), and returns to upper-primary level of education are higher in rural than in urban areas" (Tilak, 1997).

The contribution of education is not restricted to economic returns only. Its significant effect on reduction in poverty and improvement in income distribution,

improvement in health and nutritional status of the population, its negative relationship with fertility and population growth and positive association with adoption of family planning methods, and its positive relationship with general social, political and economic development and overall quality of life are well recognized. Thus, there is a two way relationship between education and development or we can say that improvement in education push development positively and in turn development pushes education positively. All this has contributed to the rapid growth of education in India, though it is still not adequate.

One of the reasons forward for the faster economic growth of eight East-Asian tigers in 60s is due to demographic dividend. India is passing through such a phase of unprecedented demographic changes. These demographic changes are likely to contribute to a substantially increased labour force in the country. The Census projection report shows that the proportion of working age population between 15 and 59 years is likely to increase from approximately 58 per cent in 2001 to more than 64 per cent by 2021. In absolute numbers, there will be approximately 63.5 million new entrants to the working age group between 2011 and 2016. Further, it is important to note that the bulk of this increase is likely to take place in the relatively younger age group of 20-35 years. Such a trend would make India one of the youngest nations in the world. In 2020, the average Indian will be only 29 years old. Comparable figures for China and the US are 37, 45 for West Europe, and 48 for Japan. This 'demographic dividend' provides India great opportunities, but it also poses a great challenge. It will benefit India only if our population is healthy, educated, and appropriately skilled. Thus, we need concrete policy measures in education sector, which will generate skillful workforce that can help us in future development of our economy.

Over the years the definition of development has taken up several turns and now it is a multidimensional concept and measured in various aspects. Now the society's well-being is measured in Human Development Index, which captures the broad areas of development linked directly to the people's life. The Human Development Report (HDR)

published by the United Nations Development Programme (UNDP) estimates the Human Development Index (HDI) in terms of three basic capabilities: to live a long and healthy life, to be educated and knowledgeable, and to enjoy a decent economic standard of living. According to HDR 2011, the HDI for India was 0.547 in 2011 with an overall global ranking of 134 (out of the 187 countries) compared to 119 (out of 169 countries) as per HDR 2010. However, a comparable analysis of the trends during 1980-2011 shows that although lower in HDI ranking, India has performed better than most (including high and very high human development) countries in terms of average annual HDI growth rate. India is behind only China and Bangladesh in this regard. The existing gap in health and education indicators as compared to developed countries and also many of the developing countries indicates the need for much faster and wider spread of basic health and education.

The performance of India in terms of mean years of schooling is not only much below that of countries like Sri Lanka, China, and Egypt which have higher per capita incomes but also below that of Pakistan, Bangladesh, and Vietnam which have lower per capita incomes. It is also much lower than the global average. The National Human Development Report (NHDR) 2011 of the Institute of Applied Manpower Research and Planning Commission states that India's HDI between 1999-2000 and 2007-08 has increased by 21 per cent, with an improvement of over 28 per cent in education being the main driver.

Budgets are the most crucial policy documents that reveal the social and economic priorities of governments. It is in these expenditure decisions that official objectives and stated commitments get a concrete shape. In order to understand policy priorities, one therefore has to look at budgets and expenditure patterns. Of course, it is true that the effect of these expenditures on human development does not only depend on their level, but also on the effectiveness of their utilisation. Often, the impact of social sector investments is less than what it could be because of inefficient bureaucracies, waste and corruption. These inefficiencies, important as they are, should however not detract us from the issue of the expenditure levels itself (Dev, Mooij, 2002). Therefore, we will use the

budgeted expenditure of state governments to study the pattern and levels of public expenditure in elementary education in North-Eastern region.

The National Policy on Education (NPE) 1968 and the NPE 1986 has laid special emphasis on the fulfillment of the Constitutional Directive of universalisation of elementary education (UEE). Five Year Plans have repeatedly promised to take the nation towards achieving this goal. Elementary education was also included in the 'National Programme of Minimum Needs' in the Five Year Plans, and this inclusion has significant implications for allocation of resources. This was expected to ensure favourable treatment in the allocation of resources, and to protect it from reallocation of approved outlays away from elementary education. Education was also made an important component of the 'national human development initiative' in the Union Budget of 1999-2000.

The Government of India had repeated its resolve to universalize elementary education in the country as early as possible, and also to increase the public funding of education to at least 6 per cent of national income, so that education, elementary education in particular, does not suffer from paucity of financial resources.

But even after six decades of development planning and five decades after the deadline stipulated by the constitution, and despite several strategies adopted, programmes and schemes launched, this goal is still elusive. It is strongly felt that elementary education suffered in India due to, apart from several other factors, insufficient allocation of financial resources. At the same time, it should be noted that while finances are an important constraint, they are however not the only constraint, but one among many. Financial resources provide a necessary but not a sufficient condition in achieving UEE.

The government has pledged to rise public spending on education to 6% of Gross Domestic Product (GDP). For accelerating public expenditure, the Central Budget 2004 introduced a cess of 2% on major central taxes/duties for elementary education and Budget 2007 a cess of 1% for secondary and higher education. In the Eleventh Plan,

Central Government envisages an outlay of about Rs 2.70 lakh crore at current price (Rs 2.37 lakh crore at 2006–07 prices) for education. This is a four-fold increase over the Tenth Plan allocation of Rs 0.54 lakh crore at 2006–07 prices. The share of education in the total plan outlay will correspondingly increase from 7.7% to 19.4%. Around 50% of Eleventh Plan outlay is for elementary education and literacy, 20% for secondary education, and 30% for higher education (including technical education) of total educational expenditure.

This reflects the high priority being given to the education sector by the Central Government and represents a credible progress towards rising the public spending of the Centre and the States combined to 6% of GDP. However, it is a shared responsibility between the Centre and States to raise education expenditure to the targeted level.

The North-Eastern region consists of seven states, also referred to as the 'seven sisters'. The region has only 4 percent of the country's population but about twice as much share of its area. A small corridor of about 22 kilometers connects the region to the rest of the country. Otherwise the region shares boundaries with China, Myanmar and Bangladesh and serves as India's gateway to South-East Asia.

The region has witnessed a lot of change since 1947. Tripura, Manipur and Khasi Hills of Meghalaya were erstwhile Princely States which merged with India after Independence. The entire region of North-East has undergone considerable political reorganization. Nagaland State was created in 1960; Meghalaya, Manipur and Tripura in 1972 while Arunachal Pradesh and Mizoram became separate States only in 1986. The Partition of India in 1947 had reduced the North-East to a land locked region and affected its economy. Due to cut off from the rest of India, the region suffered neglect in developmental terms. Its politics too remained insulated. At the same time, most States in this region underwent major demographic changes due to influx of migrants from neighbouring States and countries.

The North-Eastern States of India, excluding Assam, i.e. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, is taken as the area of investigation for the present study. Assam excluded from the study because Assam shows more similarity with the Indian mainland than the other states of the region both geographically and culturally. The region has been chosen because this region has been under-represented in literature and no comprehensive study has been found therefore, this present study aims to fill this gap in elementary education sector. In addition to this, the importance of the region has been improved mainly with the introduction of "Look-East Policy" of Government of India, which was initiated by Late Prime Minister Narsimha Rao, in 1992. This region is a door-step for India to foster its economic and social ties with South-East Asian nations. It has been also emphasized that this region is surrounded by hills and thus forests are the main natural resources of the region. Thus, human development via education is the most suitable path for the development of this region. Since education is a broad sector, therefore, we will confine the boundaries of present study to elementary education only. In addition to this, as above mentioned the economies of this region are not economically strong, thus this study will focus on the government provisioning of education and therefore will limit only to public spending on elementary education. Private spending on elementary education has been also becoming a important part of total expenditure but its analysis is not feasible as far as concerned to the level of present study because it is difficult to collect data and other information in regard of private spending on elementary education in North-Eastern region.

#### 1.2 Scheme of Chapter:

This present study is divided in following chapters. Chapter 2 presents a vast literature review of the topic. It is felt here that there are very few studies found related to North-Eastern States. But there is large literature available on various themes of elementary education. Therefore literature review part has been divided in various sub-sections, which explains the various themes related to different aspects of elementary education. Chapter 3 describes the data sources and methodology used in this study. This study is exclusively

based on secondary data. The picture depiction via charts has been used to give a clear picture about the time trends and state-wise pattern of education expenditure. Chapter 4 examines the public spending on elementary education by North-Eastern States in absolute and comparative terms, both at the current prices and constant prices in the national and regional context. The study also investigates the level of gross fiscal deficit and interest payments over the period. The study tried to analyse the fiscal performance of North-Eastern States with regard to their public spending on elementary education. It also studies the growth and trends in public spending on elementary education. Chapter 5 will conclude the study. The Appendix describes the definition of some of technical terms used in this study.

This study is confined to public expenditure which in incurred by education departments of the respective states on the development of elementary education in their respective states. We will also confine our self to revenue expenditure only because bulk of public expenditure on elementary education is accrued under the revenue account and capital expenditure comprise a negligible part of total expenditure.

#### 1.3 Objective of Study:

The North-Eastern Region of India has been suffering from insurgency, political and social isolation from the rest of the country. It is one of the economically backward areas of the country. The North-Eastern region is known for its social and economic backwardness, socio-political instability and poor delivery system. One crucial feature that attribute to backwardness of the region is inadequate investment in infrastructure and human resource development with emphasis on education (higher & technical), vocational training and health.

It is widely accepted that there is an acute shortage of resources in the education sector in India. Economic reforms and associated requirements of fiscal

discipline have aggravated the situation. By contrast, however, official sources claim that significant progress has been made in financing education. But yet the achieved levels are much below the minimum norm which is mentioned in various education policies.

Initially education was the responsibility of individual states, but in 1976 it was placed in the Concurrent List (denoting joint responsibility of both central and state governments). Following two constitutional amendments in 1993 (Rural Local Bodies and Urban Local Bodies), more power has been vested with rural and urban local bodies making elementary education a responsibility of these bodies.

The theme of present study is to investigate the long term trend (i.e., 1990-91 to 2009-10) and pattern of public spending in elementary education by North-Eastern States. There are very few studies found on North-Eastern region regarding the public expenditure on education. There is a lack of comprehensive studies on this matter. Most studies concentrated on major states of India. Here an attempt has been made to fill this gap in elementary education sector of North-Eastern States. Efforts are made to bring out some new facts and conclusions, which help to understand policy implications.

The objective of present study is to investigate the long term pattern and trend of public expenditure on elementary education in North-Eastern States. The period of study is taken-up from 1990-91 to 2009-10. This phase is mainly known as economic reform period, where government has reduced its role from a producer to a regulator & social service provider. This present study aims to know following answers from this study:

- 1. What has been the trend of public expenditure in North-Eastern States of India over the period of study?
- 2. To compare inter-state variations in public expenditure on elementary education?
- 3. To analyze the relationship between growth of NSDP and growth of education expenditure over the period of study?

- 4. Does the level of deficit and interest payments restrict government spending on elementary education in North-Eastern States?
- 5. To bring out the facts regarding education policy & public expenditure to study policy implications?

## CHAPTER 2

## LITERATURE REVIEW

The theme of present study is being chosen because this region has been under-represented in literature and no comprehensive study has been found on North-Eastern region in this regard. Therefore, this present study aims to fill this gap in elementary education sector of North-Eastern States. Efforts are made to bring out the facts and conclusions, so that the policy making will improve in this region as well. The region is also important from the point of view of 'Look-East' policy of India, which focuses on improving the ties of India with South-East Asian economies.

There are a number of studies on public expenditure on elementary education in general and particularly on elementary education. The coverage of these studies are mainly restricted to major States of India and focused primarily on policy matters in this field. There are many studies which are related to various government schemes and utilization of resources in the fields of education. Since the literature on present study is vast and diverse, therefore, the literature review part has been divided in following parts:

#### 2.1 Education Policies:

There have so far been mainly two comprehensive statements of the National Policy on Education, viz those of 1968 and 1986. The former contained decisions of the Central Government on the recommendations of the National Commission on Education, 1964-66. The latter was a result of the renewed priority assigned to Education the government of the Late Shri Rajiv Gandhi, who was Prime Minister during 1984-89. The 1986 policy was reviewed by a committee constituted in 1990 under the chairmanship of Acharya Ramamurti. On the basis of the recommendations of this committee, certain

provisions of the 1986 policy were modified in 1992. Thus, in all, the following three comprehensive national policy statements exist on Education:

- a) National Policy on Education, 1968
- b) National Policy on Education, 1986
- c) National Policy on Education, 1986, as modified in 1992

Besides the above comprehensive policy statements, policy decisions on individual issues are taken from time to time as needed – in the form of Resolutions, Schemes, Guidelines, Orders, etc. Education in India falls under the control of both the union and the states, with some responsibilities lying with the union and the states having autonomy for others. The various Articles of the Indian Constitution provide for education as a fundamental right. Most universities in India are controlled by the union or state Government. Education in India is provided by both public and private sector with control and funding coming from three levels: federal, state and local.

The National Policy on Education (NPE) also reinforced the Programme of Action (POA) in 1996. The government initiated several measures. They include the launching of DPEP (District Primary Education Programme) and SSA (Sarva Shiksha Abhiyan) in 2001. India's initiative of 'Education for All' and setting up of Navodaya Vidyalaya and other selective schools in every district, advances in female education, inter-disciplinary research and establishment of open universities. India's NPE also contains the National System of Education, which ensures some uniformity while taking into account regional education needs. The NPE also stresses on higher spending on education, envisaging a budget of more than 6% of the Gross Domestic Product. While the need for wider reform in the primary and secondary sectors is recognized as an issue, the emphasis is also on the development infrastructure.

#### 2.1.1 National Policy on Education (1968):

The National Policy on Education (NPE-1968) was prepared to improve the quality of education in the country and was focused on providing education facilities to all the citizens of the nation. The policy has been reviewed in the subsequent years. It was further updated in 1992 to spread knowledge and freedom of thought among the citizens of the country. Though education is in the concurrent list of the Constitution of India, the State Governments play an important role in the development of education especially in the primary and the secondary levels.

According to the National Policy on Education-1968, the government of India had formulated certain principles to promote the development of education in the country. Some of the principles are as follows:

#### 1. Free and Compulsory Education:

According to Article- 45 (Indian Constitution), education should be free and compulsory up to the age of 14. Steps should be taken to ensure that child who is enrolled in the school should successfully complete the course.

#### 2. Education Opportunity for all:

Under this policy every child of the country should get education irrespective of caste, religion, region or whatever the case may be. Special emphasis should be given to backward classes, minority children, girls and physically challenged children to avail the education facilities.

#### 3. Uniform Education Structure:

The structure of education should be uniform throughout the country. It should be a 10+2+3 pattern from higher secondary to college level.

#### 4. To review the progress:

The government should review the progress of education in the country from time to time and should present guidelines for future development.

#### 2.2.2 Review of National Policy on Education, 1968:

Since the adoption of the 1968 Policy, there has been considerable expansion in educational facilities all over the country at all levels. More than 90 per cent of the country's rural habitations now have schooling facilities within a radius of one kilometer. There has been sizeable augmentation of facilities at other stages also. Perhaps the most notable development has been the acceptance of a common structure of education throughout the Country and the introduction of the 10+2+3 system by most States. In the school curricula, in addition to laying down a common scheme of studies for boys and girls, science and mathematics were incorporated as compulsory subjects and work experience assigned a place of importance. A beginning was also made in restructuring of courses at the undergraduate level. Centres of Advanced Studies were set up for post-graduate education and research. And we have been able to meet our requirements of educated manpower.

While these achievements are impressive by themselves, the general formulations incorporated in the 1968 Policy did not, however, get translated into a detailed strategy of implementation, accompanied by the assignment of specific responsibilities and financial and organisational support. As a result, problems of access, quality, quantity, utility and financial outlay, accumulated over the years, have now assumed such massive proportions that they must be tackled with the utmost urgency. Education in India stands at the crossroads today. Neither normal linear expansion nor the existing pace and nature of improvement can meet the needs of the situation. In the Indian way of thinking, a human being is a positive asset and a precious national resource, which needs to be cherished, nurtured and developed with tenderness, and care, coupled with dynamism. Each individual's growth presents a different range of problems and requirements, at every stage

from the womb to the tomb. The catalytic action of Education in this complex and dynamic growth process needs to be planned meticulously and executed with great sensitivity.

#### 2.1.2 National Policy on Education, 1986 (modified in 1992):

The National Policy on Education-1986 was modified in 1992. It is a comprehensive frame work to guide the development of education in the country. The principles included in the NPE-1968 are also included in the new policy with some modifications. Some of these principles are as follows:

- 1. Promotion of equality. It could be achieved by providing equal access and equal condition of success to children.
- 2. A common educational structure (10+2+3) for the whole of India.
- 3. Education for women's equality. The Indian education should be used as a tool to change the status of women in the society.
- 4. Opening of primary schools in tribal area for promotion of education in ST people.
- 5. Development of curriculum and study material in the language of tribal people.
- 6. Emphasis on the education of minorities.
- 7. Adult education Initiation of National Literacy Mission, for teaching illiterate people of age group 15-35. And making them aware of the day-to-day realities of their surroundings.
- 8. Special emphasis on early childhood care and education by opening up of day care centers, promotion of child focused programs.
- 9. Increasing the scope of Operation Blackboard for upliftment of standard of primary education in India.
- 10. Minimum exposure to computers and training in their use to be the part of professional education.

- 11. Providing teachers a better deal to make education system in India work in proper way, as teachers are the backbone of the system. Providing better facilities to institutions and improved services to students.
- 12. Measures to be taken for easy accessibility of books at minimum costs to all sections of students.
- 13. The purpose of examination to be to bring about qualitative improvement in education. It should discourage memorization.
- 14. Overhauling of the system of teacher education and establishment of District Institutes of Education and Training (DIET) to organize courses for elementary school teachers.
- 15. Involvement of local communities for school improvement programmes.
- 16. Strengthening the base of pyramid of Indian population for proper development of education system in India.

National Policy on Education (1992) laid down many objectives for the development of education system in India but it has not been successful in achieving all of them. It has specified that the examination system should discourage the memorizing but it is what is going on. The education in India seems to encourage rote learning instead of experimentation and questioning. There is some disparity in assessment as all the State Boards have different standards of evaluation.

The reservation on the basis of caste and religion is also a negative point in Indian education. Corruption is visible in the allocation of seats of institutions of higher studies and student politics is another sore point. These are some of the issues, which need to be worked upon. Though there are disparities between the objectives and their implementation in education but still education system in India has come a long way and will continue to improve in the future.

#### 2.2 Social Sector Expenditure of Central and State Government:

The market led reforms of 1991 were aimed to interchange the role of government from a producer to as social service provider and as a regulator. Thus, it is perceived that the pattern and direction of government expenditure does change in the following years of 1991. With the effect of policy reforms in 1991, it can be expected that the government expenditure will increase in social sector generally and particularly on education sector.

Dev and Mooji (2002) have studied the social sector expenditure in 1990s and analyse the central and state budgets. The paper focuses on social sector expenditure in the 1990s, and looks at several aspects, including overall levels of allocation, expenditure on health and education and interstate disparities. In this study it was found that percentage of aggregate public expenditure in GDP declined significantly during the 1990s and share of development expenditure in the aggregate public expenditure also declined over the same period. Thus, the prior arguments that policy reform of 1991 lead the government to shift its focus to social sector proved wrong. It was also found that the education expenditure is the largest item of social sector expenditure of state governments. Education sector alone constitutes more than one half of the total state social sector allocations so defined by the RBI and about 32 per cent of the total developmental expenditures of the states.

It was also found that combined expenditure of Centre and State governments on education has declined for 1990s. In addition to this the share of elementary education has increased from around 46% in the early 1990s to 49% in the late 1990s. There has been a decline in the shares of secondary, higher and technical education during the same period. The shift to elementary education is mainly due to the significant increase in the share of elementary education by the central government since the mid-1990s. This was mainly due to the introduction of the Mid-Day Meal (MDM) programme

and District Primary Education Programme (DPEP) in the mid-1990s. Thus, the priorities of elementary education have been realized and funds were allocated accordingly since mid-1990s.

Same result has been obtained by Shariff, Ghosh, Mondal (2002). This paper analyses the trends in public expenditures on social sector and poverty alleviation programmes from 1990-91. It was observed that a considerable proportion of these expenditures is undertaken by the states but the central share seems to be increasing over time. This paper analyses trends in state expenditure, expenditure by the central government and central and state adjusted combined expenditures. Overall, expenditure on social sector schemes is increasing in real terms but mainly through increased expenditure of the central government.

In 1995-96, there was a large increase in the centre's education budget (about 32 per cent points) over the previous year. Mainly due to the introduction of nutrition support to primary education in the form of Mid-Day Meal Scheme as a new central programme launched from this year with an allocation of Rs 514 crore (in real terms). Besides, there was a big jump in the central allocation for District Primary Education Programme (DPEP).

The adjusted state and central expenditure suggest that the share of state expenditure on education, sports, art and culture has decreased from a high of 91.1 per cent in 1991-92 to 88.9 per cent in 1999-2000. Education is a subject that draws in substantial state resources; in 2000 the state share in total education expenditure has been 89 per cent.

Thus it is clear form above studies that the total expenditure on education has declined in 1990s and it is centre's share which increases during this period. It is also found that the inter-sectoral allocation of education expenditure has shifted towards elementary education from secondary, higher, and technical education.

Analysis of State Budgets: Elementary education (2010) by Azim Premji Foundation is a study that examines trend in elementary education spending and focuses on central government's Sarva Shiksha Abhiyan and state government's allocation on elementary education since 2005-06. This study finds that total education expenditure has doubled in five year period from 2004-05 to 2009-10. This increase is largely due to increases in central government expenditure for education. It also finds that within education budget elementary education is a priority and in year 2008-09 it constituted over 50 percent of the total expenditure on education (centre and states combined). In addition to this, the Sarva Shiksha Abhiyan (SSA) is going to play an important role in universalisation of elementary education. Allocation to SSA in 2010-11 is amounting to 30 percent of total education allocations. The data shows that lagging states have prioritized implementing SSA.

Trends in state education budget shows that salary cost represents between 80-90 percent of non-capital spending on education. The state-wise analysis shows that there are large variations in the number of children enrolled per school. The analysis also shows that there in no clear correlation between enrolment rates and budget trends. It is bring out that state-wide access of school trends suggest that there are correlations with budget increase.

The above study shows that public expenditure in education sector has started increasing from 2004 onwards, especially after the introduction of UPA government, and this is mainly due to shifting and increase of expenditure on elementary education. Thus the policy makers and government realize the importance of elementary education as stated in various national policies on education.

#### 2.3 State Level Studies on Education:

Education is in concurrent list but still most part of expenditure on education is bear by state governments. In year 2009-10 total expenditure (Plan & Non-Plan) on

revenue account was Rs. 235996.21 crore. Out of this Rs. 174815.66 crore has been spent by State government and remaining Rs. 61180.55 crore has been bear by Central government i.e., near about 74 percent of total education expenditure has been bear by state governments. Thus, government plays critical role in the provisioning of education. Several studies suggested that state governments have to play an important role in universalization of primary education. But low quality of public education system comes in the way in achieving this goal (as various studies suggests).

Roy, Kamaiah, Rao (2000) study the educational expenditure of large states with the help of regression analysis. The paper uses the pooled data for 15 large Indian states over the period 1992-93 to 1997-98; this study employs panel data models to estimate the normative (average) levels of expenditure on primary, secondary, and higher education. The study finds that rich states spend more and poor states spend less as far as social sectors are concerned. The only exception is Orissa, where the expenditure on higher education is significantly higher than the normative level. The study also finds existence of unutilized capacity in both primary and higher education. This can be attributed to the shift in preference from government to private education mainly due to low quality of public schools in comparison to private schools. Thus any effort to rationalise the utilisation of existing capacities must involve improvement in the quality of education in the government sector.

Similarly, a paper by Sood (2003) has find that the state of Himachal Pradesh has achieved key successes on the literacy and elementary education fronts. The literacy level has increased from 32 percent in 1971 to 77 percent in 2001. Similarly female literacy has increased from 20 percent to 68 percent in the same period. It is mainly due to state initiatives and investment in primary education. But study finds that the enrolment rate in primary classes has declined in public schools despite overall enrolment in primary classes did actually increase in the same period. The main problem identified for this is the quality of public schools. The paper also put forward following questions regarding the teacher's accountability, empowerment of Panchayats/Block Samitis/Village education

committees in regards of education, etc. to improve the quality of education in the state. Thus state level provisions of education are necessary to improve the educational standard in the country.

Another study by (Kulkarni, 2002) finds that low quality of public schools is the major factor behind the low enrolment and retention rate. This study also finds that adult education is necessary to achieve child education. "If parents understand the value of education they would definitely send their children to school whether it is a fundamental right or not. Wherever the adult literacy is high, enrolment and retention rate in primary schools are also impressive" (Kulkarni, 2002). Thus quality of public schools is considered as the major factor in universalization of elementary education.

#### 2.4 Rational for Public Expenditure on Education:

Several studies suggest that education has various social and economic benefits. In addition to this, education is considered as 'Pure Public' as well as 'Merit' good. Thus government should assume complete responsibility of funding it.

Professor Henry M. Levin (2005) discusses the cost associated to failure to graduate from high school. This study is mainly in context of America. The study compares the academic achievements of black and white. This study finds that "Seventeen percent of black children suffer from asthma, versus 1 percent of white children. Asthma is generally believed to be the single largest cause of chronic school absenteeism." The paper also finds that "Whether the growing youth population will contribute to economic productivity or become a drag on social resources hinges crucially on policy decisions to bolster educational investments." This paper finds out that economic costs of inadequate education are enormous. "Lower earnings among dropouts alone could be costing the United States as much as \$158 billion in lost earnings and \$36 billion in lost state and federal income taxes for each class of 18-year olds...about 1.6 percent of the nation's gross national domestic product." In addition to economic costs, some of social costs are also associated with

inadequate education. This paper finds that "Increasing the high school completion rate by one percent for all neb ages 20 to 60 could save the U.S. up to \$1.4 billion a year in reduced costs from crime...a one-year increase in average years of schooling reduces murder and assault by almost 30 percent, motor vehicle theft by 20 percent, and burglary and larceny by about 6 percent." This paper says that in addition to economic and social cost, there are also civic costs of inadequate education; "Education is the cornerstone of democracy because it aids in the cognitive, ideological and strategic development of democratic citizens, allowing voters to acquire political information, deliberate about the issues, voice perspectives and engage in politics." Therefore, we find that there are numerous cost attached to inadequate education, which could hamper the growth and development of an economy. This paper also finds that parental participation and successful interventions of parents can improve students learning. In addition to this, this study finds that participation in early education programs reduces high school dropout rates, special education placements, etc. reduces the economic burden to society and taxpayers. Therefore, education is considered as a crucial ingredient in economic development process of an economy.

Sihenggenfan, Azell, Tihorat (2000) have used the state-level data for 1970-93, a simultaneous equations model was developed to estimate the direct and indirect effects of different type of government expenditure on rural poverty and productivity growth in India. The paper estimates that expenditure on education grew at a low rate in the 1990s (0.22 per cent per year, compared with 7 to 8 per cent during the 1970s and the 1980s). Among social service expenditures, education accounted for 52 per cent, health for 16 per cent and welfare of scheduled castes and tribes for 7 per cent. The results show that in order to reduce rural poverty, the Indian government should give highest priority to additional investments in rural roads, agricultural research and education. These types of investment not only have much larger poverty impacts per rupee spent than any other government investment, but also generate higher productivity growth. Other investments (including irrigation, soil and water conservation, health, and rural and community development) have only modest impacts on growth and poverty per additional rupee spent.

It was find out that higher level of education and improved road networks help to reduce rural poverty by improving wages and non-farm employment.

A paper by Vimala, Nishi, Kameshwari (2007) has tried to bring together the experiences of different approaches to incentives followed by six NGOs in the states of Rajasthan, Maharashtra, Orissa, Andhra Pradesh and Karnataka. These NGO are partners with an international child sponsorship based charity and have been working in the field for over 25 years. All the NGO partners started off with individual child sponsorship programmes – providing a range of incentives (cash and kind) to identified children.

Incentive at school level by both government and NGO/International NGO, parents had to bear some cost of their children's education. Parents were willing to pay for exam fees, bags, footwear, stationary, uniforms etc. Parents spent not only for the sponsored child (on hostel fees, exam fees, schooling peripherals, health etc) but also for the non-sponsored siblings when they wanted them to attend school. At the primary level, parents reported spending a minimum of Rs 500-1000 per annum for a child. These extra costs are one of the factors that deter the poorest from accessing schools even if they are in the village.

It is also observe that incentives are not sufficient to enhance access to quality education. This study finds that individual incentives could increase disparities. The most deprived and marginalized households in most of the visited villages were left out due to flaw selection procedure of beneficiaries for incentives. This study also suggests that the key is to turn the system around and make the school vibrant and responsive Mobilization is essential for a rights based approach Create structures for participation and active engagement.

#### 2.5 Financing of Education in India:

Education has numerous benefits, which range from economic, social, etc. Education is in concurrent list but still major part of public expenditure on education is bear by state government. Education and especially elementary education are regarded as 'Pure Public' and 'Merit' good. It is strongly suggested that the provision of such goods should be made by government. Several committees on education sector have strongly suggested for increasing public expenditure on education. Education Commission (1966) recommended a quantitative target of 6 percent of national income to be spent on education from the public exchequer.

Tilak (2007) review the premises and current relevance of the recommendations of Kothari Commission (1964-66). This study found that "Of the several recommendations made by the commission, 6 per cent of GNP is one that was accepted and resolved by the government of India (1968) in the National Policy on Education (NPE) 1968 "to increase the investment in education so as to reach a level of expenditure of 6 per cent of the national income as early as possible". This study finds that controversies related to commission's recommendation, regarding 6 percent of GNP to be spent on education, were attempted to misinterpret the facts. But finally the controversy have been buried with the Common Minimum Programme of the UPA government (2004) where government pledge to raise public spending in education to at least 6 percent of the GDP. It is also pointed out that contrary to commission's suggestion education was made a concurrent subject with the 42<sup>nd</sup> amendment to the Constitution of India in 1976, though fail to make any significant increase in the role of the centre in financing education. It has been also noticed by the commission that in the early stages of educational development the rate of growth of educational expenditure ought to be approximately twice the rate of growth of national income.

This paper concludes that "the report was considered a landmark in the history of Indian education. The commission made several important suggestions, which even after 40 years are still relevant for development of education. They are relevant not

just because their implementation is overdue; they are relevant today for their intrinsic value, essentially because the commission had looked into the distant future, adopted a visionary approach, built its recommendations on strong empirical evidence and knowledge – national and international, with a strong conviction on the role of education in national development, and above all with a strong commitment to national development."

Tilak (1997) has study the pattern of financing of elementary education in India, specifically focusing on the 1990s. This paper finds that despite recognizing the contribution of education to economic growth and development, the pattern of allocation of resources to education is still far from satisfactory. The long term analysis suggest that education expenditure as a share of GNP has increased significantly, from 1.2 percent of GNP in 1950-51 to 3.6 percent of GNP in 1997-98, but still it is below the levels as recommended by Education Commission (1966), the resolve made in National Policy on Education (1968), reiterated in National Policy on Education (1986), and the revised policy (1992) to invest 6 percent of GNP in education. This paper finds that even this ratio has been consistently declining since 1990s. However, this proportion has increased considerably in a few states including in some of the backward states. The analyses of expenditure level on education as a proportion of GNP of various Indian states suggests that the level of economic development is not an important determinant of public expenditure on education. This paper also suggests that due to 'Pure Public' and 'Merit' good nature of school education, specifically elementary education, government should assume complete responsibility of funding it. And non-governmental resources may be restricted to higher education only.

Similarly, in a paper by Shariff & Ghosh (2000) finds that public investment in education in India has been inadequate for meeting the needs of education for all. The main objective of this paper is to analyse state-level and national-level pattern of public expenditure on various heads of accounts in education in India. This study finds that despite education is in concurrent list (i.e., it is combined responsibility of both Union and State governments) the Union government account for relatively small proportion of the total

expenditure. Although, this share of Union government has been increasing over the years, especially on elementary education. It is also pointed out in this study that the major proportion of education expenditure is predominantly on revenue account. This proportion was about 99.2% during 1995-96.

The analysis also reveals that the rate of growth of public expenditure on elementary education in India between 1980-81 and 1995-96 was 12.7 percent. The cross-state comparison of spending pattern for education reveals that almost all the states have focused fiscal effort in favour of elementary education. It is also evident that the educationally backward states have a higher allocation of resources for elementary education. In addition to this the developed states like West Bengal, Punjab, and Andhra Pradesh spent more on secondary and higher education as compared to less developed states. It is also find that per-pupil expenditure on elementary education is lower than on secondary and higher education during 1980-81 to 1995-96. The per-pupil expenditure has declined for all levels of education may be due to enrolments grown at faster rate than resource allocations for education. This resulted in deterioration of quality and standards of education in India.

Tilak (1997) has focused exclusively on issues relating to financing education in India. It is stated in the paper that "Despite recognizing education as a 'critical investment for national survival', the pattern of financing education in India during the 50 years of independence has not been satisfactory." In absolute terms, the increase in expenditure on education in India during the 50 years of independence is very impressive, but not in real terms. The real increase in expenditure per student has been rather very modest. Even the relative importance given to education has declined gradually over five-year plans. It is only after the introduction of National Policy of Education (1986) i.e., during Seventh & Eight Five Year Plan, this declining trend has reversed. This study finds the following problems with education system of India:

- a) The capital expenditure on buildings, libraries, equipment, furniture, etc, forms a very small proportion, 2 per cent, of total expenditure on elementary education
- b) Of the total recurring expenditure on education, particularly primary education, teachers' salaries amount to more than 95 percent and expenditure on the salaries of the non-teaching staff form the next largest proportion 2-3 percent. All other items, including teaching learning material like apparatus, chemicals, books, libraries, and others like financial incentives, games, sports, etc, receive negligible amounts
- c) Privatisation which was not a respectable term in education in 1950s and later, if not a taboo, became a fashionable slogan for the 1990s and beyond. The poor do not figure prominently any more in discussions on financing education, as if education is a 'luxury good' meant for the rich only.
- d) Privatisation of education is also increasingly viewed by some as an effective solution to the problem of finances.
- e) Introduction of more and more 'marketable' self-financing courses and eventually may distort the academic priorities of higher education institutions
- f) Lastly, excessive reliance on community and household contributions for financing education, elementary education in particular, may also create new problem. There is also a danger that the voluntary nature of such contributions may be replaced in practice by 'compulsory nature'. Further, this might create new regional inequalities

Ramachandran, Rawal, and Swaminathan (1997) made an attempt to provide a methodology for state-wise estimates of the magnitude of resources that need to be mobilised to achieve the goal of Universal primary education. To analyse children's access to a primary school via school attendance, this paper use the data from 43rd round of the National Sample Survey (NSS) for 1987-88 on school attendance for 18 major states of India. It is pointed out in this study that low school attendance is a general picture, except Kerala. In addition to this, attendance rates for girls were lower than for boys in all states, and in general, attendance rates were lower in rural than in urban areas. It is found that stabilization and structural adjustment programmes of 1990s via expenditure reduction results in reduced spending on education, health, social welfare and programmes that

directly benefit low-income groups in the economy. It is also viewed that resources alone cannot transform conditions without appropriate socio-political changes and commitments from governments, teacher and parents. This paper uses Colclough and Lewin (1993) methodology for calculating investment requirement to finance universal education in 17 major states of India. The results of this study show that very high levels of investment need to be made to achieve the target of universalisation of primary education. This study also shows that in order to achieve the said target, expenditure level needs to be doubled and at least 3.1 percent of GDP needs to be allocated to primary education at all-India levels.

Gill and Brar (2009), has studied the various aspects of public spending on higher education by the Northern States of the country during the post-reform period, i.e., 1991-92 to 2004-05. This paper examines the public spending on higher education by six Northern States namely, Haryana, Himachal Pradesh, J&K, Punjab, Rajasthan, and UP in absolute and comparative terms. This paper finds out that budgetary allocations by the Northern States to higher education sector, both in absolute and relative terms, fell short of the economic size of the region. The Northern States collectively accounted between 20 and 22 percent of the total higher educational expenditure of All States of the country. The analysis brings out the gross inadequacy of the spending on higher education. The share of total higher education budget of the Northern States in overall budget of these states registered a decline. Although, on per capita basis, the public expenditure on higher education in case of Northern States as a whole, at real prices, increased by 1.19 times. Even the growth of state budgets and state incomes were more than that of the education sector in over all and higher education. Thus, higher education sector has suffered setbacks and actually experienced the resources loss.

From above studies, it can be concluded that government should assume complete responsibility for financing of education, especially elementary education, mainly due to 'Pure Public' and 'Merit' good nature of education. In addition to this, the level of quality of public education system has been declining in lack of proper resource allocation

to education sector. It is stated in various studies that to achieve universalization of elementary education, greater public resources required (i.e., targeted at 6 percent of GDP). Therefore, it is critically important to realise that the costs of delayed investments and under investments in education are too heavy to bear, and certainly it would be costlier than the costly investments that we have to make in education now.

### 2.6 Fiscal Deficit and Social Sector Expenditure of Government:

Fiscal deficit is a tool with central government to finance its excess expenditure over its revenue and capital receipts. Some kind of fiscal deficit improve the future growth and thus assumed to be good in nature, which includes expenditure on investment to improve future productive capacity, expenditure on human capital, etc. On the other hand, there is some type of expenditures which adversely affects the economic growth of an economy if financed by increasing fiscal deficit. Expenditure on revenue account other than on creating human capital, expenditure on consumption, etc is examples of such expenditures. But still there is no agreement among economists either on analytical grounds or on the basis of empirical results whether financing government expenditure by incurring fiscal deficit is good, bad, or neutral in terms of its real effects, particularly on investment and growth.

Interest payments of government are the result of its past borrowings. This represents the compulsory burden on exchequer, which is not spent on either developmental or non-developmental projects. In particular, government's interest payment adds to the disposable incomes in the private sector. At the same time, interest payment adds to government's revenue expenditures leaving less of current fiscal deficit for the purpose of government capital expenditure. This has implications for government revenues as well. Increases in revenue expenditures, ceteris paribus, lead to a fall in government's net savings, which has an adverse impact on the overall savings and consequently on the growth rate. However, private savings may be positively affected by a higher fiscal deficit because of a positive impact due to higher wealth in the private sector in the form of

government bonds. As government capital expenditure on infrastructure and other vital public goods is increased, the growth impulse is positively affected. Increasing values of interest payments are worrisome for every economy and each one try to keep it in limits.

According to Neo-Classical view "The component of revenue deficit in fiscal deficits implies a reduction in government saving or an increase in government dissaving. In the neoclassical perspective, this will have a detrimental effect on growth if the reduction in government saving is not fully offset by a rise in private saving, thereby resulting in a fall in the overall saving rate. This, apart from putting pressure on the interest rate, will adversely affect growth." The neo-classical economists assume that markets clear so that full employment of resources is attained. In this paradigm, fiscal deficits raise lifetime consumption by shifting taxes to the future generations. If economic resources are fully employed, increased consumption necessarily implies decreased savings in a closed economy. In an open economy, real interest rates and investment may remain unaffected, but the fall in national saving is financed by higher external borrowing accompanied by an appreciation of the domestic currency and fall in exports. In both cases, net national saving falls and consumption rises accompanied by some combination of fall in investment and exports (Rangarajan and Srivastava, 2004).

On the other hand, according to Keynesian view "With some resources unemployed, an increase in autonomous government expenditure, whether investment or consumption, financed by borrowing would cause output to expand through a multiplier process. The traditional Keynesian framework does not distinguish between alternative uses of the fiscal deficit as between government consumption or investment expenditure, nor does it distinguish between alternative sources of financing the fiscal deficit through monetisation or external or internal borrowing. Subsequent elaborations of the Keynesian paradigm envisage that the multiplier-based expansion of output leads to a rise in the demand for money, and if money supply is fixed and deficit is bond financed, interest rates would rise partially offsetting the multiplier effect. However, the Keynesians argue that increased aggregate demand enhances the profitability of private investment and leads to

higher investment at any given rate of interest. The effect of a rise in interest rate may thus be more than neutralised by the increased profitability of investment. Keynesians argue that deficits may stimulate savings and investment even if interest rate rises, primarily because of the employment of hitherto unutilised resources. However, at full employment, deficits would lead to crowding out even in the Keynesian paradigm. In the standard Keynesian analysis, if every one thinks that a budget deficit makes them wealthier, it would raise the output and employment, and thereby actually make people wealthier. Unlike the loanable funds theory, the Keynesian paradigm rules out any direct effect on interest rate of borrowing by the government (Rangarajan and Srivastava, 2004).

In the perspective of Ricardian equivalence (e.g. Barro, 1974, 1976, 1979, 1987, 1989), fiscal deficits are viewed as neutral in terms of their impact on growth. The financing of budgets by deficits amounts only to postponement of taxes. The deficit in any current period is exactly equal to the present value of future taxation that is required to pay off the increment to debt resulting from the deficit. In other words, government spending must be paid for, whether now or later, and the present value of spending must be equal to the present value of tax and non-tax revenues. Fiscal deficits are a useful device for smoothening the impact of revenue shocks or for meeting the requirements of lumpy expenditures, the financing of which through taxes may be spread over a period of time. However, such fiscal deficits do not have an impact on aggregate demand if household spending decisions are based on the present value of their incomes that takes into account the present value of their future tax liabilities. Alternatively, a decrease in current government saving that is implied by the fiscal deficit may be accompanied by an offsetting increase in private saving, leaving the national saving and, therefore, investment unchanged. Then, there is no impact on the real interest rate. Ricardian equivalence requires the assumption that individuals in the economy are foresighted, they have discount rates that are equal to governments' discount rates on spending and they have extremely long time horizons for evaluating the present value of future taxes. In particular, such a time horizon may well extend beyond their own lives in which case they save with a view to making altruistic transfers to take care of the tax liabilities of their future generations (Rangarajan and Srivastava, 2004).

The economic universe of these alternative schools of thought also is characterised by individuals who differ in their behavioral responses in critical respects. The Keynesian world is inhabited by myopic, liquidity constrained individuals who behave under money illusion, and have a high propensity to consume out of current disposable income. The Ricardian equivalence people conceive of a universe of farsighted, fully informed, altruistic individuals. The neo-classical world is inhabited by rational individuals who respond to real changes in their wealth portfolios, and who are farsighted enough to plan consumption over their life-cycle.

A fourth hypothesis formalised by supply side economists, is sometimes called the "tax and spend" hypothesis. An exposition of the hypothesis is given in Vedder, Gallaway, and Frenze (1987). In their view, raising taxes with a view to cutting down deficits would not work because it would only encourage the politicians to spend more. The result would be that while the deficit would remain the same, in the long run the size of the private sector would be cut down. In their view, a tax cut, which puts pressure for contraction of government spending leaving deficits and national savings unchanged, and which leads to an increase in private consumption, should be considered more desirable. The main problem is that when government expenditure does not fall, it has to run a deficit, which raises interest payments and causes total government expenditure including interest payments to rise as a share of GDP (Rangarajan and Srivastava, 2004).

It is not clear from above discussion that whether fiscal deficit is good or bad for an economy. But several studies and papers suggest that to reduce income inequality and to improve economic growth fiscal deficit could be used within some limits.

A paper by Narayan (2006) has a view that "in the current economic scenario, higher fiscal deficits should be used for accommodating higher expenditure on

infrastructure and social sectors". This paper also finds that though the overall expenditure on health and education has increased, but it is still less than what was promised in the National Common Minimum Programme (NCMP) mainly due to enactment of FRBM Act in 2005-06.

Rangarajan and Srivastava (2004) have studied the impact of fiscal deficits on saving, investment, and growth on the combined accounts of the central and state governments. This paper finds that debt-GDP ratio has increased since 90s and especially after 2000-01 mainly because of cumulative primary deficit and excess of interest rate over growth rate. This paper states that "When fiscal deficits are high in magnitude relative to GDP and largely structural in nature, government's ability to mount countercyclical interventions could be compromised, particularly when growth is below trend levels and intervention is needed. This was clearly experienced in the late nineties and the early part of the new decade. This paper also suggests that government's own investment demand fell as its debt-GDP ratio and the ratio of interest payments to revenue receipts rose. The analysis shows that, in the nineties and beyond, government capital expenditure relative to GDP fell not only because interest payments relative to GDP increased but also because ratio of revenue receipts to GDP fell. The FRBM Act has certain positive features but it is incomplete mainly due to two reasons. One, it does not indicate a suitable level of Debt-GDP ratio along with the specified fiscal deficit target, and secondly, it does not provide for a suitable strategy for coping with short-term fluctuations. This paper also finds that as the ratio of interest payments to revenue receipts begins to fall, it will enable a progressively larger amount of primary revenue expenditure to be incurred on the social sectors.

Orissa Human Development Report (2004), chapter on "Strategies for Financing Human Development" found that Orissa is in a disadvantageous position due to the severe financial crunch faced by it. The financial position of the state has now become unsustainable. The revenue deficit as a share of Gross State Domestic Product (GSDP) has steadily increased from 0.18 per cent in 1990–91 to 4.98 percent for the fiscal 2000–01. The fiscal deficit has also risen sharply. But the real worry is the massive outstanding debt,

which has increased at a steady rate. The report finds that although total education expenditure has increased impressively, yet it remained lower than the two-third norm. Not only with education sector, is the same case with other components of social sector. The main cause of this is increased debt level, which is affecting expenditure meant for social sector.

### 2.7 The FRBM Act, 2004

As far the Central finances of Government of India are concerned, a Fiscal Responsibility and Budget Management Act (FRBMA) was enacted in 2003. Some states have also enacted fiscal responsibility legislations. The central government has also framed rules under the FRBMA. The Act and the Rules, as these presently stand, have provided for the elimination of the revenue deficit by 2008-09, with 0.5 percentage point of GDP as the minimum annual reduction target, and fiscal deficit to be brought to the level of 3 percent of GDP, with 0.3 percentage point of GDP, as the minimum annual reduction target. The FRBMA has some built-in flexibility in achieving revenue and fiscal deficit reduction targets as there is a provision that the specified limits may be exceeded 'due to ground or grounds of national security or national calamity or such other exceptional grounds as the Central Government may specify'. The Act has also provided that 'Reserve Bank of India may subscribe to the primary issues to the Central Government Securities' for specified reasons.

### 2.8 Gaps in Existing Literature:

The literature on the subject of this study is vast and diverse. Therefore, we have divided literature review part in various sub-sections. As far as concerned to National Policies on education (1968, 1986, modified in 1992) it is stated that state should assume the full responsibility of providing elementary education to all. In addition to this, Right to Education Act, 2005, is a commitment from government to provide free education to

children aged 6-14 years. But, real picture is different and government is still far below than what it has committed in Constitution of India and various national policies on education. At present government spent (both central and state) 3.17 percent of GDP on education during 2009-10, which is much below than 6 percent of GDP level suggested by National Policy on education (1968) to achieve Universalisation of elementary education. Thus the target of Universalisation of elementary education is no where in the picture and seems to be difficult to achieve in near future given governments financial provision to this sector.

It has been observed that most of literature on the subject is related to major states of India and there is hardly any study on North-Eastern region in this context. Whereas, North-Eastern region comprise 4 percent of the country's population and about 8% share of its area, but still the region has been under-represented in literature. The region has been ignored at the cost of main land states of India and not given the due importance. The need of the hour is to foster research on economic and social issues of the region to understand policy implications of the region.

It has been also observed that studies on the subject are mainly concerned with the levels of spending on education and compare it with the targeted figure of 6 percent of GDP on education set under National Policy on Education, 1968. But the amount spent on education depends on the relative fiscal strength of a state. Since, fiscal position varies from state to state thus there is need to focus on relative levels rather than focusing on absolute levels.

It has been also observed that most of the studies on the subject see expenditure on education from income angle only and ignore the other side. But the state expenditure on education depends on both income and expenditure. NSDP and budgeted expenditure of a state represents income & expenditure levels of a state. It has been expected that a state with higher income should spent more on education sector. But, especially after the implementation of FRBM Act, 2004 a state's expenditure depends on

the deficit level that a state can bear. Thus, fiscal deficit and interest payment are related to the expenditure level of a state, and therefore, a state wants to keep these within specific limits. Therefore, to evaluate the performance of a state in terms of its expenditure on education sector, both levels (i.e., income and expenditure) needs to be study in simultaneous.

The present study aims to fill the above mentioned gaps in the existing literature on the topic. Thus, this study incorporates the above mentioned gaps in the literature and trying to contribute to the literature on the subject. This may help in improving the understanding of the subject in special context of North-Eastern region.

# CHAPTER 3

# DATA SOURCES AND METHODOLOGY

In India, the financial resources flow towards elementary education from a large variety of sources, which could be broadly divided into following parts, viz. (a) governmental sources, and (b) non-governmental sources. The governmental sources include contribution from the union, state, and local governments. The non-governmental sources include student fees, funds, voluntary donations, and endowments, etc. This study does not take into account the private expenditures of various types incurred by the individuals, households and other private providers of education on either acquiring of education or education development in general. The study deals with the financing of elementary education from the government sources only, i.e. public expenditure on education. The subject of the present study is to investigate long term trend and pattern of public expenditure on elementary education by the North-Eastern States. The education expenditure by government comprises revenue expenditure and capital expenditure, and budget data shows that capital expenditure is a meager part of total education expenditure (just about 2 percent approx.). Therefore, the study confine to the public expenditure incurred on elementary education on revenue account only.

The study is confined to expenditure which is incurred by the education departments of the respective states on the development of elementary education. This study does not include the expenditure incurred by the government departments other than the education department such as labour, agriculture, rural development, defence, or any other on the formal and on-job training of their respective personnel. The period of analysis for present study is 1990-91 to 2009-10. The data on public expenditure on elementary education at current prices has been taken from "Analysis of Budgeted Expenditure on Education Statistics", MHRD for the period 1990-91 to 2009-10. This data has been taken from various issues of above said publication i.e., publications for the year from 1990-91 to 2007-08. The figures for all the years show actual budgetary spending, except for the year

2008-09 and 2009-10 in which case it is in the form of revised estimates and budgeted estimates respectively. The data has been taken on Total public (i.e., both plan and non-plan expenditure) expenditure on elementary education on revenue account only for present study.

Public expenditure on elementary education by the North-Eastern States has been compared with combined expenditure of All States of the country. The term All States throughout the study refers to all the states of the country, and does not include the union territories as well as the Union government. The public expenditure on elementary education in North-Eastern States of India in absolute terms and relative terms has been analysed at the current prices and at constant prices.

Data for NSDP and Per Capita NSDP has been taken from "Handbook of Statistics on State Government Finances, 2010", RBI. Since the state-wise data on NSDP and Per Capita NSDP were based on multiple base level, thus chaining technique (also know as split technique) has been used to convert the data into a single base year. The continuous series of above said data has been converted on a single base of 2004-05 year. To convert the series with an old base year into the new base year, the following method has been adopted:

Value in year t with new base year =

Value with new base year for overlapping year

Value in year t with old base year

Value with old base year for overlapping year

Thus, we must have values for an overlapping observation expressed in both base years to calculate the quotient with which all values can be multiplied. Since all years are multiplied by the same quotient, the transformation keeps the relative magnitudes between years. It is of course also possible to transform the series with the new base year to the old base year by reversing the operation.

Per Capita expenditure on elementary education has been calculated. To get the per capita expenditure on elementary education by various states, the total public expenditure by a particular state has been divided by its respective population. The population data has been obtained form CSO's web-site (Central Statistical Organisation). In addition to this, State government budgeted expenditure has been taken from RBI publication.

NSDP shows the capacity to spend of a particular state. Whereas, Gross Fiscal Deficit and Interest Payment shows the limitations or restriction on spending of a particular state. Some states are bold enough to spend more on education even with higher levels of Gross Fiscal Deficit and Interest Payment. But it is not good for the fiscal health of the state. Gross Fiscal Deficit as a percentage of NSDP of a respective state has been calculated to analyse the fiscal prudence of the state. Higher levels of gross fiscal deficit as a percentage of NSDP restricts the public expenditure on education in that state, especially in an economically backward state.

Public expenditure on elementary education as percentage of NSDP of respective state has been calculated with the given data of NSDP and public expenditure on elementary education. This measure has been used to make state-wise comparison of expenditure (in current prices on revenue account).

Elementary education expenditure by a particular state as percentage of total budgeted expenditure has been also calculated to make state-wise comparison. It shows the relative priority given by a state to its education sector.

To assess the relative picture of North-Eastern States in regard of public expenditure on elementary education average annual growth rates of various variables has been calculated. It can be calculated by taking the average of annual growth rates of variable over the period under study.

# Average Annual Growth Rate = $\frac{Summation of Annual Growth Rates over the year}{1 - Number of Years}$

This present study is based exclusively on the secondary sources of data. Charts have been used at several places to depict the data in picture, which is more convenient way to make comparable analysis. The data for present study has been taken from Central Statistical Organisation, RBI (Various Publications), Ministry of Human Resource Development.

### **CHAPTER 4**

# ANALYSIS OF ELEMENTARY EDUCATION IN NORTH-EASTERN REGION

### 4.1 Introduction

An analysis of public expenditure on elementary education in North-Eastern region of the country has been made in this chapter of this study. It came out in various studies and National Policies on Education, as already mentioned in literature review part of this study, that due to 'Pure Public' and 'Merit' good nature of elementary education it should be fully financed by government. It has been also found that lower expenditure on elementary education and low quality of public schools is the major factor behind the non-achievement of universalisation of elementary education in the country. In the ongoing analysis in this chapter we will study the public expenditure on elementary education in North-Eastern states. We will also study the gross fiscal deficit and interest payment of North-Eastern states and its effects on social sector expenditure of state governments. Therefore, we will make effort to study the performance of North-Eastern States on elementary education front.

#### 4.2 North Eastern States versus All India

Table 1 depicts the public expenditure incurred on elementary education by All States and the North-Eastern States of India for the period of 20 years from 1990-91 to 2009-10 on revenue account at current prices. Although, public expenditure on elementary education at current price is not comparable for an individual state for twenty years, but it is meaningful for inter-state comparison. It is clear from the below table that the levels of the realized expenditure were successively increasing in case of both categories i.e., All State

and North-Eastern States, for all the years under study, except 2002-03 in case of North-Eastern States.

Table 1
Public Expenditure at current Prices on Elementary Education in India: All India vs.
North-Eastern States

(at Current Prices on Revenue Account)

(Rs. Crore)

Year	North-East	All states*	Percentage Share
1990-91	187.86	8283.58	2.27
1991-92	227.02	8283.58	2.74
1992-93	250.11	9030.24	2.77
1993-94	300.99	10341.79	2.91
1994-95	335.99	11936.85	2.81
1995-96	399.53	13839.02	2.89
1996-97	452.67	16138.47	2.80
1997-98	519.80	17916.71	2.90
1998-99	557.97	22079.39	2.53
1999-00	692.06	24819.63	2.79
2000-01	831.92	26331.43	3.16
2001-02	858.48	28594.38	3.00
2002-03	853.12	28826.72	2.96
2003-04	914.34	30794.71	2.97
2004-05	963.03	33487.52	2.88
2005-06	1036.54	38118.31	2.72
2006-07	1064.12	42574.68	2.50
2007-08	1221.90	49998.37	2.44
2008-09\$	1359.45	63009.60	2.16
2009-10#	1527.72	74452.14	2.05

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

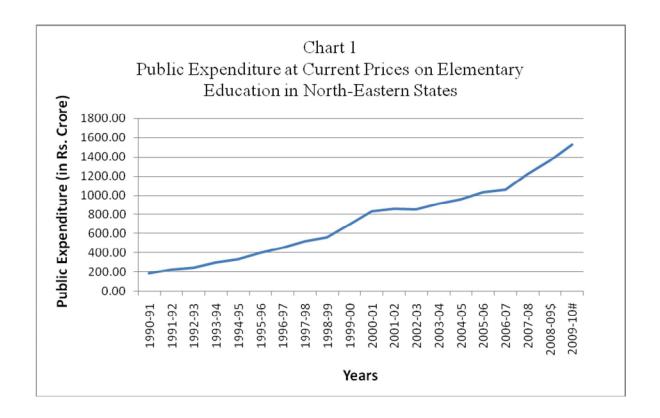
Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

The expenditure movements by and large follow the similar path. The expenditure level on elementary education by All States was at 8283.58 crore during 1990-91 and it went up to 74452.14 crore in 2009-10. Similarly, the total expenditure level for

<sup>#</sup> the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

<sup>\*</sup> All states refer to all the states excluding the UTs and Union Government.

North-Eastern States was at 187.86 crore during 1990-91 and it went up to 1527.72 crore in 2009-10. The expenditure levels were about 8.12 times and 8.99 times higher during 2009-10 as compared to the figures in 1990-91 for North-Eastern States and All States respectively.



The above line graph in **chart 1** shows that total public expenditure on elementary education at current prices by North-Eastern States is growing, shown by upward portion of curve in the chart.

The proportion of public expenditure on elementary education by North-Eastern States in All States is almost stable with very small yearly variations, hovering around 2 to 3 percent. It was highest during 2001-02 (3.00 percent) and lowest during 2009-10 (2.05 Percent). The trend shows that the share of expenditure by the North-Eastern States in All States has increased for the period 1990-91 to 2001-02 and then start declining for the rest of period. The below line graph in **chart 2** shows that total public expenditure

on elementary education at current prices by All States is also growing, shown by a upward sloping curve in the below chart. It is also estimated that average annual growth rate of public expenditure on elementary education are 11.87 percent and 12.44 percent for North-Eastern States and All States respectively. Thus, expenditure on elementary education raised more rapidly in All States compared to North-Eastern States.

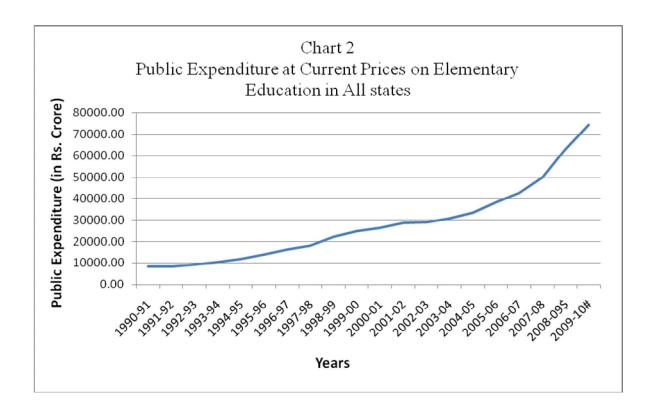


Table 2 shows the State-wise allocation of public expenditure on elementary education on revenue account in North-Eastern States. The figures are based on current prices. The state-wise public expenditure on elementary education for the year 1990-91 is as follows: Arunachal Pradesh (22.96 Rs. crore); Manipur (29.12 Rs. crore); Meghalaya (31.02 Rs. crore); Mizoram (23.08 Rs. crore); Nagaland (27.44 Rs. crore); Sikkim (13.64 Rs. crore); Tripura (40.60 Rs. crore); and the All North-Eastern States (187.86 Rs. crore). This expenditure has increased to following levels by 2009-10: Arunachal Pradesh (224.15 Rs. crore); Manipur (196.99 Rs. crore); Meghalaya (244.13 Rs. crore); Mizoram (215.57 Rs. crore); Nagaland (230.31 Rs. crore); Sikkim (117.91 Rs. crore); Tripura (298.66 Rs.

crore); and the All North-Eastern States (1527.72 Rs. crore). The level of expenditure during 2009-10 was higher than the level during 1990-91 for all States and it has increased by the following rate over the 20 year period under the consideration of present study: Arunachal Pradesh (9.76 times); Manipur (6.76 times); Meghalaya (7.87 times); Mizoram (9.34 times); Nagaland (8.39 times); Sikkim (8.65 times); Tripura (7.36 times); and the All North-Eastern States (8.13 times).

Table 2
State-Wise Public Expenditure on Elementary Education by the North-Eastern
States

(at current prices on Revenue Account)

(Rs. Crore)

	Arunachal							
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	North-East
1990-91	22.96	29.12	31.02	23.08	27.44	13.64	40.60	187.86
1991-92	29.47	34.77	39.95	27.86	29.71	15.26	50.01	227.02
1992-93	31.27	41.07	43.73	32.03	34.52	17.48	50.00	250.11
1993-94	34.64	49.02	49.50	36.70	59.13	18.48	53.52	300.99
1994-95	39.58	59.59	51.20	34.30	62.22	24.20	64.91	335.99
1995-96	43.30	67.99	65.58	39.10	71.36	29.59	82.61	399.53
1996-97	50.60	71.30	85.03	54.58	65.83	35.22	90.12	452.67
1997-98	59.38	98.26	89.37	54.43	73.64	35.10	109.62	519.80
1998-99	69.46	80.72	88.72	52.56	82.59	69.10	114.81	557.97
1999-00	69.46	150.48	121.35	78.23	93.24	64.48	114.81	692.06
2000-01	80.34	123.53	129.36	96.35	132.34	69.46	200.55	831.92
2001-02	86.90	153.86	123.73	96.46	114.93	71.59	211.01	858.48
2002-03	86.90	131.61	124.61	91.10	120.13	64.35	234.42	853.12
2003-04	103.89	111.20	128.65	100.68	134.22	64.26	271.45	914.34
2004-05	108.42	146.92	143.36	100.68	134.01	76.90	252.74	963.03
2005-06	130.71	177.28	155.17	138.09	163.97	87.56	183.75	1036.54
2006-07	153.51	134.58	155.88	127.91	191.48	92.09	208.67	1064.12
2007-08	190.36	193.06	186.23	146.25	205.67	112.29	188.05	1221.90
2008-09\$	212.74	199.99	201.02	162.93	225.61	125.68	231.48	1359.45
2009-10#	224.15	196.99	244.13	215.57	230.31	117.91	298.66	1527.72

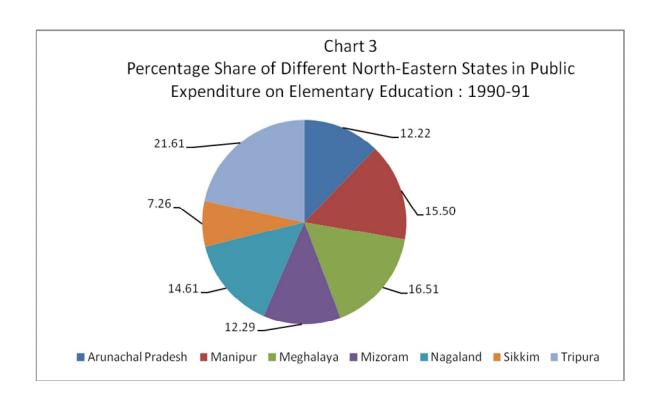
Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

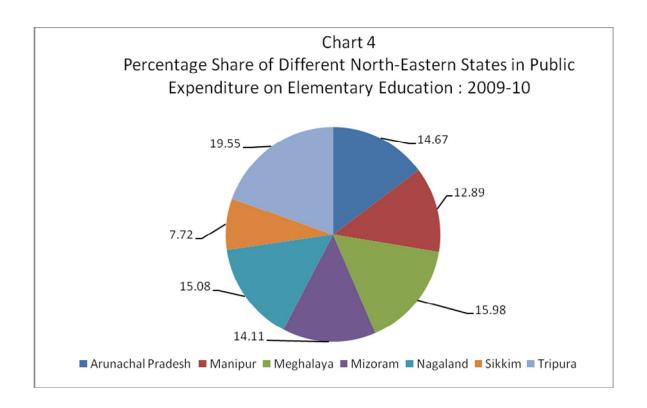
But, it is to be noted that the elementary education sector had not experienced the enhanced flow of resources for each and every year. Some years of the studied period for every state has seen dip in expenditure levels. But as a whole the North-Eastern State has seen a dip in only one year which is for 2002-03.

Table 3 shows the percentage share of different states in total public expenditure on elementary education by North-Eastern States. Out of total public expenditure on elementary education by the North-Eastern States, approximately 20 percent has been incurred by Tripura. In 1990-91, states share in total public expenditure on elementary education is as follows: Arunachal Pradesh (12.22 percent); Manipur (15.50 percent); Meghalaya (16.51 percent); Mizoram (12.29 percent); Nagaland (14.61 percent); Sikkim (7.26 percent); and Tripura (21.61 percent). The same results are shown in below **chart 3**. It can be seen from this pie-chart that Tripura Spent largest and Sikkim spent smallest share of public expenditure on elementary education among North-Eastern States in 1990-91.



The share of states has interchanged little bit by 2009-10 and percentage share of various states for the year 2009-10 is as follows: Arunachal Pradesh (14.67 percent); Manipur (12.89 percent); Meghalaya (15.98 percent); Mizoram (14.11 percent); Nagaland (15.08 percent); Sikkim (7.72 percent); Tripura (19.55 percent).

The same results can be concluded from **chart 4**. It can be seen from below pie-chart that the share of public expenditure on elementary education by North-Eastern States has marginally changed in 2009-10. In 2009-10, the top most and lowest rank of states remain same as in 1990-91, i.e., Tripura remain on top position and Sikkim on lowest position.



Arunachal Pradesh, Mizoram, Nagaland, and Sikkim are the States that have seen the increase in their share of elementary expenditure to total public expenditure on elementary education over the period under consideration of this study. The share of Nagaland and Sikkim has increased marginally. On the other hand Manipur, Meghalaya,

and Tripura are the states which have seen decline in their share to total public expenditure on elementary education. Manipur has seen the drastic decline in its share from 15.50 percent in 1990-1991 to 12.89 percent in 2009-10. But no State has seen a drastic change in its share to total Public expenditure on elementary education over the period from 1990-91 to 2009-10.

Table 3
Percentage share of Different North-Eastern States in Public Expenditure on Elementary Education

(in Current Prices on Revenue Account)

	Arunachal							
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
1990-91	12.22	15.50	16.51	12.29	14.61	7.26	21.61	100.00
1991-92	12.98	15.32	17.60	12.27	13.09	6.72	22.03	100.00
1992-93	12.50	16.42	17.48	12.81	13.80	6.99	19.99	100.00
1993-94	11.51	16.29	16.45	12.19	19.65	6.14	17.78	100.00
1994-95	11.78	17.73	15.24	10.21	18.52	7.20	19.32	100.00
1995-96	10.84	17.02	16.42	9.79	17.86	7.41	20.68	100.00
1996-97	11.18	15.75	18.78	12.06	14.54	7.78	19.91	100.00
1997-98	11.42	18.90	17.19	10.47	14.17	6.75	21.09	100.00
1998-99	12.45	14.47	15.90	9.42	14.80	12.38	20.58	100.00
1999-00	10.04	21.74	17.53	11.30	13.47	9.32	16.59	100.00
2000-01	9.66	14.85	15.55	11.58	15.91	8.35	24.11	100.00
2001-02	10.12	17.92	14.41	11.24	13.39	8.34	24.58	100.00
2002-03	10.19	15.43	14.61	10.68	14.08	7.54	27.48	100.00
2003-04	11.36	12.16	14.07	11.01	14.68	7.03	29.69	100.00
2004-05	11.26	15.26	14.89	10.45	13.92	7.99	26.24	100.00
2005-06	12.61	17.10	14.97	13.32	15.82	8.45	17.73	100.00
2006-07	14.43	12.65	14.65	12.02	17.99	8.65	19.61	100.00
2007-08	15.58	15.80	15.24	11.97	16.83	9.19	15.39	100.00
2008-09\$	15.65	14.71	14.79	11.99	16.60	9.25	17.03	100.00
2009-10#	14.67	12.89	15.98	14.11	15.08	7.72	19.55	100.00

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

### 4.3 Elementary Education, State Budget and State Income

The share of NSDP to Elementary Education is treated as an important indicator which shows the States commitment/progressiveness to its social sector. It also shows the relative priority being accorded to education sector by the state. Over the years the government is seeking to increase the public spending on education to at least 6 percent of GDP. In addition to this, the government is spending 49.97 percent of total education expenditure (both plan and non-plan) on elementary education in 2009-10 in the country.

**Table 4** shows the Public Expenditure on Elementary Education as Percentage of the Respective NSDPs of the North-Eastern States. This share as a whole for North-Eastern States has increased from 2.95 percent in 1990-91 to 3.33 percent in 2009-10. It shows a marginal increase over the 20 years time period. The public expenditure on elementary education as percentage of the respective NSDPs for year 1990-91 for various states is as follows: Arunachal Pradesh (3.00 percent); Manipur (2.19 percent); Meghalaya (2.02 percent); Mizoram (4.93 percent in 1993-94); Nagaland (2.35 percent); Sikkim (4.52 percent in 1993-94); Tripura (2.59 percent); and North-Eastern States (2.95 percent). This share has reached to following levels in 2009-10: Arunachal Pradesh (3.55 percent); Manipur (2.54 percent); Meghalaya (2.22 percent); Mizoram (4.25 percent); Nagaland (3.33 percent in 2007-08); Sikkim (4.00 percent); Tripura (2.35 percent); and North-Eastern States (3.33 percent).

Inter-state analysis shows that this share has increased in 2009-10 as compared to its levels in 1990-91 for all states except Mizoram, Sikkim, and Tripura for the period under study. It can also be seen from the table that Mizoram and Sikkim spent a large part of their NSDP on education as compare to other North-Eastern States. In addition to this the share of Mizoram, Sikkim, and Tripura has declined over the years. Sikkim has seen a wide variation in its share of public expenditure on elementary education as a percentage of NSDP. While other States shows a small variation and their proportion remain stable over the years.

Table 4
Public Expenditure on Elementary Education as Percentage of NSDP of Respective
North-Eastern States

(in Current Prices on Revenue Account)

	Arunachal							
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	North-East
1990-91	3.00	2.19	2.02	N.A.	2.35	N.A.	2.59	2.95
1991-92	3.37	2.41	2.48	N.A.	2.45	N.A.	3.11	3.36
1992-93	3.49	2.72	2.88	N.A.	2.49	N.A.	3.00	3.58
1993-94	3.38	3.18	3.05	4.93	4.20	4.52	2.89	3.50
1994-95	3.59	3.61	2.88	4.24	3.79	5.46	3.36	3.59
1995-96	3.20	3.57	3.06	3.78	3.83	5.64	3.48	3.57
1996-97	3.70	3.19	3.61	4.61	3.16	5.90	3.15	3.57
1997-98	3.94	3.87	3.32	4.42	3.06	5.11	3.17	3.58
1998-99	4.06	2.81	2.77	3.83	3.36	8.66	2.89	3.40
1999-00	3.78	4.52	3.36	5.04	3.55	7.56	2.39	3.72
2000-01	3.93	3.89	3.20	5.59	4.17	7.29	3.67	4.04
2001-02	3.61	4.53	2.71	5.00	3.09	6.72	3.35	3.67
2002-03	3.68	3.72	2.57	4.28	2.86	5.36	3.53	3.42
2003-04	3.85	2.77	2.42	4.39	2.98	4.77	3.64	3.31
2004-05	3.46	3.21	2.48	4.19	2.79	5.09	3.09	3.17
2005-06	3.88	3.46	2.44	5.18	3.12	5.05	2.03	3.09
2006-07	4.23	2.45	2.06	4.34	3.36	4.92	2.09	2.86
2007-08	4.63	3.17	2.20	4.29	3.33	5.25	1.74	2.97
2008-09\$	4.40	2.92	2.11	3.89	N.A.	5.05	1.97	3.43
2009-10#	3.55	2.54	2.22	4.25	N.A.	4.00	2.35	3.33

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

**Table 5** shows the public expenditure on elementary education as percentage of the General Budget expenditure of the respective States. The public expenditure on elementary education as percentage of total budget expenditure of North-Eastern states shows that Meghalaya performed better than other states in the beginning of 90s and spend largest share in the region on elementary education. But by 2009-10, it is the Mizoram state which spend largest share in terms of percentage of its total budget on elementary education. The below table also indicates that this share has declined for all

states during over the twenty year period of study i.e., from 1990-91 to 2009-10, except Mizoram where this share actually increases. This shows the relative importance attached to elementary education in budget expenditure of concerned state. Thus, it is clear that funds are shifted from elementary education sector to other sectors.

TABLE 5
Public Expenditure on Elementary Education as Percentage of the General Budgets of the Respective North-Eastern States

(Rs. Crore)

							(1.101 01 01 0)
	Arunachal						
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	5.77	6.43	7.64	4.60	4.97	7.45	6.62
1991-92	6.65	6.52	8.12	6.73	4.58	6.69	7.39
1992-93	6.22	4.98	8.05	6.54	4.03	6.99	7.61
1993-94	6.02	7.70	7.26	7.03	6.34	7.03	6.82
1994-95	5.73	8.83	8.72	5.79	6.87	4.03	7.38
1995-96	5.39	8.38	8.42	5.47	6.86	2.98	8.34
1996-97	5.68	7.03	10.83	6.74	6.01	2.84	7.64
1997-98	6.11	8.67	10.50	6.26	5.99	2.52	8.12
1998-99	6.92	7.23	8.80	5.89	5.54	4.26	7.50
1999-00	6.33	8.45	10.16	6.74	6.24	3.98	6.48
2000-01	6.66	8.94	9.08	7.48	7.21	7.33	9.39
2001-02	6.29	7.27	8.87	7.23	5.69	3.75	8.56
2002-03	6.38	6.10	7.84	6.48	6.27	3.02	9.24
2003-04	4.74	4.79	7.27	5.51	5.63	4.35	9.82
2004-05	5.20	5.65	6.93	5.54	5.89	3.56	8.47
2005-06	5.36	6.46	7.73	6.36	5.84	4.08	5.57
2006-07	5.51	3.71	6.72	5.57	6.21	4.09	6.32
2007-08	6.20	5.19	6.72	5.71	5.77	3.98	4.90
2008-09\$	4.36	4.22	5.06	5.09	5.14	3.70	4.52
2009-10#	4.90	4.35	5.33	6.18	4.82	3.34	4.91

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

For year 1990-91, the North-Eastern States has spent following percentage share of their general budget on elementary education: Arunachal Pradesh (5.77 percent);

Manipur (6.43 percent); Meghalaya (7.64 percent); Mizoram (4.60 percent); Nagaland (4.97 percent); Sikkim (7.45 percent); and Tripura (6.62 percent). Similarly for the period 2009-10, these figures are as follows: Arunachal Pradesh (4.90 percent); Manipur (4.35 percent); Meghalaya (5.33 percent); Mizoram (6.18 percent); Nagaland (4.82 percent); Sikkim (3.34 percent); and Tripura (4.91 percent). In case of Meghalaya and Tripura, this share has shown wide variation. The lowest and highest value achieved in case of Meghalaya is 5.06 in 2008-09 and 10.83 in 1996-97 respectively. Similarly in case of Tripura these figures are 4.52 in 2008-09 and 9.82 in 2003-04 respectively.

**Table 6** provides the public expenditure on elementary education as percentage of the total public expenditure on education of the concerned state. With the help of this indicator we can evaluate whether the funds are shifted to other sub-sectors in education sector and where the elementary education stands in priority list under the education sector in a state.

Table 6
Public Expenditure on Elementary Education as Percentage of the Total Public Expenditure on Education of the Concerned States

(in Current Prices on Revenue Account)

	Arunachal						
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	62.27	43.12	55.47	54.30	58.34	57.39	39.28
1991-92	66.12	40.80	59.19	57.02	60.06	57.11	43.29
1992-93	62.28	42.95	57.77	57.49	61.33	58.02	40.70
1993-94	63.40	45.43	53.67	57.16	71.41	56.65	39.91
1994-95	61.78	47.82	59.69	52.34	70.40	62.16	43.38
1995-96	61.16	47.15	59.92	50.36	72.56	65.09	48.54
1996-97	58.38	61.24	51.09	53.83	63.15	64.06	41.38
1997-98	59.00	52.05	67.46	53.21	64.59	60.28	49.10
1998-99	61.49	44.74	55.16	53.26	64.57	63.22	46.95
1999-00	61.49	46.10	63.71	55.44	62.80	60.31	46.95
2000-01	59.78	49.09	61.16	57.09	71.48	63.17	49.38
2001-02	63.06	56.11	55.88	55.61	63.20	61.86	52.34
2002-03	63.01	48.62	57.62	49.95	62.62	51.90	52.39
2003-04	64.02	45.91	54.41	52.88	57.93	49.14	57.31
2004-05	57.86	47.30	54.45	52.88	61.06	50.12	54.05
2005-06	64.81	46.02	54.76	56.29	58.31	47.74	42.69
2006-07	67.41	43.28	51.13	52.36	63.88	47.93	43.08
2007-08	67.82	52.43	56.87	51.77	61.35	49.44	38.03
2008-09\$	68.28	50.06	48.82	49.88	64.49	45.99	38.82
2009-10#	60.18	43.88	48.62	51.67	62.38	34.87	38.08

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

The above table shows that Arunachal Pradesh, Meghalaya, Mizoram, and Nagaland are the States which spend more than 50 percent of their total education budget on elementary education. Other states also observe more than 50% of total education budget being spent on elementary education, but they are not consistently spending such large proportion on elementary education. On the other hand, this share has been varying between 40 - 60 percent for all North-Eastern States over the years under consideration. It

can also be said that this share of all North-Eastern States has declined from 1990-91 to 2009-10 except Manipur and Nagaland. The share of Manipur has increased marginally. The state of Meghalaya and Sikkim has seen the largest decline in their share of elementary education as percentage of total expenditure on education in the respective state. The share of elementary education in total expenditure on education was at 55.47 percent during 1990-91 in Meghalaya and declined to 48.62 percent in 2009-10. Similarly, this share has been declined from 57.39 percent to 34.87 percent in Sikkim during the same time period. This is a steep decline of 22.52 percent in 20 year. This shows decline in importance of elementary education in these States. This may be either due to already achievement of universalisation of elementary education or higher priorities being accorded to other subsectors of education sector.

### 4.4 Per Capita Expenditure Level

The priority accorded to elementary education by various states becomes very clear when we examine the resources allocated to elementary education on per capita basis. The per capita public spending on elementary education has been worked out by dividing the level of elementary education spending by the population of concerned state.

**Table 7** depicts the per capita public expenditure on elementary education at current prices. Below table shows that the per capita expenditure on elementary education has been increased in North-Eastern States over the period under consideration of present study. Arunachal Pradesh has seen highest growth in per capita public expenditure on elementary education. The per capita public expenditure on elementary education has grown by 582 percent in 20 years in Arunachal Pradesh. It has increased from Rs. 269.13 in 1990-91 to Rs. 1835.78 in 2009-10.

Table 7
Per Capita Public Expenditure on Elementary Education of different North-Eastern
States

(in Current Prices on Revenue Account)

(in Rupees)

	Arunachal						
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	269.13	160.17	176.84	337.95	236.53	339.57	149.18
1991-92	335.98	186.73	220.93	396.63	240.15	369.22	178.98
1992-93	347.84	215.54	235.61	442.07	266.90	411.53	174.89
1993-94	372.51	251.08	260.67	494.00	431.59	426.77	182.90
1994-95	414.90	298.29	262.69	448.94	434.33	544.99	217.54
1995-96	442.76	332.77	327.76	498.67	476.46	648.84	272.11
1996-97	505.48	341.32	413.95	677.96	420.40	750.87	292.33
1997-98	579.87	460.22	423.75	659.72	449.81	726.81	351.12
1998-99	664.70	370.02	409.80	622.01	469.26	1387.63	364.03
1999-00	651.60	675.44	546.14	905.38	504.09	1254.53	361.28
2000-01	740.42	543.04	567.13	1089.91	680.75	1305.65	628.28
2001-02	782.92	662.10	528.99	1069.42	562.45	1296.97	659.81
2002-03	775.24	555.03	526.67	997.84	558.98	1159.50	719.51
2003-04	915.36	459.48	536.49	1069.89	-	1141.33	821.32
2004-05	943.63	594.90	590.68	1034.72	748.26	1358.71	754.67
2005-06	1123.90	703.70	631.30	1383.74	905.94	1528.15	542.02
2006-07	1303.11	523.82	626.53	1249.72	1040.63	1585.09	608.02
2007-08	1596.96	737.05	739.59	1393.09	1099.82	1912.91	541.31
2008-09\$	1763.99	749.04	788.91	1513.23	1186.81	2112.34	658.55
2009-10#	1835.78	724.03	946.99	1952.02		1955.41	839.64

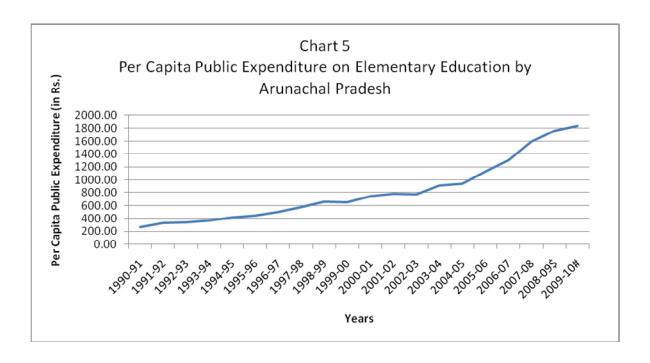
Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

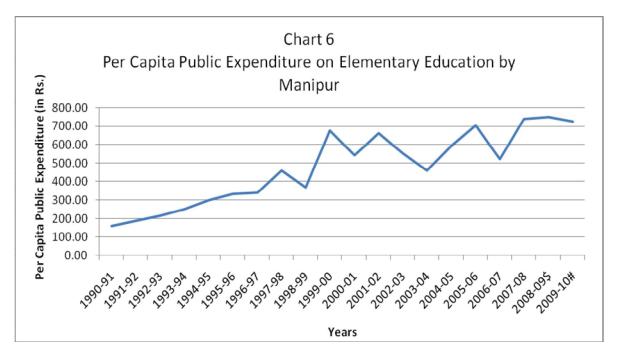
# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Analysis of Budgeted Expenditure on Education, MHRD, Govt. of India

On the other hand, Manipur has attended the lowest growth in per capita public expenditure on elementary education among the North-Eastern States. It has grown by almost 352 percent in 20 year period.

Line graph in **Chart 5** and **Chart 6** shows the per capita public expenditure on elementary education by Arunachal Pradesh and Manipur respectively. The state of Manipur has seen more ups and downs in per capita public expenditure on elementary education over the period from 1990-91 to 2009-10.





The per capita public expenditure on elementary education has been grown by the following rate in various North-Eastern states during 1990-91 to 2009-10: Arunachal Pradesh (582.11 percent); Manipur (352.04 percent); Meghalaya (435.50 percent); Mizoram (477.61 percent); Nagaland (401.76 percent); Sikkim (475.86 percent); and Tripura (462.82 percent). Of North-Eastern States Sikkim, Mizoram, Arunachal Pradesh, and Nagaland are the States which spends more than Rs. 1000 p.a. on per capita public expenditure on elementary education in 2009-10, whereas Meghalaya, Tripura, and Manipur are the states which spend less.

### 4.5 Fiscal Discipline of North-Eastern States

A state has some restrictions over its expenses; it can not go on spending as it desires. There are some fiscal disciplines, and a state has to keep its expenditure under such limitations. FRBM Act, 2004 (Fiscal Responsibility Budget Management Act, 2004) is an central government act which puts the upper cap on fiscal and Revenue deficit of both Central as well as State governments under some specified limitations. Similarly, Interest Payments can tell us about the level and pattern of borrowings of a State. Therefore, an evaluation of gross fiscal deficit and interest payments can give us a clear picture about the expenditure and revenue scenario and its implication for public expenditure on elementary education.

**Table 8** shows the State-wise gross fiscal deficit in North-Eastern States. The figures are given in Rs. Crore and Minus sign (-) indicates surplus in deficit indicator. It can be seen from the table that there are very few times that a state has observe a surplus in its budget. The state of Meghalaya and Sikkim has never seen a surplus in its budget or has always felt a deficit in its budget over the period under study. On the other hand Manipur, Mizoram, Nagaland, and Tripura have seen only once a surplus in their accounts over the 20 year period under the consideration of this study. Whereas, Arunachal Pradesh

is the only state which has observe surplus in its accounts about 4 times in its budget from 1990-91 to 2009-10 period.

Table 8
State-Wise Gross Fiscal Deficit of North-Eastern States
(Rs. crore)

	Arunachal						
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	26	40	41	-94	102	20	86
1991-92	-20	69	72	5	96	41	94
1992-93	-9	18	93	60	138	34	23
1993-94	16	-20	88	8	174	31	111
1994-95	73	62	35	38	239	46	110
1995-96	40	105	52	71	231	40	34
1996-97	70	168	23	125	184	56	122
1997-98	121	188	127	124	204	67	196
1998-99	55	106	147	132	243	147	118
1999-00	59	656	209	179	249	93	290
2000-01	210	234	250	375	359	51	445
2001-02	275	340	221	422	366	67	538
2002-03	214	249	161	315	443	10	537
2003-04	250	286	202	306	-157	50	341
2004-05	386	449	313	234	218	186	240
2005-06	256	271	179	397	306	149	110
2006-07	-106	475	75	191	156	97	-131
2007-08	-16	-102	214	392	397	64	17
2008-09\$	1015	473	125	372	721	345	756
2009-10#	1118	407	614	212	591	457	1277

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

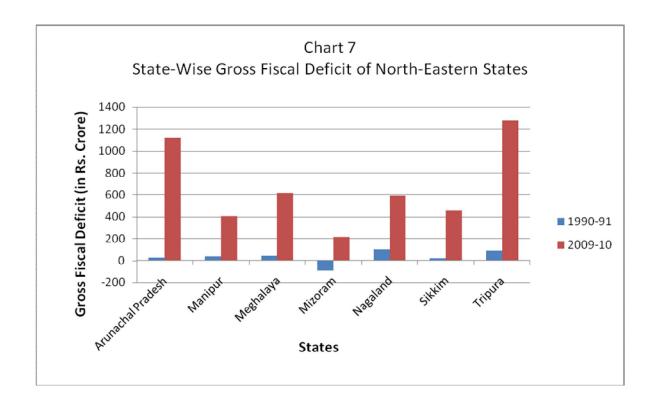
# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Minus sign (-) indicates surplus in deficit indicator.

Sources: Handbook of Statistics on State Government Finances, 2010, RBI

It can also be seen from above table that gross fiscal deficit has increased at phenomenal rate in all North-Eastern States. This may be due to economically backwardness of these states. The raising fiscal deficit put a restriction on the levels of social sector expenditure of these states mainly under the premises of FRBM Act.

Bar diagram in **Chart 7** shows the state-wise gross fiscal deficit (GFD) for year 1990-91 and 2009-10. It can be seen from below chart that Mizoram, Arunachal Pradesh, and Sikkim had the lowest fiscal deficit in 1990-91. On the other hand, in 2009-10 Tripura and Arunachal Pradesh have highest fiscal deficit whereas Mizoram has the lowest.



On the other hand, the level of deficit has been growing over the years. The above bar-diagram shows the state-wise gross fiscal deficit for 1990-91 and 2009-10. The level of gross deficit in 1990-91 in North-Eastern States is as follows: Arunachal Pradesh (Rs. 26 crores); Manipur (Rs. 40 crores); Meghalaya (Rs. 41 crores); Mizoram (Rs. -94 crores); Nagaland (Rs. 102 crores); Sikkim (Rs. 20 crores); and Tripura (Rs. 86 crores). This deficit has increased to following levels by 2009-10: Arunachal Pradesh (Rs. 1118 crores); Manipur (Rs. 407 crores); Meghalaya (Rs. 614 crores); Mizoram (Rs. 212 crores); Nagaland (Rs. 591 crores); Sikkim (Rs. 457 crores); and Tripura (Rs. 1277 crores).

Below **Table 9** shows the state-wise gross fiscal deficit as a percentage of NSDP of the concerned state. It can be seen from below table that this proportion varies from state to state but it is large proportion of NSDP. It means a large expenditure of state is financed by borrowings. It shows the poor fiscal conditions of these states. And since the introduction of FRBM Act, 2004 we could expect that there is pressure on state government to keep it within specific limits.

Table 9
State-Wise Gross Fiscal Deficit as a percentage of NSDP of the concerned
North-Eastern state

		110	ntii Lastoii	State			
	Arunachal						
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	3.40	3.01	2.67	-	8.75	-	5.49
1991-92	2.29	4.79	4.46	-	7.91	-	5.84
1992-93	1.00	1.19	6.13	-	9.95	-	1.38
1993-94	1.56	1.30	5.42	1.07	12.35	7.58	5.99
1994-95	6.62	3.76	1.97	4.70	14.56	10.37	5.69
1995-96	2.96	5.52	2.42	6.86	12.39	7.63	1.43
1996-97	5.12	7.52	0.98	10.56	8.84	9.38	4.26
1997-98	8.04	7.40	4.72	10.07	8.48	9.75	5.68
1998-99	3.22	3.69	4.59	9.62	9.88	18.41	2.97
1999-00	3.21	19.70	5.79	11.54	9.49	10.91	6.04
2000-01	10.26	7.38	6.19	21.75	11.30	5.35	8.15
2001-02	11.41	10.01	4.85	21.89	9.85	6.29	8.55
2002-03	9.07	7.03	3.32	14.81	10.57	0.83	8.08
2003-04	9.27	7.12	3.81	13.35	3.49	3.71	4.57
2004-05	12.32	9.81	5.42	9.75	4.54	12.31	2.94
2005-06	7.59	5.29	2.82	14.90	5.82	8.59	1.22
2006-07	2.92	8.65	0.99	6.49	2.74	5.18	1.31
2007-08	0.39	1.68	2.53	11.49	6.42	2.99	0.16
2008-09\$	21.01	6.90	1.31	8.88	-	13.85	6.45
2009-10#	17.73	5.24	5.59	4.17	-	15.49	10.03

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Minus sign (-) indicates surplus in deficit indicator.

Sources: Handbook of Statistics on State Government Finances, 2010, RBI

Table 10 State-Wise Interest Payment of different North-Eastern States

(Rs. crore)

	Arunachal						` ,
Year	Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1990-91	16	31	18	33	44	10	38
1991-92	21	31	22	13	54	15	50
1992-93	22	45	25	28	58	19	59
1993-94	28	49	33	23	62	22	68
1994-95	35	52	45	30	80	26	76
1995-96	42	58	50	35	79	29	89
1996-97	53	66	56	48	98	33	110
1997-98	60	79	61	66	113	41	120
1998-99	71	91	69	74	137	53	141
1999-00	80	132	96	94	163	68	185
2000-01	121	177	114	101	194	79	226
2001-02	109	191	129	146	223	84	253
2002-03	125	255	151	133	215	90	291
2003-04	142	215	170	167	235	93	333
2004-05	147	266	177	182	250	99	356
2005-06	156	238	191	185	254	103	371
2006-07	188	289	203	229	280	115	388
2007-08	155	299	189	208	270	118	396
2008-09\$	228	315	230	229	332	141	393
2009-10#	253	338	246	240	379	170	390

Note: \$ the figures for the year 2008-09 are based on Revised estimates (R.E.)

# the figures for the year 2009-10 are based on Budgeted estimates (B.E.)

Sources: Handbook of Statistics on State Government Finances, 2010, RBI

Interest payments are the compulsory payments that a state has to bear in lieu of past borrowing. If these increases by a greater level then it leads to disrupt the fiscal condition of a state. Thus a State has to keep its level under the limits, so that it won't hurt the future fiscal condition.

**Table 10** gives the state-wise detail of interest payment of various North-Eastern States over the period from 1990-91 to 2009-10. The above table shows that interest burden of every North-Eastern States of India has increased over the period under consideration of present study. The level of interest payments in 1990-91 in North-Eastern States is as follows: Arunachal Pradesh (Rs. 16 crores); Manipur (Rs. 31 crores); Meghalaya (Rs. 18 crores); Mizoram (Rs. 33 crores); Nagaland (Rs. 44 crores); Sikkim (Rs. 10 crores); and Tripura (Rs. 38 crores). This payment has increased to following levels by 2009-10: Arunachal Pradesh (Rs. 253 crores); Manipur (Rs. 338 crores); Meghalaya (Rs. 246 crores); Mizoram (Rs. 240 crores); Nagaland (Rs. 379 crores); Sikkim (Rs. 170 crores); and Tripura (Rs. 390 crores).

At simple growth rate interest payments growth is highest in Sikkim. It has grown by 1600 percent in 20 year period. On the other hand, interest payment has grown by 1480 percent and 1266 percent in Arunachal Pradesh and Meghalaya. Interest payments grown by lowest percentage in Manipur, it has grown by 627 percent over the 20 year period under the consideration of present study.

### 4.6 Relative Growth Rates

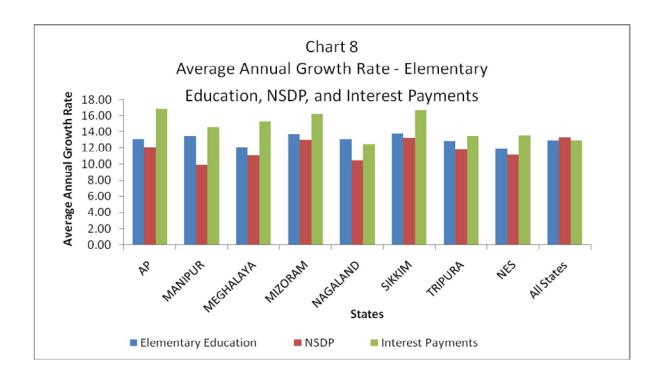
The average annual trend of growth rates at current prices for six variables, i.e. public expenditure on elementary education, public expenditure on overall education, state income (i.e., NSDP), Budgeted Expenditure of State, Gross Fiscal Deficit (GFD), and Interest Payments for All States, North-East States and for each of the State within the North-Eastern Region is reported for 20 year period under the consideration of present study (i.e., 1990-91 to 2009-10) in a comparable manner is given in below **Table 11**.

It is clear from below table that average annual growth rate in public spending on elementary education in North-Eastern States (11.87 percent) is lower by one percent than the level of All States (12.90 percent). Although, some of individual States had performed better than the All States in terms of average annual growth rates. Similar pattern could be observed for Education Overall, NSDP, and State Budget Expenditures by

looking at the below table. The growth rate of these variables is lower for North-Eastern States than for the All States.

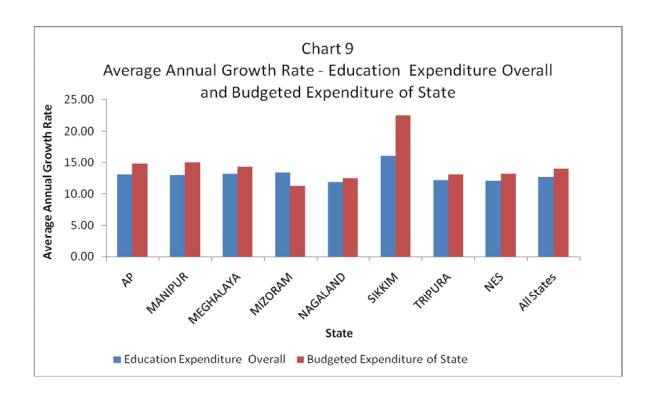
Table 11										
Average Annual Growth Rates of Different States										
	3									
	Elementary	Education		Budgeted						
	Education	Expenditure		Expenditure		Interest				
State	Expenditure	Overall	NSDP	of State	GFD	Payments				
(1)	(2)	(3)	(4)	(5)	(6)	(7)				
					-					
ARUNACHAL PRADESH	13.00	13.16	11.99	14.80	339.78	16.79				
MANIPUR	13.41	13.07	9.88	15.06	-33.87	14.53				
MEGHALAYA	12.05	13.22	11.06	14.32	54.60	15.27				
MIZORAM	13.61	13.42	12.91	11.31	85.91	16.14				
NAGALAND	13.05	12.00	10.44	12.52	0.65	12.41				
SIKKIM	13.75	16.13	13.20	22.52	63.82	16.61				
TRIPURA	12.77	12.23	11.82	13.12	247.87	13.42				
NORTH-EASTERN STATES										
(NES)	11.87	12.12	11.10	13.22	30.11	13.51				
All STATES	12.90	12.77	13.27	14.04	15.94	12.84				

The average annual growth rate of All States for Education Expenditure Overall, NSDP, and Budgeted Expenditure of State is 12.77 percent, 13.27 percent, and 14.04 percent respectively. Whereas, the North-Eastern States grown by only 12.12 percent, 11.10 percent, and 13.22 percent respectively for the same variables. The State specific growth rates shows variation and some of North-Eastern States performed better than the All States in the region on variables mentioned in above table.

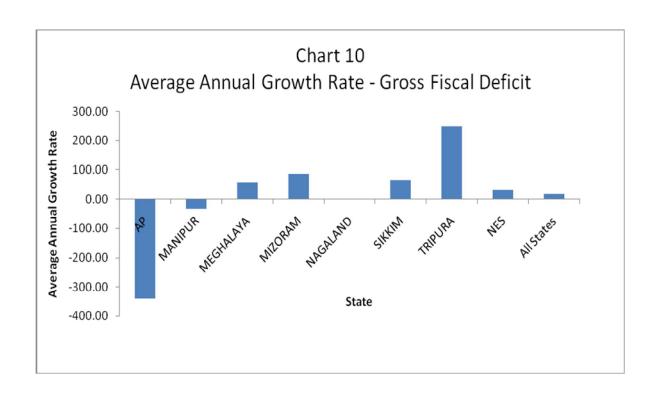


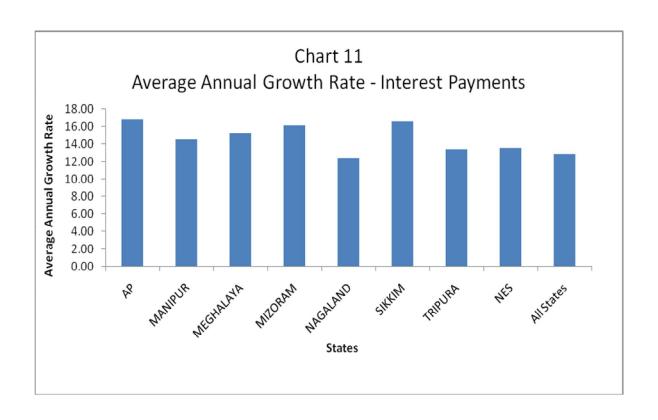
The above bar-diagram in **chart 8** shows that there is strong correlation between average annual growth rate of NSDP and interest payments. The above chart also shows that the average annual growth rate of elementary education is higher than growth rate of NSDP but lower than the growth rate of interest payments. It can also be observe from above chart that even with growing interest burden the North-Eastern States are managing their public expenditure on elementary education. Thus, all North-Eastern states performed better in terms of elementary education with limited resources.

The below bar-diagram in **chart 9** shows the annual average growth rate of public expenditure on education expenditure overall and budgeted expenditure of state. It can be seen from this chart that all states of North-Eastern region, North-Eastern States, and All States have higher growth in budgeted expenditure of state as compared to public expenditure on education expenditure overall, except Mizoram. In case of Sikkim, the gap between two growth rates is higher as compared to other states of North-Eastern region.



Column 6 of above **table 11** shows the average annual growth rate of Gross Fiscal Deficit. It can be observed from the calculated data that abrupt changes have been taken place in case of Arunachal Pradesh and Tripura. But the actual figures show that Gross Fiscal Deficit has increased tremendously in all states of North-Eastern region. In addition to this the North-Eastern States has seen more growth in Gross Fiscal Deficit as compared to All States. It may be due to heavily dependence of North-Eastern States on agriculture, forest and natural resources. The same analysis can be made by looking the below bar-diagram of average annual growth rate of gross fiscal deficit in **Chart 10**.





Similarly column 7 of above **table 11** shows the average annual growth rate of Interest Payment. It can be observed from the figures that interest payment burden has grown more rapidly in case of North-Eastern States and all States of North-Eastern region as compare to All States. The same conclusion can be drawn from the above bar-diagram. It can be seen from above **chart 11** that growth of Interest Payment is lowest in case of All States compare to all states in North-Eastern region and North-Eastern States, except Nagaland.

### CHAPTER 5

## **CONCLUSION**

India is one of the fastest developing economies in the world. The 1991 policy reforms bring dramatic changes in the economy. In 21<sup>st</sup> century India has been recognized by many as the economic power. The per capita income levels risen at a faster pace since 1990s as compared to previous levels. The country has faced the recession of 2008 bravely and sustained it whereas other developed and developing economies face challenges and seen dramatic decline in growth rates & rise in unemployment rates. These trends show that India is doing outstanding on economic front.

But in terms of various social sector indicators the country is lagging behind. India has performed even worse than many of developing countries. Even the rank of India in UN publications on many fronts attained lower than many other developing countries. According to HDR 2011 (Human Development Report), the HDI for India was 0.547 in 2011 with an overall global ranking of 134 (out of the 187 countries) compared to 119 (out of 169 countries) as per HDR 2010. Thus, India's performance on social sector is not impressive. Thus, it becomes necessary on the part of government to provide the due importance to social sector.

From the review of available literature on the subject, it can be concluded that government has fell short, by a large margin, of desired targets of education expenditure as recommended by Education Commission (1966). And with present level of financing to education sector government can not achieve the target of universalisation of elementary education. But since the introduction of National Policy on Education (1986), new boost has been felt by policy makers and government started focusing on education sector by increasing its financing to the sector. In addition to this, following two Constitutional amendments of 1993 more powers has been vested in the hands of rural and

urban local bodies and making elementary education a responsibility of these bodies (Panchayati Raj Act in rural area and Urban Local Bodies in urban area). It has been found that central government's proportion of expenditure on education sector has been increasing since second half of 90s, especially on elementary education. It is also observed that higher value of gross fiscal deficit lowers the social sector expenditure of states.

It has been also observed that most of the studies on the subject see expenditure on education from income angle only and ignore the other side. But the state expenditure on education depends on both income and expenditure. NSDP and budgeted expenditure of a state represents income & expenditure levels of a state. It has been expected that a state with higher income should spent more on education sector. But, especially after the implementation of FRBM Act, 2004 a state's expenditure also depends on the deficit level that a state can bear. Thus, fiscal deficit and interest payment are related to the expenditure level of a state, and therefore, a state wants to keep these within specific limits. Therefore, to evaluate the performance of a state in terms of its expenditure on education sector, both levels (i.e., income and expenditure) needs to be study in simultaneous.

The chapter on analysis of public expenditure on elementary education finds that realized expenditure in both All States and North-Eastern States were successively higher during 1990-91 to 2009-10. It is also found that proportion of expenditure by the North-Eastern States to All States is very small and hover around 3 percent.

The state-wise analysis shows that Tripura spend highest amount of public expenditure on elementary education in absolute terms at current prices all along the period of study i.e., 1990-91 to 2009-10. Sikkim spent lowest amount among the North-Eastern States. Tripura also spends highest on elementary education among North-Eastern region as a percentage share of total spending on elementary education to total spending all along the period of study.

The state-wise analysis shows that Mizoram spends highest in terms of its percentage share of public expenditure on elementary education of respective NSDPs. But the state of Sikkim has seen wide variations in terms of its percentage share of public expenditure on elementary education of respective NSDPs and follows the state of Mizoram. The state of Meghalaya which spend second highest in absolute terms actually spends lowest as a share of NSDP. Thus, it is the relative contribution which represents the correct picture and performance of a state and not the absolute.

The public expenditure on elementary education as percentage of total budgeted expenditure of North-Eastern states shows that Meghalaya performed better than other states in the beginning of 90s and spend largest share in the region on elementary education. But by 2009-10, it is the Mizoram state which spend largest share in terms of percentage of its total budget on elementary education. The result also indicates that this share has declined for all states during over the twenty year period of study i.e., from 1990-91 to 2009-10, except Mizoram where this share actually increases.

It has been stated in various studies and National Policy on Education that elementary education is the priority area in education sector. Thus, it could be expected that a large share of total expenditure on education has been given to elementary education. The public expenditure on elementary education as percentage of total public expenditure on education has declined for all states of North-Eastern region except Nagaland and Manipur over period under the consideration of present study i.e., 1990-91 to 2009-10. It increases by negligible amount in case of Manipur.

It has been also found that per capita public expenditure on elementary education at current prices has increased impressively in all North-Eastern States. Arunachal Pradesh has seen the highest growth whereas Manipur grown at lowest rate among North-Eastern States.

This study also includes the fiscal deficit and interest payment of North-Eastern States. Raising fiscal deficit and interest burden puts restriction on public expenditure in education sector.

Interest payments of government are the result of its past borrowings. This represents the compulsory burden on exchequer, which is not spent on either developmental or non-developmental projects. In particular, government's interest payment adds to the disposable incomes in the private sector. At the same time, interest payment adds to government's revenue expenditures leaving less of current fiscal deficit for the purpose of government capital expenditure. If interest payment becomes a larger share of NSDP then it may lead to a debt-trap situation, which makes a state's fiscal position vulnerable. And in order to revive from such circumstances a state has to reduce its expenditure (both developmental and non-developmental).

The analysis in this study shows that resources fell short of required level to achieve the Universalisation of Elementary Education target of government as envisaged in Constitution of India. The above study shows that North-Eastern states have performed well on most of the indicators on education sector. But still the target of universalisation of elementary education is far to achieve in near future, it is mainly due to poor economic conditions and lack of resources of the region. It is also felt that due to 'Pure Public' and 'Merit' good nature of elementary education it should be fully financed by government. Thus, it is required that central government should support North-Eastern States by making more contribution in the provision of elementary education and bear more burden of expenditure on elementary education in North-Eastern States.

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#### Appendix I

# DEFINITION OF SOME TECHNICAL TERMS IN EDUCATION

- **1. Per child education expenditure:** total expenditure on elementary education divided by the total enrolment in government schools.
- **2. Teacher-Pupil Ratio:** Teacher-Pupil Ratio means the average number of students per teacher at a specific level of education during a given school year.
- 3. Gross Enrolment Ratio (GER): GER means the total enrolment in a specific level of education regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. An increase in GER indicates a decrease in the number of drop-out students and out of school children in the state.
- 4. **Drop-Out Rate:** Drop-Out Rate is the percentage of students/pupils who dropped-out from a given grade or cycle or level of Education in a given school year.

Reconstructed Cohort Method places less demand on the availability of detailed data over time. For applying this Method, data on enrolment by grade for two consecutive years and on repeaters by grade from the first to the second year is sufficient to enable the estimation of three main flow-rates - promotion, repetition and drop-outs.

- 5. **Revenue Expenditure:** Revenue expenditure is for the normal running of government departments and various services, interest charges on debt incurred by government etc. Broadly speaking, expenditure which does not result in creation of assets is treated as 'Revenue expenditure'. Financial Administration grants given to state governments and other parties are also treated as revenue expenditure.
- 6. **Capital Expenditure:** A Capital expenditure may be defined as any expenditure other than operating expenditure, the benefits of which extend over a period of time

exceeding one year. The main characteristic of capital expenditure is that at least a major portion of the expenditure is made at one point in time and the benefits are realised at different points in time in the ensuing years. In other words, Capital expenditure is the expenditure which is intended for creating concrete assets of a material character in the economy.

- 7. Plan v/s Non-Plan Expenditure: Government expenditure can also be classified into "Plan" and "Non-Plan" expenditure. Plan expenditure refers to the expenditure incurred by the Central Government on Programmes/Projects, which are recommended by the Planning Commission. Non-Plan expenditure, on the contrary, is a generic term used to cover all expenditure of government, not included in the plan.
- 8. **Elementary Education:** Elementary education, that is, classes I–VIII consisting of primary (I–V) and upper primary (VI–VIII).
- 9. **Sub-Heads of Education Sector:** In government budgets education sector include Elementary Education, Secondary Education, Adult Education, Language Development, University and Higher Education, Technical Education, General Education, and Physical Education.
- **10. Fiscal Deficit of State Govt.**: This is the gap between the government's total spending and the sum of its revenue receipts and non-debt capital receipts. It represents the total amount of borrowed funds required by the government to completely meet its expenditure.
- 11. **Interest Payments of State Govt.:** The government sells bonds to pay for its various expenditures. An individual or foreign government buys the bonds based on the promise that the government will pay back the price of the bond, plus interest. In addition to this, state governments borrowed funds from Central government, RBI, Commercial Banks, Foreign Banks, Financial Institutions, etc. An interest rate is set, along with a fixed annual or monthly payment by the government to the bondholder. A government interest payment is the periodic payment that the government pays to a given bondholder.