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Generating Human Resource: A Study on Expenditure on Education in India

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Abstract: Education fosters peace, tolerance, secularism and national integration by creating most powerful human resource in the nation. But how can it be done is yet to be clarified as system of high education seems to be in crisis today. Urgent need is to be focused on improving quality of education and training. The new education policy of the Government of India speaks about constructivism, IT enabled education, Free Software and sharing educational resources. The goal of our new education system should be to create entrepreneurs, innovators, artists, scientists, thinkers and writers who can establish the foundation of a knowledge based economy. This paper provides an analysis of the expenditure in various sectors of education under the Ministry of Human Resource and Development (MHRD), which constitutes over 90 per cent of the total education budget of the Government of India and the centre-state budget provisions as well as the inter zonal comparisons of expenditure on budget and suggesting further reforms.

Keywords: Expenditure, Financial Assistance, loans, Interstate Comparisons.

I. INTRODUCTION

In 2010 the country achieved a historic milestone when Article 21-A and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 became operative on 1st April 2010. The enforcement of Article 21-A and the RTE Act represented a momentous step forward in our country's struggle for universalising elementary education. The RTE Act is anchored in the belief that the values of equality, social justice and democracy and the creation of a just and humane society can be achieved only through provision of inclusive elementary education to all. In keeping with the vision of providing education of equitable quality to fully harness the nation's human potential, the MHRD has laid down the following objectives:

- Reinforce the national and integrative character of education in partnership with States/UTs.
- Improve quality and standards of school education and literacy towards building a society committed to Constitutional values.
- Universalise elementary education in keeping with the rights conferred under the RTE Act.
- Universalise opportunities for quality secondary education.
- Establish a fully literate society.

There have been major changes in the level of financing of education and in priorities attached to different sectors within it. Education at the primary level had been rather neglected by the early planners, who focused more on higher and technical education. The budgetary allocation and expenditure by the central government has increased significantly between 2007–08 and 2011–12. Budgetary allocation has doubled in the case of elementary education, and has risen by more than three times for secondary and higher education. During the 11th Plan, education financing by the central government has reflected the focus on

increasing enrolment and reducing dropouts. Institutional grants for higher education, either directly or through the UGC, have shown significant increase in allocations. Public spending on education; total (% of gdp) in India was last measured at 3.35 in 2012, according to the World Bank. Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). It is observed that the percentage of expenditure on education is below the National GDP in respect of the major states such as Delhi, Haryana, Gujarat, Punjab, West Bengal, Goa, Maharashtra, Andhra Pradesh, Orissa, Jammu & Kashmir, Chhattisgarh, Tamil Nadu, Jharkhand, Rajasthan, Puducherry and Chandigarh. The analysis of public expenditure in the present paper has focused on the central and the state governments' expenditure on education.

II. OBJECTIVES

The objective of this paper is to provide a comprehensive assessment of

- The allocations made by the Government of India through its budgetary provision in the education sector.
- Inter zonal comparisons of state and union territories expenditure on education.
- Sector wise expenditure on education by centre and state government.
- Suggestions for reforms in education sector.

III. DATA AND METHODOLOGY

In order to achieve stipulated objectives of the study secondary data from various government publications like "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues has been used. The state-wise expenditure data is from the RBI Annual Reports available at www.rbi.in. The indicators used to analyse the state-wise expenditure are from the latest state report cards published in the DISE website – www.dise.in. The State-wise relationship between budgeted expenditure on education for all departments on Revenue Account in terms of the Gross State Domestic Product for the available years of various States and Union Territories for the purpose of comparative study. The tabular and functional analytical procedures were used for analysis work. The data of expenditure in various states was further interpreted by dividing into 6 zones.

IV. RESULT AND DISCUSSION

The budget provisions for the Education department of the Central and the State Governments are indicated below for various years. Table 1 clearly reveals that in 2008-08 centre government contributed 82.5 percent in expenditure on budget whereas it was just 12.20 percent by states out of their budget provisions. Later it rose as about 84.23 percent of the Central expenditure on education whereas in the case of States/UTs it is only 14.66 percent in the year 2010-11. It then kept about fluctuating for further years. It is observed from the table that the States/UTs are contributing about 73.32 percent of the total revenue expenditure on education in the country while centre contributes about 26.68 percent to the education sector as a whole. The total revenue account of Rs.465142.80 crore constitutes 15.76 percent of the total budget of the Centre and the States/UTs for 2013-14. About 82.72 percent of the Central expenditure on education is under plan whereas in the case of States/UTs it is only 21.03 percent in the year 2013-14.

Table 1 expenditure on education by centre and state government

Year	2008-09		2009-10		2010-11		2011-12		2012-13		2013-14	
Expenditure	Centre	States	Centre	States	Centre	States	Centre	States	Centre	States	Centre	States
Plan Exp.	28409.28	14438.8	32102	20255.5	42032	25675.8	50769.2	34404.4	56207.9	51040.8	65107	60432.5
Non- Plan Exp.	6026.39	103947.8	9046	136507.3	7872	149474.9	9491.6	175426.5	10611	203894.3	13594	226831.6
Total Exp. On Edu.	34435.67	118386.7	41148	156762.9	49904	175150.5	60260.8	209830.9	66818.9	254935.2	78701	287264.1
Share Of Plan Exp. To Total Exp. On Edu.	82.5	12.2	78	12.9	84.23	14.6	84.25	16.4	84.1	20.02	82.72	21.03

Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

V. SECTOR WISE EXPENDITURE ON EDUCATION

Table 2 reveals the Sector-wise Expenditure on Education by Education Department incurred by both Centre and States in 2010-11 and 2013-14. It is found here that Elementary Education accounted for 49.14 percent of the total expenditure on education in 2010-11, followed by Secondary Education, which was 31 percent. The share of University & Higher Education and Technical Education was 12.79 percent and 4.89 percent respectively. When discussed about year 2013-14, it was found that Elementary Education accounted for 50.72 percent of the total expenditure on education, followed by Secondary Education, which was 30.06 percent. The share of University & Higher Education and Technical Education was 12.97 percent and 4.79 percent respectively. The contribution to elementary education has increased whereas that on secondary education and technical education seems to have decreased marginally within period of three years.

Table 2 Sector-wise Expenditure on Education by Education Department with percentage - Centre and States/UTs 2013-14 and 2010-11

	% share of plan expenditure		% share of non-plan expenditure		% share of total expenditure in total budget	
	2013-14	2010-11	2013-14	2010-11	2013-14	2010-11
	Elementary Education	60.59	58.39	45.57	45.16	50.72
Secondary Education	19.58	15.63	35.53	37.67	30.06	31
Adult education	0.82	2.42	0.12	0.14	0.36	0.84
Language Development	0.32	0.36	0.4	0.49	0.37	0.45
University & Higher Education	9.29	12.68	14.89	12.97	12.97	12.79
Technical Education	8.12	9.66	3.05	2.84	4.79	4.89
General Education	1.28	1.21	0.45	0.68	0.73	0.54
Total Education	100	100	100	100	100	100

Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

VI. TOTAL BUDGETED EXPENDITURE ON EDUCATION

The total expenditure on education and training by the Centre and the States/Union Territories for the year 2008-09 amounted to Rs.192395 crore comprising Rs.48727.59 crore by the Centre and Rs. 143667.41 crore by States/ UTs. The total expenditure on education constituted 10.96% of the total actual expenditure during 2008-09. The corresponding percentages for Revenue, Capital Account and Loans & Advances are 12.64 percent, 1.07 percent and 3.47 percent respectively. The data of 2012-13 for expenditure on education and training by the Centre and States/Union Territories amounted to Rs.414738.54 crore (Rs.408421.71 crore under Revenue Account, Rs.6267.57 crore under Capital Account and Rs. 49.26 crore under Loans & Advances), comprising Rs.103311.82 crore by the Centre and Rs.311426.72 crore by the States/ UTs. The corresponding percentages for Revenue, Capital Account and Loans & Advances are 15.59percent, 1.60 percent and 0.09 percent respectively.

The total expenditure on education during the year 2011-12 (Actual) incurred by the Education Departments of the Centre and the States under all the three accounts; (Revenue Account, Capital Account, & Loans and Advances) amounted to Rs. 273243.79 crore . Out of this amount, Rs. 270091.78 crore is under the Revenue Account, Rs. 3040.82 crore under the Capital Account (outside Revenue Account) and Rs.111.19 crore under Loans and Advances.

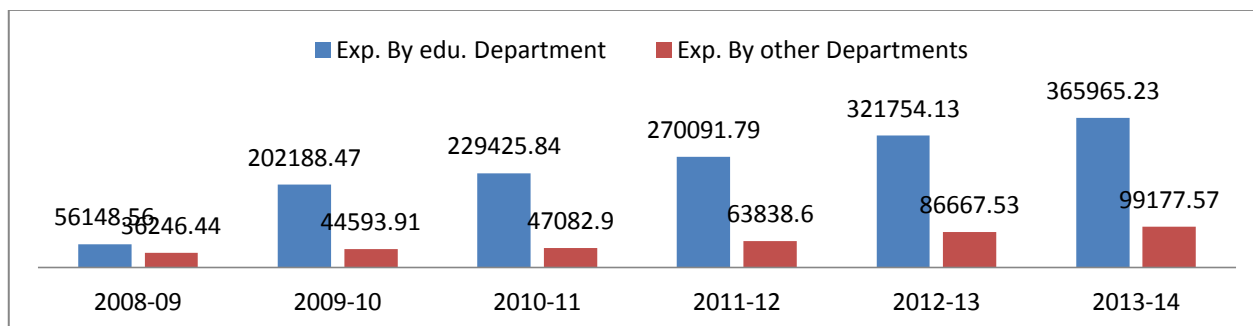


Fig 1 represents total budgeted expenditure by centre and state government on education Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

VII. INTERSTATE PLANNED AND NON-PLANNED EXPENDITURE ON EDUCATION

Interstate comparisons by dividing entire nation into six zones has been done to study the percentage plan and non plan expenditure on education by various state governments. Six zones include east, west, north, south, middle India and the union territories. Table 3 as given below reveals that rajasthan contributes maximum buget provision to expenditure as compared to other states and at number two lies chhatisgarh where the education is now given maximum importance. Among maximum is contributed by Puducherry.

Table 3 Inter Zone Comparisons of Expenditure on Education by State Governments

Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Average
East							
Arunachal Pradesh	16.22	14.71	11.9	19.82	34.17	21.94	19.8
Assam	30.76	17.09	15.74	13.53	17.42	14.12	18.1
Meghalaya	20.11	17.07	15.08	42.56	42.1	34.93	28.6
Sikkim	14.21	16.31	16.36	45.83	15.23	48.48	26.1
West Bengal	15.04	19.71	21.27	14.97	14.97	19.35	17.6
West							
Rajasthan	23.26	23.66	24.57	20.03	177.7	22.4	48.6
Maharashtra	24.48	26.29	28.34	7.64	8.77	9.94	17.6
Gujarat	17.49	18.6	19.23	18.59	20.2	25.22	19.9
North							
Punjab	13.98	15.37	15.1	8.15	14.66	17.34	14.1
Haryana	20.39	21.63	23.24	31.43	38.51	44.23	29.9
Himachal Pradesh	20.35	21.67	22.23	8.56	10.18	2.04	14.2
Uttarakhand	44.62	53.14	50.37	14.32	16.26	18	32.8
South							
Andhra Pradesh	14.29	15.26	16.3	35.59	28.07	33.26	23.8
Karnataka	22.87	21.42	22.25	28.14	33.91	37.13	27.6
Kerala	21.72	23.33	22.58	0.51	14.09	15.56	16.3
Tamil Nadu	19.52	20.95	21	13.88	20.32	19.1	19.1
Middle							
Chhatisgarh	21.9	27.04	29	55.04	60.6	56.97	41.8
Madhya Pradesh	20.27	20.65	19.01	31.79	32.6	30.51	25.8
Jharkhand	21.66	20.55	22.01	31.17	35.4	34.41	27.5
Bihar	23.23	22.6	21.8	28.34	43.07	35.53	29.1
Union Territories							
Chandigarh	21.05	25.47	23.88	15.07	18.03	21.88	20.9
Delhi	26.75	28.89	29.01	25.88	30.85	32.93	29.1
Puducherry	15.83	14.41	18.66	49.92	44.97	49.3	32.2
A&N Islands	14.02	12.3	15.35	41.98	47.9	47.41	29.8

Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

VIII. SECTOR WISE EXPENDITURE ON EDUCATION BY VARIOUS STATES

The sector-wise Public expenditure for various sectors viz. Elementary Education, Secondary Education, University & Higher Education, Adult Education and Technical Education contains expenditure on these sectors by other departments also included while incorporating the expenditure of other Departments in various sectors, the expenditure incurred by Ministries of Railways, Defence, Labour and Employment, Social Justice & Empowerment, Culture, Tribal Development and Department of

Women & Child Development mainly goes towards Elementary and Secondary Education sectors and therefore expenditure incurred by these Ministries has been counted towards Elementary & Secondary Education sectors. This expenditure has been thereafter segregated into Elementary and Secondary in the same proportion as that of the expenditure incurred by the Education Department on these two sectors. Table 4 reveals such sector wise expenditure in various years for 2008-09 to 2013-14. The percentage share of such expenditures have also been given for various states and union territories.

Table 4 sector wise expenditure on education by states and union territories

Expenditure	2008-09		2009-10		2010-11		2011-12		2012-13		2013-14	
	Total exp. On edu. (rs in thousand)	% share in total budget	Total exp. On edu. (rs in thousand)	% share in total budget	Total exp. On edu. (rs in thousand)	% share in total budget	Total exp. On edu. (rs in thousand)	% share in total budget	Total exp. On edu. (rs in thousand)	% share in total budget	Total exp. On edu. (rs in thousand)	% share in total budget
Elementary Education												
Total States	15555658	2.66	20889825	2.79	23049120	2.74	1055075133	51.45	1271196537	51	1432139548	51.07
Union Territories	627777	6.05	878800	6.67	800750	5.85	8149648	17.06	9654297	17.06	11272987	17.38
Secondary Education												
Total States	398927758	34.76	538667213	35.49	601463320	35.34	70704186	34.39	845955395	33.94	951042908	33.87
Union Territories	20176593	55.55	28537288	59.13	27846473	56.25	30853398	64.6	35897695	103.44	41476088	63.94
Adult Education												
Total States	1331303	0.12	2598013	0.17	4846256	0.28	2595160	0.13	4663665	0.19	5208360	0.19
Union Territories	645180	1.78	1011488	2.03	944042	1.91	946182	1.98	1085654	1.92	116501	1.8
Technical Education												
Total States	27060391	0.36	36605366	2.41	43157186	2.54	54203272	2.64	69173286	2.77	77386493	2.76
Union Territories	1889472	5.2	2270039	4.54	245373	4.9	2712823	5.86	3458195	6.11	3630718	5.6
Language Development												
Total States	4781445	0.42	6425295	0.42	7884376	0.46	6710292	0.33	77818392	0.31	9424830	0.34
Union Territories	84257	0.23	100121	0.2	96559	0.2	81284	0.17	133138	0.24	1228030	0.19

Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

IX. FINANCIAL ASSISTANCE IN EDUCATION

The financial assistance for educating entire nation is being provided by all the states in the form of scholarships, fee concession, fellowships etc that also carries greater weightage in budget provisions of all the states. Again the details of zones wise comparison of such assistances are given below in table 5.

Table 5 inter zone comparisons on financial assistance to students

Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
East						
Arunachal Pradesh	4.9	6.08	6.73	6.22	6.55	7.37
Assam	12.77	13.63	13.63	14.7	17.44	15.08
Meghalaya	13.62	14.29	14.29	9.65	11.31	13.13
Sikkim	2.6	2.02	1.78	5.45	5.18	5.11
West Bengal	11.62	12.16	13.76	12.24	12.54	11.22
West						
Rajasthan	4.58	5.9	5.5	5.67	6.88	5.57
Maharashtra	9.49	7.61	7.58	9.66	11.81	11.81
Gujarat	8.65	7.68	7.34	8.67	8.76	7.35
North						
Punjab	14.5	12.6	9.65	7.56	13.68	7.92
Haryana	12.44	13.58	12.19	12.6	11.11	9.34
Himachal Pradesh	6.31	7.3	7.09	7.61	7.87	6.85
Uttrakhand	6.23	4.68	5.78	4.82	5.24	4.63
South						
Andhra Pradesh	16.52	15.2	17.19	13.37	15.56	13.66
Karnataka	8.42	8.69	13.07	13.49	12.23	13.17
Kerala	14.06	14.02	14.92	14.14	16.41	16.89
Tamil Nadu	10.31	9.06	9.45	9.74	11.57	11.12
Middle						
Chhatisgarh	5.77	6.73	8.77	10.31	6.06	9.45
Madhya Pradesh	9.22	7.48	7.9	7.69	8.18	8.21
Jharkhand	14.12	15.05	12.31	11.92	13.06	12.46
Bihar	14.94	12.6	14.32	18.1	18.14	20.74
Union Territories						
Chandigarh	34.38	39.38	35.74	27.5	28.45	26.99
Delhi	3.08	3.66	2.6	4.04	3.76	6.5
Puducherry	14.34	19.49	22.79	17.49	16.43	22.24
A&N Islands	5.58	5.44	5.73	5.93	5.63	6.07

Source: "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India various issues

X. A DIFFERENCE – KERALA

The state of Kerala- The highest literacy rate among all states, and was declared the first fully literate state about a decade back. Life expectancy, both male and female, is very high, fertility rate, infant and child mortality are among the best in the country. The policies also have been very different from the rest of the country, leading to the development model followed in Kerala, with high expenditure in education and welfare, coming to be known as the "Kerala Model" among economists.

Kerala has also always shown interest in trying out ways of improving its school education system. Although there was opposition from various quarters, -The state experimented with the District Primary Education Programme (DPEP). The state was the first in the country to move from the traditional behaviorist way of teaching to a social constructivist paradigm. It was mentioned in the National Curriculum Framework of NCERT in the year 2000, and Kerala started trying it out the next year. The transaction in the classroom and the evaluation methodology were changed. A Comprehensive and Continuous Evaluation (CCE) system was introduced along with this, which took into consideration the overall personality of the student and reduced the dependence on a single final examination for deciding promotion to the next class. At present, the CBSE also has implemented CCE, but in a more flexible manner.

Kerala was also the first state in the country to introduce Information Technology as a subject of study at the High School level. Eventually, from the year 2007, only GNU/Linux was taught in the schools, and all computers in schools had only GNU/Linux installed. At that time, perhaps even today, this was the largest installation of GNU/Linux in schools, and made headlines even in other countries. Every year, from 2007 onwards, about 500,000 children pass out of the schools learning the concepts behind Free Software and the GNU/Linux operating system and applications. The initiative taken by Kerala is now influencing other states and even the policies of the Government of India as the States like Karnataka and Gujarat are now planning to introduce Free Software in their schools, and some other states like Maharashtra are examining the option.

XI. SUGGESTING REFORMS

1. CONDITIONING WITH REWARDS

Conditioning the behavior with rewards and punishments can create magic. Our education system rarely rewards what deserves highest academic accolades. Deviance is discouraged. Our testing and marking systems need to be built to recognize original contributions, in form of creativity, problem solving, valuable original research and innovation. If we could do this successfully Indian education system would have changed overnight. Memorising is actually no way of learning, however the biggest flaw in our education system is perhaps that it incentivizes memorizing above originality.

2. SMART TEACHER CREATES BETTER HUMAN RESOURCE

Teaching jobs are until today widely regarded as safe, well-paying, risk-free and low-pressure jobs. Thousands of terrible teachers all over India are wasting valuable time of young children every day all over India. It is high time to encourage a breed of superstar teachers. The internet has created this possibility – the performance of a teacher now need not be restricted to a small classroom. Now the performance of a teacher can be opened up for the world to see. It is supposed to be subjected to criticism. The better teacher will be more popular, and acquire more students. We need leaders, entrepreneurs in teaching positions, not salaried people trying to hold on to their mantle.

3. REDEFINING EDUCATION

Our education system is still a colonial education system geared towards generating babus and pen-pushers under the newly acquired skin of modernity. We may have the most number of engineering graduates in the world, but that certainly has not translated into much technological innovation here. The goal of our new education system should be to create entrepreneurs, innovators, artists, scientists, thinkers and writers who can establish the foundation of a knowledge based economy rather than the low-quality service provider nation that we are turning into.

4. INFUSING PRIVATE CAPITAL IN EDUCATION

The central government spends about 4% of budget expenditure on education, compared to 40% on defence. Historically, the government just did not have enough money to spend on even opening new schools and universities, forget overhauling the entire system and investing in technology and innovation related to the education system. But there lies a problem with private investors too who make as they are crooks, money launderers and politicians opening “private” educational institutions which extract money from the educational institution through creative structuring. The focus is on marketing rather than innovation. The government does not have enough money to provide higher education of reasonable quality to all of us, and it has no excuse to prevent private capital from coming into the educational sector. But a strict check has to be made upon such institutions too.

5. SKILL FORMATION AND VOCATIONAL EDUCATION

Our education system is geared towards teaching and testing knowledge at every level as opposed to teaching skills. Knowledge is largely forgotten as the semester exam is over. Still, year after year Indian students focus on cramming

information. The best crammers are rewarded by the system. This is one of the fundamental flaws of our education system. The best thing is to help students to learn feeding themselves and work for their needs.

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