

GROWTH AND CHANGING PATTERNS OF GOVERNMENT EXPENDITURE ON EDUCATION IN BIHAR

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ABSTRACT

The present paper analyses the trends and growth of public expenditure on education in Bihar. Expenditure on education is the most effective tools to raise the living standard of the people and eradication of poverty in the state. Investment in terms public expenditure on health and education is the requirement of the day for human capital formation that require for output growth. Government spending on education play vital role for inclusive, faster and sustainable growth of the state. It is found in the study that public expenditure on education has been increased continuously and seen improvement in educational outcome in the state. Plan and non-plan expenditure on education increased tremendously, expenditure on primary education given maximum priority but higher education neglected by the state government therefore, it should be taken seriously. It is also found that the percentage of public expenditure on education in Bihar is comparatively better at national level but far from the targeted 6 percent of GSDP. Special package from the central government is the urgent requirement for financing education and other development aspect of the state. Government must concentrate on quality education in every stage primary, secondary and higher level. For faster growth there must be investment in technical education like setting up new engineering institutes, IITs, IIMs management institutes and also invite private institute of eminence for knowledge revolution and optimal utilisation of quality human resources.

KEYWORDS: *Public Expenditure, Equitable, Faster & Sustainable Growth, Quality Education, Higher Education.*

Introduction

Bihar is one of the agriculture dominated developing state which registered the highest growth rate in double digit i.e., 10.5 percent, more than national growth rate, during the period 2005-06 to 2014-15. This high growth performance of the Bihar economy concentrated towards socio-economic development that ensures inclusive growth in the state. The high growth trajectory of Bihar possible because of good governance and higher development expenditure concentrated towards agriculture and social welfare programmes. Despite higher economic growth, there are many challenges of development in the state like human development. Development with justice is the objective of Sustainable Development Goals which realised through investment in human resource development in the state. There are two sources of capital formation i.e., physical capital formation and human capital formation. Both the sources of capital formation are essential for faster economic growth. Now a day's human capital formation is essential for physical capital formation because of new technology. Technological knowhow is the requirement of the day for fighting of poverty and unemployment to ensure overall development in the economy.

Despite of high growth rate Bihar is still in the category of an underdeveloped state where poverty, unemployment and illiteracy are widespread. Human development index is dismal in the state and the position is lowest among the states. As we know that Bihar is the third most populated state in the country where human resources are abundance and it is the main source of capital formation. To improve the human capital formation there must be expenditure on education and health. In underdeveloped state like Bihar the requirement is more and more public expenditure on education and health. The focus of the study in this paper is on public expenditure on education. Per capita income and

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per capita expenditure on education is the lowest in the country. Therefore, the public expenditure on education must be given priority. J.M. Keynes advocated the role of the state in terms public expenditure in economic development. Dreze' and Sen in 'Development and Participation' emphasised more and more public expenditure on education for overall socio-economic development in the country.

Review of Literature

The analysis of public expenditure on education and its impact on the growth and development of Bihar based on the study of many research paper that examine the relationship between public expenditure and economic growth within and outside the country. According to Gupta et al. (2002) in cross-sectional study of 50 countries found that increased public expenditure on education and health has positively correlated with educational outcome and health status and emphasised that strong impact on education that enhance the individual's income and other socio-economic determinants of development. Kaur and Misra (2003) found that the public expenditure on education is more effective and productive than health while analysing 15 non-special category states using panel data analysis of social sector expenditure in India.

Tara Iyer (2009) investigated 115 districts in India and found that public expenditure on primary education has negligible impact on enrolment, transition and overall performance of the students and suggested alternative way to improve educational outcome. Hanusheck and Woessmann (2010) found the role of education is crucial for human capital formation for nation building by government investment in education and also realised positive returns to society and further said that it enhance overall output productivity of the nation. Ghosh et al. (2015) examined the relationship between primary, secondary and tertiary education expenditure and economic growth using time series data for the period 1951-2011 and found that the expenditure on education positively affected growth rate from 1980s onwards and also emphasised the increase in government expenditure enhance quality and upgrade the educational outcome. Daniela Del Boca, C. Monfardini and S. Grace See (2018) highlighted the government expenditure on education in early phase of childhood that has positive and significant impact on child outcome and overall development.

Plabito Bhattacharyya (2019) found the casual relationship between public expenditure on education and economic growth while analysing 28 Indian states and further said that the need is to further increase in public expenditure on education that enhances economic growth. Kushwaha and Tiwari (2019) study concerned with the relationship between public expenditure on education and Gross State Domestic Product (GSDP) in Gujarat for the period 1998-2017 and found that the positive relationship between public expenditure on education and growth and contributed 67 percent change in GSDP and realised the most contingent factor of growth in the economy. Therefore, through the above literature it is observed that in most of the studies there is positive relationship between public expenditure on education and economic growth. If it happens in context with Bihar then there ensure improvement in enrolment ratio, reduction in drop-out rate and improvement in retention rate with quality education and finally its positive impact on the overall growth rate of Bihar.

Research Methodology & Data Sources

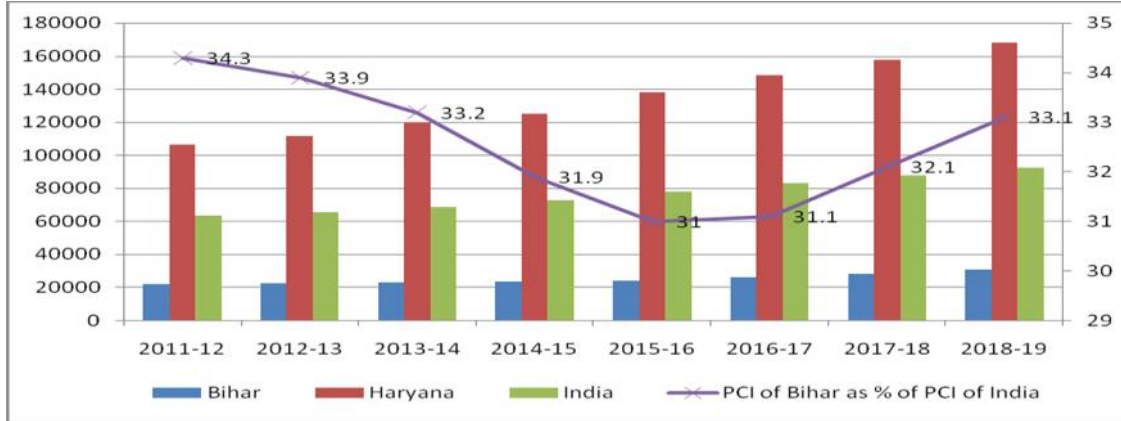
The optimum level of literacy is not possible without proper public expenditure on education in underdeveloped state like Bihar where large number of population live below the poverty line. Therefore, the public expenditure on education is necessary to achieve sustainable and faster economic growth of Bihar. The research methodology of the study is based on the secondary sources of data that obtained from Economic Survey, Central Statistical Organisation, State Government Finance, GOB, Educational Statistics at a Glance, Analysis of Budget Expenditure on Education, MHRD. The study prepared and analysed more extensively through the above mentioned data. The Simple tables, graphical analysis and statistical tools like percentage, growth rate year on year etc. are used for analytical study over the period of time.

Result Discussion

Bihar is one of the underdeveloped state where growth rate is high, but it is seen no change in overall performance of the economy in reality. If we see the growth rate of Bihar it was 11.3 percent during the period 2017-18 higher than that of the national growth rate. The per capita income of Bihar is very low in comparison to other states, therefore it affect severely to the development process. According to the recent economic survey of Bihar the per capita income is the lowest but increasing. The per capita income of Bihar was Rs. 21750 in 2011-12, it increased to Rs. 30617 during the period 2018-19. In figure

1, the trends of per capita NSDP of Bihar is increasing positively but still the lowest in the country. The per capita NSDP of Haryana was Rs. 106085 in 2011-12 and it increased to Rs. 168209 during the period 2018-19 more than five times than that of Bihar. The per capita income of Bihar is three times less than that of India. The per capita income of Bihar as percentage of per capita income of India was 34.3 percent in 2011-12, then after decreased to 31 percent in 2015-16 and then improve to 33.1 in 2018-19 i.e., U-shaped improvement. Because of low per capita income, government must more spend on social sector development particularly in education sector.

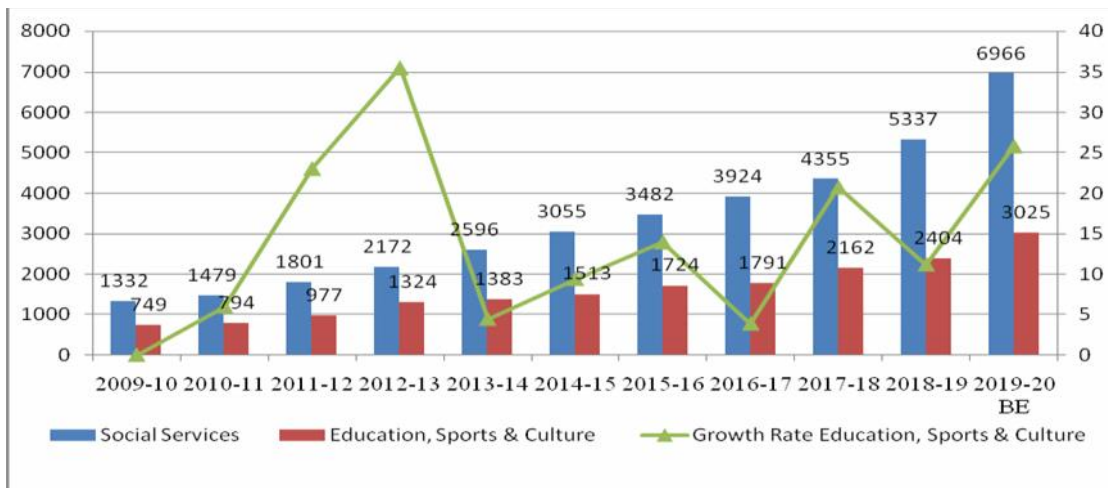
Figure 1: Trends of Per Capita NSDP at (2011-12) Prices



Source: Central Statistical Organisation, Government of India

Expenditure on Social services and Education: In welfare state there must be increase in public expenditure on socio-economic factors. As we now that there is low income in the state, the people are not able to spend on even basic needs like education, health etc. So the government must spend for socio-economic development of the state to improve the decent living standard of the people. Government expenditure on different types of welfare programmes continuously increased in Bihar. In Figure 2, it is shown that there is increase in government expenditure on social services and education increased at increasing rate continuously. The per capita expenditure on social services and education including sports & culture was Rs. 1332 and Rs. 749 in 2009-10 that increased to Rs. 6966 and Rs. 3025 respectively during the period 2019-20. It shows that the growth rate of government expenditure continuously increased at faster rate up to 2012-13 since then increased discontinuously.

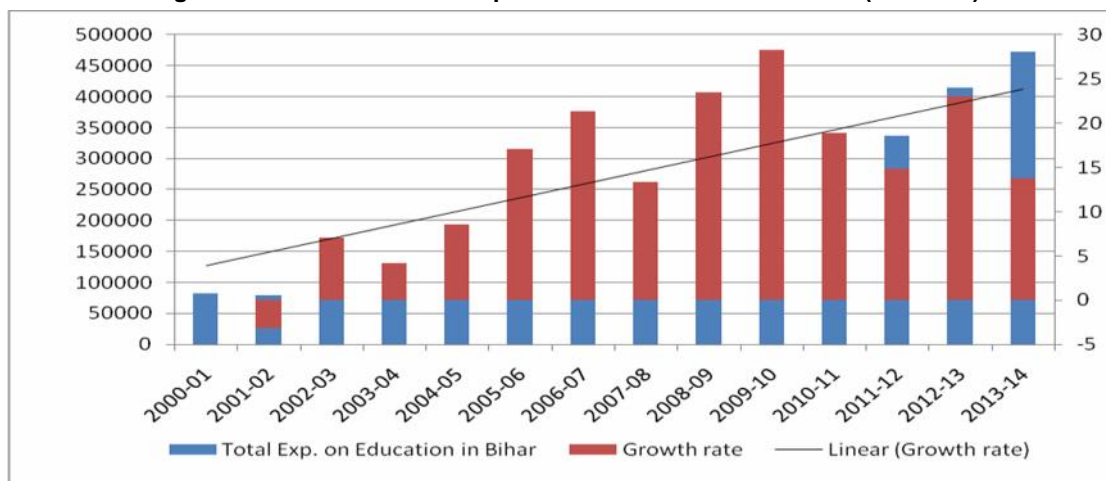
Figure 2: Per Capita Expenditure on Social Services and Education (Rs.) in Bihar



Source: Economic Survey, different issues, Government of Bihar

Total Expenditure on Education: Government expenditure on education continuously increased. As per the annual reports of MHRD data shown in figure 3, the total expenditure on education in Bihar was Rs 82486 crore in 2000-01 that increased to Rs. 246782 crore in 2009-10 and further increased to Rs. 472011 crore during the period 2013-14. The growth rate of government expenditure on education was negative i.e., -3.17 percent in 2001-02 than after fastly increased to 28.2 percent in 2009-10 and then there has been increasing continuously. The trends of linear growth rate of government expenditure on education also increased positively. It shows that the role of the government is very significant for growth and development of the state.

Figure 3: Growth and Total Expenditure on Education in Bihar (Rs Crore)



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

Plan and Non-Plan Expenditure on Education: There are two types of expenditure plan and non-plan expenditure so both types expenditure are essential for educational development in the state. The expenditure on infrastructure like construction of building, laboratories, auditorium, libraries etc. which already planned earlier are counted as planned expenditure and it is also called development expenditure. So the plan expenditure of education in Bihar was Rs. 1046.26 crore in 2007-08 that has increased to Rs. 10303.31 crore in 2015-16 in table 1. The growth rate of plan expenditure has been positive except 2011-12. On the other hand non-plan expenditure which are concerned with the maintenance activities like salary and non-salary and other expenditure like maintenance of libraries, buildings, electricity, laboratories etc. The non-plan expenditure has been always larger than that of plan expenditure on education. The non-plan expenditure on education was Rs. 4741.76 crore in 2007-08 has been increased to Rs. 9082.32 crore during the period 2015-16. The growth rate of non-plan expenditure has been fluctuating over the period. The growth rate of total expenditure on education has been fluctuating but positive over the period. No doubt there has been increasing public expenditure on education but far from the targeted rate of growth of expenditure on education. The need of the hour is to increase government expenditure more than that of 6 percent of GSDP as recommended by Kothari commission.

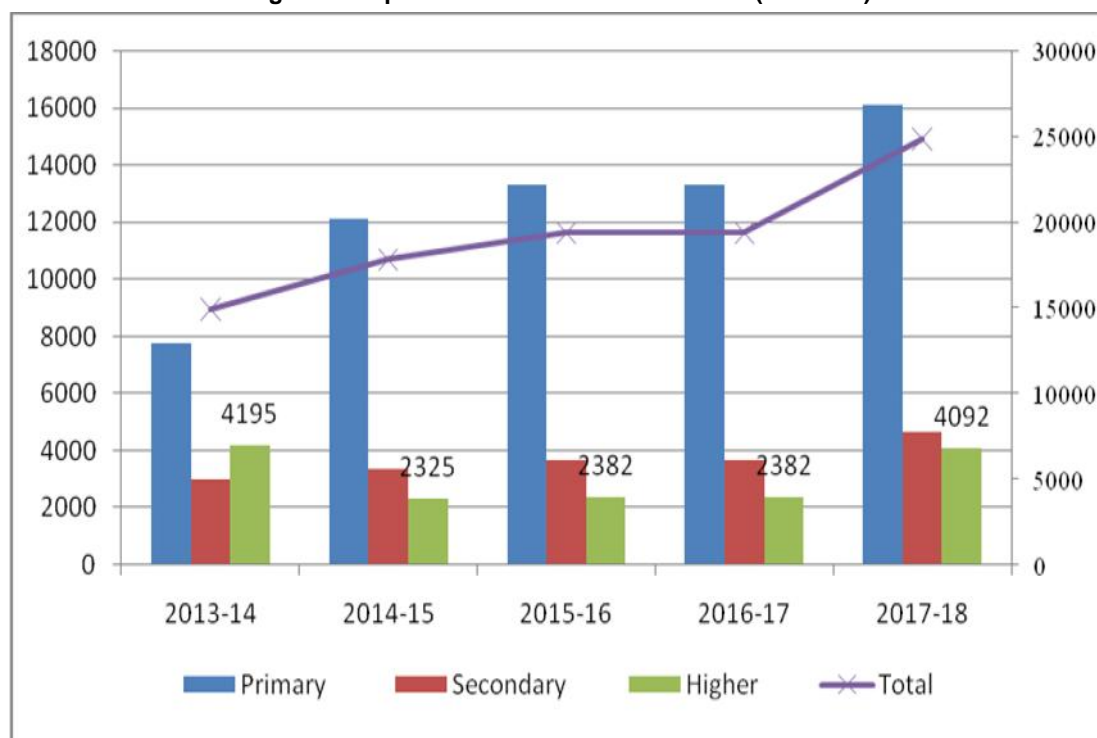
Table 1: Plan and Non-Plan Expenditure on Education (Rs Crore)

	Plan	Growth Rate	Non-Plan	Growth Rate	Total	Growth Rate
2007-08	1046.26		4741.76		5788.02	
2008-09	1565.52	49.63	5099.47	7.54	6664.99	15.15
2009-10	1585.02	1.24	5958.68	16.84	7543.7	13.18
2010-11	3356.97	111.79	4667.28	-21.67	8024.25	6.37
2011-12	2901.18	-13.57	6836.34	46.47	9737.52	21.35
2012-13	4949.63	70.60	8439.03	23.44	13388.66	37.49
2013-14	5038.99	1.80	9907.18	17.39	14946.17	11.63
2014-15	8258.51	63.89	9574.42	-3.35	17832.93	19.31
2015-16	10303.31	24.75	9082.32	-5.13	19385.63	8.70

Source: State Government Finance, GOB

Expenditure on Education Sector-wise: According to the constitution of India, education was in the state list but after 42nd amendment act, it is now in the concurrent list. So the responsibility of development of education sector shared between state and the central government. The financing education is the major issue at this stage. The state government largely depends on central government for financing development activities in the state. No doubt, the state government has been financing more on education sector as compare to the central government. Category-wise trends of public expenditure on education in Bihar are shown in figure 4. The trends of total expenditure on education have been increased during the period 2013-18. Among all the categories, primary education was given maximum priority by the state government. The government expenditure on primary education was Rs. 7764 crore in 2013-14 that has been increased to Rs. 19109 crore during the period 2017-18.

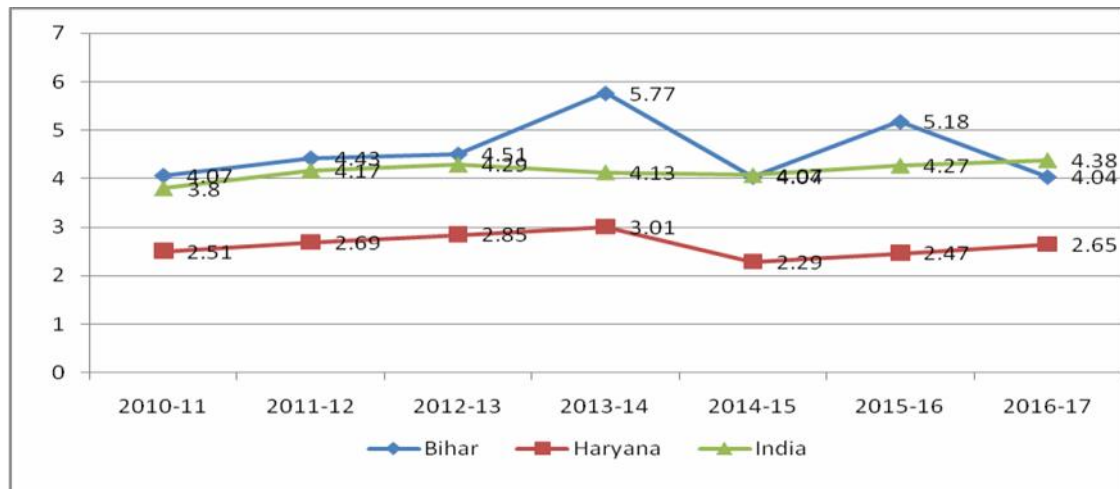
Figure 4: Expenditure on Education in Bihar (Rs Crore)



Source: State Government Finance, GOB

The expenditure on secondary education given less priority in 2013-14 than after given some priority and expenditure increased from Rs. 2987 crore to Rs.4655 crore during the period 2013-18. Whereas higher education was given lesser priority by the government as compare to primary and secondary education. The expenditure on higher education continuously decreased from Rs. 4195 crore to Rs. 2382 crore during the period 2013-17 than after improved. Therefore, there has been increased public expenditure in all categories but maximum priority given to primary education because it affect more and prepare for further education. It is found that expenditure on higher education was neglected by the government therefore, there needs to be more concentration towards higher education in the state.

Expenditure on Education as percentage of GSDP: Expenditure on education is one of the major steps that ensure faster growth and development of the economy. For financing Indian education system Kothari commission recommended that there must be 6 percent of GDP expenditure on education but we failed to spend that much amount. Developed countries are spending more than 6 percent of their GDP on education to ensure around cent percent literacy rate. For faster and sustainable growth and development of an underdeveloped country like India there must more than 6 percent spending on education. Bihar is one of the illiterate and underdeveloped states among the states in India. Convergence towards the developed states, government must spend much more than required.

Figure 5: Expenditure on Education as % of GSDP

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

If we look at figure 5, percentage of GSDP public expenditure on education are shown for Bihar and rich state in terms of per capita income Haryana. It is found that the trends of percentage government spending of GSDP in Bihar always more than that of Haryana and India. The expenditure on education as percentage of GDP was 4.07, 2.51 and 3.8 percent in Bihar, Haryana and India respectively during the year 2010-11. There has been faster increased percentage expenditure on education in context with Bihar i.e., 5.77 percent, Haryana and India lagging behind but positively increased in 2013-14. The overall percentage expenditure on education decreased over the period 2016-17. Therefore, it is found that none of the states and even India crosses six percentage point level of GDP expenditure on education as recommended by Kothari commission.

Conclusion and Policy Suggestions

Investment in education is one of the basic requirements to improve the socio-economic performance of the state. Human capital formation is one of the major requirements of modern economic development. There is positive relationship between human capital and economic growth. In underdeveloped state like Bihar there is immense potentiality to utilise human resources through investment in education. Investment in terms public expenditure on health and education is the requirement of the day for human capital formation that require for output growth. Government spending on education play vital role for inclusive, faster and sustainable growth of the state. It is found from the above analysis that public expenditure on education has been increased continuously and seen improvement in educational outcome in the state. Plan and non-plan expenditure on education increased tremendously, expenditure on primary education given maximum priority but higher education neglected by the state government therefore, it should be taken seriously. It is also found that the percentage of public expenditure on education in Bihar is comparatively better at national level but far from the targeted 6 percent of GSDP. Special package from the central government is the urgent requirement for financing education and other development aspect of the state. Government must concentrate on quality education in every stage primary, secondary and higher level. For faster growth there must be investment in technical education like setting up new engineering institutes, ITI, management institutes and also invite private institute of imminence for knowledge revolution and optimal utilisation of quality human resources.

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