

**AN ANALYSIS OF THE PUBLIC AND PRIVATE
EXPENDITURE AT DIFFERENT LEVELS OF
EDUCATION IN INDIA**

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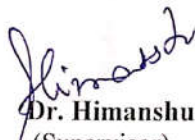
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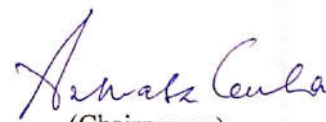
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CERTIFICATE

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Dedicated
to
my parents
&
the loving memory of
my brother

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ABBREVIATIONS

GDP	Gross Domestic Product
UEE	Universal Elementary Education
CAA	Constitutional Amendments Act
UTs	Union Territories
RE	Revised Estimates
BE	Budget Estimates
NEP	National Education Policy
GNP	Gross National Product
R&D	Research and Development
NSSO	National Sample Survey Organisation

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INTRODUCTION

For long, we have asked: how do we best educate our generations to be worthy men and women of tomorrow. Indeed, as governmental and non-governmental agencies, educationists, social scientists, epistemologists and economists brainstorm on the form and content, medium and message, and value and returns of education in the third world countries in the twenty-first century, it is vital to understand that at stake are the futures of millions of children whose lives can only be transformed by proactive policies that put them at the locus. Along with transforming their lives, right education has the potential of transforming societies and economies in a multitude of ways; education is the key to uplifting underdeveloped societies and brings them closer to the outer world, and for many families across nations, education is the way up the class ladder. Yet for others, it is an end in itself: it makes one complete, empowering them all this world has to offer.

Countries today are unlikely to make strides towards the goal of sustainable development without investing enough in human resource development. This could be in several ways viz. healthcare, education, and others. Amongst these, it is widely accepted that education, which is a part of human capital, contributes significantly to economic growth. Individuals, regions, and countries having superior levels of education, ideas, or research and development strategies have an edge over those of their counterparts which are on a lower pedestal comparatively. Developed countries understood this much earlier and have for long firmly believed that education is not only a contributing factor to economic growth but also has its own positive externalities. Education changes people's perspectives of themselves and their surroundings, it helps them find an informed worldview. In the modern world, it helps people fulfill their basic needs while providing satisfaction to the soul.

Investment in this direction is indeed a crucial investment because it determines the class and social location of families, and societies in the longer run. Such investments also determine the future economic conditions, and the economic strength of the families and

therefore, the country. In turn, the determinants of such investments are numerous and wide-ranging. How much and in what particular pattern a public office or a household spends on education depends on economic location as well as cultural biases. What the State decides to spend also determines how much the families spend; likewise, public policies also take into account the patterns of household funding on education. Household expenditure on education in India is also determined by class, caste, family demography and gender, and such factors interplay in varied ways across the country. This accounts for an interesting study. Mainly, there are two sectors that finance education in India: public and private. These are also categorised into expenditure incurred in the institutional domain (public sector) and expenditure incurred in the individual domain (private sector), famously known as public expenditure and household or family expenditure respectively. Both expenditures, together, constitute the expenditure incurred in the social domain.

Public expenditure refers to the expenditure that is carried out by the governments at both levels—centre and the state—on funding the education of the people under their domain. After the 73rd and 74th amendments to the constitution¹, it also empowered the local bodies to get involved; alongside that, foreign assistance or aid from other multinational bodies offered to a government and spent on education is also included under public expenditure on education. Financial resources allocated by any government to any sector in an economy indicate the importance attached to that sector. Availability of financial resources for education is an important determinant for quantitative expansion and qualitative improvement of the education sector. After independence, India has witnessed a steady expansion in numbers of students enrolled, schools, teachers, colleges and other educational institutions and public expenditure on educational development has increased to Rs. 62 thousand crores in 1998-99 from Rs. 55 crores in 1947 (Tilak, 1997) and it has further increased to Rs. 82 thousand crores in 2001-01 and reached to Rs. 3.5 lakh

¹ 73rd and 74th amendments to the Constitution of India gave constitutional status to Panchayati raj institutions and urban local bodies or Municipalities respectively. The intention behind this was to strengthen local self governments and bring third tier to our democracy and thus local bodies also got the responsibility to finance and run schools.

crores in 2012-13. According to budget estimates, the expenditure on education sector would be of the order of Rs. 4.84 lakh crores in 2014-15. But this remarkable boost in the expenditure on education has been belittled by three reasons: population growing at a rapid pace, a gigantic rise in the number of students, and increasing costs of education. Even after seven decades of independence, there exists a large number of illiterate people, children in large numbers are still out of school and a significant educational inequality exists at socio-economic, gender and regional levels. Dropout rates continue to remain high in private and public institutions of learning. A long envisaged goal of universalisation of elementary education is yet to be achieved.

Over the years, several commissions on education set up after 1947 have conducted studies calculating the required allocation of resources for the education sector and have come up with the recommendation of increasing public expenditure at each level of education in general but on primary and secondary level in particular. Kothari Commission (1966), National Education Policy (NEP 1968, 1986, 1992), Saikia Commission (1996), Common Minimum Programme (2004) and recently set up TSR Subramaniam Commission (2015)² have all recommended that public expenditure, as a proportion of GDP, needs to be increased to 6 per cent to enable a major overhaul in the sector. At present, the proportion spent on education on the GDP hovers around 3-4 per cent. Public expenditure on education as a proportion of GDP was 4.14 per cent in 2000-01 which started declining thereafter and reached to 3.58 per cent in 2012-13, for the year for which such data is available in the actual term.

Major changes were experienced in the sector after education was brought to concurrent list, this is especially true for intra-sectoral allocation of resources to primary, secondary, higher and technical education. Tilak 1997 has shown how such allocations have been lopsided. There has been a zig-zag pattern when it comes to intra-sectoral allocation and no long-term vision has been put onto it across the years. This confused set of priorities is reflected in education budgets across years and governments. Planned expenditure on education, which includes the allocation for new schemes, has continued on a highly

² The committee was set up in 2015 and submitted its report in May, 2016

positive trend significantly. However, aggregate expenditure has maintained the opposite trend, prompting debates regarding schemes' relevance down the years. It is notable that state going schemes governments are mainly focused on maintaining existing infrastructure and implementing existing schemes while the centre spends more on plan expenditure, therefore set the direction of the sector for future years.

Private expenditure (or household expenditure) is referred to those expenditures which are incurred by wards or their parents on education when it comes to tuition fees, examination fees, buying books and stationery, transportation cost and expenditure for uniforms and others. Household expenditure on education—elementary, secondary, and higher—is distributed diversely across the country and is a contested terrain mainly because it is dependent on a number of determinants that vary across time and space, along with culture and identity. Households spend on education due to several reasons; they expect economic and non-economic returns from it. Education remains a way up the class ladder and such belief is firmly entrenched in the Indian minds over the years after the independence. It is this belief that return rates from expenses incurred on education are very high that exhorts millions of families in India to reduce their consumption so as to spend more on the education of the progeny. This is aimed at securing long-term benefits to help the household climb up the class ladder. However, it is important to note that this investment is widely uncertain, especially as poorer families find this venture too “risky”. They tend to under-spend on education for there is no guaranteed long-term return. It is thus safe to say that the money spent by high-income households when it comes to education is higher than the money spent by comparatively low-earning families.

Public investment is also a determinant of how much families spend on education. If public investments in maintenance of physical and human resources fall, it is households which have to substitute the public investment by spending more money on education. Again, if the government spends more on education, the families are more willing to invest enthusiastically. High levels of household expenditure can also be accounted for due to a few other reasons apart from low public investment and lack of enthusiasm from the governments' side. Some families which spend higher on education tend to believe

that higher expenditure would result in better performance of their children; this is especially true in the form of private tuitions.

On the other hand, there are several key arguments against high household expenditure. The idea of higher private expenditure on elementary education stands in sharp contradiction against the values of free and compulsory education in many countries including India. Household expenditure on education also creates a system where education is seen as a commodity which can be sold and bought, thus leading to higher systemic inequalities in the system. Higher private expenditure also reflects the government's inefficiencies. Earlier preconceived notions that the entire burden of education is borne by the state was proven wrong (Panchamukhi, 1965) (Tilak, 1996, 2000) and a new stage was set to further study to inquire about the patterns of household expenditure.

In all, taking into account the economic returns arising from education into consideration, families certainly must bear the burden of financing the education of their wards partly, even if not completely, if the governments do not allocate resources to education adequately. The second argument in favour of household expenditure is based on the assumption that the household expenditure on education, specifically on fees, would make the system more efficient and it would also bring seriousness amongst children for studies. Some also argue that those households which have the ability and willingness to spend on education should be fully exploited. Alongside are key arguments against household expenditure on education. Since the spirit of free and compulsory education for the children of age 6-14 years has been mentioned in the Constitution of India, and in numerous declarations of the United Nations and conventions, the occurrence of private expenditure, particularly on the elementary level of education, undermines the spirit. Also, the demand for education is affected if the household expenditure plays a significant role in achieving education and it may force the lower income households to avoid schooling and not to opt for education at all. This results in a lower outreach of education amongst the communities that need it the most. As higher income families incur huge expenditure on education and lower income families less, the dependency on household expenditure may perpetuate inequalities in the system. Some authors also

argue that the high level of expenditure on education incurred by households reflects the government is highly ineffective and inefficient in providing education in the country.

It may be argued that that families may be impelled to shell out more for education of their children if the direction of public efforts are insufficient and this can be observed in the poor quality of infrastructural and human resources available in institutions. Therefore, even households with meager incomes are forced to shell out more on education. If the infrastructure and basic amenities in government-run institutions are poor, considering other factors remaining same, the household expenditure rises. Private investments tend to replace, or substitute public investments for they attempt to overcome the rifts created by falling public investments.

Similarly, it has been found that families enthusiastically spend towards the education of their wards to supplement government funding if it is sufficiently high. The private and public investments are related, or they substitute/complement one another. Factors relating to quantity and quality of schooling, thus, might be an important set of factors that determine the level of private expenditure on education. Since several social and cultural aspects affect the expenditure, families might incur more on the education of their boys as compared to those of girls. Various factors including social group identities like caste, gender, faith, family demography, and occupation and education background of family members also affect the amount of money spent by certain families on the education of their wards.

As India leaned towards socialist ideas post-independence, it was widely believed that the governments of the day would provide free or very cheap education to all its citizens, and this was enshrined in the Directive Principles of the Constitution. It was hailed that it does matter one is rich or poor, he or she deserves good education by virtue of Indianness. Over the years, the dominant view made its ground that household expenditure on education in India is negligible and that the entire burden of educating its citizens lies on the Government of India. This was proven incorrect in the 1960s in the small number but seminal works in the field of education expenditure by Panchamukhi (1965), and Shah (1969). It was due to these works that the myth of negligible household expenditure was dismantled. Later, National Accounts Statistics' national estimates laid a

foundation with its reports, making clear the high amounts of private expenditure on education, though it was not as high as earlier researchers had concluded. Again, there is scarce data available when it comes to gross private spending on education; according to estimates from Tilak's study, in 1979-80, total private expenditure on education was 6.6 per cent of the GNP but the public expenditure stood at 3.9 per cent. Though education is supposed to be provided free to everyone, especially at the elementary level of education according to the Constitution of India, it is found that students and families incur large amounts on it. Poor families in India shell out significant amounts from the lowly income to spend on education and related expenses like transportation, books, uniforms and others (Tilak 1996, 2002c).

Importance of research on private expenditure on education is being realised, especially in the light that the public expenditure on education has been falling short of the required funds; it still hovers around 3-4 per cent of the GDP in India. Since government's policies are based on a thin range of research evidence, updated research needs to be initiated to contribute to the formulation of such policies on education. In the context of the formulation of alternative policies on financing education, the study in your hand is a humble attempt of throwing some light and adding some perspectives on research in the economics of education in India.

This dissertation examines the trends and changing patterns of public expenditure and household expenditure in India at various levels of education in the 21st century. The dissertation presents a detailed profile on several aspects of the public expenditure on education in India for the period 2000-01 and 2014-15. The study tries to analyse the trends and changing patterns of inter-sectoral allocation of resources, intra-sectoral allocation of resources and centre-state relationship in financing education.

The dissertation also examines the changing patterns of household expenditure on education in India for the period 2007-08 and 2014. At the same time, analysing the household expenditure on education at different levels of education- elementary, secondary and higher education- is also important for both the period. The differences in household expenditure on education based on nature and characteristics of the household such as region, social groups and household expenditure quintiles have been observed

along with the difference by gender. Therefore, it becomes important to examine the dynamics of household expenditure on education and its trends and changing patterns. The differences, by gender, region, social group, type of school/institution and household expenditure quintiles, in household expenditure is also examined in the dissertation.

Research Objectives:

1. To know the extent of fund allocated by the centre and state governments on education and the changing pattern of different components of public expenditure in India.
2. To examine the pattern of inter-sectoral and intra-sectoral allocation of resources to education.
3. To examine the extent of household expenditure on education in India for different levels of education.
4. To study the patterns of differences in the household expenditure at different levels of education by gender, region, types of schools/institutions, social groups and household expenditure quintiles.

Research Questions:

1. What are the recent trends of shares of centre and states in total public expenditure on education?
2. What are the patterns of inter-sectoral and intra-sectoral public financing of education in India?
3. What are the recent patterns of household expenditure on education for different level of education?
4. Is there any difference in household expenditure at different levels of education by gender, region, types of schools/institutions, social groups and household expenditure quintiles?

Data Sources and Methodology:

The present study covers the period of 2000-01 to 2014-15 and uses the ‘Analysis of Budgeted Expenditure on Education’ of various years for data on public expenditure on education in India. The report is published by Ministry of Human Resource Development

of Government of India and the publication is brought out annually. It contains the Budget provision made by the states/UT s and Central Ministries for the development of education. The publication provides the details related to Plan and Non-Plan expenditure provisioned by the education departments of centre and states/UT s for a range of sub-sectors of the education sector. It also gives the details of expenditure incurred on education by departments other than the education department in order to obtain the complete picture of public financing of education in India.

The present study also proposes to cover the time period 2007-08 and 2014 for household expenditure on education in India and is based on the 64th round and 71st round of survey of participation and expenditure on education sector conducted by NSSO. The National Sample Survey Organisation is under the Ministry of Statistics and programme implementations of Government of India. The organisation conducts surveys to collect information about diverse dimensions of socio-economic conditions in India since 1950. More notably, the NSSO occasionally conducts surveys focusing specifically on education. The previous rounds such as 42nd round and 52nd round conducted in 1986-87 and 1995-96 respectively had concentrated on education. The surveys conducted specifically for education make available a number of detailed information on household expenditures on education for each level of education, diverse nature and characteristics of the population – caste, region, household expenditure etc. The 64th round of National Sample Survey, which was a survey on ‘Participation and Expenditure in Education’, was conducted during July 2007 – June 2008. The survey covered in all 445960 persons from 63318 rural households and 37263 urban households across the country. The 71st round of NSS, which was a survey on ‘Social Consumption: Education’, was conducted during January – June 2014. The survey covered 29447 urban households from 3720 blocks and 36479 rural households from 4577 villages.

Chapterisation:

Three main chapters, which are organised on the basis of broad objectives discussed in the introduction, give this dissertation a direction and meaning. The introduction to the dissertation comprises of research objectives, research questions, data sources and methodology, and limitations of the study and the chapterisation scheme. Again, at the

beginning of every chapter is an introduction that attempts to draw a brief overview of the study and argues the different objectives of the study in brief.

The first chapter deals with the theoretical issues regarding the role of education in economic growth and societal development. The second part of this chapter deals with the review of existing literature. This section on literature review is mainly divided into four sub-sections. The first sub-section attempts to analyse the existing literature on the role of investment in education and its contribution to economic growth and development. The second part of this section attempts to review existing literature on the trends and pattern of public expenditure on education and its composition. The third sub-section deals with the review of literature related to policy recommendations of various commissions on education and National Education Policies. The fourth sub-section of this part reviews the existing literature on household expenditure on education at different stages of education in India.

The second chapter deals with the trends and patterns of public expenditure on education and its compositions. The first sub-section of this chapter analyses the trends and patterns of inter-sectoral allocation of resources on education for the period 2000-01 to 2014-15. The second sub-section examines the trends and patterns of intra-sectoral allocation of resources on education for the same time-period. Finally, the concluding part summarises the trends, attempting to draw a picture attempting to understand logical trends in this direction.

The third chapter deals with the household expenditure on education at different stages of education. An attempt to analyse the patterns of household expenditure on education depending upon the nature and characteristics of the household was made in this chapter.

CHAPTER ONE

An Overview of Background: Theoretical Issues, Related Literature and Education Committees on Education in India

1.1 Introduction

It is a widespread knowledge and widely accepted fact that education, which is a part of human capital, contributes significantly to economic growth. Individuals or countries having a higher level of education, knowledge, ideas or R&D have an edge over their counterparts, something which is understood by developed countries much earlier, who have always believed that education is not only a contributing factor to economic growth but also has its positive externalities. Investing in education is an investment in the future. “Education is a powerful lever for poverty alleviation and social and economic growth” (World Bank Report, 2002b).

In the Indian context, there are two primary sources to finance education- the public sector and the private sector. They are also categorised into expenditure incurred in the institutional domain (public sector) and expenditure incurred in an individual domain (private sector). These are famously known as public expenditure and household or family expenditure respectively. Both expenditures, together, constitute the expenditure incurred in the social domain (Majumdar, 1983).

Institutional expenditure or public expenditure refers to the expenditure incurred by central and state governments, local bodies (after 73rd and 74th amendments to the constitution)³ and foreign assistance which is transferred through the budget of central

³ 73rd and 74th amendments to the Constitution of India gave constitutional status to Panchayati raj institutions and urban local bodies or Municipalities respectively. The intention behind this was to strengthen local self governments and bring third tier to our democracy and thus local bodies also got the responsibility to finance and run schools.

government. Financial resources allocated by any government to any sector indicate the importance attached to that sector. How much resources are available financially for education determines the future of the sector both quantitatively as well as qualitatively. Education is in the concurrent list after 1976 (42nd CAA), and thus the state governments have the greater responsibility in making provision for education. Huge disparities among states at primary, secondary and higher education in terms of the difference in enrolment rates, dropout rates and literacy rate raise the doubt if the states are fulfilling their obligation properly. Financing education has been a major issue while walking on the path to educational development in India.

Aggregate expenditure allocated to education reflects the importance given to it but, in the Indian context, it is disaggregated to make the picture more clear in terms of changes in the direction of the education sector. The components of public expenditure can be divided into plan expenditure and non-plan expenditure. Earlier Plan expenditure, which is the part of aggregate expenditure, was incurred on new schemes and projects especially proposed under the current FYP or the unfinished tasks of the previous plans. But, now the FYP is discontinued after the planning commission got renamed as NITI Aayog. Therefore, now plan expenditure is the expenditure made on new schemes, programmes and infrastructure etc. On the other hand, non-plan expenditure includes expenditure on maintenance of the existing infrastructure and operation of existing schemes and projects. Earlier, recurring parts of plan expenditure used to become part of non-plan expenditure once the FYP ends.

Another distinction between the expenditure on education can be made in terms of revenue account and capital account. Expenditure on revenue account is incurred on normal running of existing schemes and their maintenance and does not result in the creation of assets. The nature of the expenditure on revenue account is recurring and for a short period of time and it is incurred regularly such as salaries of teachers etc. On the other hand, expenditure on capital account is the expenditure incurred for the creation of capital assets and it is non-recurring in nature, and for a long period of time e.g.

construction of school building. The huge chunk of aggregate expenditure is under the head of the revenue account and a very little portion is under the head of the capital account. But this does not mirror that the asset creation is negligible because the low expenditure under the heads of capital account has its main reasons, firstly, the inclusion of the entire grants-in-aid under the head of the revenue account. Secondly, expenses on construction activity generally come under heads of other departments.

On the other hand, household expenditure includes direct expenditure and indirect costs. The indirect costs refer to opportunity costs, also known as forgone earnings. Direct household expenditure is referred to those expenditures which are incurred by students and/or their parents on education in terms of tuition fees, examination fees, buying books and stationery, transportation cost and expenditure for uniforms etc. Earlier research showed that indirect or opportunity costs are vital and sizeable (Tilak, 1988). This study, however, chooses to ignore this aspect due to certain constraints.

1.2 Literature Review:

There are several kinds of literature on education and its role in economic growth resulting in setting up of many committees to estimate the required public expenditure and its composition, on education in India. The available literature on public expenditure on education and its trends and growth have come up with valuable findings. Before analysing and studying the essence of this topic further and contribute to the available literature productively, it is better than we understand the existing literature. The literature review section has four sections. Importance of education in economic growth and development is talked about in the first section. The second section reviews the trends, growth and changing pattern of public expenditure on education as well as its composition. Over the years, several committees that were set up after 1947 to help develop policies on funding education, their recommendations and reviews have been studied under the third section. Finally, household expenditure on education in India has been dealt with in the last section.

1.2.1 Role of Education in Economic Growth and Its Positive

Externalities

Investment in human capital, education is the part of it, has been a lever for economic growth in developed as well as developing countries. Several Models focusing on economic growth and its contributory factors such as Romer (1986) and Lucass (1988) stressed that human capital and investment in it is a crucial contributing factor to economic growth and development. An addition to human capital can significantly contribute to per-capita income growth by encouraging other factors such as investment in physical capital, which is also a contributing factor to economic growth and development. There are many pieces of evidence given by the existing literature which shows that the effective and efficient utilisation of physical capital itself is dependent on the accumulation of human capital. Many poor countries are attempting to accumulate physical capital at a rapid rate and giving a negligible attention to the accumulation of human capital and, therefore, limiting the likely fruits realising from the physical capital formation. Hence, the physical capital in these countries is not put to efficient utilisation because of the underinvestment in human capital.

The evidence from the existing literature is quite convincing regarding the significant connection between investments in education and economic growth and development. There are huge differences in investment and the levels of human capital across different countries. Every nation, on the path to high economic growth, makes efforts to enhance their human capital. India is a growing population of 1.21 billion people with the majority being the youth ready to enter the workforce. So, India has a demographic dividend opportunity to grab, otherwise, it could also result in demographic deficit if required importance or allocation not given to the creation of human capital because the majority is unskilled population.

Several theoretical works of literature, by using simple production function taking capital and labour as inputs, emphasized on the importance of education for a country following the path of economic growth and development:

Solow (1956) using Cobb-Douglas production function with constant returns to scale with capital and labour as inputs. The neoclassical growth model (Solow, 1956) tried to explain disparities in per capita incomes between nations and regions with the help of differences in productivity. Solow model considered technological progress to be exogenous i.e affected by factors outside the model. The production function changes because output becomes a function of capital (k) and effective labour (AL). Mankiw et al. (1992) using the Solow model and augmented it with human capital that is also one of the contributing factors. Solow model results in diminishing returns to scale. So the increase in the time given to the human capital and its accumulation has an only non-permanent effect on the rate of economic growth and finally results in convergence to a steady state level. Neo-classical Model came up during the 1950s and 1960s also states that the poor countries grow faster than the richer countries and these trends to catch up with the richer ones. Romer (1986, 1990) and Lucas (1988) argued that the stock of knowledge or human capital is the key determinant of Total Factor Productivity. Romer explained the endogenous growth of technology by showing that the technology has a growth effect which compensates diminishing returns to capital. Its production function can be written as “ $Y = A(h) F(K, L)$ ”, where, “h” is the stock of human capital. Thus, the increase in the availability of human capital increases the rate of growth of the economy. Romer (1990) assumes that the growth of the economy depends on the existing ideas and the time given by the individuals for them.

Coe and Helpman (1995) by using a sample of some first world countries found that total factor productivity is significantly affected by the level of domestic and foreign R&D. Barrow (1999) while doing cross-country analysis stressed that there is no pattern of absolute convergence but provides strong evidence of conditional convergence across countries. The existing literature focusing on the knowledge economy framework has mentioned that the level of population’s education along with the level of innovation in the institutional regime and the level of information and communication technology affect Total Factor Productivity. So, in 21st-century economic growth is based on the level of knowledge, skills, ideas, and innovations (i.e. Human capital) and some other factors such as policies and institutions etc.

The new economic growth model suggested by many economists have been checked by various empirical work and academicians have come up with several interesting findings, which bolstered the claim of the new model of economic growth. Viswanath et al. (2009) intended to find out the significance of human capital and physical capital in the growth process of the Indian Economy by taking an aggregate production function approach. Human capital is represented by mean years of schooling (MYS). The results show that both physical and human capital are significant but human capital turns out to be statistically more significant than physical capital in explaining the growth in Net State Domestic Product (NSDP). This paper shows that a positive and strong relationship exists between investments in human capital and economic growth. Chen and Dhalman (2004) assessed the effects of the level of knowledge on economic growth and stated that availability of knowledge can become a vital source of economic growth if the economy contains human capital stock of high-level quality, a significant strength of innovation and technological adoption, proper organisation of the information and communication infrastructure and a good institutional quality ecosystem. This paper contained data from 92 countries for the period 1960-1999 by using some indicators which represents knowledge as an independent variable in cross-section regressions.

Also, through this paper, it is found that an increase in 20% means a year of schooling which is a proxy of human capital stock tends to increase the average annual economic growth by 0.15% points and a 20% increase in innovation leads to 3.8% increase in economic growth. It also shows that the quality of institutions and the health of the economy are also the important determinants of the economy. Barrow (1999) analysed the determinants of economic growth by using a panel of 100 countries observed from 1960-1995 and the findings of this paper are that the growth of an economy is positively related to the human capital stock or the starting level of means years of schooling at higher and secondary levels and it was also found that science test scores have a strong positive relationship with growth Hanushek (2013) realised that the simple redistribution of incomes and resources does not overcome the poverty in the long run because reducing level of poverty in developing countries relates to the rate of economic growth. Income levels will go up in developing countries with the inclusion of economic growth which can result from the introduction, in developing countries, of human capital policies. It

also checked the relation of cognitive skills, measured by the test score of science and mathematics, with economic growth in its variability.

Abbas and Mukhter (2001) has incorporated human capital as well as physical capital into an aggregate production function as factors of production with GDP being the dependent variable to do a comparative analysis between India and Pakistan. They have used three levels of human capital namely Primary, Secondary and Higher education. They have used schooling enrolment ratio as a variable. They found that growth of GDP in India is significantly affected by human capital at primary level. Secondly, in both Pakistan and India, the coefficient of secondary school enrolment ratio has a positive and significant to the growth of their GDP. Thirdly, in contrast, as against Pakistan where the coefficient of higher education enrolment ratio is positive and significantly affects the GDP, in India it is negative. One can, therefore, infer that human capital peroxided by the student enrolment ratio contributes significantly toward the economic growth of Pakistan.

Buysse (2001) has explained that there is a strong positive impact of public expenditure on economic growth. It argued that keeping mean years of schooling constant, the countries which give more importance to education and invest more in it, are more likely to increase the productivity of human capital. It also accounted that some developing countries appear to have increased in the class size due to increased enrolment during the time of high economic growth. Whereas some OECD countries saw a decrease in class size due to a slowdown in population growth rate but this decreasing in class size does not have much effect on the quality of education. Thus public expenditure on education has to be increased and improved to ensure a decent level of quality in education.

1.2.2 Trends and Pattern of Public Expenditure on Education and Its Composition

Despite recognising that education is not consumption expenditure but a critical investment for national survival and for the bright future of a country, as constantly reminded by several education commissions set up post-independence, the pattern of public financing towards education since independence has not been up to the mark. After judging the pattern of public financing of education on three counts—adequacy,

equity and efficiency, one can conclude that the performance in India has been mixed. It has been observed that at certain places, the results have been remarkable, while there have been significant shortcomings in certain other areas, and this can be attributed to severe underinvestment Tilak (2009).

It is widely accepted fact that the education system in India is facing an acute shortage of funds despite the continuous recommendations, of increasing the public expenditure on education to 6% as a proportion of GDP, given by various education commissions, academicians, experts etc.

In order to expand the sector in quantitative terms, to advance its quality, and to strengthen equity and diversity, it is necessary to pitch in huge sums so as to make it cohesive in the truest manner possible Tilak (2006). In 1966, the education commission chaired by D S Kothari (famously known as Kothari commission) had recommended public expenditure on education to be 6 % of National Income but the goal is yet to be fulfilled, though the recommendation of increasing the public expenditure on education to 6% as a share of National Income along with other many recommendations was accepted by the then government Tilak (2007). Further, the Common Minimum Programme (CMP) of the UPA government focused on raising public spending to at least 6 per cent of the GDP in a phased manner. Subsequently, the Central Advisory Board of Education (CABE) Committee on Financing Higher and Technical Education (2005) stated that a detailed plan needs to be prepared for the needed annual increase in allocation of resources to reach the yet to be fulfilled goal.

The declining trend of the relative share of education in five-year plans has been seen over the years as it declined from 7.9 per cent in the first five years plan to 2.7 per cent in the sixth FYP. Due to its coinciding with the National Education Policy of 1986, this declining trend was reversed during the seventh and eight FYP. The allocation stood high at 4.5 per cent in the eighth FYP, however, it remained quite less than that of with the first FYP allocation share. BG Tilak (1997) in his paper categorised the allocation of resources and prioritisation of education under different FYPs into three distinct phases. In a zig-zag manner, while allocation in the first three FYPs remained more than 5 per cent, it declined in the second but went on to increase in the third plan. In the fourth, fifth

and sixth FYPs, India saw a consistent fall in the allocation to education. Then the efforts were made after National Education Policy 1986 prepared and the decline in the allocation to education was subsequently checked during seventh and the eighth FYP which is categorised as the third phase.

Many academicians through their research papers stated that the expenditure in real terms showed upward trends during the 1990s but it has stagnated since then and the share of public expenditure on education as a proportion of GDP has been hovering around 4 per cent. But the composition and modalities of expenditure have experienced major changes after 1976 when the education as a subject brought into the concurrent list from state list and became joint responsibility of centre and states both, and thereafter saw that the centre has been playing an increasingly vital role in state education finance through centrally sponsored schemes.

Anuradha De et al. (2008) has examined the trends of public financing policies on education in India and analysed the expenditure incurred on education in the institutional domain. They also analysed the composition of public expenditure on education and its allocation and utilisation along with the mechanism of resource sharing, separately for centre and states and in aggregate as well. Most importantly, the paper came up with the findings that the public expenditure on education grew at CAGR of 13.4 per cent if calculated at current prices but the same has reduced to 6.5 per cent if calculated at constant prices for the period 1990-91 to 2000-01. Though the expenditure got doubled between the period 1990-01 to 2000-01, it has stagnated rather declined since then. As a proportion of GDP, the share of public expenditure on education has been in the range of 3-4 per cent. More interestingly, changes in composition and patterns of expenditure on education over the years could be realised. And also, the centre has been playing, interestingly, a significant role in financing education in India since education came into the concurrent list.

Smita Anand(2014) in her paper while examining the inter-sectoral and intra-sectoral allocation of resources found that during 1980-81, the expenditure on education was 2.55 per cent of GDP and it was 0.10 per cent and 0.36 per cent of GDP for higher and technical education respectively. The share of total education expenditure, technical and

higher education increased to 3.34 per cent, 0.15 per cent and 0.45 per cent of GDP respectively in 1990-91 but it has come down, during the period 1990-91 to 2000-2001, to 3.25 per cent which has gone further down to 3.20 per cent in 2009-2010. The same trend found in higher education also, but the share of technical education remained almost the same.

The trends related to intra-sectoral allocation of resources to education such as elementary, secondary, higher education, technical education and so on have shown lopsided priorities by centre and states. BG Tilak (1997) in his paper has dealt with the intra-sectoral distribution of public expenditure within the education system and shown that it has been lopsided. Whereas, 56 per cent to elementary education, 13 per cent to secondary, 9 per cent to university education and 13 per cent to technical education, of the total plan resources to education were allocated. But the relative share given to elementary education decreased to 35 per cent in the second plan, to 34 per cent in the third plan and subsequently to 30 per cent in the sixth plan. But efforts made during the Eighth Plan to increase the share but it was still less than the level of the First Five Year plan though it was 42 per cent. According to BG Tilak (1997), this zig-zag pattern of public financing at various levels of education mirrored the confused state of priorities in resources allocation. Anuradha De. et al (2008) studying the breakdown of expenditure by education departments on different sectors of education for the period of 1990-91 to 2004-05 showed that the proportion of elementary education has increased to around half of the total resources, one third to secondary education, the share of higher education hovering around 11 per cent to 15 percent and the share of technical education was low and declining.

Looking at the trends of plan and Non-plan expenditure within education is also important while studying the trends and growth of aggregate public expenditure because it shows the clear picture of utilisation of public expenditure on education as Non plan expenditure mainly include the expenses that are occurred to maintain and running of existing schemes in education sector whereas the plan expenditure is expenditure on new projects and schemes started by the government. Anuradha De. et al (2008) through paper showed that the trends of plan expenditure are somewhat different from the trends pattern

of aggregate expenditure. There was an increase in plan expenditure at a slow rate between 1996-97 and 2000-2001 but it increased rapidly thereafter. As aggregate public expenditure showed reverse trends after the nineties, the plan expenditure saw opposite trends for the same period reflected from the introduction of many different schemes in elementary education.

Center plays a dominant role in plan expenditure and set the direction of the education sector. The major portion of plan expenditure is done by the centre and the states governments have larger proportion in non-planned expenditure such as payment of salaries to teachers and bearing recurring expenses in the education system. Thus the state governments by playing the vital role in the maintenance of existing infrastructure, through non-planned expenditure, check the quality aspect of the education sector.

Analysis of public financing of education in aggregate can result in limited use in India. There are different priorities and limitations due to varying financial capacities both at the state level as well as the federal level. There are differences in financial power and priorities in different states too. Therefore, the disaggregated analysis will be of more use and valuable in understanding the public financing in the education sector.

Anuradha de et al (2008) showed in their paper that the proportion of plan expenditure incurred by the centre in total plan expenditure stood very high and rose from 42 per cent in 1992-93, going up to 63 per cent in 2003-04. It fluctuated between 25 to 30 per cent since the first FYP and lasted up to the fourth FYP when education was not in the concurrent list Tilak (2003). Even as education was included in the concurrent list, it did not increase immediately rather it started increasing in the early nineties. The dominant role in changing of the education sector is being played by the centre through plan expenditure. Talking about non-plan expenditure, state governments have contributed regularly about 92-94 per cent and this has come from their own domain. There have been changes in inter-sectoral allocation in the expenditure by the centre and states over the years. The major role in higher education and technical education was played by the centre and state governments stressed on elementary and secondary education. But the last decade and a half shows that there was an increase in expenditure mainly on elementary education by the centre. It increased rapidly after 1995-96 and exceeded 50

per cent in 2003-04 from 13.7 per cent in 1990-91. But the increase in expenditure on elementary education by the centre was at the cost of secondary education. The proportion of higher education also declined rapidly but the share of technical education stood unchanged, Anuradha de et al (2008).

Tasleem Araf C (2016) in his paper found that share of planned expenditure in total expenditure on education made by the centre, state/UTs has increased while the proportion of non-plan expenditure has gone down. Plan expenditure has experienced increasing trends at the state level and it grew up from 12.45 per cent to 25.23 per cent in the period 2003-04 to 2013-14. When it comes to non-plan expenditure, it faced a declining trend and has declined from 87.55 per cent to 74.77 per cent for the same period. Plan and non-plan expenditure at centre level also demonstrated the same trends. Plan expenditure increased from 71.43 per cent to 74.41 per cent and non-plan expenditure declined to 25.23 per cent from 28.57 per cent during the same period.

Different states have differed financial capacity and priorities, therefore, to understand and make any sense out of the trends and growth of public expenditure on education, it is important to study it on the state level. The disparity at the regional level with respect to educational outcomes] can be answered by the analysis of public financing of education at the state level. When the allocation was studied state-wise Smita Anand (2014), a relatively higher share of their GSDP on total education was allocated by states like Tamil Nadu, Kerala, Maharashtra, and Karnataka amongst major states of the country. The author also stated that in most of the states in particular and India in general, the expenditure on education as a proportion of GDP has shown a declining trend for all the sectors except technical education after 1990-1991.

1.2.3 Education Committees Related to Financing of Education with their Recommendations and NEP

Even seven decades after independence, there exists a large number of illiterate people, children in large number still out of school and significant inequality at socioeconomic, gender and regional level. The underachievement at the socioeconomic level and with respect to the political and cultural transformation of society, which is considered as

externalities of education, resulted from our failure in achieving educational goals and targets. The major reason for underperformance in realising educational goals and targets has been underinvestment in education despite various education commissions, since independence, recommended to increase the investment in the education sector.

Back to back several commissions on education, set up after the independence, focusing on the estimation of required allocation for the same, have unanimously come up with the recommendations of increasing the public expenditure on education at every level in general and primary and secondary education in particular. From Kothari commission (1966) to all National Education Policies (NEP 1968, 1986, 1992) and other many commissions such as Saikia commission, common minimum programme (CMP) and even recently made TSR Subramaniam committee calculated requirement for universalising the education and recommended public expenditure, as a proportion of GDP, to be increased to 6% which is still hovering around 3-4% since independence. .

Indian Education Commission (1964-1966), famously known as the Kothari Commission, had assessed the education sector in India and gave recommendations based on valuable empirical findings and knowledge. The revolution in the theory of human capital by Schultz in 1961 and its role in the economic progress seem to have its influence on the commission (Tilak, 2007). The commission estimated the requirements of public expenditure on education and gave a recommendation for increasing public expenditure on education to at least 6 per cent of GDP along with many other recommendations. The estimated requirements of expenditure to education was based on the following considerations- next 20 years period- the amount, a proportion of GNP, allocated by the economically forwarded countries like US, Japan and the USSR on education and its advancement- normative principles that the spending on education should normally grow at double the rate of economic growth. Schultz (1986) stated, “during the process of economic modernisation the rate of increase in human capital is higher than that of reproducible physical capital”. But the commission pleaded for a modest goal of 10 per cent growth in expenditure on education while the country was expecting 6 per cent rate of economic growth and gave sufficient time of 20 years to the government for realising the goal and targets. Amongst various recommendations

proposed by the Kothari Commission, the recommendation of increasing expenditure to at least 6 per cent of GDP was accepted by the government along with other many recommendations and resolved it in the NEP 1968. International organisations such as UNESCO and UNDP endorsed the recommendation of allocation of 6 per cent of GDP on education and they also favoured it, for other developing countries, as a desirable level of public expenditure.

The national education policy 1968 focused on free and compulsory education for children of 6 to 14 years of age under Article 45 of directive principles of state policy (DPSP). The policy also stressed on ensuring equalisation of educational opportunities and checking the imbalances at regional, gender and caste and communities level. It also recommended for enhancement of science education and R&D for economic growth to accelerate. An increase in public expenditure on education, as a proportion of GDP, to at least 6 per cent was also reiterated along with radical restructuring in the NEP 1968.

The composition and modalities of public expenditure on education got changed after 1976, by 42nd Constitution Amendment Act, when the education was transferred to concurrent list from state list and it became joint responsibility of centre and states both. Since then, the centre has also, which played an important role mainly in higher education and technical education earlier, started investing in primary and secondary education too along with state governments.

National Education Policy, prepared in 1986, gave more emphasis on removing disparities at a regional level, gender gap and caste and communities. After focusing on the quantitative expansion of education in last two decades, the qualitative aspect of education was also given attention along with efforts to enhance the percentage of literacy, checking of brain drain] and modernisation of curricula and improvement in the examination system.

With 73rd and 74th Constitutional amendments, constitutional recognition was given to local governments through PRI and Municipalities. The responsibility of school education was included in the list of responsibilities of local bodies. Local bodies have an important role in financing and implementing education programme since then.

Subsequently, the Saikia Commission comprising of state education ministers studied, among other, the implications of making free and compulsory education a fundamental right. The committee reiterated the requirement of an expenditure of 6 per cent as a proportion of GNP with 50 per cent of it for primary education. TMC, in 1999, calculated and estimated additional allocation requirements for UEE. The cost estimation methodology given by TMC for universalising elementary education became a trendsetter, and therefore subsequent requirement estimation policies took it as a reference. The committee took inputs and active components such as the pupil-teacher ratio of 30:1, provision of at least two teachers in primary school and not less than three teachers and a headmaster in upper primary school. In the long run, there is no substitute for adequately qualified and trained teachers though, in the short run, para-teachers may play a significant role in encouraging higher school attendance. The committee suggested cost considering formal education instead of part-time non-formal schooling as assumed earlier, even, for children who have been out of school. Estimates mentioned that additional funds in the range of 137000 crores were required for free universal elementary education over the decade.

In 2002, providing free and compulsory education to children of 6-14 years of age covered under fundamental right under article 21A of the constitution by 86th CA Act. Provisions regarding early childhood care and education below 6 years of age, were also made during the same process.

Common Minimum Programme of the UPA government in 2004 included the same public expenditure target which was being recommended by various committees since Kothari commission, to increase public financing to education to 6 per cent of GDP with at least half being allocated to primary and secondary education. To finance the agenda to universalise access to basic education with quality, a cess of 2 per cent on all central taxes was introduced by the committee. A special aid to enhance and expand infrastructure was promised to be given to northern states. A national scheme of cooked nutritious mid-day meal, mainly funded by the centre, was announced to be introduced at primary and secondary school. All these would be done in a phased manner. It also

included universalisation of Integrated Child Development Services (ICDS) to provide and ensure a functional Anganwadi in every settlement and its full coverage.

In 2005, the CABE committee report on universalization of secondary education stressed on the bifurcation of the targeted requirement of 6 per cent of GDP for education and recommended that the allocation of 3, 2 and 1 per cent of GDP to elementary, secondary and higher education respectively.

Recently formed an education committee under the leadership of TSR Subramaniam (former cabinet secretary) in 2015 submitted its report in May 2016 with all its key recommendations. Its major recommendations, including the yet to be fulfilled long demand of 6 per cent of GDP on education, consist of pre-school education for children (4-5 years of age) as right under RTE. No detention policy till V, detaining policy at the upper level and provisions of remedial classes and two extra chances to pass the class, on-demand board exams, reserving 25 per cent of seats for the economically weaker section (EWS) in minority schools are some of the major recommendations proposed by TSR committee. The committee has given a recommendation of Indian Education Services with the permanent settlement with state governments but cadre controlling authority with the HRD ministry.

Almost every commission formed on education and National Education Policies prepared since independence, more or less, has given the same recommendation regarding public expenditure on education amongst their other many recommendations. Formulation of proper plans, schemes, and setting up of methods and mechanism for investing the recommended allocation on education are considered as prerequisites for efficient and effective utilization of the resources. Prevention of misuse or wasteful spending of resources can be achieved by raising the absorptive capacity of the system. Investment in other sectors can prove to be complementary to the recommended amount of allocation to the education sector Tilak (2003). Other sectors such as investment in setting up adequate security measures for girl children on roads, street lighting, transport etc. are important and considered as complementary to efforts in the education sector. Unless, effective implementation of child labour laws and sustainable rehabilitation mechanism for children, are ensured, the fruits from efforts made in the education sector cannot be

realized in full potential. The suggested level of investment in education should be met by government resources, and non-governmental expenditure will be additional to the recommended level of allocation. Therefore, any contribution made by the private sector will be different from the recommended allocations on education which have to be made by the centre and state governments.

1.2.4 Household Expenditure on Education

Even as education remains a fundamental right of all citizens of India, it has been long argued that it is not entirely free. In his article “How Free Is 'Free' Primary Education in India?”, Jandhyala B G Tilak uses NSSO data on household expenditures to argue that households in India spend a large proportion of their income in educating their wards. Even in public schools, students paid significant sums of money to acquire books, uniforms, transportation, and other amenities. Across the length and breadth of the nation, there is spatial and regional variation when it comes to how much families spend on education. Rurality and urbanity, gender, caste, class location, education levels of family, demography and structure of the family are some of the many factors that impact the proportion of household income spend on the education of children. The MHRD defined education as free when no tuition fees were paid, but tuition fees alone do not sum up the needs of a student. Material incentives such as mid-day meals, uniforms, and stationery are also restricted to a significantly small section of students in public schools, and is dependent on the initiatives were taken up by the state governments, the impact of which varies both intra-state and inter-state in India. For instance, NCAER (1994) found that families in Bihar spent 8 per cent of their household income on education, but 20 per cent in Kerala. Similarly, even as richer households pay more for the education of their wards in absolute terms, it is actually the poor households that pay a larger proportion of their income on acquiring education.

It is this proportion of household income that is spent on education that is referred to as household expenditure on education, or private expenditure on education. This stood against the public expenditure of education that was done by the State. At times, private expenditure on education has complemented the public expenditure on education, while

at other points of time and space, it has also replaced or acted as a substituent for public expenditure. It is especially vital today to go analyse such patterns and trends of how private expenditure on education is carried out in times when budgetary allocation on education are falling all over the world and governments across the east and west are increasingly looking towards households to fund their education themselves. For a long time in India, the dominant narrative maintained that household expenditure on education by Indian families is negligible since education is free and therefore the entire burden of educating its citizens lies on the Government of India. This was proven incorrect in the 1960s in the small number but seminal works in the field of education expenditure by Panchamukhi (1965), and Shah (1969). It was due to these works that the myth of negligible household expenditure was dismantled. Later, National Accounts Statistics' national estimates laid a foundation with its reports, making clear the high amounts of private expenditure on education, though it was not as high as earlier researchers had concluded. Again, there is scarce data available when it comes to gross private spending on education; according to estimates from Tilak's study, in 1979-80, total private expenditure on education formed 6.6 per cent of the GNP whereas the government expenditure stood at 3.9 per cent. J B G Tilak (2000) has argued that government bodies respond prompter than households when it comes to education. For instance, he has argued that a rise in household expenditure does not necessarily mean a rise in expenditure on education, but a rise in income for the State means a rise in expenditure on educational infrastructure and services. This is contrary to what Schulz (1981) had argued about household expenditure on education versus public expenditure on education in India. Tilak has also argued that households are willing to spend when it comes to primary as well as higher education in India and that an increase in public spending also prompts an increase in household spending on education. Across these researches, the need for more detailed quantitative analysis has been felt for a long time now.

Due to scanty data available at home, Indian studies on private expenditure on education have looked outwards to studies conducted in developed and other developing countries. Such studies have also focused on education-related decisions made by families in correspondence to their incomes. Such decisions could relate to mother's education, expected return from the investment in education, the performance of the wards, and

availability of student loans amongst others. Notable studies conducted in this regard are Becker (1981) and McMahon (1984). Williams (1983) tried to understand such patterns governing private expenditure on education in Australia. A lack of home-based study means that determinants of decisions on education and the private expenditure are still largely unknown in the case of the Indian public.

To achieve a universalisation of elementary education in India and understand the patterns of household expenditure on education, it is vital to deconstruct links between the economic, caste, gender, and demographic location of household and the proportion of income they spend on education. Amitava Saha (2013) has argued how gender discrimination against girls in Indian households has led to a differential treatment towards them when it comes to spending on education. Families tend to spend more on the education of boys than of girls. This stands true across rural and urban areas in most of the states of the country. At a disaggregated level, his paper *An Assessment of Gender Discrimination in Household Expenditure on Education in India* has used the 64th round of NSSO data to argue how gender discrimination operates in multifarious various and how it is not just limited to underdeveloped or “backward” states of India. Some of the findings include the fact that gender discrimination when it comes to household expenditure on education is least in tribal communities and then in SC communities. The most extreme discrimination exists in Bihar and then in other states like Rajasthan, Uttar Pradesh and Madhya Pradesh. Other findings report that females in larger families experience more discrimination when it comes to household expenditure on education and this stands true across rural and urban areas; on the other hand, families with five or fewer members are less pro-male in spending on education. In India, intra-household allocation of resources on education thus needs to be seen through the lens of gender as well.

CHAPTER TWO

Public Expenditure on Education in India: Inter and Intra-Sectoral Allocation of Resources and Analysis of Its Trends

2.1 Introduction

The chapter tries to provide a broad overview of the public expenditure on education during the period of 2000-01 to 2014-15. Financial resources allocated by any government on any sector indicate the importance attached to that sector. It is a widely accepted knowledge that education contributes to economic growth as well as to society as a whole. Availability of finances for education is an important determinant for quantitative expansion and qualitative improvement of education sector. Though India, after independence, experienced a steady expansion in numbers of student enrolled, schools, teachers, colleges and other educational institutions, but, are the funds accorded for education sector adequate?(Tilak, 2004).

Absolute figure of expenditure on education at national level during the planning period after independence is remarkable. The expenditure on educational development increase by 900 times from Rs, 55 crores in 1947 to Rs. 62 thousand crores in 1998-99 (Tilak, 2003).

It has further increased to 82 thousand crores in 2000-01 and reached to 3.5 lakh crores in 2012-13, the latest year for which such data is available. According to the budget estimates, the expenditure on education sector would be of the order of 4.84 lakh crores in 2014-15. But this remarkable boost in the expenditure on education has been belittled by three reasons: population growing at a rapid pace, a gigantic rise in the number of students, and increasing costs of education. Even seven decades after independence, there exist a large number of illiterate people, a large number of children are still out of school

and a significant inequality exist at socioeconomic, gender and regional level. The long envisaged goal of universalisation of elementary education is yet to be achieved.

Post-Independence several commissions were set up to highlight the appropriate allocation of resources to the education sector. Almost all these commissions came up with the common recommendation of increasing public expenditure on education at every level in general and at primary and secondary levels in particular.

Kothari Commission (1966), National Education Policy (NEP 1968, 1986,1992) Saikia Commission, Common Minimum Programme(CMP) and recently set up TSR Subramaniam commission recommended public expenditure, as a proportion of GDP, to be increased to 6 per cent which is still floating around 3-4 per cent. Public expenditure on education as a proportion of GDP was 4.14 percent in 2000-01 which started declining thereafter and reached to 3.58 percent GDP of the in 2012-13.

The focus of this chapter would be on trends and pattern of public expenditure on education in India during the period of 2000-01 and 2014-15, dealing with a comprehensive profile of several aspects of public expenditure on education in the country. Not only inter-sectoral and intra-sectoral allocation of resources to education would be covered but also the share of Centre and states in total public expenditure on education would be analysed. Since the aggregated expenditure does not clear the picture about the direction of education sector properly, therefore the disaggregated expenditure on education in itself and on different level of education is also studied. Though the issues chosen here are limited and highly selective, but the analysis of issues made here are analytical and descriptive of the major issues regarding public expenditure on education in India.

2.2 Public Financing of Education and Trends in Expenditure

2.2.1 Primary Sources of Funds for Education

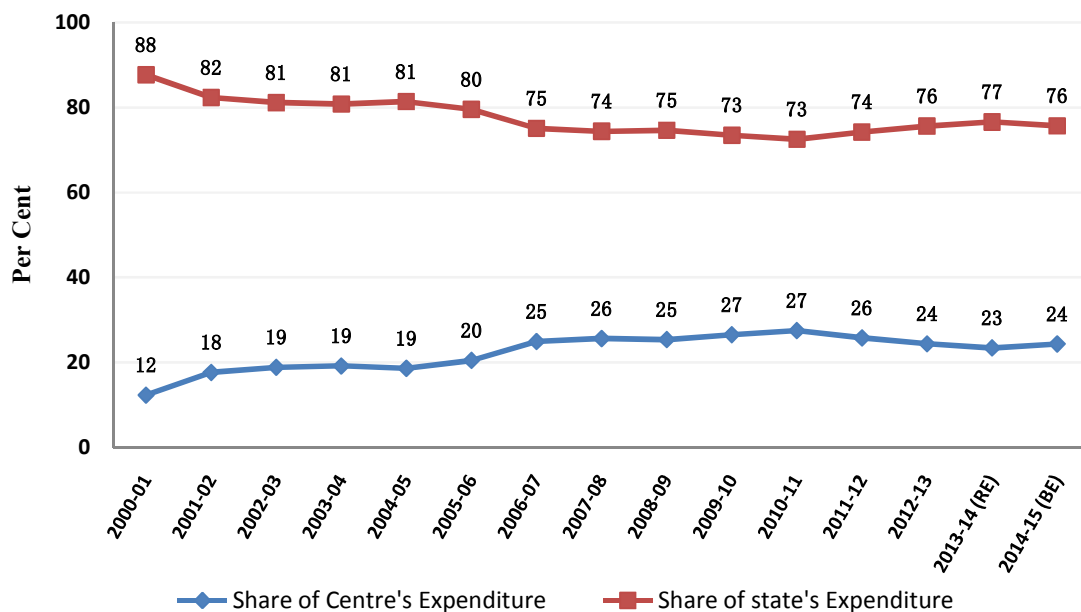
There are two primary sources to finance education – Public Sector and Private Sector. Public sector majorly consists of financing by central government, state governments,

local bodies and foreign assistance. Foreign aid and assistance are majorly transferred through the Centre. On the other hand, source of private sector means expenditure by students and/or parents, households, non-profit organization. The private sector also includes corporate sector which allocates resources through Corporate Social Responsibility (CSR) fund.

Since 1976, when the 42nd Constitutional Amendment Act was passed in the parliament and the education was transferred to concurrent list from state list, financing for education has become joint responsibility of both the Centre and the states.

Figure 2A shows the shares of Centre and states in total budget expenditure on education for the period 2000-01 to 2014-15.

Figure 2A: Share of the Centre and the States in Education Expenditure



While the greater portion of expenditure on education is still financed by states, their share in the financing of education has been declining after 2000-01. The share of expenses on education borne by states has declined from 87.64 per cent in 2000-01 to 72.52 per cent in 2010-11. After a constant decline of share of states in total expenditure on education till 2010-11 since 2000-01, it has shown an upward trend thereafter. It has

increased to 75.64 percent in 2014-15 (Budget estimate) but still remained lower than the level of 2000-01. On the other hand, the share of Centre in the financing of education has increased and reached to 24.36 per cent in 2014-15 (Budget estimate), highest in 2010-11, from 12.36 per cent in 2000-01.

2.3 Resources Allocation to Education

The resource allocation to education is categorized into the following two patterns in this chapter.

- 1) Inter-Sectoral allocation of resources to education: (a) allocation of resources to education as proportion to GDP (b) resources allocation to education by education department vis-à-vis other departments and its share in total government expenditure, (c) disaggregated allocation of resources to education under the heads of plan expenditure and non-plan expenditure.
- 2) Intra-Sectoral allocation of resources to education which means allocation within the education sector: (a) resources allocation to different level of education i.e., elementary, secondary, university and higher education and technical education (b) relative share of plan expenditure and non-plan expenditure on different level of education.

2.3.1 Inter-Sectoral Allocation of Resources

Share of Education in GDP

The importance given to education can be analysed by the percentage share of expenditure on education to gross domestic product. It is the most used and standard indicator of studying the efforts of a country on educational development. Every country has to allocate resources to different sector in an economy on the basis of importance accorded to it. Therefore, the above indicator shows the relative priority given to education in an economy.

Despite several committees on education have recommended for public expenditure to be increased to 6 per cent of GDP, the public expenditure on education is still hovering around 3-4 per cent even after seven decades of independence. With the introduction of “planning for five years method” for economic development in 1950-51, India spent 1.2 per cent of GDP. It had increased to 3.9 percent in 1998-99 but not with a smooth growth (Tilak, 2003).

Table 2.2A in Appendix shows the figures on expenditure on education for the period of 2000-01 till 2014-15, as proportion of GDP.

Figure 2B shows the trends of public expenditure on education as a proportion of GDP for the period 2000-01 to 2014-15.

Figure 2B: Share of Public Expenditure on Education in GDP (%)

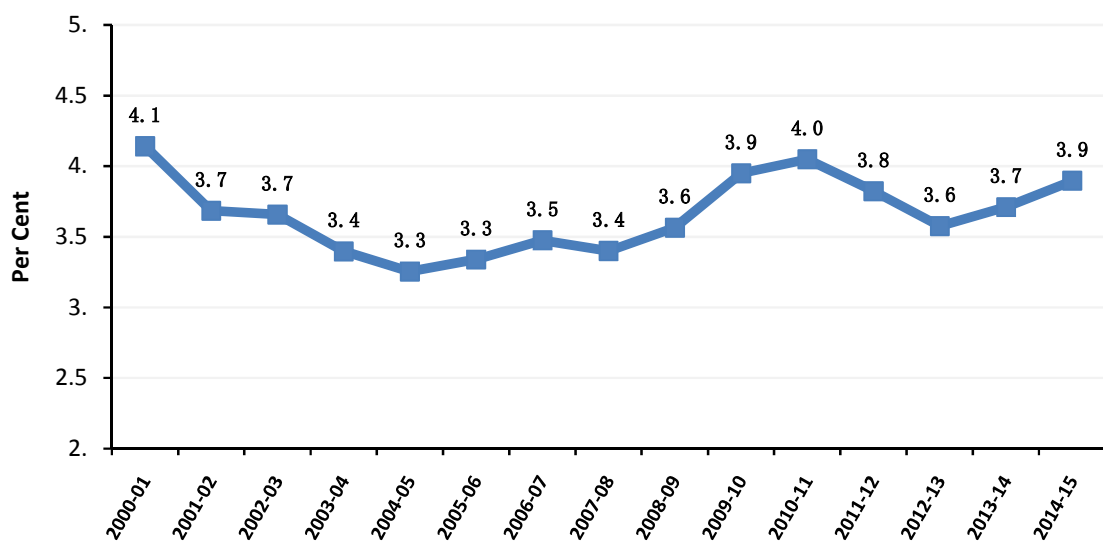


Figure 2B captures the trend and shows that it has increased from 3.9 per cent in 1998-99 to 4.14 per cent in 2000-01 (as shown in the Table 2.2) (Tilak, 2003). Despite free education to children of 6-14 years of age being enshrined in the constitution as a fundamental right under the article 21A, the share of expenditure on education as proportion of GDP has started declining since 2000-01 and it has reached its lowest in 2004-05 with expenditure level of 3.25 of the GDP. This has been the lowest level in the last decade and a half. It started increasing thereafter but at slow rate till 2008-09. A large

increase can be seen in 2009-10 (the year when RTE Act was passed in the parliament) but it again started decreasing after 2010-11.

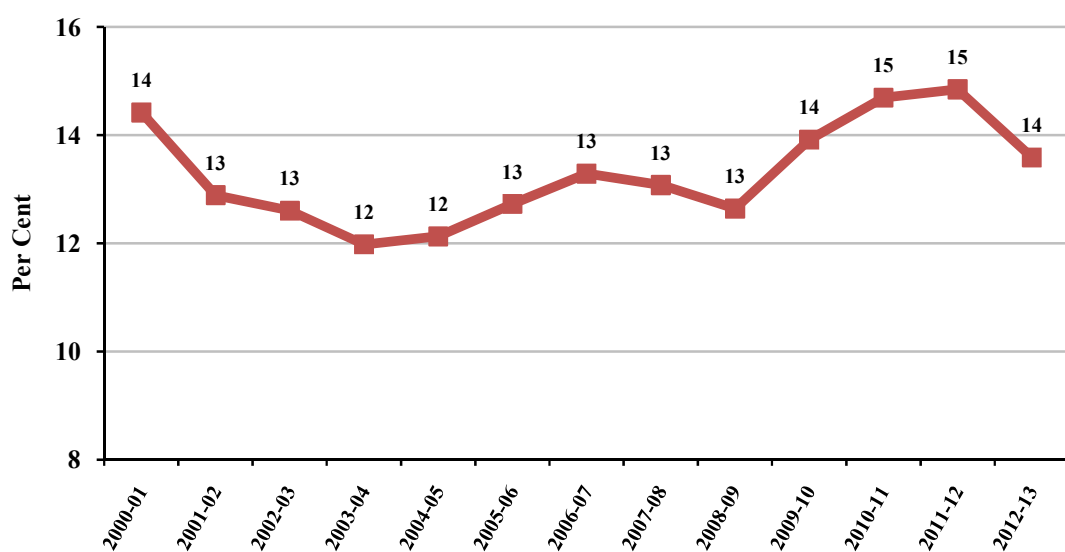
Share of Education Expenditure in Government Total Expenditure

A more vital measure of the real picture regarding expenditure on education is the priority given to education sector in the total government budget. This measure is even preferred over the earlier one, as the control of government over government spending plan is direct in nature than on GDP. Since there is no special budget for education in India, one has to go through the union budget, budgets of all the states and UTs and look for the education components to calculate education budget of the country as whole (Tilak, 2003).

Table 2.3A given in the appendix is showing the share of expenditure on education in total public expenditure which is graphically represented below in the **Figure 2C**.

It was 14.42 per cent in 2000-01 and decreased thereafter and reached to 11.98 per cent in 2003-04. The share of expenditure on education in total public expenditure started showing upward trend but it has remained 13-14 per cent throughout the studied period.

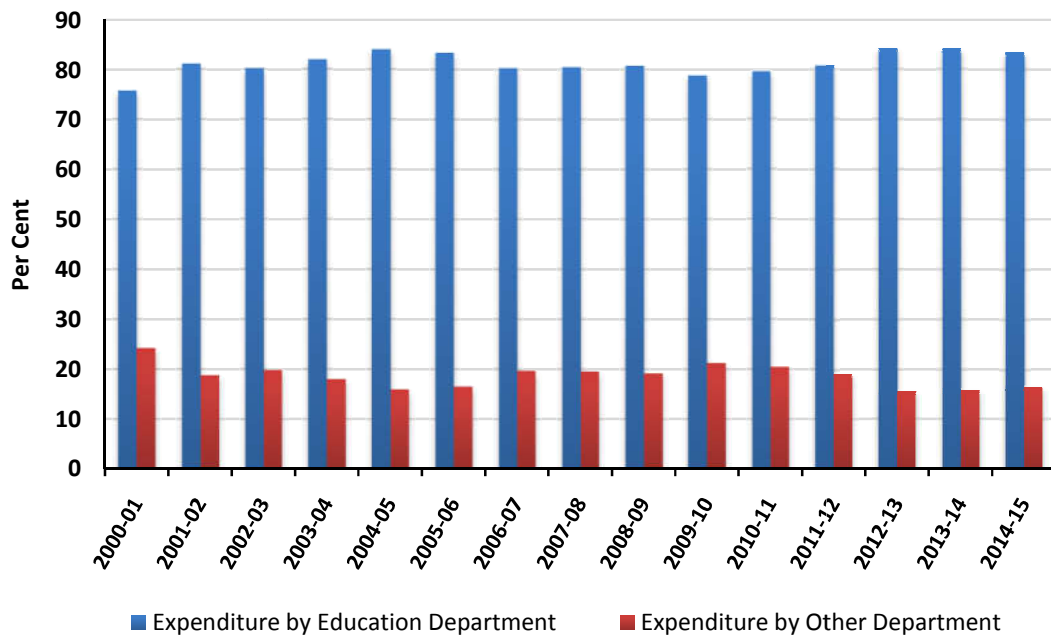
Figure 2C: Share of Education Expenditure in Total Budget Expenditure on All Sectors



Allocation of resources to education is not made by only education department (MHRD) but also made by other department. Important ones among them are departments of Women & Child Development, Health & Family Welfare, Social Justice & Empowerment and Culture etc. A significant share is contributed by the education department, whereas the other departments, in addition to education department, also allocate resources to facilitate educational development such as expenditure on women safety, enforcement of child labor laws etc. The relative share of expenditure on education by other departments as a proportion to total expenditure on education has increased from 8.5 per cent in 1971-72 to 16 percent at the end of the 1990s. (Tilak, 2003)

The increase in the relative share of expenditure on education by other departments to total educational expenditure continued till 2000-01 and reached to 24.23 per cent. It has been shown in Table 2.3 that post 2000-01 the share of other departments in total expenditure on education started declining and reached to 19.17 per cent in 2008-09. But, in 2009-10, it has again increased to 21.19 per cent. After showing an increase for one year after 2008-09, the share of expenditure by other departments in total expenditure on education has shown some downward trend and it has declined to 16.48 per cent in 2014-15. The relative share of expenditure by education department as a proportion to the total expenditure on education has again reached to the same level as it used to be: 83.51 per cent.

Figure 2D: Share of Expenditure on Education By Education Dept. and Other Dept. in Total Education Expenditure.



Plan and Non-plan Expenditure

Aggregate expenditure allocated to education reflects the importance given to the education sector. To make the picture clear about the expenditure on education and analyse its direction, the aggregate expenditure on education has been further disaggregated into plan expenditure on and non-plan expenditure on education. While, plan expenditure is the expenditure made to finance new schemes, programs, infrastructure etc, non-plan expenditure, on the other hand, includes expenditure on maintenance of the existing infrastructure and operation of the existing schemes and projects. Another distinction between expenditure on education is made in terms of revenue account and capital account. Expenditure on revenue account is majorly incurred on running of existing schemes and their maintenance and it does not result in to the creation of assets. On the other hand, expenditure in capital account is the expenditure incurred for the creation of capital assets and it is non-recurring in nature eg. construction of school buildings. A large proportion of the expenditure on education comes under the head of revenue account and a negligible proportion is under capital account. The share

of expenditure on education under capital account as a proportion of total expenditure is less than one per cent (Tasleem Araf C, 2016). Therefore, we are not considering expenditure on education under the head of capital account for our study. But the huge chunk of expenditure on education made under revenue account doesn't mean that the asset creation in education sector is negligible in India. Because, the entire grants-in-aid is included in the revenue account instead of capital account and the expenses on construction activity generally come under the heads of other departments.

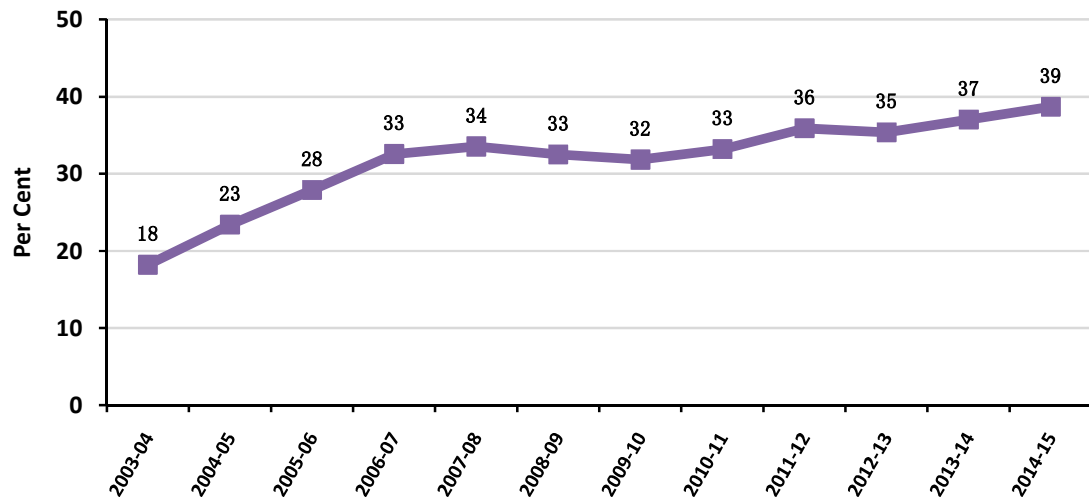
Through the **Table 2.5A** in Appendix, it is shown that the bulk of expenditure is made under the head of non-plan expenditure. In 2003-04, 81.78 per cent of the total expenditure on education was non-plan expenditure; on the other hand, 18.22 per cent was under the head of plan expenditure. While, 74.32 per cent of central expenditure on education was under the head of plan expenditure in 2003-04, the relative proportion of plan expenditure to total expenditure made by state governments was 8.67 per cent in the same period. The overall share of plan expenditure on education has shown an upward trend and it has increased from 9.5 per cent in 1980-81 (Chanchal, 2008) to 18.22 per cent in 2003-04. It has experienced a continuous increase and therefore it has reached to 38.70 per cent in 2014-15 (BE) as shown in the Table 2.5A.

Given the efforts made by central government to give the direction for education development, a higher rise has been seen for the states allocation too, as the plan expenditure on education by the states has grown from 18.22 per cent in 2003-04 to 25.25 per cent in 2014-15 (BE). On the other hand, plan expenditure on education by central government has continued to grow which has increased from 74.32 per cent in 2003-04 to 80.47 per cent in 2014-15 (BE). The trend analysis of the share of plan expenditure as a proportion of total expenditure on education borne by Centre and states/UTs has grown whereas there has been decline in the share of non-plan expenditure by all entities.

Increase in plan expenditure by Centre since 1980s can be partially attributed to the introduction of National Policy on Education (1986) which was revisited in 1992 and a number of centrally sponsored schemes were initiated to promote and encourage UEE. The further increase in it after 2003-04 can be attributed to the 86th amendment to the

constitution (2002) and further the enactment of RTE Act in 2009. The plan expenditure on education by central government has experienced a steady growth thereafter.

Figure 2E: Share of Plan Expenditure in Total Education Expenditure



2.3.2 Intra-Sectoral Allocation of Resources

Intra- sectoral allocation of resources in education in India since independence shows a lopsided emphasis (Tilak, 2003). A crystal clear shift in the priorities has been observed from the **Table 2.6A**. In 2001-02, the share of elementary education in total expenditure on education was 50.91 per cent. The priorities, measured as a share of total expenditure, given to elementary education started declining and it reached to 45.07 per cent in 2014-15(BE) except the year 2004-05 when it was 51.45 per cent as proportion of total expenditure on education.⁴

⁴ See the Table 2.6 in the Appendix

Figure 2F: Intra-Sectoral Allocation in Education Expenditure.

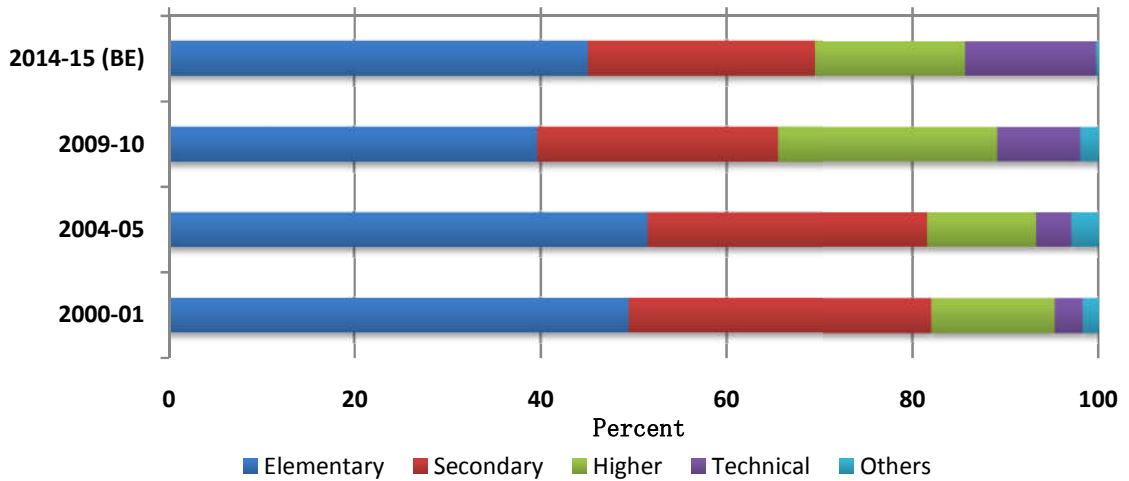


Table 2.1 has shown that the 56.40 per cent of total plan expenditure on elementary education was incurred by Centre and the rest 43.60 per cent was incurred by states/UTs in 2000-01. On the other hand, almost cent percent of non-plan expenditure on elementary education was incurred by states/ UTs and a negligible part of non-plan expenditure was incurred by Centre for the same period. While, 99.93 per cent of the total expenditure on elementary education by Centre was plan expenditure, but only 9.14 per cent of total expenditure on elementary education incurred by states/UTs was plan expenditure in 2000-01. When the figures are compared with the year 2014-15, a clear cut change can be observed in the pattern of allocation of resources on elementary education by states/UTs. In 2014-15, plan expenditure by Centre on elementary education, as proportion of total expenditure by Centre on the same, has been more or less same but the share of plan expenditure by states/UTs has increased from 9.14 per cent in 2000-01 to 25.32 per cent in 2014-15 (BE).

**Table 2.1: Plan and Non-plan Revenue Expenditure on Primary Education
(At current prices: Rs. Crores)**

Years	Plan Expenditure			Non-plan Expenditure			Total Expenditure		
	Centre	State	Total	Centre	State	Total	Centre	State	Total
2000-01	3177.3 (56.40)	2456.5 (43.60)	5633.8 (100)	2.1 (0.01)	24416.5 (99.99)	24418.6 (100)	3179.4 (99.93)*	26873 (9.14)*	30052.4 (18.75)*
2004-05	7689.65 (64.65)	4205.27 (35.35)	11894.92 (100)	2.53 (0.01)	29976.72 (99.99)	29979.25 (100)	7692.18 (99.97)*	34181.99 (12.30)*	41874.17 (28.41)*
2009-10	20182.15 (62.85)	11931.68 (37.15)	32113.83 (100)	6.1 (0.01)	63453.56 (99.99)	63459.66 (100)	20188.25 (99.97)*	75385.24 (15.83)*	95573.49 (33.60)*
2014-15	42498 (50.20)	42160.92 (49.80)	84658.92 (100)	8.28 (0.01)	124382 (99.99)	124390.3 (100)	42506.28 (99.98)*	166542.9 (25.32)*	209049.2 (40.50)*

Notes: (1) Figures in () are percentage share. (2) * Denotes plan expenditure as percentage of total expenditure.

Source: Computed from data in *Analysis of Budgeted Expenditure on Education (various years)*.

The share of secondary education in total expenditure on education has experienced a fall as it has declined from 32.56 per cent in 2000-01 to 24.38 per cent in 2014-15 (BE) **Table 2.2**. While analyzing the pattern of allocation of resources to secondary education by disaggregating the expenditure, it has been observed that the 24.99 per cent of total plan expenditure on secondary education was incurred by Centre and 75.01 per cent was incurred by states/UTs in 2000-01 which was a significant proportion⁵. On the other hand, 96.68 per cent of non-plan expenditure on secondary education was incurred by states/ UTs and 3.32 per cent of non-plan expenditure was incurred by Centre for the same period. While, 47.78 per cent of the total expenditure on secondary education by Centre was plan expenditure, but only 8.61 per cent of total expenditure on secondary education incurred by states/UTs was plan expenditure in 2000-01. When the figures are compared with the year 2014-15, a drastic change can be observed in the pattern of

⁵ See the Table 2.2

allocation of resources on secondary education by Centre and states/UTs both⁶. In 2014-15, plan expenditure by Centre on secondary education, as proportion of total expenditure by Centre on the same, has shown upward trend which has increased to 72.94 per cent in 2014-15 and the share of plan expenditure by states/UTs has increased from 8.61 per cent in 2000-01 to 20.15 per cent in 2014-15 (BE).

**Table 2.2: Plan and Non-plan Revenue Expenditure on Secondary Education
(At current prices: Rs. Crores)**

Years	Plan Expenditure			Non-plan Expenditure			Total Expenditure		
	Centre	State	Total	Centre	State	Total	Centre	State	Total
2000-01	550.3 (24.99)	1651.4 (75.01)	2201.7 (100)	601.4 (3.32)	17536.6 (96.68)	18138 (100)	1151.7 (47.78)*	19188 (8.61)*	20339.7 (10.82)*
2004-05	682.29 (35.70)	1229.15 (64.30)	1911.44 (100)	771.52 (3.32)	22457.66 (96.68)	23229.18 (100)	1453.81 (46.93)*	23686.81 (5.19)*	25140.62 (7.60)*
2009-10	2849.12 (42.14)	3912.16 (57.86)	6761.28 (100)	2597.93 (4.93)	50112.04 (95.07)	52709.97 (100)	5447.05 (52.31)*	54024.2 (7.24)*	59471.25 (11.37)*
2014-15	8829 (33.90)	17218.73 (66.10)	26047.73 (100)	3275.01 (4.58)	68247.38 (95.42)	71522.39 (100)	12104.01 (72.94)*	85466.11 (20.15)*	97570.12 (26.70)*

Notes: (1) Figures in () are percentage share. (2) * Denotes plan expenditure as percentage of total expenditure.

Source: Computed from data in *Analysis of Budgeted Expenditure on Education (various years)*.

The proportion of total expenditure to university and higher education has shown a zig zag trend as it has decreased to 11.67 per cent in 2004-05 from 13.23 per cent in 2000-01 and shown an upward trend till 2008-09 and it has eventually decreased thereafter Table 2.3. Disaggregated figures⁷ has revealed that the 56.84 per cent of total plan expenditure on university and higher education was incurred by Centre and the rest 43.16 per cent was incurred by states/UTs in 2000-01. In contrast to elementary and secondary education, almost 20 per cent of non-plan expenditure on elementary education was incurred by Centre and 79.77 per cent of non-plan expenditure was incurred by states/UTs for the same period. 24.52 per cent of the total expenditure on university and higher

⁶ See the table 2.2

⁷ See the Table 2.3

education by Centre was plan expenditure and only 5.89 per cent of total expenditure on university and higher education incurred by states/UTs was plan expenditure in 2000-01. When the figures are compared with the year 2014-15⁸, a clear cut change can be observed in the pattern of allocation of resources on university and higher education by states/UTs. In 2014-15, plan expenditure by Centre on university and higher education, as proportion of total expenditure by Centre on the same, has increased to 55.90 per cent but the share of plan expenditure by states/UTs has increased from 5.89 per cent in 2000-01 to 11.95 per cent in 2014-15 (BE).

Table 2.3: Plan and Non-plan Revenue Expenditure on Higher Education
(At current prices: Rs. Crores)

Years	Plan Expenditure			Non-plan Expenditure			Total Expenditure		
	Centre	State	Total	Centre	State	Total	Centre	State	Total
2000-01	501.4 (56.84)	380.8 (43.16)	882.2 (100)	1543.5 (20.23)	6084.7 (79.77)	7628.2 (100)	2044.9 (24.52)*	6465.5 (5.89)*	8510.4 (10.37)*
2004-05	810.65 (62.11)	494.44 (37.89)	1305.09 (100)	1288.35 (15.72)	6909.77 (84.28)	8198.12 (100)	2099 (38.62)*	7404.21 (6.68)*	9503.21 (13.73)*
2009-10	4042.69 (72.76)	1513.71 (27.24)	5556.4 (100)	4034.88 (23.48)	13145.82 (76.52)	17180.7 (100)	8077.57 (50.05)*	14659.53 (10.33)*	22737.1 (24.44)*
2014-15	9349.03 (69.46)	4110.03 (30.54)	13459.06 (100)	7375.23 (19.59)	30278.7 (80.41)	37653.93 (100)	16724.26 (55.90)*	34388.73 (11.95)*	51112.99 (26.33)*

Notes: (1) Figures in () are percentage share. (2) * Denotes plan expenditure as percentage of total expenditure.

Source: Computed from data in Analysis of Budgeted Expenditure on Education (various years).

A clear cut shift of priorities towards technical education has been shown in the Table 2.4. The share of technical education to total expenditure on education has increased substantially from 3.02 per cent in 2000-01 to 14.08 per cent in 2014-15(BE). The boost in the expenditure on technical education as a proportion to total expenditure is coincided with the steady decline in the share of elementary and secondary education. Therefore, the increase in the share of technical education is at the cost of elementary and secondary education.

⁸ See the Table 2.3

**Table 2.4: Plan and Non-plan Revenue Expenditure on Technical Education
(At current prices: Rs. Crores)**

Years	Plan Expenditure			Non-plan Expenditure			Total Expenditure		
	Centre	State	Total	Centre	State	Total	Centre	State	Total
2000-01	504.7 (63.13)	294.7 (36.87)	799.4 (100)	616.8 (35.94)	1099.4 (64.06)	1716.2 (100)	1121.5 (45.00)*	1394.1 (21.14)*	2515.6 (31.78)*
2004-05	615.74 (56.73)	469.69 (43.27)	1085.43 (100)	825.96 (40.08)	1234.83 (59.92)	2060.79 (100)	1441.7 (42.71)*	1704.52 (27.56)*	3146.22 (34.58)*
2009-10	3489.26 (74.00)	1226.16 (26.00)	4715.42 (100)	1961.69 (42.53)	2650.62 (57.47)	4612.31 (100)	5450.95 (64.01)*	3876.78 (31.63)*	9327.73 (50.55)*
2014-15	7138.97 (66.46)	3602.5 (33.54)	10741.47 (100)	3078.38 (36.78)	5291.74 (63.22)	8370.12 (100)	10217.35 (69.87)*	8894.24 (40.50)*	19111.59 (56.20)*

Notes: (1) Figures in () are percentage share. (2) * Denotes plan expenditure as percentage of total expenditure.

Source: Computed from data in Analysis of Budgeted Expenditure on Education (various years).

Disaggregated figures shown in the Table 2.4 has the findings that the share of plan expenditure by Centre on technical education, as proportion of total expenditure by Centre, has increased from 45 per cent in 2000-01 to 69.87 per cent in 2014-15. A steady increase in the share of plan expenditure on technical education by states/UTs has been also observed. It has increased from 21.14 per cent in 2000-01 to 40.50 per cent in 2014-15(BE).

2.4 Conclusion

In this chapter, a detailed profile on various aspects of public financing of education in India for the period 2000-01 to 2014-15 is presented. The study tries to analyse the trends and changing pattern of inter-sectoral allocation of resources, intra-sectoral allocation of resources and Centre-state relation in financing education.

Since education brought into concurrent list in 1976 (42nd CAA), Centre has been playing a significant role in financing education. Though, the lion share is still financed by states/UTs, the relative share of Centre in total expenditure on education grew by a large

margin between 2000-01 and 2014-15 and it has increased to 24.36 per cent in 2014-15 from 12.36 per cent in 2000-01. The analysis of inter-sectoral allocation of resources to education captures that, even after seven decades of independence, despite a continuous effort made by several committees on education and education policies, the public expenditure on education has been hovering around 3-4 per cent of GDP even for the period 2000-01 to 2014-15. Priority given to education vis-à-vis other sectors in the economy measured in the form of share of expenditure on education in total expenditure reveals that the same had been in the range of 13-14 per cent during the period in 2000-01 and 2014-15 except the year 2003-04 when it was 11.98 per cent. The expenditure on education is not only done by education department but also by departments other than the education department. The share of expenditure by other departments has been increasing before the period considered for the study in this chapter and reached to 24.23 per cent in 2000-01. But, the share has started declining thereafter and has come down to 16.48 per cent in 2014-15 and the lion share of expenditure on education is financed by education department itself, which is 83.52 per cent in the same year. Aggregate expenditure on education disaggregated into Plan and Non-plan expenditure helps to understand the real picture of the direction of education system in the country, since plan expenditure is the expenditure made to finance new schemes, programs, and infrastructure etc., whereas non-plan expenditure is made on maintenance of existing infrastructure and operation of existing schemes and projects. Though, the major proportion of the total expenditure on education is incurred under the heads of non-plan expenditure, but the share of plan expenditure has been increasing during the period 2003-04 (the share of plan expenditure was 18.22 per cent) to 2014-15 (38.70 per cent). Centre allocates major part of its resources to education under the heads of plan expenditure, the share of which has increased from 74.32 per cent in 2003-04 to 80.47 per cent in 2014-15. On the other hand, the states/UTs allocate very less resources to education under the heads of plan expenditure which is 8.67 per cent of the total expenditure incurred by states/UTs. But the share of plan expenditure by states/UTs has also experienced an increase which has gone up to 25.25 per cent in 2014-15.

Intra-sectoral allocation of resources to education- elementary, secondary and higher, technical education and others - has also been examined. The findings of the analysis

reveal that the priority given to different levels of education has been lopsided during the period 2000-01 to 2014-15. In 2001-02, the share of elementary, secondary, higher, technical education in total expenditure was 50.91, 33.79, 11.34 and 2.32 per cent respectively, which has reduced to 45.07 per cent and 24.38 per cent for elementary and secondary education respectively in 2014-15. But the share of higher education in total expenditure on education has increased to 24.47 per cent in 2007-08 but decreased thereafter and reached to 16.17 per cent in 2014-15. More interestingly, the share of technical education has increased from 2.32 per cent in 2001-02 to 14.08 per cent in 2014-15. The increase in the share of technical education in total education expenditure is majorly at the cost of elementary and secondary education, as the share of which has decreased during the same period.

Almost cent per cent expenditure on elementary education by Centre is under the heads of plan expenditure, whereas the states/UTs allocate resources majorly under the head of non-plan expenditure for the same level of education. But, the share of plan expenditure in total expenditure incurred by states/UTs has increased from 9.14 per cent in 2000-01 to 25.32 per cent in 2014-15 for elementary education. It has increased to 20.15 per cent, 11.95 per cent and 40.50 per cent in 2014-15 from 8.61 per cent, 5.89 per cent and 21.14 per cent in 2000-01 for secondary, higher and technical education respectively. And, the share of plan expenditure in total expenditure on education incurred by Centre has increased to 72.94 per cent, 55.90 per cent and 69.87 per cent in 2014-15 from 47.78 per cent, 24.52 per cent and 45 per cent in 2000-01 for secondary, higher and technical education respectively.

CHAPTER THREE

Household Expenditure on Education in India: Differences Based on Nature and Characteristics of Household and Gender Discrimination

3.1 Introduction

There are two primary sources to finance education- public sector and private sector. They are also categorized into expenditure incurred in institutional domain (public sector) and expenditure incurred in individual domain (private sector). These are famously known as household or family expenditure and public expenditure respectively. Both expenditures, together, constitute the expenditure incurred in social domain (Majumdar, 1983). Institutional expenditure refers to the expenditure incurred by central and state governments, local bodies (after 73rd and 74th amendments to the constitution)⁹ and foreign assistance which is transferred through the budget of central government. On the other hand, household expenditure is referred to those expenditures which are incurred by students and/or their parents on education in terms of tuition fees, examination fees, buying books and stationery, transportation cost and expenditure for uniforms etc.

Both expenditures, whether it is institutional or household expenditure, are of elevated importance not only because of their enormity but also because of their nature and characteristics (Tilak, 2000). They are so inter-related and inter-dependent that, if either of them is absent, there would likely to be under allocation of resources to education (Panchamukhi, 1989). While, educational facilities such as building, infrastructure are

⁹73rd and 74th amendments to the Constitution of India gave constitutional status to Panchayati raj institutions and urban local bodies or Municipalities respectively. The intention behind this was to strengthen local self governments and bring third tier to our democracy and thus local bodies also got the responsibility to finance and run schools.

made available with the help of public expenditure, only household expenditure will make it possible to grab advantage of them (Tilak, 2000).

Household expenditure on education—primary, secondary, and higher—is distributed diversely across the country and is a contested terrain mainly because it is dependent on a large number of factors. Households spend on education due to several reasons: they expect economic and non-economic returns from it. Education remains a way up the class ladder and the belief is firmly entrenched in the Indian minds over the years after the independence. It is this belief that return rates from expenses incurred on education are very high that exhorts millions of families in India to reduce their consumption so as to spend more on the education of the progeny. This is aimed at securing long-term benefits to help the household climb up the class ladder. However, it is important to note that this investment is widely uncertain, especially as poorer families find this venture too “risky”. They tend to under-spend on education for there is no guaranteed long-term return. It is thus safe to say that high-income households spend more on education as compared to low-income families.

Public investment is also a determinant of how much families spend on education. If public investments in maintenance of physical and human resources fall, it is households which have to substitute the public investment by spending more money on education. Again, if the government spends more on education, the families are more willing to invest enthusiastically. High levels of household expenditure can also be accounted for due to a few other reasons apart from low public investment and lack of enthusiasm from the governments’ side. Some families which spend higher on education tend to believe that a higher expenditure would result in better performance of their children; this is especially true in the form of private tuitions.

On the other hand, there are several key arguments against high household expenditure. The idea of higher expenditure on primary education stands in sharp contradiction to the values of free and compulsory education in many countries including India. Household expenditure on education also creates a system where education is seen as a commodity which can be sold and bought, thus leading to higher systemic inequalities in the system. Higher expenditure on education also reflects on the inefficiencies of the government.

Earlier preconceived notions that the entire burden of education is borne by the state was proven wrong and a new stage was set to further study to inquire about the patterns of household expenditure (Panchamukhi, 1965) and (Tilak, 1996, 2000).

The arguments given in favour of household expenditure on education are based on the following grounds.

- Taking the economic returns arising from education into consideration, households have to necessarily finance the education of their wards at least partly if the governments do not allocate resources to education adequately.
- The second argument is based on the assumption that the household expenditure on education, specifically on fees, would make the system more efficient and it would also bring seriousness amongst children for studies.
- Some also argue that those households which have the ability and willingness to spend on education should be fully exploited.

On the other hand, the following arguments against household expenditure on education have also been presented.

- Since the spirit of free and compulsory education for the children of age 6-14 years has been enshrined in the Constitution of India, and in numerous UN declarations and conventions, the occurrence of household expenditure, particularly on the elementary level of education, undermines this spirit.
- The demand for education is affected if the household expenditure plays a significant role in achieving education and it may force the lower income households to avoid schooling and not to opt for education at all.
- As higher income families incur huge expenditure on education and lower income families less, the dependency on household expenditure may perpetuate inequalities in the system.

- Some authors also argue that the high level of expenditure on education incurred by households reflects the government is highly ineffective and inefficient at providing education in the country.

The purpose of the study is to understand how the household expenditure on education in India has responded before and after the RTE Act, 2009. The chapter proposes to use the 64th round (2007-08) and 71st round (2014) for the above purpose. At the same time, analysing the household expenditure at different levels of education-elementary, secondary and higher education- is also important for both the period. The study also examines the dynamics of household expenditure on education and its trend and it focuses on the differences in household expenditure in terms of – rural-urban, gender, types of schools/institutions, social groups and by household expenditure quintiles. These differences are to be analysed for each level of education during the period 2007-08 and 2014.

An analysis of the existing data on household expenditures on education in India, provided by the 64th and 71st rounds of National Sample Survey published in 2007-08 and 2014 respectively, demonstrates a number of remarkable features, some of which are highlighted here:

3.2 Annual Average Expenditure on Education

In India, huge expenditure is incurred by households at every level of education. **Table 3.1** shows that, on average, a household spends Rs. 4873.88 per child per annum for elementary education¹⁰ in 2014 which is almost three times of the expenditure incurred by household in 2007-08 when the expenditure was Rs.1637.36 at the same level of education. When the child goes to the secondary¹¹ level of education, the expenditure

¹⁰ Elementary education/schools include primary education and middle or upper primary education both.

¹¹ Secondary Education/schools include senior or higher secondary level of education as well.

incurred by the household increases to Rs.10645.37 and it further increases to Rs.30886.98 when he/she comes to higher education¹² in 2014.

Table 3.1 shows the average annual household expenditure per student by gender differences.

	Male		Female		Total	
	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	1732.18	5195.01	1522.28	4493.35	1637.36	4873.88
Secondary	3280.29	11532.93	2778.58	9541.08	3058.27	10645.37
Higher	15004.71	33115.86	13761.75	28094.09	14475.18	30886.98

The same pattern of increase was also observed in 2007-08. At the secondary level, household is spending Rs. 3058.27 and it has increased to Rs.14475.18 for higher education for the period 2007-08. Earlier set of estimates and its comparison with the current data shows that there has been a steep increase in the household expenditure on education between 1995-96¹³ and 2014 and show a steady upward trend in expenditure at every level of education. It has also been observed that the household expenditure¹⁴ increases with the increasing level of education for both the period.

3.3 Household Expenditure on Education by Gender

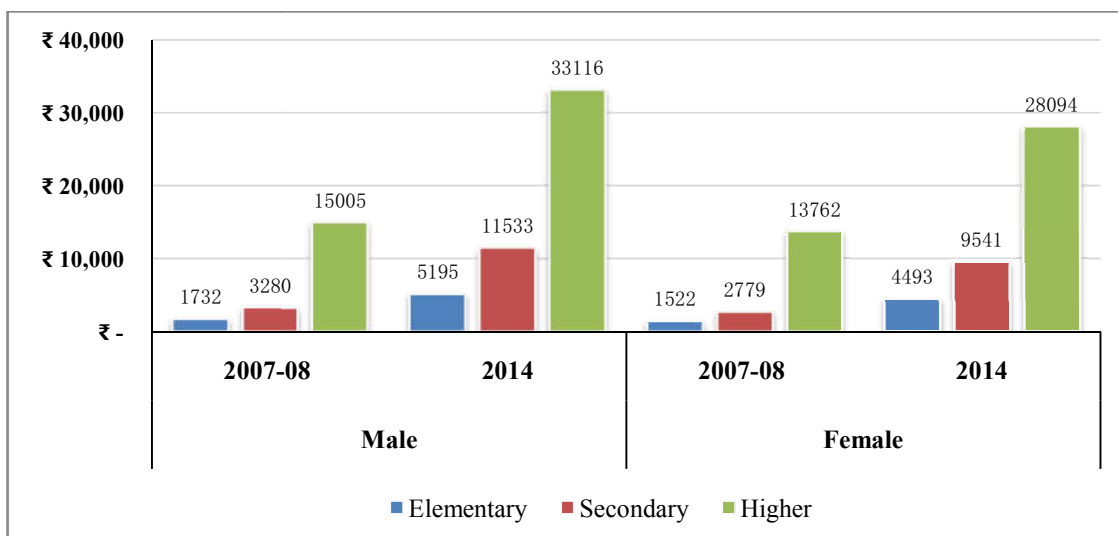
Most importantly, as shown in the **Figure 3A**, that there exists a significant difference in household expenditure on education by gender, i.e., between male and female child.

¹² Higher education refers to what is known as 'above higher secondary level' in NSSO report.

¹³ 52nd round of the National sample Survey

¹⁴ Annual average expenditure per student

Figure 3A: Gender-Inequality in Household Expenditure on Education



Though, in 1995-96 (52nd round of NSS), there were no significant differences in household expenditure on education by gender rather the difference was in favour of female child for each level of education except primary education (Tilak, 2000). But the estimates of data of 2007-08 and 2014 show that the expenditure incurred by households on education for male child is more than the expenditure incurred for female child at each level of education. In 2014, household spends Rs. 4493.35 on female child and Rs.5195.01 on male child for elementary education which is 1.16 times the expenditure on female child¹⁵. In fact, the same kind of pattern was found at other level of education too for the same period. Household expenditure incurred on male child was 1.21 and 1.18 times the expenditure on female child for secondary and higher education respectively. A quick comparison with the data estimates of 2007-08 shows that there exists the similar pattern of differences in expenditure on education by gender at each level of education in 2007-08. The difference between household expenditure on male child and female child in ratio terms was 1.14, 1.18 and 1.09 for elementary, secondary and higher education respectively for the period 2007-08.¹⁶ But the difference in household expenditure by gender has declined for each level of education during the period 2007-08 and 2014. And

¹⁵ See in the Table 3.1A in the Appendix.

¹⁶ See the Table 3.1A in the Appendix.

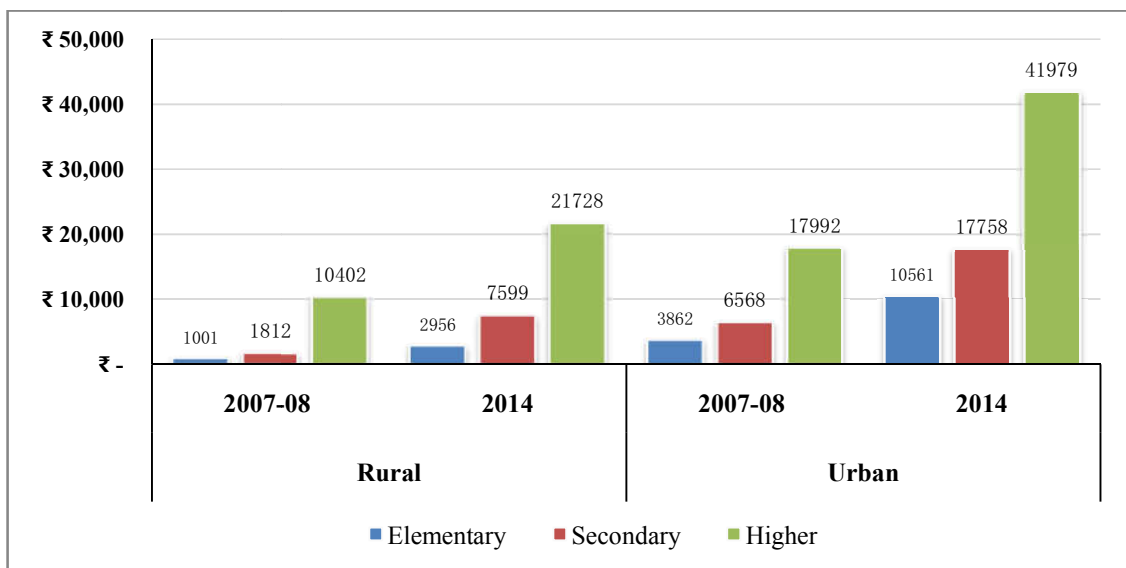
also, the household expenditure at each level of education has experienced a steep increase in the expenditure between 2007-08 and 2014 whether it is for male child or female child. The difference in household expenditure by gender has declined for each level of education during the period 2007-08 and 2014.

3.4 Household Expenditure on Education with Rural-Urban Differences

The overall figures of annual average per capita household expenditure on education at the national level may misinterpret the real picture of this and its distribution throughout the country because the disaggregated data for rural and urban separately reveals the existence of striking differences at rural-urban level.

Figure 3B shows the pattern of household expenditure on education in rural areas and urban areas at each level of education for the period 2007-08 and 2014.

Figure 3B: Rural-Urban Differences in Household Expenditure on Education



A household in rural area spends nearly one-third of the expenditure that a household in urban areas has to incur for elementary education in 2014. The rural-urban differences in household expenditure gradually decline by increasing levels of education for the same

period.¹⁷ For secondary education level in urban areas, it costs 2.3 times the cost of secondary education in rural areas¹⁸. The rural-urban differences decline at the level of higher education, as in urban areas, it costs 1.9 times the cost of higher education in rural areas.

When the current estimates are compared with the estimates of 2007-08 (64th round of NSSO), it is observed that the cost of elementary education, secondary education and higher education in urban areas is 3.8 times, 3.6 times and 1.7 times of the cost of the same in rural areas respectively. It also has to be noted here that the rural-urban difference has declined for elementary and secondary education but the same has increased for higher education during the period 2007-08 and 2014.¹⁹

3.5 Gender-Inequality by Rural-Urban Differences

Within the differences of rural-urban areas in terms of household expenditure on education, the differences by gender too exist with a very stark margin. **Figure 3C** shows the pattern of household expenditure on education in rural areas and urban areas with gender differences at each level of education for the period 2007-08 and 2014.

¹⁷ Explained from the Table 3.2A in the Appendix

¹⁸ Rural-Urban differences are simply as a ratio of expenditure in urban areas to the corresponding figures in rural areas.

¹⁹ Explained from the Table 3.2A in the Appendix

Figure 3C: Gender-Inequality within Rural-Urban Differences in Household Expenditure

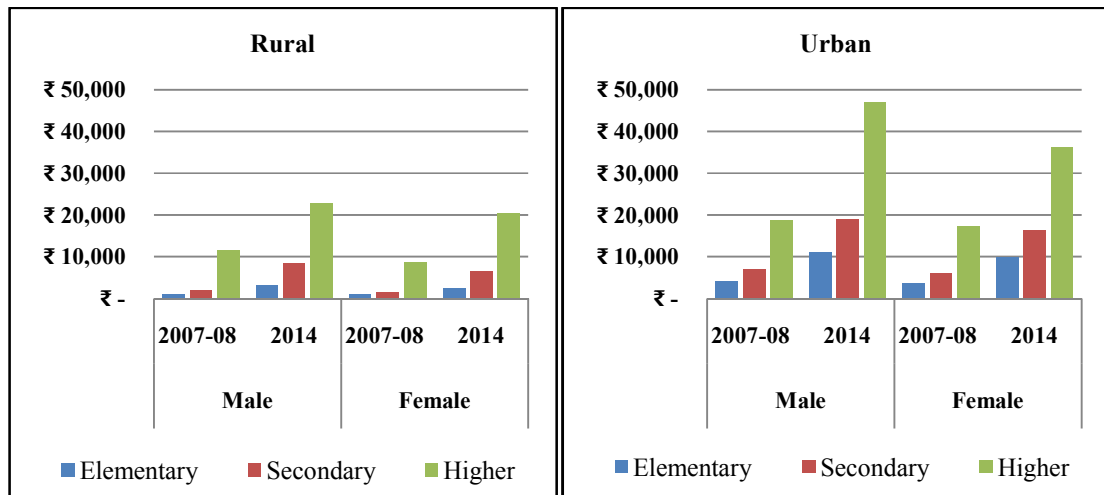


Figure 3C shows that there are striking differences in household expenditure on education between male child and female child within the rural areas and urban areas. The differences are against female child at all level of education whether the female child is the resident of urban areas or rural areas. Perhaps the importance of girls' education is yet to be recognised by families in full potential and accordingly, they do discriminate against female child in spending on their education if compared to their counterparts-male child.

Quite importantly, it is observed from the figure 3C (showing the different graphs for rural and urban areas with male and female differences therein), that there exists the difference in household expenditure on education for female child in urban areas and rural areas. Household, in urban areas, has to spend 3.8 times the expenditure that a household, in rural areas, has to spend on female child for elementary education²⁰. The difference between expenditure on education for female child declines gradually for increasing level of education. For female child in urban areas, it costs 2.5 and 1.7 times the cost in rural areas for secondary and higher education respectively²¹. Comparing with

²⁰ A ratio of household expenditure on female in urban areas to household expenditure on female in rural areas for elementary education calculated from the Table 3.3 and 3.4 in the appendix.

²¹ Calculated from the Table 3.3A and 3.4A in the Appendix

the estimates of data from 2007-08, the similar kind of pattern was observed for elementary and higher education but the difference at the secondary level of education was remarkable. Secondary education for female child in urban areas has costed 4 times the cost of educating the same in rural areas.

The most disadvantageous section is female children in rural areas because the household expenditure on education for this section is the least at each level of education. The household expenditure on male child in rural areas is lesser than the expenditure that a household has to incur for female child in urban areas. Therefore, male child in urban areas is the most advantageous section because household spends the most on them.

3.6 Household Expenditure on Education by Types of Schools/Institutions

The above figures related to the household expenditure on education are analysed for the types of schools- government²², private aided/government aided²³ and private unaided²⁴ schools that we have in India.

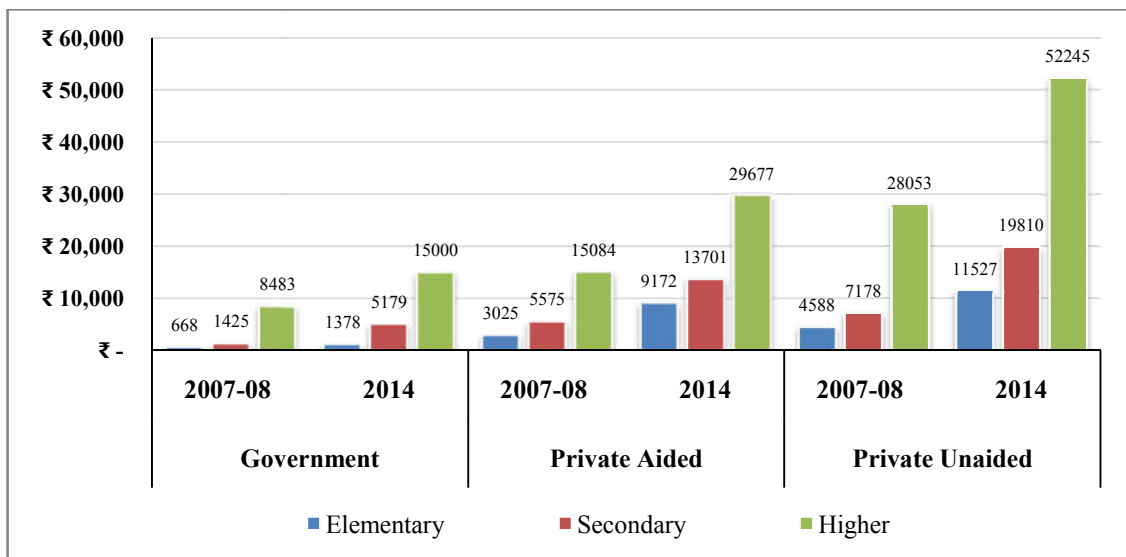
Figure 3D shows the household expenditure on education in different types of schools or institutions at each level of education for the period 2007-08 and 2014

²² Government schools refer to those schools which are run by state governments and central government. For this chapter, it includes local body schools too which are run by Panchayats, Zilla Parishads, Mandal Parishads, Municipalities, etc.

²³ They are aided by governments but the schools are privately managed. They are generally referred as private aided schools but some authors have mentioned it as government aided schools.

²⁴ Private Unaided schools in this study refer to those schools that do not receive any government aid. They are generally known as private schools but mentioned as private unaided schools in this study especially to differentiate it from private aided schools.

Figure 3D: Household Expenditure on Education by Types of Schools/Institutions



Generally, people argue that the elementary education in government schools and Figure 3D shows the private aided schools is provided ‘free’ and no significant amount has to be paid by households. This argument is based on the article 45 of the constitution²⁵, 86th CAA (2002)²⁶ and RTE Act 2009²⁷. But the available findings from the estimates of data of 71st round and 64th round reveal the opposite.

Even for children in government schools, household has to incur huge expenditure for their education. In fact, in government schools, household spends Rs.1378.22, Rs. 5178.93 and Rs. 15000.39 for elementary, secondary and higher education respectively²⁸ Figure 3D. However the expenditure incurred by household increases in private aided

²⁵ A provision for free and compulsory education for all children up to the age of 14 years within 10 years of promulgation of the constitution which is enshrined in the constitution under the article 45.

²⁶ 86th amendments to the constitution brings the article 21A into the fundamental rights which reads as “the state shall provide free and compulsory education to all children of the age of 6-14 years in such manner as the state may, by law, determine.”

²⁷ Right to Education Act 2009 is an act of parliament giving effect to Article 21A enshrined in the Constitution.

²⁸ See the Table 3.5A in the appendix

schools and it further increase in private unaided schools for every level of education and the corresponding figures there are the highest.

The difference between government schools and private unaided schools is as high as the cost of elementary education in private schools is 8.3 times the cost in private unaided schools. The difference in ratio terms declines drastically to 3.8 in secondary education and 3.4 in higher education. Despite the enactment of RTE act in 2009, the expenditure incurred by household on their children for elementary education has become almost double and increased from Rs.668.21 in 2007-08 to Rs.1378.22 in 2014 in case of government schools. The cost of education at secondary level of education has increase in 2014 to 3.6 times the cost in 2007-08 and it was 1.7 times the cost for same period for higher education²⁹. With no exception at all, the similar pattern of increase in household expenditure on education was observed in case of private aided and private unaided schools. **Figure 3D**

3.7 Expenditure on Education by Quintiles Classes of UMPCE

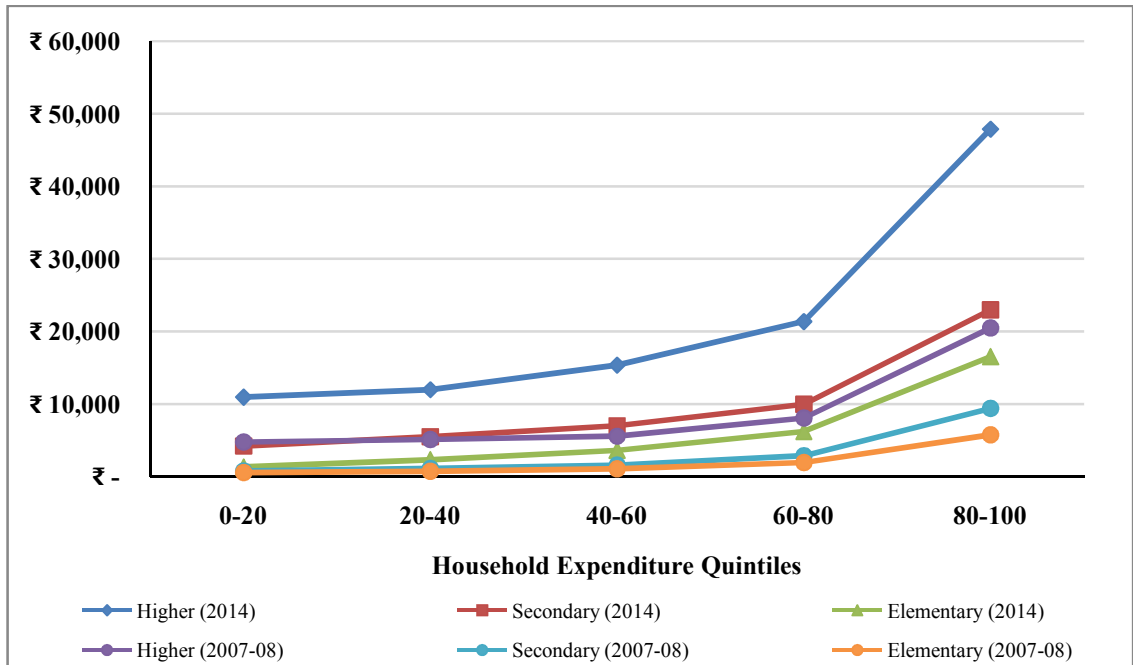
Generally, it is argued that the household expenditure on education by rich households is significantly higher than the expenditure incurred by low income households. In this study too, it happens to be true at every level of education. Not only the difference exists between rich households and lower income households but also between every two successive income groups. The households are classified into five groups based on the available data regarding total household expenditures. They are classified into five expenditure quintiles: 0-20 (the bottom income group), 20-40, 40-60, 60-80 and 80-100 (the top income group).³⁰

Figure 3E shows the household expenditure on education by household expenditure on education by household expenditure quintiles at each level of education for the period 2007-08 and 2014.

²⁹ See the Table 3.5A in the appendix

³⁰ Due to non-reliability of income data of households, household expenditure quintiles are used as to categorize households into income groups.

Figure 3E: Household Expenditure on Education by Household Expenditure Quintiles (2007-08 and 2014)



For elementary education, the average household expenditure of the top income group is 12.4 times the expenditure by the bottom income group. The difference between expenditure by top income households and the bottom income households decrease gradually by increasing level of education. The difference in terms of ratio of their expenditure is 5.4 and 4.3 for secondary education and higher education respectively.³¹ In fact, the **Figure 3E** shows that there is a smooth upward trend of increasing expenditure curve of the different expenditure quintiles till the fourth quintiles but it shows a steep upward movement along the curve and this is true for each level of education.

A comparison with the estimates of data from 2007-08 shows that, for elementary education, the average household expenditure of the top income group is 10.6 times the expenditure by the bottom income group. The difference between expenditure by top income households and the bottom income households has increased to 12.76 times for secondary education. But, for higher education, the difference was almost same as in

³¹ See the Table 3.6A and 3.20A in the Appendix

2014- 4.3 times. Similar movements for the curve were observed in 2007-08 and the steep upward movement along the curve was also observed for the top income groups at each level of education in the same period³². No intersection of curves was found between different levels of education and the quintiles in the same year and this is true for both the periods **Figure 3E**.

The differences in household expenditure incurred on education by gender, rural-urban, types of school/institutions and social groups across household expenditure quintiles at different levels of education have also been shown in tables given in the Appendix³³.

3.8 Expenditure on Education by Types of Social Groups

The annual household expenditure per student has been disaggregated for analyzing the private expenditure on education for different social groups in India. The social groups are classified into four different groups- ST, SC, OBC and Others³⁴.

Figure 3F shows the household expenditure on education by different social groups at each level of education for the period 2007-08 and 2014.

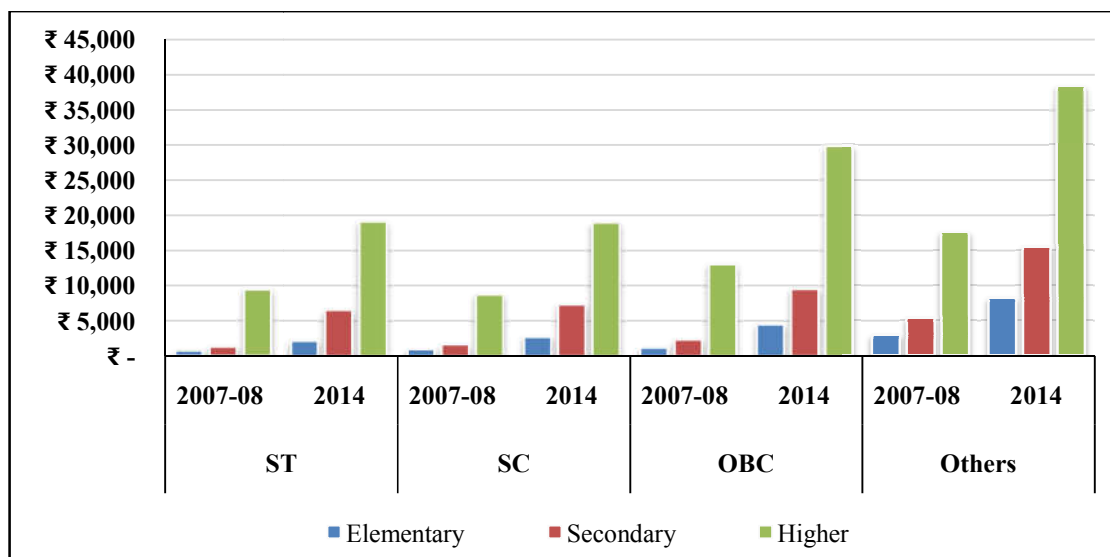
³² See the Table 3.6A in the Appendix

³³ See the Tables 3.8A, 3.9A, 3.10A, 3.11A, 3.12A, 3.13A, 3.14A, 3.15A, 3.16A, 3.17A, 3.18A, 3.19A in the Appendix.

³⁴ ST, SC and OBC refer to Schedule Tribes, Schedule Caste and Other Backward Castes respectively. "Others" category is generally referred as general caste or upper caste.

Figure 3F: Household Expenditure on Education by different Social Groups

(2007-08 and 2014)



A detailed analysis of the data from 71st round and 64th round of NSSO shows that there are significant differences between these social groups in terms of household expenditure on education in general and at elementary level of education in particular. In 2014, households belonging to the social group ST happen to be spending the least for every level of education except the higher education where annual household expenditure of the social group SC is the least. In comparison to expenditure incurred by the households belonging to ST, SC and OBC, the households belonging to other category spend more by 3.7, 2.9 and 1.79 times respectively for elementary education³⁵. The same differences at secondary level of education in terms of ratio are 2.3, 2.1 and 1.6 for SC, ST and OBC respectively. Gradually, the differences of ST, SC and OBC from other category in terms of household expenditure declines by increasing level of education and the ratio becomes 2, 2 and 1.2 for ST, SC and OBC respectively if compared with the expenditure incurred by households belonging to ‘others’ category in case of higher education³⁶.

³⁵ See the Table 3.2 above

³⁶ See the Table 3.7A simultaneously in the Appendix

Table 3.2: Ratio of average annual household expenditure (Rs.) per student (Age 5-29) by others and different social groups, 2007-08 and 2014

	Others/ST		Others/SC		Others/OBC	
	2007-08	2014	2007-08	2007-08	2014	2007-08
Elementary	3.84	3.73	2.90	2.96	2.29	1.80
Secondary	4.01	2.35	3.08	2.11	2.22	1.62
Higher	1.87	2.01	2.01	2.02	1.35	1.29

Between 2007-08 and 2014, the difference between the expenditure incurred by households belonging to ST and Others has decreased a little (3.8 in 2007-08 to 3.7 in 2014) at elementary level but the decline was remarkable (4.01 in 2007-08 to 2.7 in 2014) in secondary level and the difference, in fact, has increased (1.8 in 2007-08 to 2 in 2014) for higher education. The same observations regarding SC reveal that the difference has increased negligible at elementary level (2.90 in 2007-08 to 2.95 in 2014) and a decline was observed for secondary education (3 in 2007-08 to 2.1 in 2014) and has remained more or less same for higher education. In case of OBC social group when compared to others category, the difference has declined at each level of education between 2007-08 and 2014.

3.9 Conclusion

In this chapter, the focus of the study was on household expenditure incurred on education for each level of education-elementary, secondary and higher education-and analysing the data to provide the extent of differences in household expenditure on education in terms of- gender difference, regional difference, social group difference, difference by types of schools/institutions and difference by household expenditure quintiles- based on the data from two recent rounds of NSS. The pattern of household expenditure on education estimated from both the rounds shows that the overall expenditure on education has experienced an increase for each level of education during the period 2007-08 to 2014. It has increased for elementary, secondary and higher education by 2.9, 3.4 and 2.1 times respectively between 2007-08 and 2014. It has also

been observed that the household expenditure increases with the increasing level of education.

Distribution of expenditure on education based on gender exposed the real picture of gender-inequality against female child in terms of expenditure incurred by households for their education. Due to existing social inequality and cultural gender discrimination, families generally tend to spend more on the education of male child, as compared to that of female child. This pattern is observed in both rural and urban areas. However, the inequality is less in case of higher education in rural areas than the inequality present in urban areas for the same level in 2014 and exactly the opposite was observed in 2007-08. Interestingly, unlike commonly believed, rural households spend a lot on education. We observe a steep increase in household expenditure on education in rural areas between the period 2007-08 and 2014. The level of development of villages is important while considering the amount of money spent by rural families in education. However, there exists a remarkable rural-urban difference, having high magnitude of difference for elementary education, which is declining by increasing level of education for both the period.

Household expenditure also depends on the type of schooling the wards go to. Household expenditure is least in government schools, and then in private aided schools, and most in private unaided schools.

When it comes to social groups (caste), the pattern of distribution of expenditure on education is remarkable. Scheduled castes and tribes spend less on education than other non-scheduled groups. Amongst the scheduled groups, expenditure is less in the case of Scheduled tribes than in the case of scheduled castes. However, this pattern does not apply everywhere, especially in case of higher education for both the period.

It is then clear that the concept of “free” education, at least for elementary education, is still non-existent in India even after 86th amendments to the constitution and RTE Act (2009). Households spend a sizeable amount when it comes to the education of their children whether it be a government or private aided or private unaided schools. Households from all strata of society spend considerably on education.

SUMMARY AND CONCLUSION

The analysis presented in this dissertation looked at four major objectives to capture the trends and changing pattern of public and private expenditure on education in India at different levels of education. These objectives include the analysis of the changing pattern of public financing of education and present a detailed profile on various aspects of public expenditure such as inter-sectoral allocation of resources, intra-sectoral allocation of resources and centre-state relation in financing education in India for the period 2000-01 to 2014-15. Since education is financed through two primary sources- public expenditure and private expenditure- an analysis of changing pattern of household expenditure/private expenditure on education at different levels of education is also included in the objectives. Based on 64th round and 71st round of NSS, the study analyses the differences in household expenditure on education based on nature and characteristics of household such as region, social groups, types of schools/institutions joined and income levels (household expenditure quintiles) along with the difference by gender for the period 2007-08 and 2014. The following trends and patterns in public expenditure and private expenditure on education were observed in this study.

Since education brought into concurrent list in 1976, centre has been playing a significant role in financing education. Though, the lion share is still financed by states, the relative share of centre in total expenditure on education grew by a large margin between 2000-01 and 2014-15 and it has increased to 24.36 per cent in 2014-15 from 12.36 per cent in 2000-01.

The analysis of inter-sectoral allocation of resources has revealed that despite a continuous effort made by various committees on education and education policies with their recommendations of increasing public expenditure on education to at least 6 per cent of GDP, the public expenditure, even after seven decades of independence, has been hovering around 3-4 per cent. It was 4.14 per cent in 2000-01, declined to 3.25 per cent in 2004-05 and remained within the range of 3-4 per cent of GDP after that till 2014-15.

Priority given to education vis-à-vis other sectors in the economy analysed in the form of share of expenditure on education in the total expenditure reveals that the same has been in the range of 13-14 per cent during the period in between 2000-01 and 2014-15 except the year 2003-04 when it was 11.98 per cent.

The expenditure on education is not only done by education department but also by departments other than the education department. The share of expenditure by other departments has been increasing before the period considered for the study in this dissertation and reached to 24.23 per cent in 2000-01. But, the share has started declining thereafter and has come down to 16.48 per cent in 2014-15 and the lion share of expenditure on education is financed by education department itself, which is 83.52 per cent in the same year.

Aggregate expenditure on education disaggregated into Plan and Non Plan expenditure helps to understand the real picture of the direction of education system in the country, since plan expenditure is the expenditure made to finance new schemes, programmes, and infrastructure etc., whereas non plan expenditure is made on maintenance of existing infrastructure and operation of existing schemes and projects. Though, the major proportion of the total expenditure on education is incurred under the heads of non plan expenditure, but the share of plan expenditure has been increasing during the period 2003-04 (the share of plan expenditure was 18.22 per cent) to 2014-15 (38.70 per cent). Centre allocates major part of its resources to education under the heads of plan expenditure, the share of which has increased from 74.32 per cent in 2003-04 to 80.47 per cent in 2014-15. On the other hand, the states/UTs allocate very less resources to education under the heads of plan expenditure which is 8.67 per cent of the total expenditure incurred by states/UTs. But the share of plan expenditure by states/UTs has also experienced an increase which has gone up to 25.25 per cent in 2014-15.

Intra-sectoral allocation of resources to education- elementary, secondary and higher, technical education and others - has also been examined and the findings of the analysis reveals that the priority given to different levels of education has been lopsided during the period 2000-01 to 2014-15. In 2001-02, the share of elementary, secondary, higher, technical education in total expenditure was 50.91, 33.79, 11.34 and 2.32 per cent

respectively, which has reduced to 45.07 per cent and 24.38 per cent for elementary and secondary education respectively in 2014-15. But the share of higher education in total expenditure on education has increased to 24.47 per cent in 2007-08 but decreased thereafter and reached to 16.17 per cent in 2014-15. More interestingly, the share of technical education has increased from 2.32 per cent in 2001-02 to 14.08 per cent in 2014-15. The increase in the share of technical education in total education expenditure is majorly at the cost of elementary and secondary education, as the share of which has decreased during the same period.

Almost cent per cent expenditure on elementary education by centre is under the heads of plan expenditure, whereas the states/UTs allocate resources majorly under the head of non plan expenditure for the same level of education. But, the share of plan expenditure in total expenditure incurred by states/UTs has increased from 9.14 per cent in 2000-01 to 25.32 per cent in 2014-15 for elementary education. It has increased to 20.15 per cent, 11.95 per cent and 40.50 per cent in 2014-15 from 8.61 per cent, 5.89 per cent and 21.14 per cent in 2000-01 for secondary, higher and technical education respectively. And, the share of plan expenditure in total expenditure on education incurred by centre has increased to 72.94 per cent, 55.90 per cent and 69.87 per cent in 2014-15 from 47.78 per cent, 24.52 per cent and 45 per cent in 2000-01 for secondary, higher and technical education respectively.

On the other hand, the pattern of household expenditure on education estimated from both the rounds shows that the overall expenditure on education has increased for elementary, secondary and higher education by 2.9, 3.4 and 2.1 times respectively in between 2007-08 and 2014. It has also been observed that the household expenditure increases with the increasing level of education.

Though, in 1995-96 (52nd round of NSS), there were not significant differences in household expenditure on education by gender rather the difference was in favour of female child at each level of education except primary education (Tilak, 2000). Distribution of expenditure on education in 2007-08 and 2014 based on gender exposed the real picture of gender-inequality against female child in terms of expenditure incurred by household for their education. Due to existing social inequality and cultural gender

discrimination, families generally tend to spend more on the education of male child as compared to that of female child. Household spends more on male child by 1.16, 1.21 and 1.18 times than the household expenditure on female child for elementary, secondary and higher education respectively in 2014. This pattern is observed in both rural and urban areas as well. However, the inequality is less in case of higher education in rural areas than the inequality present in urban areas for the same level in 2014 and exactly the opposite was observed in 2007-08.

Interestingly, unlike commonly believed, rural households spend a lot on education. We observe a steep increase in household expenditure on education in rural areas between the period 2007-08 and 2014. The level of development of villages is important while considering the amount of money spent by rural families in education. However, there exists a remarkable rural-urban difference, having high magnitude of difference for elementary education, which is declining by increasing level of education for both the period.

Household expenditure also depends on the type of schooling the wards go to. Household expenditure is least in government schools, and then in private aided schools, and most in private unaided schools. Household expenditure for a child in private unaided school is 8.36 times the expenditure incurred on a child in government school for elementary education. The difference decreases by increasing level of education.

When it comes to social groups (caste), the difference in household expenditure on education is remarkable. Scheduled castes and tribes spend less on education than other non-scheduled groups. Amongst the scheduled groups, expenditure is less in the case of Scheduled tribes than in the case of scheduled castes. However, this pattern does not apply in case of higher education for both the period, in which annual household expenditure of the social group SC is the least. In comparison to expenditure incurred by the households belonging to ST, SC and OBC, the households belonging to other category spend more by 3.7, 2.9 and 1.79 times respectively for elementary education. The same differences at secondary level of education in terms of ratio are 2.3, 2.1 and 1.6 for SC, ST and OBC respectively. Gradually, the differences of ST, SC and OBC from 'others' category in terms of household expenditure declines by increasing level of education and the ratio becomes 2, 2 and 1.2 for ST, SC and OBC respectively if

compared with the expenditure incurred by households belonging to 'others' category in case of higher education.

By and large, it is argued that the household expenditure on education by rich households is significantly higher than the expenditure incurred by low income households. In this study too, it happens to be true at every level of education. Not only the difference exists between rich households and lower income households but also between every two successive income groups. For elementary education in 2014, the average household expenditure of the top income group is 12.4 times the expenditure by the bottom income group. The difference between expenditure by top income households and the bottom income households decrease gradually by increasing level of education. The difference in terms of ratio of their expenditure is 5.4 and 4.3 for secondary education and higher education respectively in 2014. By comparing with the estimates of data from 2007-08, we observed that difference of expenditure on education between top income households and bottom income households has increased for elementary education, declined substantially for secondary education and remained more or less same for higher education in between 2007-08 and 2014.

The idea of free elementary education in India as guaranteed by the 86th amendments to the constitution and RTE Act (2009) has not been realised yet. Households spend a sizeable amount when it comes to the education of their children whether it be a government or private aided or private unaided schools. Households from all strata of society spend considerably on education.

Since public expenditure on education is still hovering around 3-4 per cent, the aim of universalisation of elementary education in particular and education development, in general, falls short of required funds. Even as funds have continued to grow in absolute terms, they still fall short for a burgeoning population, for it is still less than the required 6 per cent of the GDP. This leads to increased household expenditure that attempts to complement as well as sometimes substitute insufficient public funding. The under allocation of resources to the education sector by public sector affects marginalised section the most because their families may be unable or unwilling to spend on education because of their socio-economic backwardness.

Intra-household discrimination against female children in terms of household expenditure on education acts as a serious impediment to the educational attainments of females children. In the long run, India's overall literacy is also likely to be affected and it would hamper economic development. Therefore, there is a need to initiate concerted efforts to raise awareness of the importance of providing status to women in society. If women are educationally empowered, then the road to their social, economic and political empowerment may become smooth.

We don't lack funds, what we lack is the political will. The goal of resource allocation to education equivalent to 6 per cent of the GDP is realisable with political vision and determination. Therefore, for an educated society that benefits everyone, and for an elementary education that is truly universal and free not on paper, but on the ground, as enshrined in the constitution, the need of the day is to unburden the households of educational expenditure and increase government spending, while making it more proactive and engaged with the grassroots reality.

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APPENDICES

APPENDIX 1

**Table 2.1A: Share of Centre's and States' Expenditure in Budgeted Expenditure on Education
(Rs. In Crores)**

Years	Expenditure on Education		Total
	Centre	State	
2000-01	10195.95 (12.36)	72290.53 (87.64)	82486.48 (100)
2001-02	14119.52 (17.68)	65746.19 (82.32)	79865.71 (100)
2002-03	16156.63 (18.90)	69350.7 (81.10)	85507.33 (100)
2003-04	17100.97 (19.20)	71978.28 (80.80)	89079.25 (100)
2004-05	18025.96 (18.64)	78668.14 (81.36)	96694.1 (100)
2005-06	23209.77 (20.50)	90018.94 (79.50)	113228.71 (100)
2006-07	34236.52 (24.92)	103147.47 (75.08)	137383.99 (100)
2007-08	39919.37 (25.62)	115877.9 (74.38)	155797.27 (100)
2008-09	47977.59 (25.38)	141091.25 (74.62)	189068.84 (100)
2009-10	64023.23 (26.54)	177232.79 (73.46)	241256.02 (100)
2010-11	80660.73 (27.48)	212817.5 (72.52)	293478.23 (100)
2011-12	86074.52 (25.78)	247855.86 (74.22)	333930.38 (100)
2012-13	89757.6 (24.38)	278375.27 (75.62)	368132.87 (100)
2013-14 (RE)	101594.26 (23.43)	332046.33 (76.57)	433640.59 (100)
2014-15 (BE)	122489.34 (24.36)	380440.01 (75.64)	502929.35 (100)

Notes: Figures in () are percentage values.

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India (Various years).

Table 2.2A: Share of Public Expenditure on Education in GDP (%)

Years	% age of GDP
2000-01	4.14
2001-02	3.68
2002-03	3.66
2003-04	3.40
2004-05	3.25
2005-06	3.34
2006-07	3.48
2007-08	3.40
2008-09	3.56
2009-10	3.95
2010-11	4.05
2011-12	3.82
2012-13	3.58
2013-14	3.71
2014-15	3.90

Source: calculated from “Analysis of Budgeted Expenditure on Education”, Ministry of HRD, Govt. of India (Various years).

Table 2.3A: Share of Expenditure on education in Total Expenditure of Government

Year	Expenditure on education sector by Education and Other Dept. (Rs. In crore)	Total Expenditure on All Sectors (Rs. In crore)
2000-01	82486.48 (14.42)	572160.14
2001-02	79865.70 (12.89)	619713.14
2002-03	85507.34 (12.60)	678548.31
2003-04	89079.25 (11.98)	743668.96
2004-05	96694.10 (12.13)	797345.74
2005-06	113228.71 (12.73)	889713.96
2006-07	137383.99 (13.29)	1033872.60
2007-08	155797.27 (13.08)	1191514.68
2008-09	189068.84 (12.64)	1495733.62
2009-10	241256.02 (13.91)	1734074.75
2010-11	293478.23 (14.69)	1997801.29
2011-12	333930.38 (14.84)	2249526.46
2012-13	354616.51 (13.59)	2609878.90

Notes: Figures in () are percentage values.

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India (Various years).

Table 2.4A: Expenditure on education by Education and other Departments in India (Rs. in Crores)

Years	Education Dept.	(%)	Other Dept.	(%)	Total	(%)
2000-01	62498.09	75.77	19988.39	24.23	82486.48	100.00
2001-02	64847.70	81.20	15018.00	18.80	79865.70	100.00
2002-03	68561.54	80.18	16945.80	19.82	85507.34	100.00
2003-04	73044.93	82.00	16034.32	18.00	89079.25	100.00
2004-05	81280.85	84.06	15413.25	15.94	96694.10	100.00
2005-06	94483.70	83.45	18745.01	16.55	113228.71	100.00
2006-07	110340.36	80.32	27043.63	19.68	137383.99	100.00
2007-08	125379.63	80.48	30417.64	19.52	155797.27	100.00
2008-09	152822.40	80.83	36246.44	19.17	189068.84	100.00
2009-10	190136.08	78.81	51119.94	21.19	241256.02	100.00
2010-11	233510.11	79.57	59968.12	20.43	293478.23	100.00
2011-12	270091.78	80.88	63838.60	19.12	333930.38	100.00
2012-13	299212.54	84.38	55403.97	15.62	354616.51	100.00
2013-14	351404.08	84.28	65532.39	15.72	416936.47	100.00
2014-15	404591.30	83.51	79900.08	16.49	484491.38	100.00

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India (Various years).

**Table 2.5A: Share of Plan & Non Plan expenditure on education (Revenue Account)
(Rs. in Crores)**

Years	Centre			State			Total (Centre+State)		Total
	Plan	Non Plan	Total	Plan	Non Plan	Total	Plan	Non Plan	Plan + Non Plan
2003-04	8318.10 (74.32)	2873.80 (25.68)	11191.90 (100)	5697.50 (8.67)	60015.00 (91.33)	65712.50 (100)	14015.60 (18.22)	62888.80 (81.78)	76904.40 (100)
2004-05	12877.06 (71.44)	5148.96 (28.56)	18026.02 (100)	9791.13 (12.45)	68877.01 (87.55)	78668.14 (100)	22668.19 (23.44)	74025.97 (76.56)	96694.16 (100)
2005-06	17823.18 (76.79)	5386.59 (23.21)	23209.77 (100)	13792.53 (15.32)	76226.41 (84.68)	90018.94 (100)	31615.71 (27.92)	81613.00 (72.08)	113228.71 (100)
2006-07	27752.85 (81.06)	6483.67 (18.94)	34236.52 (100)	17007.12 (16.49)	86140.36 (83.51)	103147.48 (100)	44759.97 (32.58)	92624.03 (67.42)	137384.00 (100)
2007-08	32903.28 (82.42)	7016.09 (17.58)	39919.37 (100)	19374.43 (16.72)	96503.47 (83.28)	115877.90 (100)	52277.71 (33.55)	103519.56 (66.45)	155797.27 (100)
2008-09	38227.46 (79.68)	9750.13 (20.32)	47977.59 (100)	23243.70 (16.47)	117847.55 (83.53)	141091.25 (100)	61471.16 (32.51)	127597.68 (67.49)	189068.84 (100)
2009-10	47503.67 (74.20)	16519.56 (25.80)	64023.23 (100)	29363.95 (16.57)	147868.84 (83.43)	177232.79 (100)	76867.62 (31.86)	164388.40 (68.14)	241256.02 (100)
2010-11	57953.52 (71.85)	22707.22 (28.15)	80660.74 (100)	39540.75 (18.58)	173276.75 (81.42)	212817.50 (100)	97494.27 (33.22)	195983.97 (66.78)	293478.24 (100)
2011-12	69037.81 (80.21)	17036.72 (19.79)	86074.53 (100)	50924.92 (20.55)	196930.94 (79.45)	247855.86 (100)	119962.73 (35.92)	213967.66 (64.08)	333930.39 (100)
2012-13	70860.85 (78.95)	18896.75 (31.05)	89757.60 (100)	59439.80 (21.35)	218935.40 (78.65)	278375.20 (100)	130300.65 (35.40)	237832.15 (64.60)	368132.80 (100)
2013-14	79717.42 (78.47)	21876.84 (21.53)	101594.26 (100)	80907.74 (24.37)	251138.58 (75.63)	332046.32 (100)	160625.16 (37.04)	273015.42 (62.96)	433640.58 (100)
2014-15	98567.43 (80.47)	23921.91 (19.53)	122489.34 (100)	96074.26 (25.25)	284365.75 (74.75)	380440.01 (100)	194641.69 (38.70)	308287.66 (61.30)	502929.35 (100)

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India (Various years).

Table 2.6A: Intra Sectoral Allocation of Public Expenditure on Education in India Since 2000-01

Years	Elementary	Secondary	University & Higher Education	Technical Education	Others	
2000-01	49.46	32.56	13.23	3.02	1.73	100
2001-02	50.91	33.79	11.34	2.32	1.64	100
2002-03	49.13	34.91	11.95	2.42	1.59	100
2003-04	49.57	34.95	11.61	2.28	1.59	100
2004-05	51.45	30.13	11.67	3.82	2.93	100
2005-06	46.5	25.6	19.31	7.7	0.89	100
2006-07	45.17	23.27	19.3	11.98	0.28	100
2007-08	44.62	22.98	24.47	7.67	0.26	100
2008-09	42.47	24.24	24.3	8.79	0.2	100
2009-10	39.63	25.87	23.59	8.91	2	100
2010-11	42.09	24.31	21.34	11.95	0.31	100
2011-12	44.66	25.62	16.14	13.28	0.3	100
2012-13	45.21	25.19	14.7	14.62	0.28	100
2013-14	44.59	24.86	15.29	14.95	0.31	100
2014-15	45.07	24.38	16.17	14.08	0.3	100

Source: Calculated from “Analysis of Budgeted Expenditure on Education”, Ministry of HRD, Govt. of India (Various years).

Table 2.7A: Public Expenditure on Education in India Since 2000-01

Years	Expenditure on Education		Total	Growth Rate	Share of centre in %	Share of states in %	State as % age share of GDP	State +Centre as % age of GDP
	Centre	States						
2000-01	10195.95	72290.53	82486.48	---	12.36	87.64	3.63	4.14
2001-02	14119.52	65746.19	79865.71	-3.18	17.68	82.32	3.03	3.68
2002-03	16156.63	69350.70	85507.33	7.06	18.90	81.10	2.97	3.66
2003-04	17100.97	71978.28	89079.25	4.18	19.20	80.80	2.74	3.40
2004-05	18025.96	78668.14	96694.10	8.55	18.64	81.36	2.65	3.25
2005-06	23209.77	90018.94	113228.71	17.10	20.50	79.50	2.66	3.34
2006-07	34236.52	103147.47	137383.99	21.33	24.92	75.08	2.61	3.48
2007-08	39919.37	115877.90	155797.27	13.40	25.62	74.38	2.53	3.40
2008-09	47977.59	141091.25	189068.84	21.36	25.38	74.62	2.66	3.56
2009-10	64023.23	177232.79	241256.02	27.60	26.54	73.46	2.90	3.95
2010-11	80660.73	212817.50	293478.23	21.65	27.48	72.52	2.94	4.05
2011-12	86074.52	247855.86	333930.38	13.78	25.78	74.22	2.84	3.82
2012-13	89757.60	278375.27	368132.87	10.24	24.38	75.62	2.81	3.71
2013-14 (RE)	101594.2 6	332046.33	433640.59	17.79	23.43	76.57	2.96	3.86
2014-15 (BE)	122489.3 4	380440.01	502929.35	15.98	24.36	75.64	3.06	4.04

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India (Various years).

APPENDIX 2

Table3.1A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Gender, 2007-08 and 2014

	Male		Female		Total		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	1732.18	5195.01	1522.28	4493.35	1637.36	4873.88	1.14	1.16
Secondary	3280.29	11532.93	2778.58	9541.08	3058.27	10645.37	1.18	1.21
Higher	15004.71	33115.86	13761.75	28094.09	14475.18	30886.98	1.09	1.18

Table 3.2A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) with Rural-Urban Differences, 2007-08 and 2014

	Rural		Urban		Total		Urban/Rural	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	1000.77	2955.90	3862.24	10560.80	1637.36	4873.88	3.86	3.57
Secondary	1812.21	7599.34	6568.25	17758.06	3058.27	10645.37	3.62	2.34
Higher	10402.08	21727.90	17991.54	41978.67	14475.18	30886.98	1.73	1.93

Table 3.3A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Gender in Rural Areas, 2007-08 and 2014

	Male		Female		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	1072.08	3242.73	913.75	2613.77	1.17	1.24
Secondary	2031.85	8464.31	1530.43	6496.35	1.33	1.30
Higher	11432.63	22694.64	8640.21	20385.70	1.32	1.11

Table 3.4A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Gender in Urban Areas, 2007-08 and 2014

	Male		Female		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	4064.00	11053.62	3621.82	9988.14	1.12	1.11
Secondary	6907.27	18966.78	6162.38	16337.78	1.12	1.16
Higher	18712.33	47070.81	17195.55	36334.63	1.09	1.30

Table 3.5A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Types of Schools/Institutions, 2007-08 and 2014

	Government		Private Aided		Private Unaided		Private Unaided/Govt.	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	668.21	1378.22	3024.50	9172.38	4588.12	11526.59	6.87	8.36
Secondary	1425.19	5178.93	5575.29	13700.69	7178.00	19810.20	5.04	3.83
Higher	8482.53	15000.39	15083.62	29677.36	28052.89	52245.20	3.31	3.48

Table 3.6A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles at each level of Education, 2007-08 and 2014

Quintile Class	Elementary		Secondary		Higher	
	2007-08	2014	2007-08	2014	2007-08	2014
1	540.50	1329.57	736.90	4193.81	4733.05	10922.02
2	727.34	2335.19	1083.18	5496.84	5075.30	11943.63
3	1053.08	3612.66	1544.58	6975.08	5531.37	15341.18
4	1898.27	6215.82	2849.95	9944.45	8039.46	21344.52
5	5745.32	16511.54	9408.41	22962.55	20494.67	47875.58
All	1637.36	4873.88	3058.27	10645.37	14475.18	30886.98
Top income group/Bottom income group	10.63	12.40	12.77	5.48	4.33	4.38

Table 3.7A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Different Social Groups, 2007-08 and 2014

	ST		SC		OBC		Others		Total	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
Elementary	772.7	2209.3	1020.3	2783.1	1296.9	4580.1	2963.9	8230.8	1637.4	4873.9
Secondary	1333.5	6605.0	1739.4	7359.8	2407.2	9580.6	5349.5	15517.1	3058.3	10645.4
Higher	9401.3	19086.0	8760.0	18967.7	13058.1	29837.7	17610.2	38358.4	14475.2	30887.0

Table 3.7A.1 Ratio of average annual household expenditure (Rs.) per student (Age 5-29) by others and different social groups, 2007-08 and 2014

	Others/ST		Others/SC		Others/OBC	
	2007-08	2014	2007-08	2007-08	2014	2007-08
Elementary	3.84	3.73	2.90	2.96	2.29	1.80
Secondary	4.01	2.35	3.08	2.11	2.22	1.62
Higher	1.87	2.01	2.01	2.02	1.35	1.29

Table 3.8A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Higher Education with Gender Differences, 2007-08 and 2014

Quintile Class	Male		Female		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014
1	5069.57	11146.84	4098.95	10634.45	1.24	1.05
2	5179.91	13531.79	4892.59	10085.30	1.06	1.34
3	6059.07	16993.24	4691.23	12831.08	1.29	1.32
4	8561.53	23398.96	7296.36	18795.22	1.17	1.24
5	21788.78	51680.22	18923.30	43379.22	1.15	1.19
All	15004.71	33115.86	13761.75	28094.09	1.09	1.18
Top income group/Bottom income group	4.30	4.64	4.62	4.08		

Table 3.9A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Higher Education with Rural-Urban Differences, 2007-08 and 2014

Quintile Class	Rural		Urban		Urban/Rural	
	2007-08	2014	2007-08	2014	2007-08	2014
1	4324.43	10628.77	8631.95	12500.83	2.00	1.18
2	5126.60	11534.71	4757.30	13832.84	0.93	1.20
3	5521.41	15067.76	5557.81	16373.84	1.01	1.09
4	7291.58	18571.17	9143.90	26065.21	1.25	1.40
5	18558.54	40335.37	21262.46	51417.19	1.15	1.27
All	10402.08	21727.90	17991.54	41978.67	1.73	1.93
Top income group/Bottom income group	4.29	3.79	2.46	4.11		

Table 3.10A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Higher Education with Types of Schools/Institutions, 2007-08 and 2014

Quintile Class	Government		Private Aided		Private Unaided		Private Unaided/Govt.	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	4029.51	7714.74	5342.99	12636.73	8020.64	16241.42	1.99	2.11
2	4230.25	8468.73	5060.54	12958.19	7932.77	18871.27	1.88	2.23
3	4224.30	10230.88	6079.21	14966.16	8983.76	25914.15	2.13	2.53
4	6128.88	12381.66	7621.82	21562.87	17252.75	34464.92	2.81	2.78
5	11794.21	22928.19	21186.60	43526.17	34325.67	71459.73	2.91	3.12
All	8482.53	15000.39	15083.62	29677.36	28052.89	52245.20	3.31	3.48
Top income group/Bottom income group	2.93	2.97	3.97	3.44	4.28	4.40		

Table 3.11A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Higher Education with Social Groups Differences, 2007-08 and 2014

Quintile Class	ST		SC		OBC		UC		Total	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	5298.16	9093.09	3390.67	9162.26	4895.37	10689.49	6169.92	14325.49	4733.05	10922.02
2	8218.62	9052.99	4065.50	11584.14	4449.78	11645.01	6225.59	13878.83	5075.30	11943.63
3	4046.00	12950.00	4457.94	13129.88	5554.20	17295.96	6503.18	14541.10	5531.37	15341.18
4	7698.16	18615.33	6912.53	15813.81	7791.81	21543.75	8763.14	24016.01	8039.46	21344.52
5	12439.63	32720.27	15391.10	31367.95	19088.03	48197.75	22564.53	52277.67	20494.67	47875.58
All	9401.27	19085.98	8760.02	18967.71	13058.12	29837.71	17610.16	38358.42	14475.18	30886.98

Table 3.12A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Secondary Education with Gender Differences, 2007-08 and 2014

Quintile Class	Male		Female		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014
1	789.93	4561.44	675.19	3733.27	1.17	1.22
2	1199.78	5861.67	940.02	5097.46	1.28	1.15
3	1677.90	7622.07	1377.08	6137.97	1.22	1.24
4	2991.05	10902.36	2665.64	8762.24	1.12	1.24
5	9769.62	24241.36	8917.70	21267.33	1.10	1.14
All	3280.29	11532.93	2778.58	9541.08	1.18	1.21
Top income group/Bottom income group	12.37	5.31	13.21	5.70		

Table 3.13A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Secondary Education with Rural-Urban Differences, 2007-08 and 2014

Quintile Class	Rural		Urban		Urban/Rural	
	2007-08	2014	2007-08	2014	2007-08	2014
1	697.80	3992.98	1346.51	5959.49	1.93	1.49
2	1010.78	5386.36	1712.07	6216.66	1.69	1.15
3	1425.19	6423.34	2099.07	8949.26	1.47	1.39
4	2428.46	9096.36	3692.01	11639.69	1.52	1.28
5	6904.74	16854.60	10727.36	26924.96	1.55	1.60
All	1812.21	7599.34	6568.25	17758.06	3.62	2.34
Top income group/Bottom income group	9.90	4.22	7.97	4.52		

Table 3.14A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Secondary Education with Types of Schools/Institutions, 2007-08 and 2014

Quintile Class	Government		Private Aided		Private Unaided		Private Unaided/Govt.	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	569.17	3198.22	1846.05	5693.56	1836.29	7511.65	3.23	2.35
2	749.93	4032.70	2148.91	8352.26	2632.86	9389.46	3.51	2.33
3	1041.13	4566.61	2762.70	8837.54	3166.80	12133.39	3.04	2.66
4	1787.35	5767.96	3663.31	11111.05	5092.14	16040.83	2.85	2.78
5	5237.96	10359.17	10400.99	24479.54	12894.24	31254.72	2.46	3.02
All	1425.19	5178.93	5575.29	13700.69	7178.00	19810.20	5.04	3.83
Top income group/Bottom income group	9.20	3.24	5.63	4.30	7.02	4.16		

Table 3.15A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Secondary Education with Social Groups Differences, 2007-08 and 2014

Quintile Class	ST		SC		OBC		UC		Total	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	528.44	2541.44	659.57	3685.11	740.88	4532.03	1027.28	5565.43	736.90	4193.81
2	720.85	3700.08	955.50	4829.75	1064.14	5679.25	1440.69	6807.78	1083.18	5496.84
3	1058.86	6251.58	1360.85	6224.03	1436.52	7111.37	2053.19	7542.95	1544.58	6975.08
4	1962.40	7802.57	2361.67	8719.14	2647.77	9630.48	3491.67	11578.71	2849.95	9944.45
5	5666.41	20183.59	6314.52	17000.40	7823.42	19186.88	11262.10	28008.49	9408.41	22962.55
All	1333.45	6605.02	1739.40	7359.84	2407.24	9580.58	5349.48	15517.09	3058.27	10645.37

Table 3.16A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Elementary Education with Gender Differences, 2007-08 and 2014

Quintile Class	Male		Female		Male/Female	
	2007-08	2014	2007-08	2014	2007-08	2014
1	561.97	1427.72	516.05	1220.99	1.09	1.17
2	779.45	2484.21	665.69	2166.19	1.17	1.15
3	1099.97	3923.65	996.88	3238.93	1.10	1.21
4	1954.22	6419.83	1826.58	5958.30	1.07	1.08
5	5892.56	16786.58	5547.21	16148.84	1.06	1.04
All	1732.18	5195.01	1522.28	4493.35	1.14	1.16
Top income group/Bottom income group	10.49	11.76	10.75	13.23		

Table 3.17A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Elementary Education with Rural-Urban Differences, 2007-08 and 2014

Quintile Class	Rural		Urban		Urban/Rural	
	2007-08	2014	2007-08	2014	2007-08	2014
1	511.82	1177.59	1009.14	2707.99	1.97	2.30
2	678.54	2092.41	1167.11	3719.52	1.72	1.78
3	941.76	2923.23	1578.51	5898.26	1.68	2.02
4	1488.95	5065.10	2715.94	8337.46	1.82	1.65
5	3675.71	10451.71	6869.77	19987.15	1.87	1.91
All	1000.77	2955.90	3862.24	10560.80	3.86	3.57
Top income group/Bottom income group	7.18	8.88	6.81	7.38		

Table 3.18A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Elementary Education with Types of Schools/Institutions, 2007-08 and 2014

Quintile Class	Government		Private Aided		Private Unaided		Private Unaided/Govt.	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	421.94	813.74	1260.12	3355.55	1528.87	3748.96	3.62	4.61
2	512.32	1230.77	1308.93	4786.45	1985.38	5752.54	3.88	4.67
3	669.58	1494.39	1789.43	6234.28	2557.28	8171.71	3.82	5.47
4	912.90	1906.04	2351.51	8299.42	3928.68	10893.10	4.30	5.72
5	1960.18	4000.48	5818.08	17743.31	8245.35	21328.06	4.21	5.33
All	668.21	1378.22	3024.50	9172.38	4588.12	11526.59	6.87	8.36
Top income group/Bottom income group	4.65	4.92	4.62	5.29	5.39	5.69		

Table 3.19A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles for Elementary Education with Social Groups Differences, 2007-08 and 2014

Quintile Class	ST		SC		OBC		Others		Total	
	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014	2007-08	2014
1	395.9	786.7	485.7	1113.3	541.5	1419.0	756.0	2008.9	540.5	1329.6
2	481.1	1370.6	668.3	1780.3	705.7	2604.2	976.3	2908.4	727.3	2335.2
3	713.1	2254.2	902.8	2491.3	981.9	3883.0	1435.7	4484.4	1053.1	3612.7
4	1251.2	5096.2	1515.1	4342.6	1783.5	6350.4	2361.9	7283.4	1898.3	6215.8
5	3392.4	11880.9	4103.1	12073.0	4363.4	13893.1	7112.5	20271.8	5745.3	16511.5
All	772.7	2209.3	1020.3	2783.1	1296.9	4580.1	2963.9	8230.8	1637.4	4873.9

Table 3.20A: Average Annual Household Expenditure (Rs.) per student (Age 5-29) by Household Expenditure Quintiles at each level of Education, 2007-08 and 2014

Quintile Class	71 st Round (2014)			64 th Round (2007-08)		
	Higher	Secondary	Primary	Higher	Secondary	Primary
1	10922.02	4193.81	1329.57	4733.05	736.90	540.50
2	11943.63	5496.84	2335.19	5075.30	1083.18	727.34
3	15341.18	6975.08	3612.66	5531.37	1544.58	1053.08
4	21344.52	9944.45	6215.82	8039.46	2849.95	1898.27
5	47875.58	22962.55	16511.54	20494.67	9408.41	5745.32
Top income group/Bottom income group	4.38	5.48	12.40	4.33	12.77	10.63