

TRENDS AND GROWTH OF PUBLIC EXPENDITURE ON EDUCATION IN INDIA: AN ANALYSIS

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ABSTRACT

This paper attempts to analyse the trends and growth of public expenditure on education to ensure high quality education and vibrant knowledge society in the country. It is found in the study that the public expenditure on education is increasing at increasing rate continuously. There are many states that are spending more on education of its GSDP than national GDP of central government. Among the major Indian states Manipur is spending highest on education and Gujarat spending the lowest. It is also found that the central government still spending less than 4 percent of GDP. The trends of growth rate of public expenditure on education positively increasing. Education being in the concurrent lists state government expenditure on education is more than that of the central government. The trends of proportionate share of state governments spending on education is decreasing, on the other hand central government share is increasing. Total plan and non-plan expenditure is increasing but non-plan i.e., maintenance expenditure is increasing more than that of the plan expenditure. In spite of increasing trends of government expenditure on education, the need of the hour is to increase more expenditure. Therefore, private sector investment in education should be encouraged particularly in higher education and government investment must be increased for primary and secondary level of education.

Keywords: *Public Expenditure, Quality Education, Knowledge Society, Private Sector Investment.*

Introduction

Education is one of the important socio-economic indicators of development of the country. Education contributes to economic growth through consumption, saving, investment and distribution aspect. It enhances the quality of life of the people in the country through increase in life-time earnings. As we now that India is still in the category of an underdeveloped country. Poverty, unemployment, inequality and price rise etc are the widespread problems of Indian economy since independence. Poverty and unemployment are the chronic problems our economy. We are not able to break the vicious circle of poverty even more than seventy years of independence. We are still struggling for the maintenance of the physiological / biological needs, the first stage of hierarchy of needs as developed by Ibrahim Maslow. Large number of population living both in rural as well as urban areas deprived of food, clothing and shelter even today. The people in rural areas at large scale engaged in agriculture sector. The contribution of agriculture sector to GDP has been declining but no change in dependency of rural population on agriculture. No doubt that industry and services sectors contribution has been increased to GDP. There is increase in growth rate of the economy faster than other countries in the world and India is known as fastest growing nation but the ground reality is different where as socio-economic development is concerned. There is development deficit from socio-economic point of view in the country. To maintain overall development of the people and the economy there must be investment in human development.

Increase in economic growth is the most important objective of any country and this is possible through heavy investment in capital formation. So, the investment in both physical and social capital formation are required for faster and sustainable growth of the economy. Modern economists emphasised more on human capital formation than physical capital formation. No doubt there is quick

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output growth in the economy through investment in physical capital but the base of physical capital is human resources. There is huge potentiality of human resource development in India because of second largest populated country in the world after China. We have surplus human resources and must optimally utilise through proper manpower planning. Ragner Nurkse and Lewis developed the theory related to utilisation of surplus labour force and emphasised that surplus labour engaged in agriculture sector must transfer to modern sectors like manufacturing and services sectors. But the modern sectors required skilled, educated, efficient and qualitative labour force to increase output growth. To accelerate the pace economic growth and development in the country there must be adequate investment in education, health, skill formation, research and development. Therefore, the public expenditure on education is the pre-requisite for human resource development in the country.

There is positive relationship between public expenditure on education and economic growth. Many empirical studies found that the investment in education from all category i.e., primary, secondary and higher, positively significant to economic growth. So that increase in government expenditure on all type of education ensures faster and inclusive growth in the country. In India public expenditure on education is increasing at increasing rate no doubt but whatever the percentage of expenditure on education at present is required not adequate. According to Kothari Commission there should be 6 percent of national income expenditure on education but we are spending very low in comparison to developed countries. Despite everything developed in developed countries they are spending huge amount on education to increase knowledge, skill and productivity of human resources. To break the vicious circle of poverty, decrease in inequality and unemployment and to maintain high quality standard of living of the people there must be huge investment in human capital formation in the form of government expenditure on all type of education.

Education is in the concurrent list according to 42nd amendment of the constitution, earlier it was in the state list. So both the centre and state governments are responsible to finance the education sector. After the new amendment of the constitution to education it was expected that the central government would spend more but in reality the state governments finance the maximum proportion of total expenditure on education. The present study concerned with the government expenditure on elementary, secondary and higher education. The study focused on the review of literatures relating to education expenditure, research methodology and data sources, the trend analysis of the public expenditure on social sector, on different sectors of education, growth rate of public expenditure on education, proportion of expenditure on education between the centre and the states and planned and non-planned expenditure on education and finally conclusion and policy suggestions.

Review of Literature

Investment in social services is the pre-requisite for overall economic growth and development of a developing country like India. As we now that India is one of the fastest growing nation and the second largest populated country all over the world. Because of high population there is development deficit particularly in social sector like health and education. Poverty, unemployment and illiteracy are the chronic problems of Indian economy that perpetuate vicious circle of poverty. Even after more than seventy years of independence we are not able to break the vicious circle of poverty. It must be broken through heavy investment in social infrastructure like health and education. Amartya Sen (1999) concerned with the social aspect of development concentrated towards poverty, the main obstacle of development and distinguishes poverty into income poverty and capability poverty and said that capability poverty is more important. Capability poverty concerned with deprivation of choices and opportunities and entitlements. Education play vital role for eradication of both the income poverty and capability poverty. The developing country like India there is prevalent of both types of poverty but capability poverty is more dangerous than income poverty. Capability poverty eradicated through investment in education sector. Tilak (2000b) explained poverty of education or 'education poverty' as deprivation of opportunity that hampered the overall development of the people in the country. Education poverty means that there is widespread illiteracy, high rates of school drop-out, low rates of people's participation in development activities, all these entails to exclusion of poor people from education. There is widespread education deprivation itself in the category of capability poverty in country. Therefore, inclusive education is the only way to solve this problem and required huge investment in education. Therefore, public investment in education is the best way to eradicate capability poverty.

Raghbendra Jha (2001) in his study on public expenditure on education, health and other development activities and its effect on reducing poverty in India and found that public expenditure on education is helpful for reduction of poverty in India. He further emphasised that public expenditure on

higher education is more effective for reducing poverty because of immediately income-earning opportunity realised to the people and suggested that government should spend more on higher education only than overall development realised in real sense for reduction of poverty in the country. Saumen Chattopadhyay (2007) emphasised in his study on financing higher education that only the raising of public expenditure on higher education to 1 percent of GDP is not sufficient to maintain equity and social justice. The alternative source of financing higher education is required like graduation taxes, philanthropic contribution etc. only then we can achieve inclusive growth in real sense. Anuradha De and Tanuka Endow (2008) found that the public expenditure on education increased in real terms during the 1990s and then after there has been stagnated. The new economic reforms adopted in 1991 in terms of the long term structural adjustment policy and short term macroeconomic stabilisation policy that entails to cut in public expenditure on education. Thus, there is negative impact of economic reforms on public expenditure on education in India. According to their study the public expenditure on education has been less than 4 percent of GDP. As we now that education is in the concurrent list, so both the central and state governments have the responsibility of expenditure on education. State government's expenditure on education is more than the central government but the centre has been playing vital role particularly in centrally sponsored schemes like SSA and Mid-day scheme etc.

Arusha Cooray (2009) examined the effect of total government expenditure on economic growth and found that the public expenditure on education may be insignificant if a country has low per capita income. At this situation if government expenditure done than there would be marginal effect on economic growth. There may be positive association between the quality of education and economic growth if government expenditure increased. In developing country like India there must be education policy focused on basic facilities of school infrastructure that will promote economic growth in the country. Sayantan Ghosh Dastidar and Monojit Chatterji (2015) examined the empirical relationship between expenditure on education of all level and economic growth in India using time series econometric analysis and found that all the levels of education expenditure positively affected GDP growth. So that public expenditure on education entails to improve productivity, efficiency and high economic growth in the economy. Therefore, all these literature more concerned about government expenditure on education that is the only tools to ensure overall growth and development in the country.

Research Methodology & Data Sources

The present study based on the secondary sources of data that have taken from Economic survey, Government of India, and Analysis of Budget expenditure on Education, various issues, MHRD, Government of India. The study prepared and analysed more extensively through the mentioned sources of data which are represented in terms of simple tables, graphical analysis. The statistical tools used for analytical study over the period of time like percentage and growth rate year-on-year etc. and conclusions have been drawn.

Analysis of Public Expenditure on Education

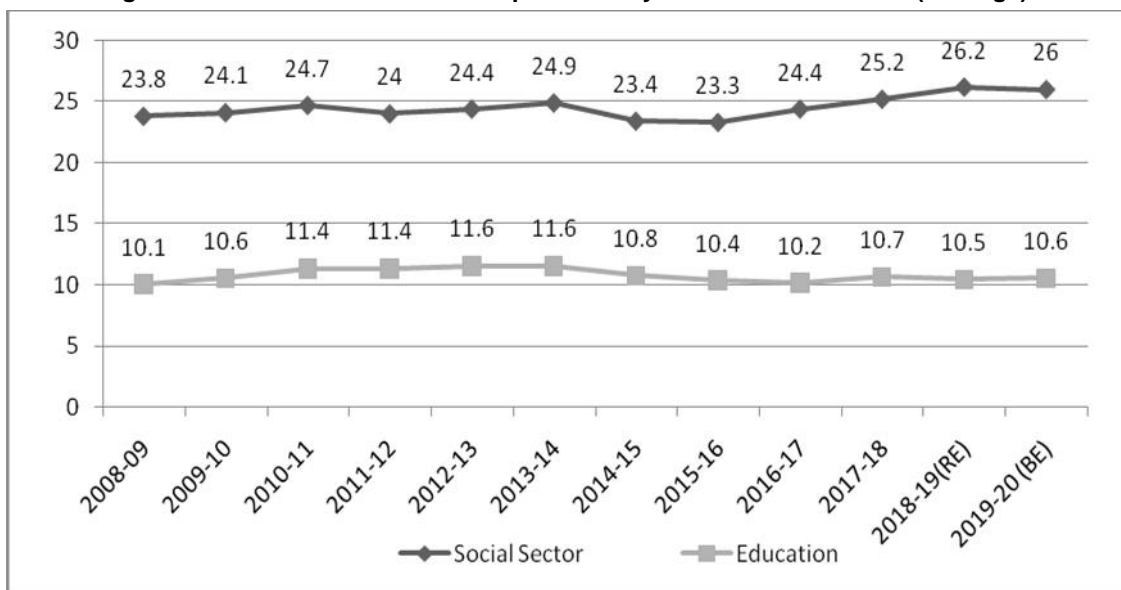
The role of public expenditure in economic growth and development is of great importance. To maximise the welfare of the people, there must be public expenditure on social sector development like education, health, sanitation etc. Human capital formation paves the way for the physical capital formation to increase productivity and production. Developed countries recognised the expenditure on education as the investment in capital formation in the economy but in underdeveloped country like India initially did not recognise the public expenditure on education as an important investment in capital formation. Now a day investment in education recognised as an important investment for sustainable and inclusive growth that entails to increase knowledge, skill and productivity in the economy. To maintain the fastest growing nation in the world we must invest in education to optimal utilisation of abundance human resources. Public expenditure on education is the most effective tools to improve the living standard of the people and proper utilisation of human resources for productivity growth in the economy.

Kothari Commission and recently New Education Policy, 2020 both recommended at least 6 percent of GDP public expenditure on education but past experience realised that less than 4 percent has been spent on education only. If we compare India to the rest the world economy in context with public expenditure on education, no doubt developed countries are spending more than 6 percent of their GDP on education. Let alone this, even many underdeveloped Asian countries are spending more on education than that of India. South East Asian countries performance in educational achievement is far better than other underdeveloped countries. They are able to break the vicious circle of poverty within certain time period through investment in education but India after more than seventy years of independence not able to completely break the vicious circle of poverty despite of many fully funded

government schemes on education. The overall literacy rate in India is only 74 percent. The female literacy rate is also very low i.e., 64.6 percent in comparison to other developed as well as many developing countries. The need of the hour is to increase the literacy through more and more investment in all type of education.

- Public Expenditure on Social Sector Development:** Investment in social sector ensures overall development of the people and also contributes to faster GDP growth in the economy. Social sector includes education, health and medical care, water supply and sanitation, housing etc. the major component of human development index. For the maximisation of social well-being, the government responsibility increased towards social sector spending. The trends in social sector expenditure by general government are shown in percentage terms in figure 1. According to the latest economic survey the government (Centre and States) expenditure on social sector increased from 6.2 to 7.7 percent as a proportion of GDP during the period 2014-15 to 2019-20.

Figure 1: Trends in Social Sector Expenditure by General Government* (In % age)



Note: *Central and State Governments combined; 2018-19 Revised estimates and 2019-20 Budget estimates; Source: Economic Survey (different years), Ministry of Finance, Government of India

The total budgetary expenditure on social sector increased from 23.8 percent in 2008-09 to 24.9 percent in 2013-14. Thereafter decline to the minimum level 23.3 percent in 2015-16, then after increased to 26 percent in 2019-20. So we can say that there is continuous increase in expenditure on social sector development except some years. Among the social sector education play vital role, the total budgetary expenditure on education almost stagnant at 10.1 percent to 10.6 percent during the period 2008-09 to 2019-20. But expenditure on education increased as proportion of GDP from 2.8 percent to 3.1 percent during the period 2014-15 to 2019-20. The need of the hour is to increase in public expenditure on education at least 6 percent of GDP only then there may be improvement in overall development index.

- Expenditure on Education Sector-wise:** The public expenditure on all the categories of education i.e., elementary, secondary, higher and others are shown in Table 1. It indicates that there was overall increase in public expenditure on education from Rs 137384 crore in 2006-07 to Rs 668395.1 crore in 2016-17. In 2009-10 there was fast i.e., 28 percent increase, whereas in 2013-14 only 10 percent increase in growth rate of public expenditure on education. Among all the sub-category, elementary education was given maximum priority i.e., Rs 62063.29 crore to Rs 277832.8 crore during the period 2006-07 to 2016-17. Secondary education was given Rs 31976.72 to Rs 159818.6 crore, higher education Rs 26516.72 to Rs 97032.23 crore, technical education Rs. 16469.45 to 132487.7 crore and adult education was given Rs 358.14 to Rs 1223.82 crore during the period 2006-07 to 2016-17.

Table 1: Public Expenditure on Education Sector-wise (Rs. in crore)

	Elementary Education	Secondary Education	University & Higher Education	Adult Education	Technical Education	Total
2006-07	62063.29	31976.72	26516.37	358.14	16469.45	137384
2007-08	69526.25	35805.94	38135.27	376.16	11953.65	155797.3
2008-09	80313.91	45831.73	45946.2	344.21	16632.78	189068.8
2009-10	100081.8	62758.56	57225.97	815.69	21622.76	242504.8
2010-11	123550.8	71358.36	62654.18	832.38	35082.52	293478.3
2011-12	149164.8	85572.91	53900.98	930.71	44361.01	333930.4
2012-13	159476.3	89938.1	62447.76	947.45	55323.19	368132.8
2013-14	182150.4	107074.7	75212.05	933.94	65507.67	430878.8
2014-15	225763.4	122762.9	70601.45	1013.62	86707.72	506849.1
2015-16 (RE)	246953.3	139131.7	89569.34	1233.91	110551.4	587439.6
2016-17 (BE)	277832.8	159818.6	97032.23	1223.82	132487.7	668395.1

Source: Analysis of Budget expenditure on Education, Various issues, MHRD, Government of India

Therefore, there has been continuous increase in public expenditure realised in all the categories of education. Here government emphasised more and more expenditure on elementary and secondary type of education because these categories affect more and the base of higher education. Developing country like India the expenditure on elementary and secondary education has more and more highly significant to economic growth compare to other sectors of education. There is positive impact of public expenditure on all categories of education and GDP growth in the economy.

- Growth of Public Expenditure on Education:** The overall expenditure on education of States, Centre and Total are shown in Table 2 and growth rate and percentage share of GDP are shown in figure 2. The total expenditure on education increased from Rs 82486.48 to Rs 668395.12 crore during the period 2000-01 to 2016-17. Among the total expenditure on education, States share increased from Rs 72290.53 to Rs 504560.53 crore and the Centre's share increased from Rs 10195.95 to Rs 163834.59 crore during the period 2000-01 to 2016-17. The trends of expenditure on education have been increased both by Centre and States. It is seen that the percentage share of expenditure on education by the States is always more than that of the Centre.

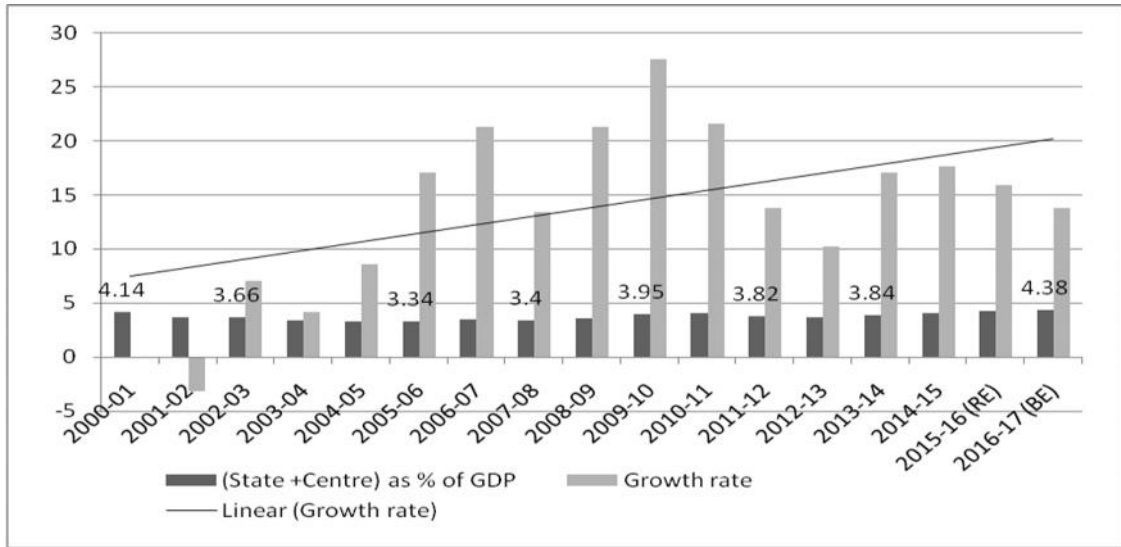
Table 2: Public Expenditure on Education (Rs. in Crore)

Years	Expenditure on Education		Total
	State	Centre	
2000-01	72290.53	10195.95	82486.48
2001-02	65746.19	14119.52	79865.71
2002-03	69350.7	16156.63	85507.33
2003-04	71978.28	17100.97	89079.25
2004-05	78668.14	18025.96	96694.1
2005-06	90018.94	23209.77	113228.71
2006-07	103147.47	34236.52	137383.99
2007-08	115877.9	39919.37	155797.27
2008-09	141091.25	47977.59	189068.84
2009-10	177232.79	64023.23	241256.02
2010-11	212817.5	80660.73	293478.23
2011-12	247855.86	86074.52	333930.38
2012-13	278375.27	89757.6	368132.87
2013-14	318249.79	112629.03	430878.82
2014-15	373457.32	133391.82	506849.14
2015-16 (RE)	448475.07	138964.49	587439.56
2016-17 (BE)	504560.53	163834.59	668395.12

Source: Analysis of Budget expenditure on Education, 2018, MHRD, Government of India

If we look at the percentage share of GDP for States there has been decreasing trends from 3.63 percent in 2000-01 to 3.31 percent in 2016-17. Whereas, the Centre's share have been increasing from 0.51 percent to 1.07 percent during the period 2000-01 to 2016-17. If we look at the percentage share of GDP for total expenditure on education both by Centre and the States it was found that there has been decreasing trends from 4.14 percent in 2000-01 to 3.26 percent in 2004-05. Since then there has been increasing trends from 3.34 percent in 2005-06 to 4.38 percent in 2016-17.

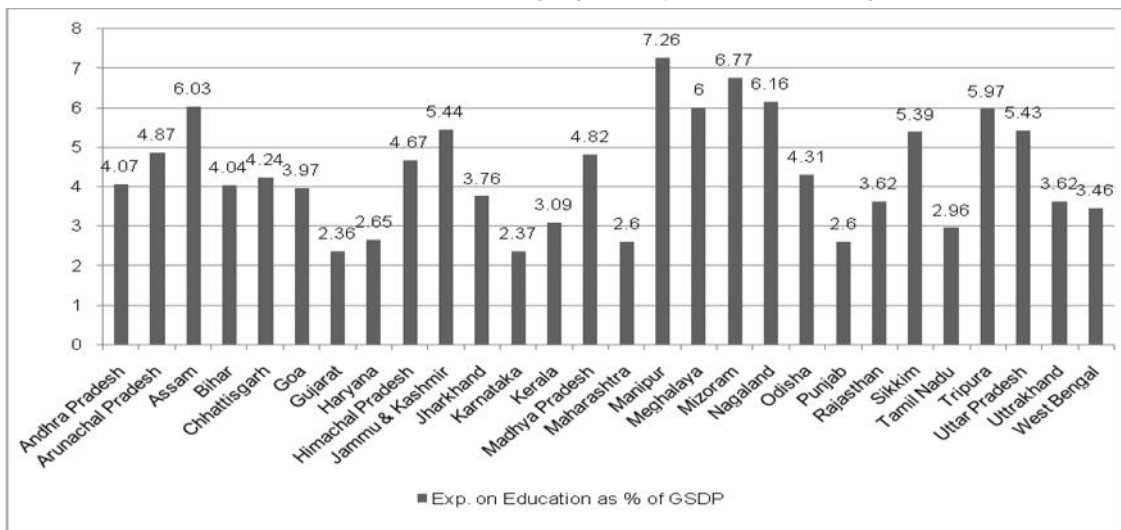
Figure 2: Growth Rate of Expenditure on Education & Percentage Share of GDP



Source: Analysis of Budget expenditure on Education, 2018, MHRD, Government of India

If we look at the growth rate of public expenditure on education it was found that there was negative growth i.e., -3.17 percent in 2001-02 and then after there has been increasing. It is also found that the trends of linear growth rate of public expenditure on education positively increasing. Therefore, the role of the government expenditure on education is very important for raising the quality standard of living of the people and overall growth in the economy.

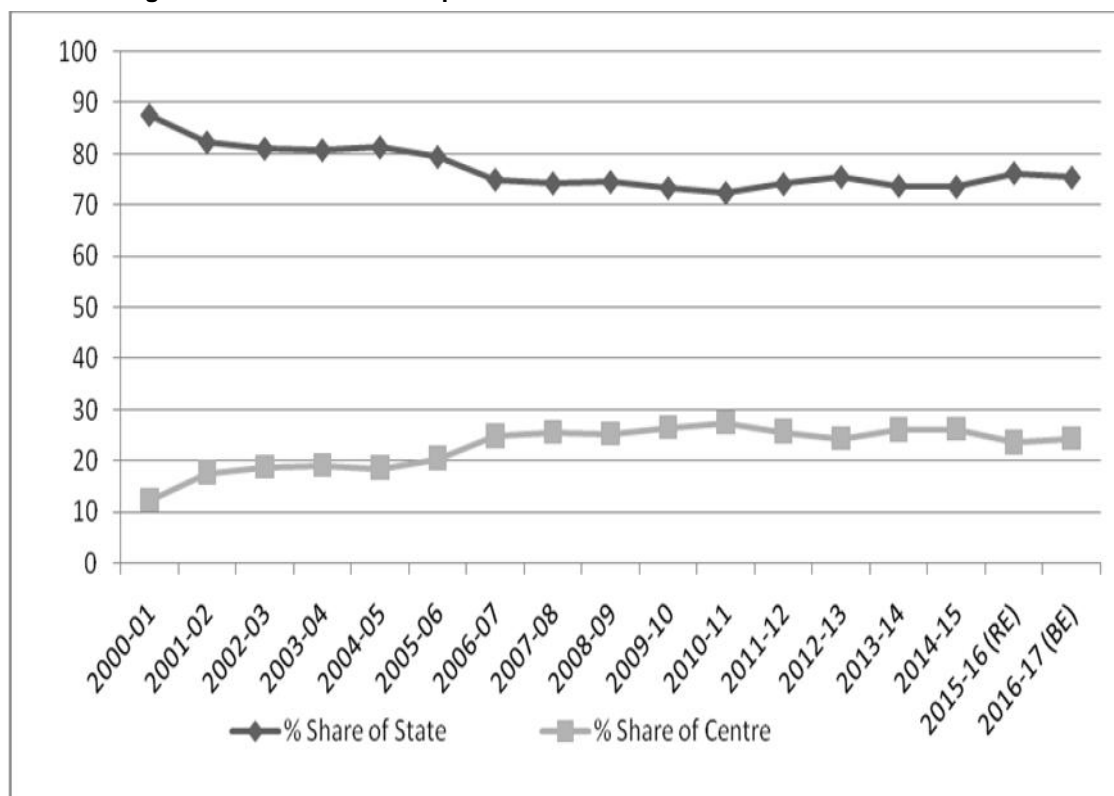
- State Government's Expenditure on Education:** State-wise expenditure on education of Gross State Domestic Product is shown in figure 3. Manipur is spending highest 7.26 percent of GSDP whereas Gujarat is spending the lowest i.e., 2.36 percent of GSDP among the major Indian states. The better performing states on public spending on education are Assam, J&K, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttar Pradesh. These states are spending more than national GDP. Whereas Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Tamil Nadu are worst performing states on expenditure on education. Education is one of the important tools by which we can solve the problems like poverty, unemployment, inequality, regional imbalance, ignorance and other social and economic problems. Therefore, there must be government expenditure on education at least 6 percent of GSDP or more than that. That would be helpful for maintaining high quality life and inclusive growth.



Source: Analysis of Budget expenditure on Education, 2018, MHRD, Government of India

- **Share of Public Expenditure on Education:** As we know that the state government is spending more on education than that of the central government. Education being in the concurrent lists so both the centre and states are responsible for policy formulation and expenditure on education. It was expected that education being in the concurrent lists so the central government spending would be more but reverse realised.

Figure 4: Share of Public Expenditure on Education between State and Centre

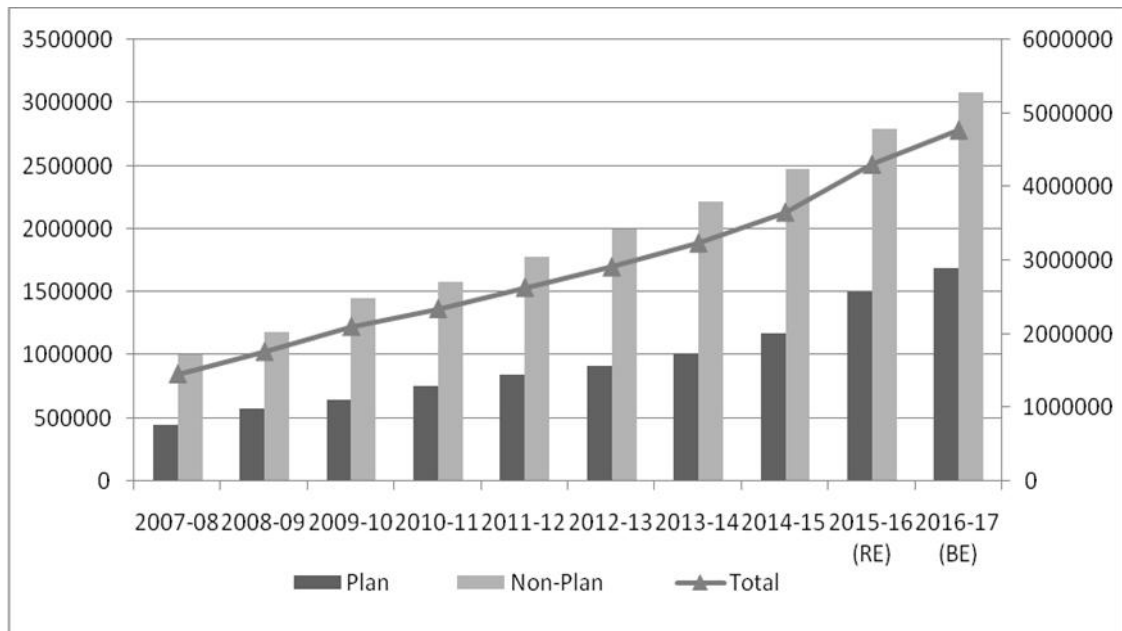


Source: Analysis of Budget expenditure on Education, 2018, MHRD, Government of India

If we look at the figure 4, the state governments are spending 70 to 90 percent of total public expenditure on education. Whereas central government spending 10 to 30 percent of total public expenditure on education. There is decreasing trends of the state government public spending on education from 87.6 percent in 2000-01 to 75.4 percent in 2016-17. On the other hand it is seen that there is increasing trends of central government spending on education from 12.4 percent in 2000-01 to 24.6 percent in 2016-17. Thus it is clear that the burden of state expenditure on education is decreasing. The flagship schemes like Sarva Shiksha Abhiyan, Mid-day meal etc. are fully supported by the central government for elementary education that entails to inclusive education to all.

- **Plan and Non-Plan Expenditure on Education:** Different types of expenditure incurred by the government on educational development in the country. Generally there are two types expenditure on education i.e., plan and non-plan expenditure. The plan expenditure concerned with the development of infrastructure of educational institutions such as construction of buildings, laboratories, libraries etc. Plan expenditure is also called development expenditure. Whereas non-plan expenditure concerned with maintenance activities like salary and non-salary expenditure, expenditure on teaching and non-teaching activities, other expenditures like maintenance of libraries, laboratories, electricity etc. The expenditure on non-plan i.e., maintenance expenditure is the largest components of total expenditure. If we look at figure 5, the total expenditure of government (combined both Centre and States) are increasing continuously from Rs 1451885 in 2007-08 to Rs 4765058 crore in 2016-17.

Figure 5: Total Budgetary Plan and Non-Plan Expenditure on Education (Rs. in Crore)



Source: Analysis of Budget expenditure on Education, Various issues, MHRD, Government of India

The non-plan expenditure is more than that of plan expenditure. Plan expenditure increased continuously from Rs 448186 crore in 2007-08 to Rs 1686897 crore in 2016-17. Non-plan expenditure, the largest component of total expenditure on education, also increased continuously from Rs 1003698 to Rs 3078161 crore during the period 2007-08 to 2016-17. No doubt public expenditure on education increased continuously but the rate of growth of expenditure is less in comparison to developed countries. We are spending less than that of targeted rate of growth of public expenditure on education. The need of the hour is to increase in public expenditure on education more than that of 6 percent of GDP as recommended.

Conclusion and Policy Suggestions

Education and health are the basic requirements of development of the people in any country. To raise the living standard of the people and eradication of poverty, the basic requirement like education must be given highest priority. The expenditure on education improves the quality of human capital formation in the country. As we know that both the human and physical capital formation required for output growth in the economy. The human capital formation play vital role for modern economic development because it is the base of physical capital formation and sources of knowledge, skill and creativity. There is positive relationship between efficient human capital and economic growth. In the developing country like India there is immense potentiality of proper utilisation of human resources to the mainstream of economic development. The contribution of people to economic development must be through increasing the public expenditure on education. In the study it is found that the public expenditure on education is increasing at increasing rate continuously. There are many states that are spending more on education of its GSDP than national GDP of central government. Among the major Indian states Manipur is spending highest on education and Gujarat spending lowest. It is also seen that the central government still spending less than 4 percent of GDP. The trends of growth rate of public expenditure on education positively increasing. Education being in the concurrent lists state government expenditure on education is more than that of the central government. The trends of proportionate share of state governments spending on education is decreasing, on the other hand central government share is increasing. Total plan and non-plan expenditure is increasing but non-plan i.e., maintenance expenditure is increasing more than that of plan expenditure. In spite of increasing trends of government expenditure on education, the need of the hour is to increase more expenditure. Therefore, private sector investment in education should be encouraged particularly in higher education and government investment must be increased for primary and secondary level of education. To be Vishwa Guru and Atma Nirbhar Bharat there must be more and more public expenditure on education.

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