

## RECOUP Working Paper No.18

### Public Expenditure on Education in India: Recent Trends and Outcomes

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#### Abstract

It is widely accepted that there is an acute shortage of resources in the education sector in India. Economic reforms and associated requirements of fiscal discipline have aggravated the situation. By contrast, however, official sources claim that significant progress has been made in financing education. This paper examines whether, and in what ways, this is so. It analyses major trends in public financing of education in India, including expenditures by the central government, state governments, other local bodies and the NGO sector. Foreign aid, which is transferred primarily through central government budgets, is also included.

The paper examines the level and composition of public expenditure on education and the mechanisms of resource sharing, allocation and utilization, in aggregate as well as separately for the centre and the states. It finds that while expenditure in real terms increased during the 1990s it has stagnated since then. As a proportion of GDP the share of public expenditure on education has been less than 4 per cent. But there have been major changes in the composition and modalities of expenditure. Initially, education was the responsibility of individual states, but in 1976 it became the joint responsibility of both central and state governments. The analysis finds that the centre has been playing an increasingly important role in state education finance. Centrally sponsored schemes, which are partly funded by external aid, have been a critical part of centre-to-state transfers. Expenditure trends in seven states are studied to explore the possible impact of expenditure on education outcomes. It indicates that for the less developed states recent changes in education expenditure have improved access, but retention and learning achievements remain very low.

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**Keywords:** education, financing education, India, education outcomes.

#### Acknowledgements:

Valuable research assistance was provided by Aftab Alam, Parwez Hussain, Shrabani Mukherjee and Debdulal Thakur from Collaborative Research and Dissemination. The authors are grateful to Dr. Praveen Jha for providing valuable guidance in conception of the paper, to Claire

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<sup>1</sup> Collaborative Research and Dissemination is the lead research organisation in India working with the Research Consortium on Educational Outcomes and Poverty (RECOUP), a DFID supported research consortium.

Noronha for her insightful comments at different stages and to Professor Chris Colclough for his meticulous reading of several versions of the paper and his detailed comments and suggestions.

An earlier version of this paper was presented at the UKFIET conference 'Going for Growth? School, Community, Economy, Nation', 11 – 13 September 2007, Oxford. This paper forms part of the Research Consortium on Educational Outcomes and Poverty (RECOUP). Neither DFID nor any of the partner institutions are responsible for any of the views expressed here.

## 1. Financing Education: Policy

In India over the last fifty years 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 Constitution of India, under the original Article 45, had directed the State to provide, “within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years.” But the goal of universal elementary education (UEE) was not addressed with urgency for four long decades possibly because Article 45 was placed in Directive Principles of State Policy and, therefore, was seen as not being justiciable.<sup>2</sup> This situation changed as a result of the introduction of the Constitutional 83<sup>rd</sup> Amendment Bill in the Parliament (1997) and eventually the passing of ‘The Constitution (Eighty-Sixth Amendment) Act, 2002’ – more than fifty years after India’s independence.

The relative neglect of elementary education has resulted in low literacy rates among adults in India and in majority of the poor children remaining out-of-school, being deprived of even elementary education. There has been rapid improvement in school participation in recent years but a national household survey commissioned by Government of India in 2005 (SRI, 2005) still reports 7.8 million out-of-school children in primary school going age. The Indian middle and upper middle classes, on the other hand, benefited from subsidized higher education and have succeeded in creating a pool of highly knowledge able and skilled workers. Since the 1990s, however, due to the twin factors of awareness of these issues at the domestic level as well as pressure stemming from structural adjustment policies<sup>3</sup> (SAP) the Indian policymakers have sought to correct the balance and there has been a concerted effort towards taking elementary education to all children, even those living in remote regions.

We present in Table 1 an overview of education policies related to education finance as it evolved since India attained independence. Although several committees and commissions were appointed from time to time to deal with various issues, the education policy was shaped primarily by the Kothari Commission and the National Education Policy. After the UPA (United Progressive Alliance) government came into power in 2004, the Central Advisory Board of Education (CABE) Committee was appointed to investigate the universalization of secondary education. While these committees had much to say about structure of the education system and priorities within it, their recommendations regarding the level of education finance were somewhat similar. In 1966, the Kothari Commission had recommended that the public expenditure on education should reach the level of 6 per cent of GNP by 1986. Subsequently, in 1996, the Saikia Committee examined the financial, among other, implications of the proposal to make free and compulsory education a fundamental right. It reiterated the need for an expenditure of 6 per cent of GNP on education with 50 per cent of it earmarked for primary education (an additional finance of Rs.40000 crores in next five years). In 1999, an Expert Group headed by Tapas Majumdar, made estimates for additional fund requirements for UEE – it was in the range of 137000 crores over the following 10 years (GOI, 1999). National Common Minimum Programme and CABE committee also had similar recommendations. However, policy statements and implementation do not always go together. Actual expenditures in the education sector have fallen far short of these targets (section 3). These recommendations repeatedly emphasize the need for higher investment in education and the importance of different levels of government in its financing.

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<sup>2</sup> In 1993 Supreme Court granted all children a fundamental right to “free and compulsory education” until they “complete the age of fourteen years” and stated that this right “flows from Article 21” i.e. Right to Life. In 1996 the Government constituted the Saikia Committee of State Education Ministers (GOI, 1997) which recommended that the “Constitution of India should be amended to make the right to free elementary education up to the 14 years of age, a fundamental right.”

<sup>3</sup> Following a severe balance of payment crisis, India took a \$ 500 million structural adjustment loan from the World Bank in 1991. The loan was intended to help India tide over the BOP crisis and also to help it to liberalize its economy through economic reforms in the domestic economy as well as in the trade sector. The fiscal discipline that had to be followed by the centre and the states as a result of SAP led to pruning of expenditure in social sectors like education. However, the renewed emphasis on elementary education the world over affected India as well, and there was increased focus on education at the elementary level, often at the cost of higher and technical education).

**Table 1: Overview of Education Policies related to Financing of Education in India**

Education Policy / Committee	Year	Recommendations
Kher Committee	1948-49	A fixed percentage of Central (10 per cent) and Provincial (20 per cent) revenues should be earmarked for education and that around 70 per cent of the total expenditure on education should come from the local bodies and provinces
Kothari Commission	1964-66	<ul style="list-style-type: none"> <li>▪ Public expenditure on education should reach the level of 6 per cent of GNP by 1986</li> <li>▪ Vocationalization of secondary education</li> <li>▪ Strengthening of centres of advanced study and setting up of small number of major universities of international standard.</li> </ul>
National Education Policy	1968	<ul style="list-style-type: none"> <li>▪ Investment on education to be gradually increased to reach a level of six per cent of national income as early as possible.</li> <li>▪ Focus on science &amp; technology and agriculture</li> <li>▪ Provision of food and effective education at primary level (on a free and compulsory basis)</li> <li>▪ Equality in education for rich and poor: common 10+2+3 education structure throughout India and eventually free schooling till class 10.</li> </ul>
Secondary Education Commission	1972	<ul style="list-style-type: none"> <li>▪ to assume certain direct responsibility for reorganization of secondary education and give financial aid for the purpose.</li> <li>▪ Encourage private contribution through tax exemptions (income tax, property tax and custom duties)</li> <li>▪ Industrial education cess should be levied for furtherance of Technical and vocational education at secondary stage.</li> </ul>
42 <sup>nd</sup> Constitutional amendment	1976	Education transferred from list to concurrent list (School education under jurisdiction of both, the Centre and the State).
National Education Policy	1986 (with revisions in 1992)	<ul style="list-style-type: none"> <li>▪ Resource support for implementing programmes of educational transformation, reducing disparities, universalisation of elementary education, adult literacy, scientific and technological research, etc. will be provided. For this actual requirements will be computed at regular intervals and outlay on education will be stepped up so that more than six per cent of national income is allocated from eighth plan onwards.</li> <li>▪ While the role and responsibility of the States in regard to education will remain essentially unchanged, the Union Government would accept a larger responsibility to reinforce the national and integrative character of education, to maintain quality and standards (including those of the teaching profession at all levels) and to study and monitor the educational requirements of the country.</li> <li>▪ Additional resources to be raised by mobilizing donations, asking beneficiary communities to maintain school buildings, raise fees at higher levels of education and effecting savings through efficient use of resources.</li> </ul>
73 <sup>rd</sup> and 74 <sup>th</sup> constitutional amendment	1992	Statutory recognition of local governments, and inclusion of school education in the list of its responsibilities. Local bodies to play an important role in financing and implementing education programmes.
Saikia Committee	1996	Need for an expenditure of 6 per cent of GNP on education with 50 per cent of it earmarked for primary education. Recommended additional expenditure of Rs. 40000/ crores over next five years on elementary education.
Tapas Majumdar Committee	1999	Estimated additional fund requirements for UEE – it was in the range of 137000 crores over the following 10 years.
86 <sup>th</sup> Constitutional Amendment	2002	Provide free and compulsory education of children between age 6 to 14 years, and provision of early childhood care and education for children below six years.
National Common Minimum Programme of present UPA Government	2004	<ul style="list-style-type: none"> <li>▪ Raise public spending in education to at least 6 per cent of the GDP with at least half this amount being spent on primary and secondary sectors. This will be done in a phased manner.</li> <li>▪ A Cess of two per cent on all central taxes to finance the commitment to universalize access to quality basic education.</li> <li>▪ A national cooked nutritious mid-day-meal scheme, funded mainly by the Central Government, will be introduced in primary and secondary school.</li> <li>▪ The Integrated Child Development Services (ICDS) scheme will be universalized to provide a functional Anganwadi in every settlement and ensure full coverage for all children.</li> <li>▪ all northeastern States will be given special assistance to upgrade and expand infrastructure.</li> </ul>
CABE Committee	2006	<ul style="list-style-type: none"> <li>▪ The additional financial requirement for universalising secondary education as per cent of GDP works out to be around 0.18 per cent in 2003-04 and to 0.86 per cent 2019-20.</li> <li>▪ With 6 per cent of GDP earmarked for education, the shares of elementary, secondary and higher secondary (as % of GDP) will be 3, 2 and 1 respectively.</li> </ul>

Source: From MHRD website; Relevant committee reports

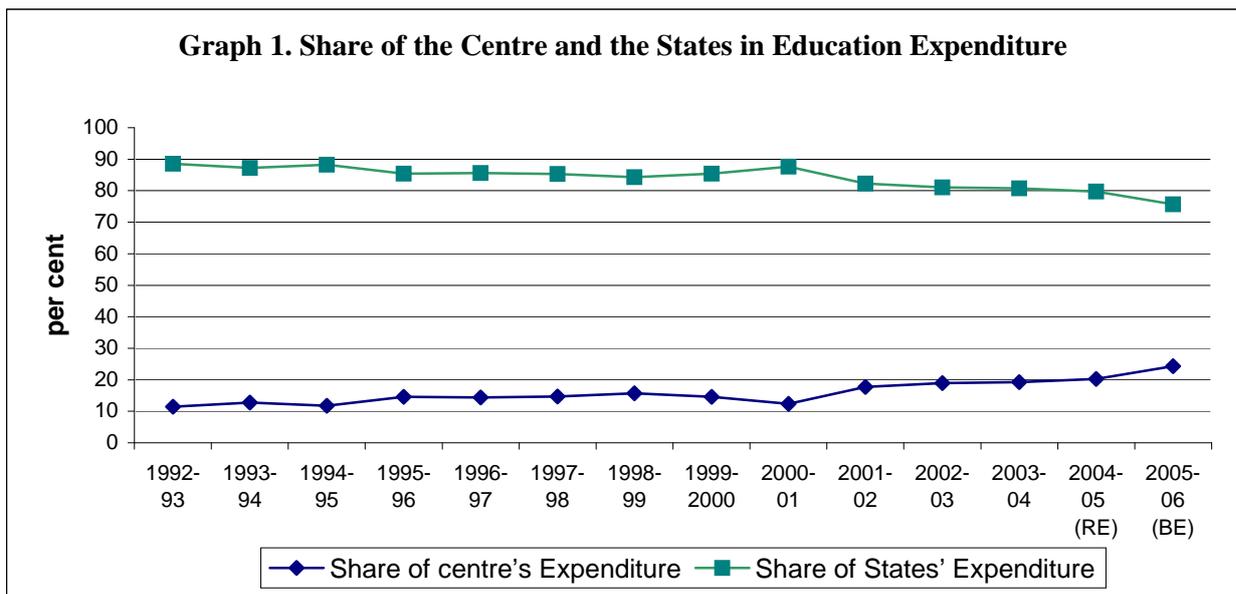
Moreover, education development in general and attainment of UEE in particular, depends not only on the quantum but also on the composition of expenditure on education. The process of allocation and disbursement also has a major impact on educational development. In order to understand the present state of public financing of education in India, we need to take a comprehensive look at the Indian fiscal system and the players involved.

This paper examines public financing of education in India in this context. It is divided into six sections. There is an initial discussion of sources of finance and problems of estimation and interpretation of data. The trend and composition of aggregate public expenditure in India is examined in the second section. The third section focuses on Centre-State relations in education finance and has contrasted their expenditure patterns. The mechanism of flow of funds and the role of centrally sponsored schemes are also discussed. Expenditure trends in several states and their possible impact on education outcomes are looked at in the fourth section. In the next section the two major problems in public expenditure – inadequacy of resources and inefficiency in allocation and utilization are analysed. The role played by foreign aid has been discussed in this context. In the concluding section the recent changes in level of public expenditure and their implementation are reviewed.

## 2. Sources of Finance

There are several important sources of education finance – the public sector which includes expenditure by the central government, the state governments and the local bodies, foreign aid which is transferred primarily through central government budgets and the private sector financed largely by individual households and, to a smaller extent, non-profit and for – profit private sector. The focus in this paper has been essentially on public expenditure on education by the centre and the states.

Initially education was the responsibility of individual states, but in 1976 it was placed in the Concurrent List (denoting joint responsibility of both central and state governments). The total budget expenditure on education and the shares borne by Centre and States respectively are shown in Table A1 in Annexure While the States still bear the lion’s share of expenses on education, their share in the total has been declining after 2000-01 (from 87.7 per cent in 2000-01 to 75.7 per cent in 2005-06 (Budget estimate)), while Centre’s share has shown a jump (from 12.3 per cent to 24 per cent during the same period) (Graph 1).



It is evident that the expenditure patterns of both the central government as well as the state governments have to be examined to get an idea of the total expenditure.

Following two constitutional<sup>4</sup> amendments in 1993, more power has been invested with rural and urban local bodies making elementary education a responsibility of these bodies. These local bodies are largely funded by the respective state governments but they also spend resources raised at their level. While in rural areas own resources raised by local bodies is a small proportion of their total revenue (3.6 per cent in 1997-8), it is much higher in urban areas (nearly two-thirds) (Rao, 2000). However the resources and expenditures of local bodies vary from state to state (Andhra Pradesh and Maharashtra accounting for a major share) and though it is possible to estimate their budgeted expenditure on education, it is not possible to estimate the extent to which this is funded from their own resources. So their expenditure has not been included in this expenditure analysis.

External aid is an important source of education financing. In relation to the total magnitude of education finance this had been insignificant before the introduction of economic reforms in the 1990s. Its role had changed since then. Earlier focused on technical and vocational education, external resources are now increasingly directed at elementary education.

## 2.1 Problems of Estimation

With several players involved in financing education and the various channels of transfer of funds, estimating total expenditure becomes quite complicated. Firstly it is difficult to ascertain the expenditure incurred on education directly because the expenditure for education by Department of Education is given under several major heads of account which includes “general education”, “technical education”, “sports and youth services” and “art and culture”. So expenditure on specific heads has to be separated to estimate expenditure on education department. Secondly this expenditure does not take into account expenditure on education by other departments. For instance, the department of Rural Development gives money for building schools, which should be included as expenditure for education. Both in the central and the state governments, quite a large amount of expenditure on education is incurred by departments other than the department of education, and their proportion has increased over the years. These departments include several ministries/ departments like Department of Women and Child Welfare, Ministry of Tribal Affairs and Ministry of Social Justice and Empowerment.

**Table 2: Expenditure on Education by Education and other Departments, Rs. Cr**

Year	Total expenditure on Education	Expenditure by Other Departments on education	Expenditure by Other Dept. as a % of Total Expenditure on education
1971-72	1007.8	85.3	8.5
1981-82	4288.8	498.7	11.2
1991-92	22393.7	3636.1	16.2
1996-97	43896.5	7524.9	17.1
2001-02	80505.9	15018.0	18.7
2003-04	95535.5	18265.2	19.1

Source : Financing Education in India, NUEPA , J B Tilak ; Analysis of Budgeted Expenditure on Education, Ministry of HRD, Govt. of India- various issues.

Table 2 shows the increasing importance of other departments of the Central and State governments in budgetary expenditure on Education. It has increased faster than total expenditure and the share of other departments has increased from 8.5 per cent in early seventies to 16 per cent in early nineties and around 20 per cent by the turn of the century.

<sup>4</sup> “By the 73rd and 74<sup>th</sup> Amendments to the Constitution, bodies of local self-government – Panchayati Raj bodies for rural and Municipal bodies for urban areas, respectively – were accorded Constitutional status, in 1993. The Eleventh and Twelfth Schedules of the Constitution provide illustrative lists of items which may, by law, be devolved on these local bodies. The Eleventh Schedule lists Education upto the Secondary level, Vocational Education, and Adult and Non-Formal Education, among others, for devolution to Panchayati Raj bodies.” Source: website of higher education department of Ministry of Human Development, India (Education.nic.in)

## 2.2 Components of Expenditure

While the aggregate expenditure reflects the priority accorded to education, in the Indian context it is important to distinguish between Plan and Nonplan expenditure. Plan expenditure is that part of total budget expenditure, which is meant for financing the schemes and programmes especially framed under the current Five-year plan or the unfinished tasks of the previous Plans. So the Plan expenditure indicates the direction of changes in the education sector. Nonplan expenditure is the expenditure on operating and maintaining existing education infrastructure. So at the end of a five year plan, the recurring parts of Plan expenditure on different programmes or schemes become part of Nonplan expenditure. So Nonplan expenditure is expected to increase steadily over the years.<sup>5</sup> The scope for decreasing this expenditure is very limited, as it involves maintaining the stock of education infrastructure which has been determined by the policies in the past years and while savings through introduction of efficiency measures are possible that would be a one-time savings. Another distinction to note is between expenditure on Revenue account, and expenditure on Capital account. Expenditure on Revenue accounts constitutes the bulk of the budget expenditure on education in India and very little is spent on the Capital account. But this does not imply that there is little or no asset creation in education. One of the main reasons for low expenditure on Capital accounts is that the entire grants-in-aid, including grants for capital works is booked under revenue account and not under capital account. Secondly expenditure on construction activity is often shown under the budget heads of other departments. The government also saves some of the construction expenditure as often village panchayats donate land for construction of school buildings and villagers provide voluntary labour and locally available construction material, and also many states have private aided schools/colleges where initial land and buildings are provided by private individuals/organizations and only the recurring costs are covered by government aid<sup>6</sup>.

## 3. Public Expenditure on Education in India

There have been several studies on education expenditure in recent times which provide valuable inputs to this paper<sup>7</sup>. Though the data presented in different papers broadly agree with each other, there are minor differences in the estimates. So in this paper we have primarily used data from Analysis of Budgeted Expenditure on Education (Ministry of Human Resource Development). The data presented in these reports take into account the expenditure incurred on education by all departments in addition to that by the education department, and is the standard source used for analyzing public expenditure on education<sup>8</sup>. However much of the data used in this paper are expenditures by education department of the relevant governments on revenue account.

We next take a look at the budget expenditure on education, its share in GDP and the Plan-Nonplan distribution of public expenditure on education.

It is seen from Table 3 that while expenditure in current prices has been growing at the CAGR of 13.5 per cent p.a. for the period 1990-91 to 2003-04<sup>9</sup>, the rate of growth has slowed down in the present decade<sup>10</sup>. Moreover expenditure in constant prices shows a much lower CAGR of only 6.5 per cent for the same period. Though the expenditure has almost doubled between 1990-01 to 2000-01, it had stagnated and even shown a decline since then<sup>11</sup> (Graph 2).

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<sup>5</sup> In the education sector, salary of teachers and administrative staff (other than those recruited under Plan schemes), expenditure on repair and maintenance of schools, expenditure on replacement of non-functional teaching equipment and similar items are Nonplan expenditure. Expenditure on construction of new schools, additional classrooms, new toilets, salary of additional teachers and nonteaching staff etc come under Plan expenditure.

<sup>6</sup> "Budgetary resources for education (1951-52 to 1993-94):" document available at website of MHRD

<sup>7</sup> Jha, Das, Mohanty and Jha (2006), Tilak (2003), Srivastava, (2005), Dev and Mooij (2002), Bashir, S (2000)

<sup>8</sup> These estimates too suffer from some overestimation. For example grants made by the Central Ministry to the State budgets are counted as expenditure of centre as well as states and so are double-counted (Jha et al, 2006). In spite of certain problems, these reports have been invaluable for studying education finance. Otherwise it would have been a very time consuming exercise to get details of education expenditure from all departments as it requires scrutiny of expenditure heads of several line ministries/departments, and totaling them.

<sup>9</sup> A major chunk of the increase is the result of pay scale revisions in public sector.

<sup>10</sup> It even showed a decrease between 2000-01 to 2001-02.

<sup>11</sup> The expenditure in 2004-5 may register as increase if the revised estimates can be achieved.

In per capita terms, expenditure at constant prices shows a sharper decline. So education expenditure has stagnated and even declined in spite of the rhetoric on the part of the Government. This is also borne out by the trend in the share of public education expenditure in GDP (Graph 3 and Table A2). The share was around 4 per cent in 1990 but declined since then. It recovered to over 4 per cent only around the year 2000, but has been since been on a decline and nowhere near the oft quoted target of 6 per cent. As a proportion of total revenue expenditure, a decline in the present decade is observed - at the turn of the century more than 14 per cent was spent on education, but around 12 per cent is spent in the present decade.

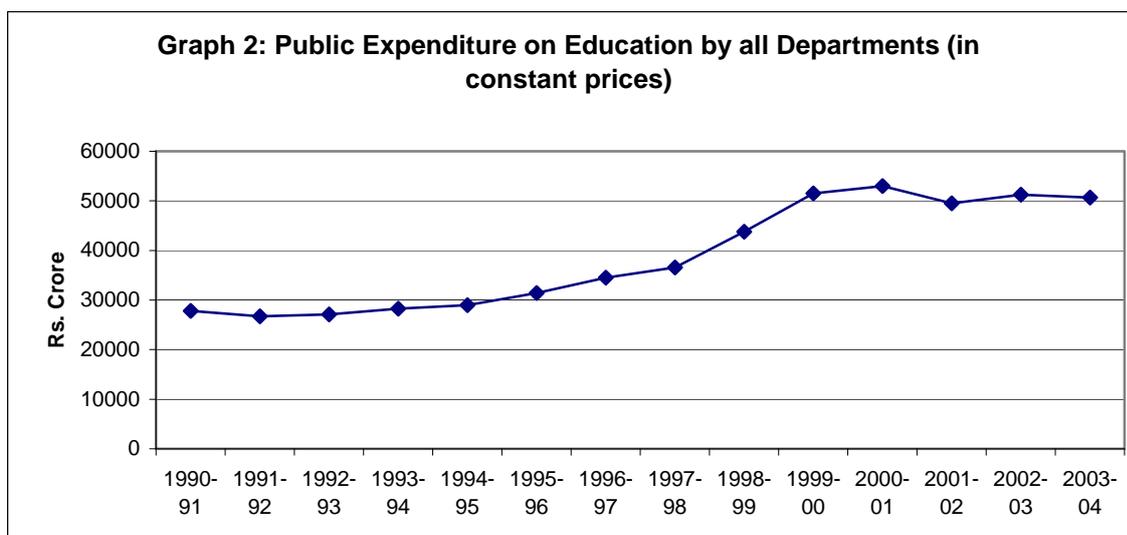
**Table 3: Changes in Public Expenditure on Education in India**

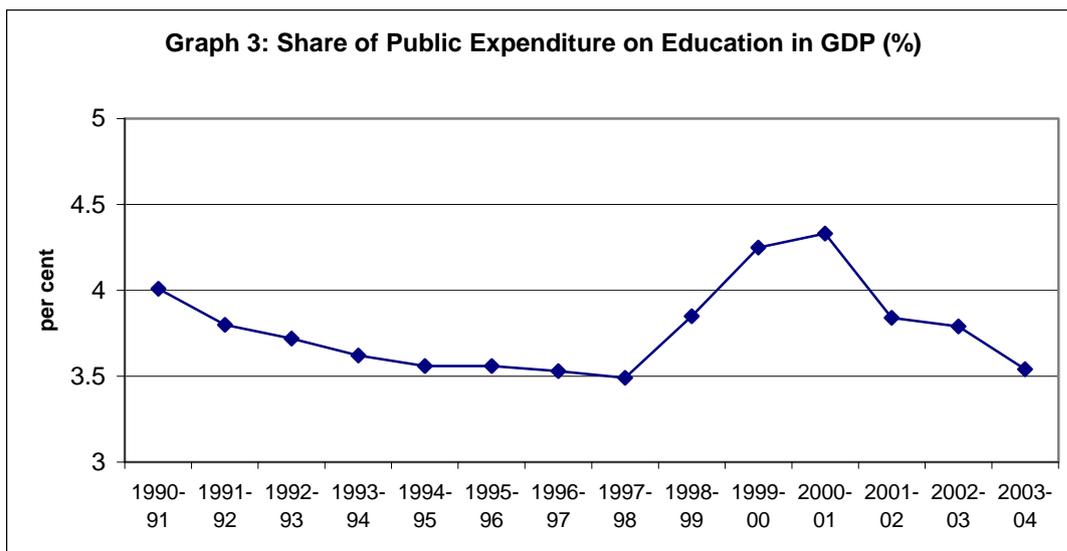
Year	Govt. expenditure on education by all Depts. in current prices (in Rs.crores)	Per capita expenditure at current prices (in Rs.)	Govt. expenditure on education by all Depts. In constant prices (in Rs Crores.)*	Per capita expenditure at constant prices (in Rs.)*
1990-91	20491	242.12	27793	328.40
1995-96	38178	408.66	31396	336.07
2000-01	82486	814.77	52978	523.30
2003-04	89079	840.35	50642	477.74
CAGR (1990-1 to 2003-04)	13.5		6.5	
CAGR (1999-2000 to 2003-4)	4.46		-0.41	

\*Price (1993-94) = 100

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

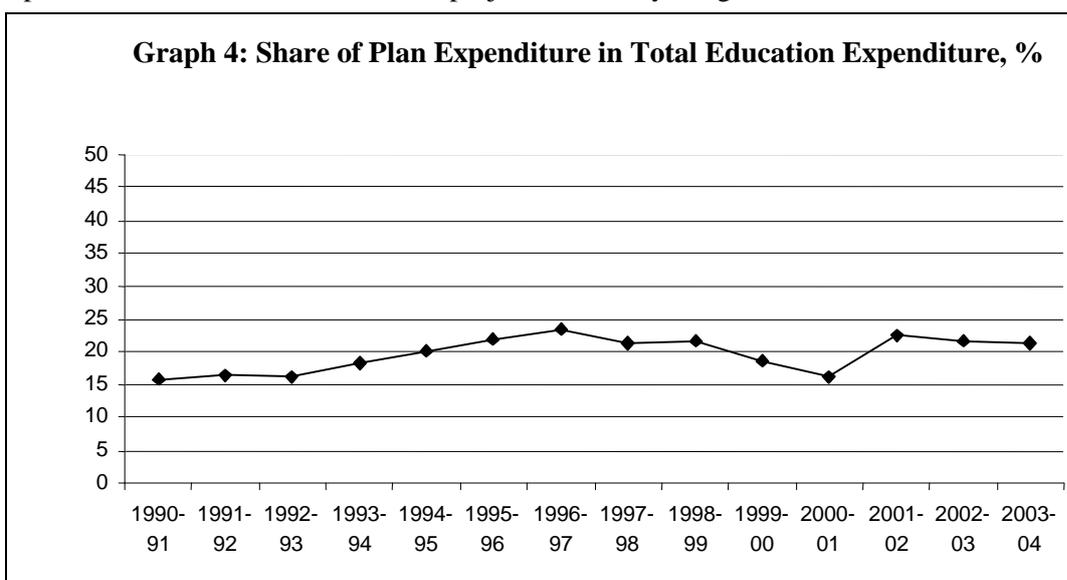
Note: GDP figures taken from National Income Statistics published by CSO





So while aggregate expenditure on education is increasing, the rate of increase is not necessarily keeping pace with budgetary expenditure, GDP growth, or rate of inflation.

Along with the trend in aggregate public expenditure on education, it is important to look at the trends of Plan and Nonplan expenditures within education. This is because, as already mentioned, Nonplan expenditure largely reflects the recurring expenses in the education sector while the Plan expenditure reflects new schemes and projects started by the government.



In the recent years the changes in Plan expenditure show a somewhat different picture from changes in aggregate expenditure. Plan expenditure had increased slowly between 1996-7 and 2000-1 but since then has been increasing rapidly (Table A3 and Graph 4). This reflects the introduction of different schemes in elementary education sector. On the other hand aggregate expenditure showed a reverse trend. As a result the proportion of Plan expenditure has increased.

This brings us to the trend of different components of education expenditure like elementary, higher education, technical education and so on. Table 4 gives the breakdown of revenue expenditure by education departments on different sectors within it for selected years<sup>12</sup>. It shows that the

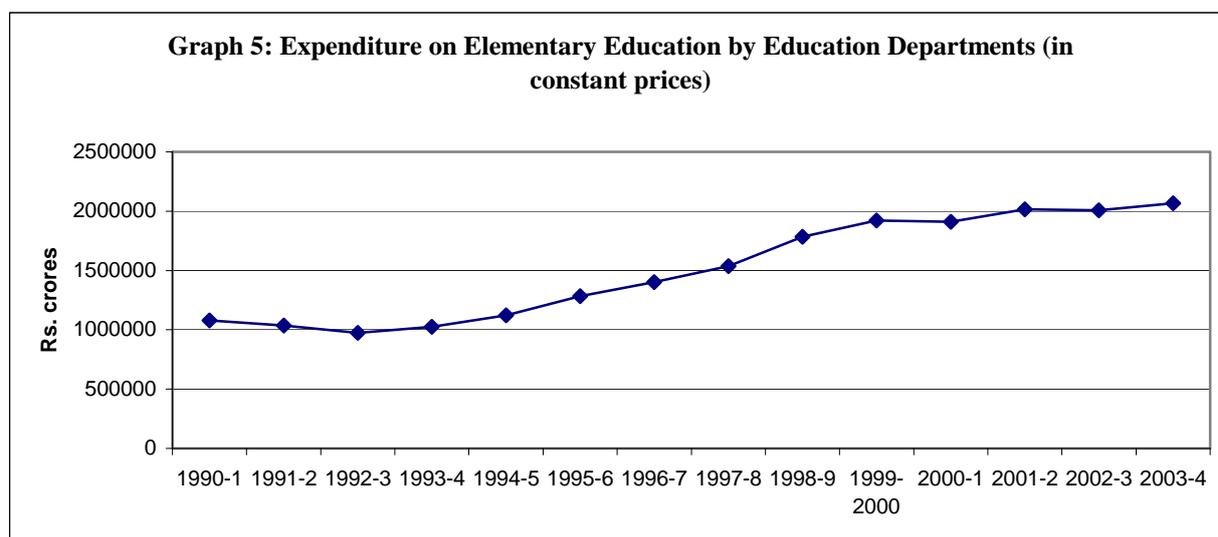
<sup>12</sup> In the absence of data on education expenditure by all departments, we focus on composition of expenditure by the various education ministries/departments. This is a major limitation since the contributions of other departments are quite significant in certain states.

proportions have remained similar over the last fifteen years: elementary education is seen to increase gradually to receive around half of the total resources, secondary education received around a third, the proportion spent on higher education fluctuated between 11 per cent to 15 per cent and technical education received a low and declining proportion. Expenditure on adult education is small and declining, indicating change in priorities. This emphasis on elementary education, together with low priority of education in aggregate public expenditure, has constrained the growth of other sectors of education.

**Table 4: Inter Sectoral Allocation of Expenditure on Education in India(per cent)**

Year	Elementary	Adult	Secondary	Higher	Technical	Total expenditure in Rs crores
1990-91	46.27	1.59	32.17	13.45	4.38	17193.66
1995-96	48.30	0.82	32.80	12.29	4.10	31506.58
2000-01	47.61	0.36	31.59	14.71	4.04	62498.02
2004-05(RE)	51.45	0.43	30.13	11.67	3.82	85686.67

Source : Analysis of Budgeted Expenditure on Education, Ministry of HRD, Govt. of India- various issues.  
Note: RE: Revised Estimates.



Graph 5 reveals a remarkable situation. While allocations to the elementary sector had indeed been increasing in the 'nineties, it has almost stagnated since then. Yet the Tenth Plan document (2002-2007) states "The Central Government has introduced the 93rd Constitution Amendment Bill, 2001 for enacting the Fundamental Right to Free and Compulsory Education for children in the age group of 6-14 years. The enactment of a Central legislation would result in adequate provisioning of public resources for improving the accessibility of children to schools, quality up-gradation, and mitigating the costs of school attendance."

The distance between policy statements and their implementations can be seen clearly. Different data sources (selected Education Statistics, DISE) bear evidence of rapid increase in enrolment at elementary level. With near stagnation in aggregate expenditure it would be difficult to support initiatives to improve quality or mitigate costs of households.

#### 4. Centre-State Relation

##### 4.1 Mechanism of the Flow of Funds

It will be useful at this point to discuss the actual flow of funds in the education sector. As mentioned earlier, the expenditure on education in India comes from both the Centre and the States. The bulk of the tax revenue is collected by the centre while states have the main responsibility of

maintaining and developing the education sector. <sup>13</sup>A part of the resource gap facing the state governments is met through transfers mandated by the Finance Commission from the central Government to the states. This includes States' share in central taxes, non-plan grants and some conditional grants. States also receive funds from the Planning Commission: directly in the form of Central Assistance to States (used to support state plans) and indirectly through the central ministries in the form of Centrally Sponsored Schemes (CSS). The CSS funds reaches the district level implementing society either through state budgets and relevant state ministry/departments or via a direct route to DRDA (District Rural Development Agencies) or SIS (State Implementing Societies). Apart from the central funds, the States fund education directly. Its magnitude also depends on own tax revenues, own borrowings and other capital receipts.

#### 4.2 Public Expenditure on Education by the Centre and the States

Analysing aggregate education expenditure is of limited value in India. Disaggregated analysis is needed because the Centre and the States have very different financial powers and different sets of priorities and constraints. <sup>14</sup>

**Table 5: Plan and Nonplan Expenditure on Education in Central and State Sectors**

Year	Plan Expenditure			Nonplan expenditure		
	Share of the centre (per cent)	Share of the states (per cent)	Total (Rs. crore)	Share of the centre (per cent)	Share of the states (per cent)	Total (Rs. crore)
1992-93	42.18	57.82	4009.00	5.53	94.47	21021.30
1995-96	44.99	55.01	8383.10	5.97	94.03	29795.00
1999-2000	48.22	51.78	13864.91	6.93	93.07	60951.18
2003-4	63.08	36.92	19092.33	7.23	92.77	69986.92

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

Table 5 and Table A4 in the Annexure, shows that Centre's share in Plan expenditure is very high and has increased from 42 per cent in 1992-93 to 63 per cent in 2003-04. On the other hand, states have consistently accounted for around 92-94 per cent of non-plan expenditure. This implies that while states are responsible for the bulk of expenditure centre has come to play a dominant role in shaping the country's education system. It has been noted earlier that the larger part of education expenditure is Nonplan. The Centre has always played an insignificant part in it, accounting for 5 to 7 per cent of the total. But its role has assumed increasing importance in Plan expenditure and calls for a closer look.

The share of the Centre in Plan expenditure fluctuated between 25 to 30 per cent from the inception of Indian planning till the Fourth plan, a period when education was a state subject (Tilak 2003). Even after inclusion of education in the concurrent list in 1976, there was no immediate increase in the share of Centre in plan expenditure – it showed a decrease rather than increase<sup>15</sup>. However since then the Centre's share has been increasing over the years – from around 40 per cent in the early 1990s, to more than 60 per cent in the recent years. In absolute terms the increase is particularly rapid since 2000-01. This implies an important shift in the role of Central government vis-à-vis state governments – Plan expenditure through which changes are implemented in the sector is gradually being dominated by the Centre – a sharp contrast from the government's professed emphasis on decentralization.

State governments are also responsible for a large part of Plan expenditure. But in contrast to the Centre's expenditure pattern, absolute Plan expenditure by States has been fluctuating around the same level since 1998-99, and so is accounting for a decreasing share of plan expenditure. The Plan

<sup>13</sup> In the early nineties net devolutions and transfers from the Centre contributed to more than a third of the total expenditure by the States. Over the decade this proportion has declined to a little less than 30 per cent to meet the needs of fiscal discipline on the part of the Centre (Ramji et al, 2001)

<sup>14</sup> In addition, each state has its own history of education development and its own sets of priorities and limitations.

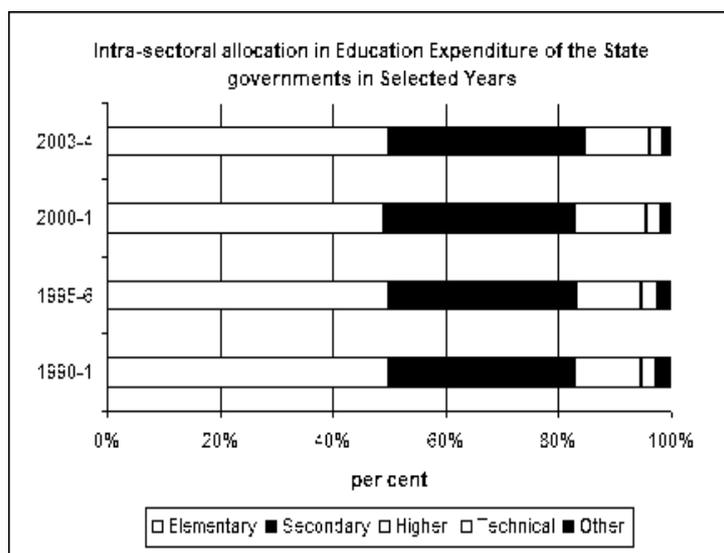
<sup>15</sup> For details see Tilak (2003).

expenditure by the States show a sharp increase for 2004-05 and 2005-06 (revised estimates and budgetary estimates, respectively)(Table A4) which may be indicative of more decentralization in the education sector.

Nonplan expenditures are almost exclusively the domain of the state governments. As this involves maintenance of existing infrastructure any decrease in its level would adversely impact school quality. But since 1999-2000, state Nonplan expenditure too has stagnated at the same level. The stagnation in expenditures of the state governments is clearly seen in tables A5 where education expenditures in constant prices are presented. It can be seen that in real terms, expenditure by states has decreased from the level reached in the year 1999-2000.

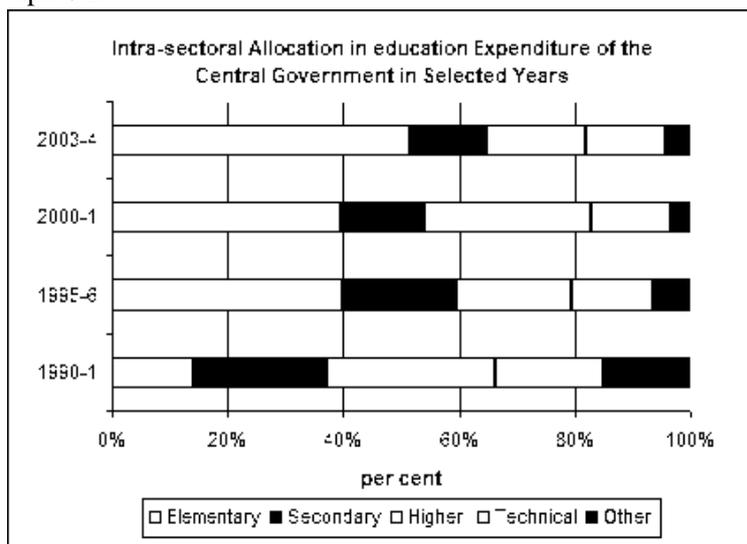
Graphs 6 A and B and Table A6 compare the intra-sectoral allocation in expenditure by education departments of the central and the state governments. Changes in their priorities are also noticed here. In the past the state governments focused on school education – elementary and secondary – while Centre played a more important role in university and higher education and technical education. But the central budget in the last fifteen years shows that the increase in expenditure has primarily come in the area of elementary education. In 1990-91, only 13.7 per cent was spent on this sector. But it increased rapidly since then and after 1995-96, the share of this sector exceeded 40 per cent and crossed the 50 per cent mark in 2003- 04. The increase in the share of elementary education has mainly been at the expense of secondary education. After 2001 the share of university and higher education (the sector for which Centre had the primary responsibility) also declined sharply. The share of technical education has remained more or less unchanged, varying within a narrow band (around 13-15 per cent). So the inter-sectoral budget allocation of the central government reflects the policy shift of priorities of public funding - towards elementary education and away from the higher levels<sup>16</sup>.

Graph 6 A



<sup>16</sup> Tilak (2006a) has used recent union budget data to point out that the large increases in budgetary expenditure in the last two years are confined primarily to Plan expenditures, and to elementary education sector. This increase has been made possible by the collection from the introduction of education cess, three years ago. This is a separate dedicated non-relapsable fund for elementary education. These extra resources are spent almost entirely on mid-day meal programme (which is a nutritional support programme run jointly by the central and state government and entails serving of a hot cooked midday meal to all children enrolled in elementary stage) and Sarva Shiksha Abhiyan, a programme which attempts to combine all programmes for universalisation of elementary education in all states.

Graph 6 B



The state budgets on the other hand do not show any shift. They have the responsibility to maintain the existing education infrastructure and do not have the flexibility of the central government. While about half of budgetary expenditure is allocated to elementary education, around a third goes to secondary education and the remaining largely to higher education. Not much goes to technical education – most states have encouraged private investment in this sector in the recent years.

### 4.3 Centrally Sponsored Schemes (CSS)

The difference in trends in public expenditure by the Centre and the States over the past fifteen years highlights the increasingly important role played by the Centre in States' finance, particularly in elementary education. A large proportion of transfers from the Centre are allotted to the States for implementing Centrally Sponsored Schemes (CSS). These schemes are formulated by the Centre which also funds a major part of their implementing costs. States, which are the implementing agencies, fund the remaining portion. As a mode of transfer of resources direct central assistance is advantageous to the states from autonomy point of view. But the states have shown preference for CSS as it is given as grants and not loans which reduce their fiscal burden.

Some prominent CSS in elementary education were designed after the introduction of New Economic Policy. In the nineties the major schemes in operation were Operation Blackboard (OB), Non-formal Education (NFE) and Teacher Education (TE), Midday Meal (MDM), Scheme for Free education for girls and District Primary Education Programme (DPEP)<sup>17</sup>. A few smaller schemes – Educational Technology (ET), Environmental Orientation of School education and Integrated Education of Disabled Children (IEDC) were for both elementary and secondary education. The earlier schemes were targeted towards improving schooling infrastructure. The later schemes were incentive based.

Centrally sponsored schemes have become critical players in education finance. In a paper on “Central transfers to States and centrally sponsored schemes” prepared for discussion on National

<sup>17</sup> Non-Formal Education (NFE), launched in 1977-78, aimed at bringing out-of-school children in the age group 6-14 years into the fold of education, targeted educationally backward states as well as hilly, tribal, desert areas and urban slums. Operation Blackboard (OB) was launched in 1987-88 for improving human and physical resources in primary schools of the country and was extended in 1993-94. The Teacher Education scheme, introduced in 1987 to create a suitable institutional infrastructure as well as an academic and technical resource base, has now been revamped with more emphasis on improving quality of teacher training institutions in partnership with the States. The DPEP, which was district focused, was a combination of several schemes including the existing ones. It started in 1994 and was a major initiative for universalizing primary education. Its major aims include: providing access to primary education for all children, reducing primary drop-out rates to less than 10 per cent, increasing learning achievement of primary school students by at least 25 per cent, and reducing the gender and social gaps to less than 5 per cent.

Advisory Council, the pros and cons of CSS as a mechanism of resource transfers to states were examined by Saxena (2006). There he had pointed out that as a consequence of liberalization, Centre's involvement with industry and energy sector was reduced, and so more Plan resources were left in its hands for state subjects. These Plan resources have been usually allocated through CSS, and education being a concurrent subject, CSS has been one of the key resource transfer mechanisms for that department.

Initially there were a plethora of CSS in education<sup>18</sup>. A common trend noted in the earlier years was that while many new schemes were launched over the eighties and nineties, their share in the total expenditure on CSS usually declined after the few initial years following their launch. In the paper referred to in the paragraph above, Saxena explained how these schemes give political mileage to the party which initiates them as their benefits can be identified easily<sup>19</sup>. So it is to the government's advantage to increase resources through these schemes rather than increase aggregate expenditure. But when the political party in power undergoes a change, the newcomer loses interest in their implementation for the success will be credited to the earlier government. So rather than putting in more effort and resources for continuing the earlier schemes, new schemes have been announced periodically. DPEP was an exception; except for a couple of years, it has maintained a fairly stable share of 20-25 per cent of the total expenditure. But an adverse side effect of introducing these schemes in selected areas has been the creation of islands of excellence without proper integration into the mainstream. Accordingly, their positive effects tend to fade away once they are over.

The most recent development in this field is the introduction of Sarva Shiksha Abhiyan (SSA) in the year 2001-02, as a major tool for achieving UEE by 2010. It acts as an umbrella scheme for elementary education insofar as it eventually intends to embrace all existing schemes in the area of elementary education. In SSA the States are required to contribute funds in a ratio of 75:25 (centre: state) during the Tenth Plan period (2002-03 to 2006-07) and in a ratio 50:50 subsequently. SSA is a combination of several schemes it gives some flexibility to the states to prioritize those schemes which are relevant to their local conditions. In 2001-02 it received 13 per cent of the expenditure on CSS (MHRD), and in the Tenth Plan it is expected to receive nearly 60 per cent of that allocated for elementary education (Table A7).

There have been evaluation studies (NIEPA 2005) which claim that the CSS have not only eased the resource constraint, but have had a positive impact on the outcomes in the education sector. The Operation Blackboard scheme, along with DPEP and SSA had led to a decline in the number of single-classroom primary schools and improvement in average number of teachers in primary schools. Larger number of female teachers had been appointed too. In elementary schools the percentage of female teachers in 2004 (42.98 per cent) was slightly higher than the average number for all types of schools (38.18 per cent). However other studies have questioned whether these schemes have added to available resources or substituted other sources. There is need for a systematic study on these schemes.

Centrally Sponsored Schemes are a channel through which the central government has been adding resources to the state education sector. However their coverage has varied over time and there has been no uniformity in its distribution over different states (Table A8). Maharashtra and Karnataka, two of the educationally better developed states, have received a major share of Operation Blackboard funds (17.4 and 10.9 per cent) while Madhya Pradesh and West Bengal received very little (4.5 and 2.1 per cent). This brings us to an important aspect in the education scenario – regional imbalance in state education indicators and failure of budgetary mechanisms to compensate for it.

## **5 Public Expenditure on Education in the States**

As discussed earlier, education had been a state subject in India till 1976, after which it became concurrent with the Centre. Therefore, state government policies would have an over-riding impact on the development of education in individual states. In this section we examine the trend in

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<sup>18</sup> During the Ninth plan there were 360 CSS in all, with allocation being about 60 percent of Central Assistance (Saxena, 2006)

<sup>19</sup> Although caste and religious factors are prominent in elections, political parties also use social sector schemes and anti-poverty measures as instruments to woo the voters (Mooij & Dev 2002).

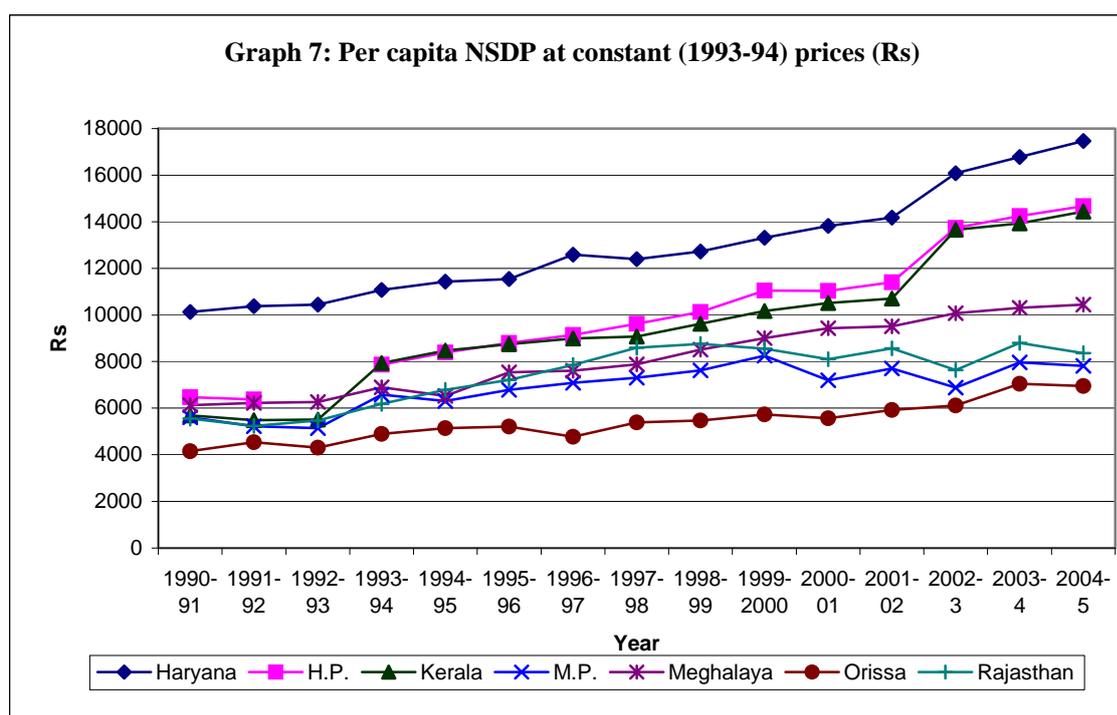
education expenditures and their possible impact on education outcomes in seven selected states. Given that the states in India have very different size, population, natural endowment and economic development, there is expectedly a lot of disparity in the education performance and the expenses incurred on education in all the states. To capture these variations we have looked at the education expenditure and outcomes of seven states in this section. The results obtained from such a small selective sample are at best indicative, and more reliable results can be obtained if changes in all states are studied<sup>20</sup>. The states have been selected from different levels of per capita Net State Domestic Product (NSDP) in the year 2004-5. According to this indicator, Haryana, Himachal Pradesh and Kerala are considered to be in the “high income” category. Meghalay is in the “middle income” category and Rajasthan, Madhya Pradesh and Orissa in the “low income” category<sup>21</sup>.

### 5.1 Trend of Per Capita NSDP in Selected States

**Table 6: Per Capita NSDP at constant prices (1993/94)**

Year	Haryana	H.P.	Kerala	M.P.	Meghalaya	Orissa	Rajasthan
1990-1	10138	6473	5685	5607	6122	4158	5558
1995-6	11545	8801	8748	6790	7537	5204	7216
1999-2000	13308	11051	10178	8248	9003	5735	8555
2004-5	17465	14674	14441	7809	10450	6955	8368
CGR: 1990-1 to 2004-5	3.7	5.6	6.4	2.2	3.6	3.5	2.7
CGR: 1990-1 to 1999-2000	2.8	5.5	6	3.9	3.9	3.3	4.4
CGR: 1999-2000 To 2004-5	5.6	5.8	7.2	-ve	3.0	3.9	-ve

Source: Economic survey (various years), WPI from Office of the economic adviser, Ministry of Commerce and Industry



<sup>20</sup> As already pointed out in FN11, data on sectoral composition of expenditure is available for education department alone. Among the states discussed in this section, other departments in Madhya Pradesh play an exceptionally important role (30 to 50 per cent) in education finance.

<sup>21</sup> Two of the “high income” states, Kerala and Himachal Pradesh, are educationally advanced states. They were included in the sample for in the early nineties their per capita NSDP were similar to other less developed states in the sample.

Table 6 and Graph 7 show the per capita NSDP (PCNSDP) figures for the seven selected states in the last 15 years. It is seen that in 1990-01, Haryana had a significantly higher PCNSDP relative to other states. All the other states except Orissa had similar figures in 1990-91. But Kerala and Himachal Pradesh progressed steadily over these years (Kerala's PCNSDP nearly tripled between 1990-91 and 2004-05, while for HP, it more than doubled) and their growth outstripped that of the other states. Haryana had a lower growth rate over the 1990s, but accelerated since 2000-1. Meghalaya had a medium growth rate and is at present in middle income category. The rest of the states also grew but at a much lower rate and MP and Rajasthan have shown a negative growth since 1999-2000. The much-publicised high GDP growth rate in India in the last few years which is seen as a positive outcome of the economic reforms in the country, seems to have left the poorer states like Orissa, MP and Rajasthan relatively untouched.

## **5.2 Stagnation in Expenditure of Education Departments in Different States**

How has the education expenditure changed in the seven selected states over the last fifteen years? Graph A1 plots the aggregate education expenditure at constant prices in the seven states over the last 15 years. It shows that in the early nineties expenditure has increased in all the seven states but towards the latter half they show a constant or decreasing trend – a trend similar to that of aggregate expenditure in India as a whole (Table 3).

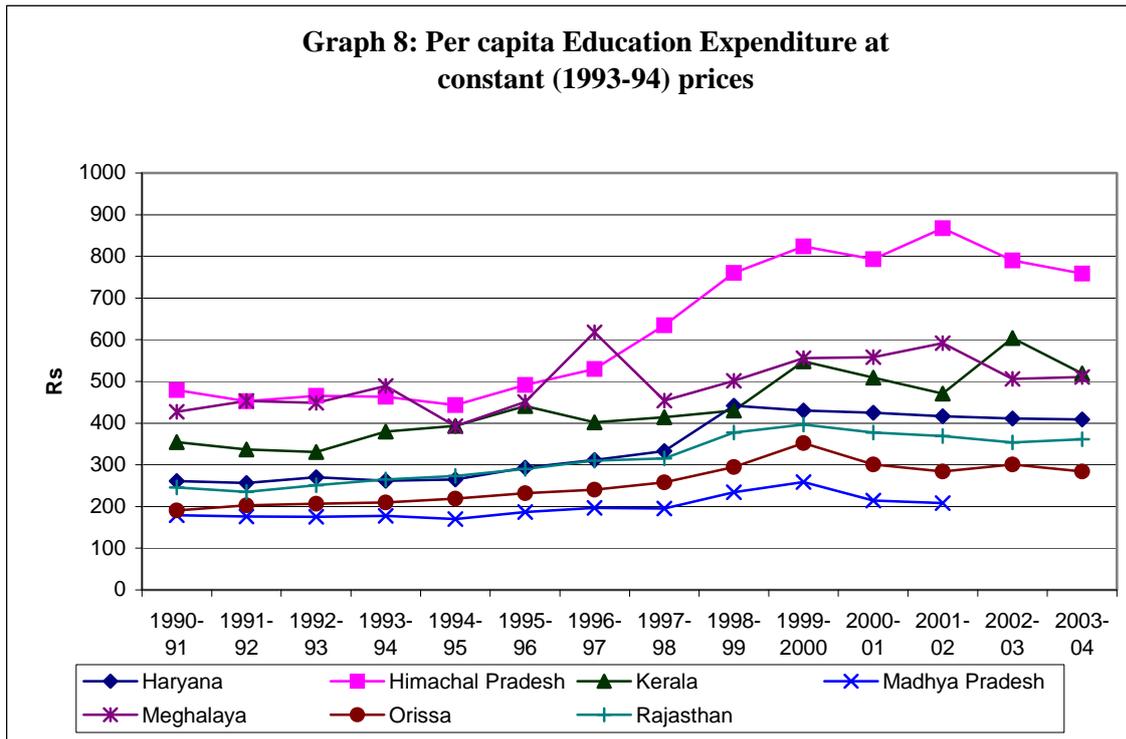
Interstate comparisons are more meaningful in per capita terms. Table A9 and Graph 8 provides the per person education expenditure at constant prices. It appears that in the nineties per person expenditure had increased in all states, though at varying degrees, followed by a decline in the recent years. A part of this increase is likely to be accounted for by increase in teachers' salaries following The Fifth Pay Commission's recommendations for pay revision. So between 1997-98 and 1999-2000, almost all the states show a spurt in per capita expenditure.

Himachal Pradesh stands out as the best performer, showing steady rise in the indicator over the years. Kerala, the other high income rapidly progressing state, has also shown good progress in terms of per capita education expenditure. But the state with the highest per capita real NSDP, i.e. Haryana, has given very little priority to education and per capita education expenditure for Haryana lies close to most of the low-income states throughout the period considered. Meghalaya, on the other hand, has shown considerable increase in per capita education expenditure despite being a middle income state<sup>22</sup>. However, for the low income states the increase in per capita expenditure has been quite low.

The recent stagnation in aggregate education expenditure is reflected in the trend of per capita education expenditure as well – Kerala with its decreasing population is the only state whose per capita education expenditure had continued to rise in the present decade. In all other states per capita education expenditure is non-increasing.

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<sup>22</sup> The seven North-Eastern states in India are the states along the North East border which had been relatively neglected earlier. In the recent years there has been special emphasis on their education policy. Meghalaya is one of the seven states and it is possible that the changed policy is reflected in the higher expenditure.



In Table 7 the states are ranked according to their per capita NSDP and per capita education expenditure. It appears that these two variables do not always move in tandem. Haryana, in spite of high per capita NSDP, gives a low priority to education, in contrast to Himachal Pradesh. Although Rajasthan is a low-income state, its per capita education expenditure has increasingly outstripped that of Madhya Pradesh (another low-income state with comparable per capita NSDP levels) over the fifteen years under consideration. While Orissa is the poorest among the seven states in terms of PCNSDP, its education expenditure per head is not the lowest. While the low income states possibly do not have much scope to increase their expenditure on education easily, the divergence in priority in Haryana and Himachal is probably due to divergence in state education policies.

**Table 7: Ranking the States by Per Capita NSDP and Per Capita Education Expenditure**

	Per capita NSDP in 2001-2 (Rs.)	Rank	Per capita education expenditure in 2001-2 (Rs.)	Rank
Haryana	16773	1	416	4
Kerala	14441	2	471	3
HP	14246	3	867	1
Meghalaya	10450	4	592	2
Rajasthan	8368	5	369	5
Madhya Pradesh	7809	6	208	7
Orissa	6955	7	284	6

Source: Calculated from economic survey (various years) and Table A9 in annexure

### 5.3 Expenditure on Elementary Education

Table 8 gives the proportions of expenditure on education allocated to elementary stage in different states in selected years<sup>23</sup>. The proportions agree with the trend seen in aggregate expenditure

<sup>23</sup> The usual sources of budgetary expenditure data give sectoral composition of expenditure of the education departments. This will be an underestimation of actual expenditure, particularly for those states where other departments spend a substantial amount on education.

of the state (Graph 6A). Though per capita expenditure on education have stagnated or even declined, the relative importance of elementary education has been maintained, and has even increased in some states (Orissa and Madhya Pradesh). It is only in the high NSDP states of Haryana and Kerala that less than half of the expenditure is on elementary education.

**Table 8: Proportion of education expenditure spent on Elementary Education, %**

State	Haryana	H.P.	Kerala	M.P.	Meghalaya	Orissa	Rajasthan
1990-91	45.90	56.62	52.40	59.38	55.46	54.98	54.38
1995-96	47.18	54.56	48.73	59.93	59.91	54.75	55.96
2000-01	45.13	56.67	46.28	68.46	61.18	60.62	57.83
2003-04	47.77	55.46	42.45	80.66	54.44	58.21	56.65

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

#### 5.4 A look at Some Outcome Variables

The primary objective of expenditure on education is to educate students. So there is a need to look at educational outcomes, rather than outlays. It is through the outcomes that the efficiency and usefulness of education expenditure can be assessed. However it should be kept in mind that the outcomes are not only influenced by educational expenditures in the immediate past but also by the educational development in the past years. These cannot be easily quantified but are important determinants. In the context of India’s commitment to UEE, the outcome of financing of elementary education is examined in this section. The analysis is limited by availability of reliable data. Data on most of the outcome variables are collected by school teachers and they have a vested interest in it as poor outcomes reflect on their work. So the reliability of the data is suspect.

Much of the money spent on education in India, as has been pointed out, is accounted for by school-teachers’ salary. This is particularly true for the States’ expenditure. But some of the States’ and a large share of the Centre’s expenditure go for creating school infrastructure, employing new teachers, improving access, providing teaching and learning materials, etc. So an outcome of this expenditure would be physical indicators like improved access (more schools, more rooms and more teachers) and improved facilities at schools.

The expenditure can also be reflected in improved enrolment (due to increased drive for UEE, for instance). The effect on pupil teacher ratio will depend on the increase in number teachers employed relative to enrolment. As long as the rate of adding new teachers keeps pace with the rate of growth in enrolment, the pupil-teacher ratio (PTR) should remain the same. But if the number of teachers has not kept pace with rising enrolment, i.e., if PTR has been rising over time, then clearly the quality of education imparted will be affected adversely. So a preferred outcome of expenditure in the education sector should be a falling PTR till a stable class-size is reached in order to maintain/improve the quality of education.

The real objective of education expenditure is to improve learning achievement of the pupils. In that sense the outcome that is most important is how much the students have improved their learning as a result of increased amounts being spent in the education sector. Since reliable learning test score data are not available for a period of time, state examination scores may be used as proxy. The outcome variables are discussed in depth below.<sup>24</sup>

<sup>24</sup> Tables A11 to A15 in Appendix give information on outcomes at national level. But as the aggregate picture hides a lot of interstate variations the discussion in this section is focused on state level outcomes.

**Table 9: School Facilities in Selected States in 2005/06**

States	% with Drinking water	% with electricity connection	% with girls' toilet	% without Black Board in all classrooms	Pupil teacher ratio	
					Primary school	Upper primary school
Haryana	(H) 90.0	(L) 41.8	(M) 70.7	(H) 5.1	41	24
HP	(H) 88.7	(M) 54.2	(L) 29.7	(H) 5.6	20	15
Kerala	(H) 93.7	(H) 79.7	(M) 71.5	(H) 4.7	26	26
MP	(H) 84.7	(L) 19.4	(L) 21.4	(H) 9.8	41	32
Meghalay	(L) 35.8	(L) 11.3	(L) 7.7	(M) 20.2	18	13
Orissa	(M) 82.8	(L) 12.5	(L) 12.4	(H) 8.4	33	33
Rajasthan	(M) 77.1	(L) 24.2	(L) 34.6	(M) 14.0	37	23

Source: Mehta (2006), State Report Cards.

Note: H: High, M: Medium, L: low

### *School facilities*

Reliable trend data for facilities at school are not available, so data for the year 2005-06 are examined in Table 9 to assess the status of infrastructure of the schools in the states under focus. Here, too, the higher income states, especially the ones with the higher education expenditure, fare the best. Kerala has the best indicators in terms of all aspects of infrastructure. HP is deficient only in terms of electricity availability and girls' toilet. Haryana also has fairly good facilities at its schools, except for lack of electricity. But availability of girls' toilet is inadequate in all the states considered, except for Haryana and Kerala.

The middle income state of Meghalaya shows poor indicators on all counts in spite of its high education expenditure per capita. This is intriguing and needs a closer examination since the higher amount spent should be reflected in better facilities at schools (unless the infrastructure was in a very poor state in the early nineties, in which case the status in 2005-06 would be an improved one).

All the poorer states suffer from low power availability and inadequate number of girls' toilets. But Orissa is better off than the other states in terms of availability of blackboard. It may be also recalled that Orissa, despite being the poorest among the seven states, had a per capita education expenditure higher than MP and was close to the expenditure of Rajasthan throughout the period considered. In fact, if we consider elementary education expenditure per capita, then in Orissa it has not only been above that of MP, but has also crossed the expenditure in Rajasthan in several of the years. So there seems to be some link between education expenditure and school facilities.

### *School Participation:*

In Table 10 school participation indicators at elementary stage are compared with per student expenditure in that stage. It is seen that enrolment ratios at the primary stage are high for all states – Haryana<sup>25</sup> being the only exception. One needs to remember enrolment is not synonymous with participation, and may include the nominally enrolled. At middle stage there is a closer correspondence between GERs and the level of finance. Meghalaya is the major exception where the high per student expenditure is not reflected in enrolment ratios.

**Table 10: Grading of Expenditure and Outcome indicators in 2003/04**

State	Per capita NSDP	Per student expenditure on elem. Education	GER primary (6 to 10 years)		GER upper primary (11 to 13 years)		Gender parity index		Dropout (class 1 to 8)
			Boys	Girls	Boys	Girls	Primary	Middle	
Haryana	H	M	M	M	M	M	H	H	H

<sup>25</sup> Haryana has a large number of private unaided and unrecognized schools (Aggarwal, 2000) at elementary stage and it is likely that the enrolments in these schools are not included in the calculation. This could be the explanation of the medium and not low GER at middle stage.

Himachal Pradesh	H	H	H	H	H	H	H	H	H
Kerala	H	M	H	H	H	H	H	H	H
Madhya Pradesh	L	L	H	H	M	L	H	M	M
Meghalaya	M	M	H	H	L	L	H	H	L
Orissa	L	L	H	H	M	L	H	M	L
Rajasthan	L	L	H	H	L	L	M	L	L

Note: 1. H: High; M: Medium; L: Low. 2. Dropout rates have been indexed in reverse – as high dropout rate is a negative outcome. 3. Gender Parity Index is the ratio of girls' enrolment to boys' enrolment in the relevant grades.

Source: Derived from Table A10 in Annexure

The dropout ratios show a close correspondence with expenditure levels – states with middle or high per student expenditure have low dropout rates and vice versa. But here Madhya Pradesh in addition to Meghalaya shows contradictory results. In spite of low levels of expenditure and low per capita NSDP, it shows medium levels of dropout. Other government departments in Madhya Pradesh spend substantially on elementary education, and the government had also introduced several innovative schemes in this sector. A more detailed analysis is required to understand whether this contradiction is due to poor data or innovative strategies.

Gender parity index is a good measure of UEE – as girls' participation has usually been lower. India traditionally has a preference for male child, so that share of girls' enrolment in total or existence of any gender bias in enrolment would indicate the areas where there is need for an increased drive for UEE. In that sense girls' enrolment share is an important outcome variable for money spent on education in the country.

It is a positive sign that there is no indication of a gender bias at the primary level in any of the seven states. However, at the middle level, Rajasthan shows a considerable difference between boys and girls enrolment. In MP and Orissa, too, there is some gender bias. The practice of early marriage for girls and relatively less emphasis on their education in Rajasthan is well-known and would probably explain the bias. Poverty and low age of marriage for girls generally go hand in hand, and may provide an explanation for the bias in the other two states.

### *Learning Achievement*

Higher enrolment, better school facilities, more teachers per class, all become meaningless without proper teaching activity in class and without proper learning on the part of the students. According to a MHRD (Ministry of Human Resource Development) Report a very high proportion (around 30 per cent) of enrolled students in India do not attend schools and teacher absenteeism was also found to be quite high (20 per cent). It also found that more than half of upper primary school students cannot divide a three digit figure with one digit<sup>26</sup>.

**Table 11: Examination Results of Final Year Students in the Primary and the Upper Primary Stage in 2004/05, %**

States	Primary (class 4/5)				Upper Primary (class 7/8)			
	Boys		Girls		Boys		Girls	
	passed	Marks ≥60%	passed	Marks ≥60%	passed	Marks ≥60%	passed	Marks ≥60%
Haryana	90.9	29.8	92.0	31.4	57.9	15.6	56.4	15.5
HP	96.6	54.1	97.2	57.9	78.7	20.6	78.6	22.3
Kerala	93.5	55.5	93.3	58.8	88.7	37.9	92.7	42.3
MP	78.1	25.3	77.0	24.2	58.2	18.3	58.3	19.1

<sup>26</sup> A research study was commissioned under SSA, where assessments were made on the basis of three unannounced visits to 6745 schools in 20 districts in 2006-7. MHRD, 2007.

Meghalay	87.7	24.3	88.8	24.6	87.1	22.9	86.5	22.8
Orissa	98.0	20.9	98.0	19.5	91.0	13.0	91.8	13.2
Rajasthan	96.7	52.6	96.6	49.5	86.7	46.3	88.0	46.8

Source: Mehta (2006): State Report Cards

We look at the examination scores for primary and middle levels for 2004-05 in Table 11 for the seven states in focus. The pass percentages are quite high at primary level for most states. At middle stage there is a 20-25 per cent drop in Haryana, HP and MP. It is not certain whether higher pass percentages indicate better quality of education or that the other states have a better examination system and screens out weak students. It is not easy to rely on exam data as the dropout rates give a contrasting picture. As seen in the earlier table, the survival rate figures for these states and Kerala are comparatively higher while dropout rates of the other states are very high.

From these different indicators it is seen that per student expenditure can explain a part of the variations in outcomes, but there remains a large unexplained part. Particularly at primary level indicators like school participation, gender parity and pass percentage seem to be quite high even when the levels of expenditure on education in several of these states are low.

As there are limited opportunities of generating finance through budgetary sources the states have looked for assistance from nonbudgetary sources. Perhaps if expenditure from these sources were also considered a better linkage between education and outcome could be observed.

A common policy adopted by several states had been to encourage private unaided schools. The rationale behind this strategy has been that it reduced the financial burden on public sector as the better off go to private schools leaving the public sector to cater to a smaller number. Table 12 is taken from Sipahimalani (2000) where household spending has been estimated from household expenditure data collected by NSSO in 1995-96 and public expenditure is taken from budget documents. It is seen that more than a third of the expenditure in elementary education is made by the household sector. Since then privatization has possibly increased, both at elementary level and at higher level.

In recent years several states have invited private funds from individuals and the corporate sector. Rajasthan Government had launched the Rajasthan Education Initiative (REI), a new venture aimed at engaging global and local partners from the private sector, foundations and NGOs in innovative multi-stakeholder partnerships to support education in the State. Madhya Pradesh have launched the scheme of "fund a school" which are exempted from both Foreign Contribution Regulation act and income tax, and allows private funding of different components in any school of their choice.

**Table 12: Contribution of Different Sector in Education Finance in India, 1995/06**

	Per cent of total expenditure funded by			Total (Rs. Millions)
	Central government	State /UT governments	Households	
Elementary	4.9	57.3	37.8	244982
Secondary	4.9	67.7	27.4	143216
University and Higher Education	13.2	58.6	28.2	54406
Technical	32.9	67.1	-	15001
Other	24.1	75.9	-	8472
Total	7.1	61.3	31.6	466077

Source: Sipahimalani (2000)

Finally, schooling outcomes depend not only on school factors but also on home factors. Information from different rounds of NSSO and census survey shows that poverty and unemployment remains a major problem in India. Apart from income and expenditure, "food insecurity, illness, lack of choices and opportunities, forced livelihood options, vulnerability to crises and lack of access to basic services such as safe drinking water, school or health facilities" are other important aspects of

deprivation, although many of these may be linked to income or expenditure-based poverty (Jha & Jhingran, 2005).

Thus the concentration of poor people in a state is likely to affect the enrolment, and, particularly, the retention of children in schools, posing a serious challenge for UEE. For many poor families, especially those from SC/ST families and some from minority communities and those from far-flung remote villages, the poverty is too crushing for children to be able to take time out for studying and for conditions conducive for education to be brought about. The girl child in a poor family is even more vulnerable because either she has to engage in income generation activities or has to take care of siblings<sup>27</sup> and household chores. Since most parents are illiterate, even the enrolled children who attend school do not receive any help with their studies at home. Many enrolled children have to help their family for work on a seasonal basis and have irregular attendance. All these factors lead some to argue that unless these problems are addressed and the resources directed there, expenditure on school education will not be sufficient to achieve desired education outcomes.

The introduction of cooked midday meal in all primary schools and universal coverage of children below 6 years under *anganwadi* facilities are too recent to evaluate their impact on outcomes. But the relevant departments have indicated prioritization of these programmes through financial allocations. It is very likely that as these policies directly target the children from economically and educationally deprived families, if implemented properly they would show positive outcomes.

### **5.5 Comparison of trend in Expenditure and Outcomes**

An attempt is made to look at changes in expenditure on elementary education and how it has impacted outcomes. Ideally one should compare changes in dropout rates and learning achievement tests with education expenditure. But in absence of relevant reliable data we have looked at enrolment and pupil teacher ratios. The first could be a measure of improving access at elementary stage while pupil teacher ratio is a useful index of school quality.

#### *Impact of Expenditure on Enrolment*

In the set of graphs in Graph A2 (A to G) in the Annexure, time series data on expenditure on elementary education at constant prices and enrolment in elementary stage is plotted. To enable comparisons in the same graph, the units of enrolment figures are in certain states in hundreds and in others in thousands. Expenditures are in rupees crores. The focus in these graphs is not the absolute number of children enrolled, but on their changes over time.

It is seen that the higher income states show a pattern different from that of the low/middle income ones. The elementary enrolment graph is flat for HP and Kerala (graphs B and C) over the period considered and for the latter there is actually some decline reflecting its declining population. For Haryana, after an initial rise till 1993-94, enrolment hardly shows any growth (graph A). For these high income states there is little correlation – for expenditures show an increasing trend in all three. This possibly indicates that almost universal enrolment has been achieved and there is little scope to increase enrolment<sup>28</sup>.

In the other states (D, E, F and G) a strong correspondence in changes in these two variables is identified.<sup>29</sup> In Meghalaya and Rajasthan, there is a steady rise in enrolment throughout. Enrolment has followed the pattern of expenditure during the nineties, but where expenditure has stagnated/declined in the present decade, enrolment has continued to rise. The situation is similar in Madhya Pradesh; the sudden dip in both the indicators is a result of formation of the new state Chattisgarh out of Madhya Pradesh. Orissa is the only state showing a poor growth in enrolment. Unlike the other states, the increase in enrolment here has come more in the period after 1998-99. So in states where many children are still out of school, there seems to be a link between education expenditure and enrolment.

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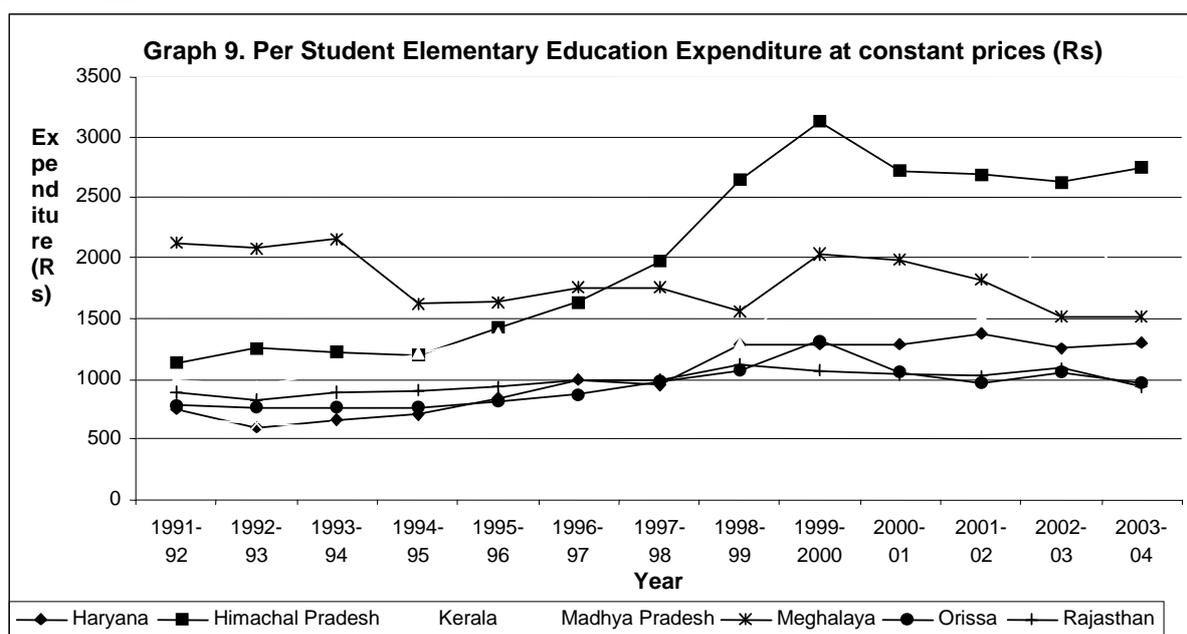
<sup>27</sup> More than 90 per cent of BPL households are nuclear where both parents must work and there are no adults to take care of children (Jha & Jhingran, 2005).

<sup>28</sup> These high income states also have a low fertility rate and child population is usually nonincreasing.

<sup>29</sup> The sudden drop in both expenditure and enrolment in figures for Madhya Pradesh reflects bifurcation of the state and formation of the new state of Chattisgarh.

*Impact of Per Student Expenditure on Pupil-Teacher ratio*

Graph 9 illustrates the increase in per student expenditure in the high income states and stagnation or decline in other states. This is in keeping with the trend in per capita education expenditure as given in Table A 9. Meghalaya started with high per student expenditure (possibly because of low enrolment) but fell subsequently. All the other states started with similar (lowest were MP and Haryana) per student expenditure. It increased in Himachal Pradesh steadily thru 90's and stabilized at a high level. Kerala also showed continuing upward trend, even after 1999-2000. Madhya Pradesh has the lowest level of per student elementary expenditure and Rajasthan has the poorest growth rate, a surprising finding considering the publicity given to elementary education by the state governments. It is remarkable that in spite of recommendations of several committees, expenditure in education as a whole and that on elementary education have not shown much progress in real terms.



In the next set of graphs (Graph A3) in the Annexure we have looked at the changes in pupil teacher ratios in primary and upper primary<sup>30</sup> schools in these states. The seven states in focus show a clear divergence in the movement of PTR in upper primary schools depending on whether the state has high per capita NSDP or low/middle per capita NSDP.

In the primary schools most states, irrespective of PCNSDP, show a flat graph since 1991-92 till around 2000-01 after that there are some sudden fluctuations. These do not correspond with the per student expenditure.

However in upper primary schools, the states with increasing per student expenditure (Haryana, HP and Kerala) show a declining trend in PTR. In view of the discussion on the trend of enrolment, it is likely that this decrease in PTR reflects the stagnating enrolment with rising number of teachers.

For the other four states at the middle level Meghalay and MP have trends slightly different from the other two states. PTR for Meghalaya has fallen throughout, but for MP, the PTR started declining after 1993-94. Orissa and Rajasthan have witnessed a slightly increasing trend in PTR till around 2000-01, after which the trend was reversed. There appears no correspondence with the per student expenditure. In these states enrolment has been increasing while per student expenditure on elementary education has been constant or declining per student expenditure. This result should lead

<sup>30</sup> Upper primary schools are different from upper primary stage. Upper primary schools are any school whose highest class is between 6 to 8 – usually it includes schools with classes 1 to 7/8 and schools with classes 6 – 8.

to an increasing pupil teacher ratio. This contradiction arose because during this period most states introduced a new cadre of teachers – teachers who were locally recruited on contract basis and paid a much lower salary and often had lower formal qualifications. The process started in Rajasthan with SIDA funded Shiksha Karmi project. But in the present decade it is Madhya Pradesh which has led the way by mainstreaming these initiatives –the cadre of assistant teachers (regular school teachers) is gradually being replaced by Shiksha karmis or samvida shikshaks (para teachers) (Leclercq, 2003).

## **6 Factors influencing Public sector finance in India**

So far the paper has looked at the major changes in trend and composition of education finance variables and some outcome indicators in the country. In this section we look at those factors which have impacted these variables and determined the direction of changes.

### **6.1 Underinvestment in Education**

It has been observed earlier (Graph 3) that expenditure on education as a percentage of GDP has varied between three to four per cent over the period 1990-91 to 2004-05. This is considerably short of the target of six per cent of GNP. And since the year 2000-1 there has been a decline in absolute expenditure in real terms. We look into the causes behind the decline and the steps taken by the central and state governments to increase resources.

#### *Budgetary imbalance arising from resource sharing mechanisms*

There is an in-built imbalance between revenue and expenditure of the state governments in the existing resource sharing system. In the revenue sharing design most of the residual powers accrue to the central government. Centralized planning in a mixed economy framework and nationalization of major financial institutions had led to concentration of financial powers in the hands of the Centre (Rao, 2000). So the States have limited options of generating additional revenue and have to depend on transfers from the Centre for many of its routine expenditures.

#### *Fiscal crisis following Structural Adjustment*

Following the structural adjustment programme (introduced in the early nineties) and accompanying economic reforms adopted at that time, both Centre and the States faced a fiscal crisis. They were told to curtail expenditure and generate additional revenue. Despite measures to control the size of the fiscal deficit, after an initial decline, it started increasing in the later part of the nineties. Implementation of recommendations of Fifth Pay Commission worsened the situation.

Several steps have been taken by the central and state governments towards fiscal reforms:

(i) Following the fiscal reforms there has been a change in the relative contribution of direct and indirect taxes reflecting additional efforts by the governments to augment their direct tax revenue to counter the impact of structural reforms on indirect tax collections. So revenue from indirect taxes as a proportion of GDP declined from 13 per cent in 1990-91 to around 11 per cent from 1997-98<sup>31</sup> but the share of direct tax revenue increased from two to nearly four per cent in the recent years. Unfortunately this was not sufficient to maintain tax revenue at earlier level, the total tax collection as a proportion of GDP had declined from around 16 per cent in late eighties and had begun to rise only since 2000. This indicates that the several measures taken by the respective governments to increase revenue receipts – broadening of tax base, improved tax compliance as well as rationalising user charges were not sufficient to maintain aggregate tax revenue at earlier levels.<sup>32</sup>

(ii) To meet fund shortages, both the Centre and the States turned to increased borrowing in the 1990s. Though this worked in meeting short term shortages, it led to higher interest payment burden.

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<sup>31</sup> There has been an increase in the proportion in 2004-5 budget estimates.

<sup>32</sup> Notes from state Finances: a study of budgets of 2003-4: RBI February 2003

(iii) The need to limit revenue deficits in both the Centre and States' budgets led to limiting of public expenditure in the 1990s<sup>33</sup>. Several states subsequently proposed some economy measures such as restriction on fresh recruitments/creation of new posts and limiting the growth of administrative expenditure. Institutional reforms have been proposed through the Fiscal Responsibility and Management Act (FRBM). This act, at the Centre, requires the Centre to wipe out revenue deficits completely and to reduce the fiscal deficit to three per cent of GDP by 2008-09. Fiscal Responsibility Acts passed by the States have similar requirements. This development implies that if revenue declines, government expenditure must also be pruned proportionately and here it is the "soft" social sectors like health and education that face budget cuts.<sup>34</sup>

The Indian government recently tried a different source of finance for meeting the huge resource requirement for UEE. An education cess of two per cent was levied on all central taxes in 2004, which yielded Rs 5000 crore in 2004-05. Indian government has established a fund titled as 'Prathmik Shiksha Kosh' to be maintained by the Department of Elementary Education and Literacy (MHRD). The receipts will be utilized solely and exclusively for elementary education, including Sarva Shiksha Abhiyan and Nutritional Support to Primary Education (Mid-day Meal Scheme). So this fund has played a crucial role in augmenting funds for SSA (Jha et al 2006). The fund will be nonlapsable in nature and balances remaining un-utilised in a year will be available on a rollover basis for the said purposes. So it has the advantage that it is an additional supplementary resource for financing elementary education and does not cut into existing sources of finance. Although many economists are not in favour of earmarking funds<sup>35</sup>, given that it has worked for many Asian, Latin American and African countries, this measure can be used for India provided specific safe-guards are built into the spending mechanism<sup>36</sup> (Mehrotra, 2005).

In general the steps taken to limit fiscal deficits, particularly the FRBM act, indicate that this will aggravate resource shortage. Since the central government is also under pressure to reduce its deficits it has restricted transfers to the states. The states in turn have a low tax base and the burden of meeting the nonplan costs. There is little scope in increasing tax revenue, so the States have become increasingly dependent on the Centre to meet their education expenditure.

## **6.2 Inefficiency in resource utilization**

Expenditure on the education sector is lower than required in the majority of the states. But that is only part of the problem. Present discussions and debates around education finance bring to the fore that it is not only the total allocation but its utilization and management which determine the outcome. The problems may arise from improper sectoral allocation, from inability to utilize allocated funds and from problems in implementing and monitoring plans due to lack of coordination within the governments.

Some of the possible reasons for inefficiencies in resource utilization are discussed below.

### *Asymmetry in allocation within the sector*

The relationship between expenditure and educational development is a complex one – the development of education depends on the composition, efficiency and accountability of the expenditure on education.

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<sup>33</sup> This was very difficult to maintain as implementation of the pay revisions recommended by the Fifth Pay Commission resulted in huge hikes in salary bills for the States; from 1995-96 to 1999-2000 the average annual increase in per employee nominal expenditure, for 21 states, amounted to 59 per cent.

<sup>34</sup> There have been some recent arguments indicating that fiscal management need not be an overriding concern for India since the debt situation has considerably improved. (Jha et al 2006)

<sup>35</sup> World Bank and IMF are two main international organizations opposed to using such earmarked extra-budgetary funds. Their position is that using such funds can lead to loss of control on aggregate expenditure, distort resource allocation, etc. and also pose a risk that the sector the funds are earmarked for may not be the final recipient, since government funds are fungible.

<sup>36</sup> For instance, DPEP funds were given to Central government on the condition that states maintain at least the 1991-92 levels of expenditure on elementary education.

As discussed earlier the balance between Plan and Nonplan expenditures is important, and balance between recurring cost and asset creation is also desirable. Within each education sector a balance between the salary and non-salary inputs is required for efficient outcomes. Public expenditure on education in India suffers from disproportionately high teachers' salaries. Some attempts to estimate the proportion of salary expenditure in elementary education showed that around 85-90 per cent of the total is spent on these items (Tilak, 2003). The high proportion of teachers' salary is not only due to large number of teachers (the pupil teacher ratios indicate the need for more teachers), it is also because of the high rates of government salaries. A study on UP teachers' salaries showed that government school teachers earned 13.6 times the average per capita income in the state. For other states with comparable levels of per capita income, the teachers' salary levels are also similar. And this ratio is very high compared to other developing countries (Mehrotra, 2005). Teachers have become politically powerful as a group in most states and so have good bargaining position. In contrast the salaries of teachers in large majority of private schools and also that of contract teachers in government schools (who are often with similar education levels) are a fraction of the salaries of government teachers' salary. Given the resource constraint insufficient amounts are allocated on non-salary inputs like Teaching Learning Material (TLM) and teacher's training. There is a lot of scope for improving efficiency in this area.

SSA has tried to provide funds for non-salary expenses. It provides Rs 5000 for building repairs to schools in the different states. This amount will possibly be a welcome addition going by the urgent repairs needed in many of the schools, particularly in the north-eastern states. Under both DPEP and SSA, there is also a provision for a lump sum grant of Rs 2000 per annum for school development for all elementary schools. There is also a TLM grant of Rs 500 per teacher per annum. One needs to assess the impact of these grants on schooling outcomes.

Balance between different sectors within education is also required. Prioritising elementary education at the expense of secondary education has its positives and negatives. Few parents want their children to stop at class eight but are often forced to do so in the absence of sufficient government schools at that level. But public subsidization of free government schooling at the secondary level, in the absence of universal primary and upper primary education, hurts equity considerations by aiding the non-poor who can afford to pay for their education.

More than half the children at secondary/higher secondary level are in private schools, many of which are aided by the government. As a result a 22 per cent of revenue expenditure of elementary schools and 50 per cent for secondary schools are on private aided schools<sup>37</sup>. The utility of the aided schools has been questioned by several researchers. If an unaided school starts being aided by the government it adds to the already squeezed public resources. And it is also iniquitous as most of the students come from section which is able to pay.

### *Three tiers of government, lack of coordination and resulting inefficiencies*

Though Indian federalism has been constitutionally a two-tiered system since 1992, rural and urban local bodies existed before that, working as agencies for the state government. With 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments in 1992 local governments received statutory recognition as elected bodies<sup>38</sup>. The amendments also contained illustrative lists of functions and sources of finance. Each state government was to appoint a State Finance Commission to assign taxes and fees to local governments and to recommend tax devolution and grants (Rao, 2000). In addition state governments transfer the funds received from central ministries for central plans and CSS to the local bodies. In certain ways this system is parallel to Centre-State transfers. The funds come through two separate strands, and the amounts are determined through separate norms.

Moreover in central plans and CSS as the designs are made at central level, the state or the local bodies do not have any flexibility, and often lack motivation. If the plan is made by the higher level of government, inefficiency in its implementation is unavoidable even when it is partly or fully funded from the higher level. There were similar problems between the central and state governments

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<sup>37</sup> Analysis of Budgeted Expenditure on Education (2003-4), MHRD, New Delhi

<sup>38</sup> The rural local government is three tiered – district panchayet, Taluk (Block) Panchayat and village panchayat. Urban local governments are municipal corporations in large cities, municipalities in smaller cities and towns and nagar panchayats in smaller towns.

and these inefficiencies existed even before the local government system was developed (regarding implementation of NFEs and OBB). With the third layer there would be little improvement unless initiatives in planning from below are successful.

Underutilization of funds: A major impact of the different tiers of government has been underutilization of allocated funds. This is a serious problem that dogs many social sectors in the Indian economy, including education, labour and employment (Mooij and Dev, 2002).

The underutilization may be for certain items and not in others and thus starve priority items within the education sector, while maintaining funds for inessential items.

- (i) There is delay in utilization as the states need time to get acquainted with new guidelines and procedures relating to new schemes.
- (ii) There have been delays in releasing installments by the central bureaucracy resulting in lower utilization in the present year and since allocation is based on previous year's expenditure, this means lower allocation in the next year.<sup>39</sup>
- (iii) For certain schemes, central funds are not released without matching grants from states and the poorer states may find it difficult to raise their share of resources. There are delays in release of funds on their part as well.
- (iv) Some schemes presuppose presence of infrastructure or institutions which may not be there. These schemes cannot be implemented in such cases.
- (v) Central Plan schemes and the centrally sponsored schemes are designed at the centre and have little flexibility. The states may not be interested in some of these schemes due to political reasons or because they feel that the schemes are not very relevant in their local contexts. So at the state level necessary plans for its utilization are not made<sup>40</sup>. Improving implementation of schemes and utilization of allocated funds will largely depend upon the effectiveness of the decentralized planning process in the country.

Some of these problems can be observed through the working of SSA, the latest initiative in elementary education. As described earlier, this scheme was a combination of several schemes and the state governments and local governments had some flexibility in its implementation. The planning started from the local government and was thereby expected to be more efficient in utilization of resources.

But it had its share of problems, some of which are discussed below:

Although the Tenth Five Year Plan recommended that the outlay by the central government on SSA during 2002-03 to 2006-07 should amount to Rs 17000 crore, it remained short of funds till 2004-05. The situation eased only when it received combined external support from the World Bank, DFID and EC committing Rs 4700 crore and a further Rs 5000 crore arising from the imposition of two per cent Education cess on all central taxes. Table 13 shows how less than half of approved outlay of MHRD had been released under SSA.

There is also a gulf between the planners in New Delhi and the activity of the state implementing societies. The SSA programme requires an Annual Work Plan and Budget to be produced in each district on the basis of a perspective plan made from household surveys. Its basis is intended to be participatory and consultative. This plan should be the starting point for assessment of expenditure. But the plans are actually drawn up by the district officials and the villagers are by-passed.

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<sup>39</sup> In the period 2001-2002 to 2004-2005 in as many as 66 cases first installment of grant was released in the month of September when the second installment should have been released. In half the cases the grant was released in March at the fag-end of the financial year (Rani, 2007).

<sup>40</sup> For instance, lack of interest of the UP government in Total Literacy Campaign and underutilization of large grants earmarked for the promotion of elementary education might have been due to vested interest in social status quo, with education being perceived as a threat (Dreze & Gazdar, 1996).

The States allege that the Centre releases funds on a piecemeal basis, creating uncertainty, whereas the funds are supposed to be released twice a year. The uncertainty of the time and amounts make it difficult for the SIS to timely release installments to the districts. In Uttar Pradesh funds received by the SIS in September 2003 were released to the districts over the next five months, Rani (2007).

The proportion of funds utilized from those released varies for different states and is usually lower for the poorer states. The need to obtain matching grants and approval of the annual work plan and budget is useful for efficient resource utilization. However this puts the poorer states at a disadvantage for their resource base is smaller and they also have lower institutional capacity.

The scheme is facing so many problems in its implementation that Jha et al (2006) have questioned the claim of Ministry of Human Resources and Development (MHRD) regarding spectacular progress made under SSA ( ...“in the year 2003, within a period of just 9 months, as many as 1 crore and 68 lakh out of school children...were enrolled in formal and alternative schools”)<sup>41</sup>. However many of these problems are expected to be solved as the SIS (State Implementing Societies) get familiarized with the process.

**Table 13: Share of Funds Released by MHRD under SSA as a Proportion of Approved Outlay**

	Approved outlay by MHRD under SSA (Rs. crores)	Funds released by MHRD under SSA (Rs. crores)	Funds released as % of approved outlay of MHRD
2002-3	1138	500	43.9
2003-4	3080	1558	50.6
2004-5	8335	2431	29.2
2005-6	11019	5051	45.8
2006-7	13608	7440	54.7

Source: Rani (2007) p 212

### 6.3 Increase in Foreign Aid

Foreign aid has been considered as a possible additional source of education finance in many developing countries. However, in India as a proportion of aggregate public expenditure on education, it appears to be quite low – in 2002-03 when external aid was at its maximum level it was equivalent only to 1.5 per cent of education expenditure and three per cent of expenditure on elementary education. However before the introduction of economic reforms in the 1990s its contribution to Indian education had been even lower. As pointed out by Tilak (2008) foreign aid was felt necessary only in the case of foreign-exchange-intensive, capital-intensive sectors and for those sectors in need of foreign expertise. Education in India in general and school education in particular do not fall in any of these categories. But the role of foreign aid in the education sector has changed since then.

In earlier years, education was financed primarily by domestic resources; the limited foreign aid available was focused on technical and vocational education. But more aid resources from abroad flowed to India from the 1990s onwards, and became increasingly directed at elementary education. The shift possibly came about because of the global awareness regarding the adverse impacts of structural adjustment policies on social sectors like education and the launching of a compensatory social safety net programme funded by loans from World Bank/IMF. Following the internationally declared objective of achieving “Education for All” in the Jomtien Conference (1990) the international aid agencies were keen to increase their aid commitments to primary education (Mehrotra et al, 2005)<sup>42</sup>.

<sup>41</sup> Jha et al raise questions regarding associated requirements for this statistic to be true: firstly, whether there was commensurate increase in the number of schools, teachers and classrooms and secondly, whether adequate resources were available.

<sup>42</sup> There is also a view that in the 1990s, there was a shift among the Indian policymakers regarding the conceptualisation of poverty and the prioritization of social policies (Mooij & Dev, 2002). This included turning away from income and employment issues as solution to poverty and moving towards a broader concept of development, which includes education, health, housing roads, infrastructure, and so on.

### *Level of Foreign Aid in Education*

It is difficult to estimate the total size of foreign aid in education through the different budgets. It enters the flow of funds as a part of Plan expenditure through the central budget and is provided both for state Plan projects and for centrally sponsored schemes. For the former, central government receives foreign aid and transfers a part through Additional Central Assistance to the State budgets. The major part of the aid comes through CSS which are given to Center's Department of Education and are released either through state budgets or via a direct route to DRDA (District Rural Development Agencies) or SIS (State Implementing Societies).

The rapid increase in foreign assistance from the Seventh to the Ninth Plans is evident from the data presented in Table 14. The allocation for the Tenth Plan has not shown any change in absolute terms. However, the data for actual expenditures indicate that a much lower amount has been disbursed.

**Table 14: Allocation on Elementary Education during different Plans, Rs. Crores**

Five Year Plan	Total Allocation	External Aid
7 <sup>th</sup> Plan 1987-1992	658.49	8.62
8 <sup>th</sup> Plan 1992-1997	4006.55	613.62
9 <sup>th</sup> Plan 1997-2002	14754	4093
10 <sup>th</sup> Plan 2002-2007	28750	4904*

\*1 bn US. dollars

Source: Annual Financial Statistics, GOI, relevant years

Table 15 gives annual estimates from different sources. The second column figures are given in Bashir (2000) and represent expenditure on externally aided projects in CSS. The estimates given in Tilak (2008) (col. 3) are for total foreign aid to education. Comparison of the two series indicates the importance of CSS as an instrument for allocating foreign aid. Column 4 gives the estimates of external assistance to education in the present decade given in GOI's external budgets. It is found to be much higher than the actual expenditure as given in column 3 since 2005-06. This is perplexing as assistance for SSA has been given in the recent years but is not reflected in column 3.

Some estimate of the contribution of foreign aid as a proportion of central government plan expenditure on education is also given in Tilak (2008). It is seen that its share has increased from five per cent in 1993-94 to 20 per cent in 2000-01. The proportion is higher for elementary education – it had increased from 10 per cent to 35 per cent. There had been a dip in the proportion in mid nineties. This should be seen in the context of decline in overall aid flow in the nineties - partly a fall-out of sanctions imposed by several donors in reaction to nuclear tests in mid nineties and partly because of completion of funding cycle from several sources. This absolute amount of external aid has not been increasing over the present decade, and its proportion has shown a declining trend primarily because of the sharp increase in GOI's allocation to elementary education.

There is also a significant portion of foreign aid which does not flow through the government budgets. These are funds both from foreign governments as well as from foreign private nonprofit agencies (Oxfam, Action Aid, Save the Children's Fund etc), and these directly fund education in the Indian non-government organisations. It is difficult to estimate the absolute size of this form of aid, as these often do not exclusively fund education interventions, but rather a combination of interventions of which education is an important component.

As regards both the volume of external aid and the modalities by which it has been provided, there have been two broad historical phases in external assistance. These are now briefly discussed.

**Table 15: Estimates of Foreign aid to Elementary Education in India, Rs. Crore**

Year	External aid to CSS in elementary education	External aid in elementary education	Budget estimates for externally aided education projects in central plan
(1)	(2)	(3)	(4)
1992-3	4.00		
1993-4	9.76	37	
1994-5	103.33	122	
1995-6	215.94	228	
1996-7	201.62	219	
1997-8	561.89	610	
1998-9	585.3	597	
1999-2000	808.25*	729	
2000-1		948	
2001-2		1210	1212.34
2002-3		1285	1383.09
2003-4		960	939.59
2004-5		683	683.45
2005-6		631	1996.5
2006-7		126	1647
2007-8		114	1677.6
2008-9			1584

\*budget estimate

Source- col (2): Bashir (2000), col (3): Tilak (2008), col (4): expenditure budgets of GOI

#### *First Phase: Increasing Aid, Many Projects, Several Donors*

The first phase began with Andhra Pradesh Primary Education Project (1986) funded by British Overseas Development assistance and some non-formal education projects funded by UNICEF. The other major aided projects were the Swedish International Development agency (SIDA) assisted Rajasthan Shiksha Karmi Project (1987), Mahila Samakhya Programme in selected states (1988-90) with Dutch International aid agency assistance, Bihar Education Project (1990) supported by Unicef, UP basis education project (1991) supported by World Bank and Rajasthan Lok Jumbish project (1992) supported by SIDA. Initial projects were part of state plans but the later projects were part of the centrally sponsored schemes.

External assistance to education started flowing in before a framework for it could be formulated. There were several donors in several projects in different districts – working without any coordination. So DPEP, started in 1994, was made to serve as an umbrella programme for all aided education projects in primary education. The external assistance in this project in 2001 was about Rs 6716 crore comprising Rs 4951 crore as credit from IDA and the rest as grants from EC/DFID/UNICEF/Netherlands (MHRD, 2001).

#### *Second phase: Decline in Aid and New Modalities*

As discussed, the aid contribution as a proportion of total education expenditure has decreased in recent years, though in absolute amount they remained at similar level. But there have been major changes in the nature of interactions between donor countries and Indian government.

In 2003, India introduced a change in policy by short-listing only six countries from which it would accept bilateral aid (US, UK, EC, Japan, Russia and Germany). In addition, it decided not to accept any tied aid. The indication was a change in its status from ‘aid-taker’ to ‘aid-giver’ (by announcing that it would stop taking bilateral aid from a number of small countries like Denmark, Netherlands, Norway, etc.) and many people have linked this decision either to the fact that donors questioned the nuclear tests carried out by India in 1998 or to the more recent anti-Muslim pogrom in Gujarat. Along with forsaking this ‘tied aid’, the Indian government simultaneously announced that it was creating an India Development Initiative Fund (IDIF) for giving aid to less developed countries (DN, 2003).

At the same time there were changes in the international context of foreign aid. The lack of effectiveness of aid in promoting development in the recipient countries in the “Structural Adjustment era” (Ranis, 2006) led to the donor countries rethinking on the aid modalities. “New Aid Modalities” were advocated, whereby the focus was placed upon the encouragement of recipient country “ownership,” aided by a sector-wide approach (SWA) rather than the earlier project-based approach to development. Poverty was to be tackled under the HIPC/PRSP initiative, led by the Bank and the Fund, and supported by bilateral donors. The Fast Track Initiative (FTI), another new aid modality, had the achievement of the education MDGs (Millennium Development Goals) as its frame of reference. Countries implementing policy and institutional reforms, and with the means to prove their performance record, are rewarded with additional aid and better coordinated external assistance for their educational plans (Subrahmanian, 2004).

The impact of these developments showed in the reduced number of donors in Indian elementary education. The World Bank, DFID and European Commission were the three donors who continued funding education. Given the Indian government’s reluctance to let the donor countries influence the path of development, and given the global shift away from a project-based approach of aid towards donors working closely with recipient countries’ national development programmes, the donors adopted an approach which accepted the lead role of the government. DFID India, in particular, developed independent relations with central and state governments for better efficacy and also collaborated with other donors (including ADB, World Bank, UNICEF, etc.) in the form of trust fund agreements. DFID’s programmes have been focused on four selected states (AP, MP, Orissa and WB) with a view to reducing inter-state disparities in achieving development goals. Between 2001-02 and 2005-06, the aid expenditure on India by DFID rose from 180 million pounds to 247 million pounds. In the education sector, the expenditure rose sharply from 9.9 million pounds in 1999-2000 to 90.6 million pounds in 2004-05.

The Government of India had already launched the Sarva Shiksha Abhiyan without any financing from bilateral partners. In 2004 the Indian government requested IDA of World Bank, DFID and EC for assistance. Out of a total project cost of \$3.5 billion the donors jointly committed to spending around \$1.046 billion during the Tenth Plan – i.e. around 30 per cent of the total. So Centre had the responsibility of funding 45 per cent (\$1.58) and the states 25 per cent (\$875 million). World Bank was the major partner – giving a loan of nearly half the amount (48 per cent) while DFID (33 per cent) and EC’s (19 per cent) aid was in the form of grants. The Centre passed on this aid to the States as a grant, irrespective of the form in which aid was received.

For the Indian education sector those bilaterals not short-listed as donors could hardly be termed small in terms of their aid contribution. For instance, the Netherlands put in close to Rs 300 crore annually in programmes for women’s education and empowerment (Mahila Samakhya), social science research (Indo-Dutch Programme for Alternatives in Development, IDPAD), and local governance reforms in Kerala. Similarly, the Scandinavians had noteworthy collaboration in the areas of fishery and social forestry and in education projects like Lok Jumbish and Shiksha Karmi. The annual support from the affected bilaterals, which are now allowed only to support civil society organizations, and from those UN and other multilateral agencies operating in India, is around Rs 700 crores (Sethi, 2003).

These donor agencies were asked to fund NGOs directly in different states, albeit with many new restrictions facing NGOs receiving foreign funds. In the past any entity having Foreign Contribution Regulation Act (FCRA) clearance could apply for and receive a grant from these bilaterals. Presently, however, each bilateral<sup>43</sup> would have to submit a list of potential grantees providing details of amounts and purpose, which has to receive prior clearance from the Department of Economic Affairs, Government of India, before funds could be disbursed (Government of India, 2005).

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<sup>43</sup> “Small” bilateral in the sense the bilaterals excluding the six countries mentioned above.

### *Impact on Education Finance*

Although foreign aid constituted a small proportion of total education finance, there is a need to analyse its net contribution. The usual argument for aid has been that available finance from budgetary sources is spent on maintaining education structure – namely salaries of teachers and staff - and alternate non-budgetary sources are necessary for new developments. There have been instances when Indian government went public in asking for aid for education<sup>44</sup>.

Introduction of DPEP helped to relax resource constraints in planning for primary education (Rani, 2003). In addition to the states' own budget for each DPEP districts, the programme made available about Rs.500 to 600 lakhs per year for a district. In 1994-95, the level of public spending per district was about Rs.6000 lakh per year in 1994-95, so that the additional resource amounted to an increase of about 10 per cent per year. However there are different opinions about whether foreign aid in education substituted for budgetary expenditure or provided a truly additional amount. Tilak (2008) questions the “additional” part – whether it is “additional to aggregate spending in base year or additional to normal growth in expenditure or simply additional programme and schemes.” He argues that availability of foreign funds reduced pressure on both centre and the state government to mobilize additional resources for education. In recent years it is seen that with decreased reliance on foreign aid the government has tapped new resources in the form of education cess. So foreign aid may have suppressed domestic resources to support the flow of education expenditure.

The inefficient utilization of resources in the education sector has been already discussed. Foreign funding, too, suffers from this problem. Despite overall progress, disbursement lags and other delays are fairly common. In the case of DFID India, for example, “In the case of *Shiksha Karmi*, only half of the committed funds had been disbursed by the end of the project. In the first three years of the twelve-year *Andhra Pradesh District Primary Education* operation less than £0.25m was spent of the £46m committed” (Heath, 2006).

DFID has of late started focusing on strengthening local institutions so that there is an improved utilization of funds, among other things. The Indian government has emphasized the need for increased decentralization in its policy framework, but even with a transfer of responsibilities for primary education to the district level, no capacity-building exercise has been undertaken so that the districts can actually carry out their responsibilities.

## **7 A review of recent changes**

Financing education in India is not a simple process. Firstly there are many players involved, both in its allocation and in its utilization – these include several ministries in the central government and the state governments, local bodies, private agencies and foreign donors. Secondly, India is a densely populated country with 13 million out-of-school children between 6 to 13 years age even in 2005. So the resource requirement for even universalizing elementary education is massive, let alone for higher and technical education. Last, but not the least, India faces the challenging tasks of overcoming poverty and unemployment for a large number of its citizens, so that education must vie for resources with other, more apparently pressing issues. The earlier discussions on the trends and composition of financing have pointed to some major policy changes in the recent years. In this concluding section a review of these changes is attempted.

### *Low priority of Education*

The analysis of public expenditure in the present paper has focused on the central and the state governments. Aggregate education expenditure in current prices has been growing during the last fifteen years, but the rate of growth has slowed down in the present decade. Thus, in constant price terms, educational expenditure increased during the second half of the 1990s, but it stagnated

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<sup>44</sup> Sadgopal (2003) talked about how Prime Minister Atal Bihari Vajpayee while inaugurating the meeting of the high-level group on Education For All (EFA) expressed deep concern about the lack of funds for elementary education in India. “Making a strong bid for additional external aid, he reminded bilateral and multilateral aid agencies, including the World Bank, that in the year 2000 they had made a pledge in Dakar, Senegal, that “no country seriously committed to basic education will be thwarted in the achievement of this goal by lack of resources”

from the year 2000-01 onwards. As a proportion of GDP the situation looks worse: the ratio of education expenditure to GDP had declined from more than 4 per cent to 3.5 per cent from 1990 to mid nineties and recovered to over four per cent around the year 2000. But since that date it has been decreasing again. So, at the macro-level, education has been struggling to maintain its importance.

#### *Changing Priorities within Education Sector*

As seen in Graph 5 earlier, expenditure on elementary education in real terms has not shown a marked increase in real terms. This should be kept in mind when relative priorities are discussed. However with declining aggregate investment in education, it is seen that elementary education has been gaining relative importance since the mid-nineties (from 45.2 per cent in 1992-93 to 51.5 per cent in 2004-05 RE) at the cost of adult education, higher education as well as technical education. This is translated in a marked decline in resources allocated to these departments in absolute terms (in constant prices).

There is a need to rethink this policy of stressing elementary education at the cost of all other sections. Enrolment in Higher and Technical education has been increasing rapidly in recent years and more than half of the students are enrolled in private institutions. Facilities for educational loan are still not developed and at present those enrolled in private institutions have to depend on own resources for their education. CABE Committee Report recommends an increase in GER at this level from present 12 per cent to 20 per cent. So if those from disadvantaged sections who have completed schooling are expected to be included in this 20 per cent more public resources need to be invested<sup>45</sup>. While the education subsidy for higher education may be reduced, fees hiked and more private financing encouraged for the upper income strata, there must be a clear government policy that higher education will not be neglected. The same is true for technical education which is even more important for the poorer classes. Of course, additional resources alone cannot provide a solution: there is need to reform at the institutional level. However many argue that the vast pool of human resources in India can only be harnessed with a judicious combination of general and technical education, to allow the employment problems to be tackled at the same time as the lack of elementary education.

#### *Increasing importance of the Central government in planning of elementary education*

The state governments play a major role in financing education in India. But the bulk of these expenses are on non-plan categories like salaries for teachers and repairs and maintenance costs. So the thrust and direction for changes in the education sector come from the central government, although efforts are under way to provide more scope to the state governments. The recent focus on the elementary sector has been spearheaded by the central government; the share of this sector in central government's expenditure has increased from 13 per cent in 1990-91 to more than 50 per cent in 2003-04. They have been able to augment resources through new sources of finance like education cess and foreign aid but the state governments had very limited scope to increase their own budgetary revenue. This increase in central expenditure has been transferred to the states via the Planning Commission as Plan expenditure and is largely in the form of Centrally Sponsored Schemes. These CSS play a critical role in the financing process. While some of these schemes have been very innovative they had largely remained islands of excellence and were not integrated in the mainstream. They also had major weaknesses, particularly in their implementation. Very recently the umbrella scheme Sarva Shiksha Abhiyan has been introduced to replace all other schemes in elementary education.

#### *Weak Link between Expenditure and Outcomes*

While the amount of expenditure on education is important, the focus should be on educational outcomes. It is a striking fact that compared to resources spent in the education sector, there is little to show at elementary level in terms of learning achievement. An excessive focus on outlay has resulted in assessing physical infrastructure creation, provision of teaching and learning materials, appointment of teachers, etc. rather than monitoring the learning process to see how many children have learned what. So in educationally weaker states where new funds have been spent on

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Prakash, Ved (2007)

improving access and infrastructure, positive linkage between enrolment and expenditure is observed. But links between expenditure and quality indicators like dropout rates and pupil teacher ratio was found to be nonexistent.

#### *The Balancing Act – Attempts to limit expenditure and augment resources*

The task of spreading education to villages and towns all over India is a major challenge given India's large size and population. The enormous resource requirement for this exercise has been aggravated by the decline in tax revenue with the states following adoption of Structural Adjustment Programme and concomitant fiscal discipline. So it has become a balancing act for the governments – on the one hand planning priorities demand increased expenditure on education, and on the other hand fiscal priorities demand decrease in expenditure.

Both the central and the state government are seen to explore additional sources of funds.

- (i) Both central and state governments have tried - and have been partially successful - in increasing revenue collected from direct taxes (share increased from two per cent to nearly four per cent of GDP). But this was not enough to offset the impact of structural reforms on indirect taxes.
- (ii) To meet fund shortages, both the Centre and the States turned to increased borrowing in the 1990s which also have led to higher interest payment burden.
- (iii) Foreign donors have played a very important role, not so much in terms of quantum of aid but in terms of nature of intervention. Their funds initially came as partial or full support for particular projects or schemes. Their funds were important inputs for many of the successful CSS. Recently they have been revising their approach and are increasingly working through government budgets rather than on individual projects.
- (iv) The states have little scope to increase expenditure through budgetary sources and have attempted to encourage private sector finance in different ways. The norms of recognition have been simplified and the barriers for setting up private unaided schools have been lowered. Private corporate sectors are increasingly being encouraged to support financing of government schools. Many of the newly implemented schemes require enormous support from the community. This has resulted in proliferation of private schools at all levels which goes against the commitment of "free" and compulsory elementary education.
- (v) The latest in line is application of education cess in successive budgets. A cess of two per cent on all central taxes was levied in 2004-05, yielding an estimated additional resource of Rs 5000 crores. This additional amount facilitated implementation of Midday Meal scheme and SSA. An additional one per cent cess was again imposed in the last budget to increase resources for secondary education.

Limiting expenditure has been of first importance, both to the central and state governments. Governments at different levels have tried to improve the efficiency of utilization. For this they had adapted a two-pronged approach of firstly replacing inputs with low-cost alternatives, and secondly by rationalizing fund flows and introducing accountability systems. The first has been achieved through adapting some of the successful innovative schemes. The schemes of Shiksha Karmi, EGS (Education guarantee schools), and NFEs (Non formal education) were introduced initially to deal with schooling problems of children in remote areas and out-of-school children under difficult circumstances. But they have rapidly been adapted by many state governments as they were found to be low-cost and efficient alternatives.

To deal with implementation problems the states have started involving local bodies in school management and plan implementations. So far they have not been very successful. Lack of accountability has been cited as a key factor in failure of effective decentralization of primary education in rural India (Pritchett and Pande 2006)<sup>46</sup>. This is bound to happen if planning and

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<sup>46</sup> Pritchett and Pande recommend unbundling the processes of delivering elementary education into constituent activities/functions; and unbundling various jurisdictions for service delivery. They use the first principles of public finance and accountability to decide which of the functions/activities should be provided/financed/monitored by the state and, if so, which level of government should be responsible.

allocation remains centralized and implementation is decentralized. It is hoped that the situation will improve as the process of planning from below is successfully incorporated in SSA.

While it is crucially important to mobilize resources and to improve the efficiency of spending, there are several pointers to the possibility that the real malady of education in India might lie elsewhere. In fact, it is possible that UEE for India may remain a distant dream unless the problems of poverty and unemployment are addressed simultaneously with education. It is only when food security and unemployment-related issues have been much reduced in intensity, and some urgent social issues are addressed that all children will be able effectively to gain access to, and benefit from education.

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## ANNEXURE

**Table A1. Share of Centre's and States' Expenditure in Budgeted Expenditure on Education**

	Share of centre's Expenditure in Total (%)	Share of All States' Expenditure in Total (%)	Total Budget Expenditure (Rs cr)
1992-93	11.40	88.60	25030.36
1993-94	12.77	87.23	28279.69
1994-95	11.74	88.26	32606.22
1995-96	14.54	85.46	38178.09
1996-97	14.38	85.62	43896.46
1997-98	14.67	85.33	48552.15
1998-99	15.71	84.29	61579.91
1999-2000	14.58	85.42	74816.09
2000-01	12.36	87.64	82486.48
2001-02	17.70	82.30	79881.92
2002-03	18.90	81.10	85507.30
2003-04	19.20	80.80	89079.25
2004-05 (RE)	20.22	79.78	104566.00
2005-06 (BE)	24.30	75.70	119029.90

Note : RE: Revised Estimates, BE: Budget estimate.

Source : Analysis of Budgeted Expenditure on Education, Ministry of HRD, Govt. of India- (various years).

**Table A2: Share of Public Expenditure on Education in GDP in India, Rs. crore**

Year	Govt. expenditure on education by all Depts. In current prices	Govt. expenditure on education by all Depts. In constant prices	GDP at current prices(at factor cost)	% of Education Expenditure to GDP
1990-91	20491	27792.61	510954	4.01
1991-92	22394	26704.34	589086	3.80
1992-93	25030	27120.04	673221	3.72
1993-94	28280	28279.70	781345	3.62
1994-95	32606	28957.64	917058	3.56
1995-96	38178	31396.46	1073271	3.56
1996-97	43896	34509.80	1243546	3.53
1997-98	48552	36560.35	1390148	3.49
1998-99	61579	43766.11	1598127	3.85
1999-00	74816	51490.77	1761838	4.25
2000-01	82486	52977.83	1902999	4.33
2001-02	79866	49513.76	2081474	3.84
2002-03	85507	51263.36	2254888	3.79
2003-04	89079	50641.98	2519785	3.54
2004-05(RE)	104566	60853.72	2830465	3.69

**Source:** Analysis of Budgeted Expenditure on Education, Ministry of HRD, Govt. of India, Various years.

GDP figures taken from national income statistics published by CSO

**Table A 3: Plan and Non-Plan Expenditure on Education (Revenue Account)**

	at current Prices(Rs. Crores)			% Distribution	
	Plan	Non-Plan	Total	Plan	Non-Plan
1990-91	3247.9	17243.3	20491.0	15.85	84.15
1991-92	3746.9	18846.9	22594.0	16.58	83.42
1992-93	4009.0	21021.3	25030.0	16.02	83.98
1993-94	5181.1	23098.6	28280.0	18.32	81.68
1994-95	6538.7	26067.6	32606.0	20.05	79.95
1995-96	8383.1	29795.0	38178.0	21.96	78.04
1996-97	10305.0	33591.1	43897.0	23.48	76.52
1997-98	10388.0	38164.6	48552.0	21.40	78.61
1998-99	13280.0	48298.6	61579.0	21.57	78.43
1999-00	13864.9	60951.2	74816.1	18.53	81.47
2000-01	13274.3	69212.2	82486.5	16.09	83.91
2001-02	17902.6	61963.1	79865.7	22.42	77.58
2002-03	18627.5	66879.8	85507.3	21.78	78.22
2003-04	19092.3	69986.9	89079.3	21.43	78.57
2004-05(RE)	27350.0	77216.0	104566.0	26.16	73.84
2005-06 (BE)	37320.2	81709.6	119029.8	31.35	68.65

Note : RE: Revised Estimates, BE: Budget estimate.

Source : Analysis of Budgeted Expenditure on Education, Ministry of HRD, Govt. of India- (various years).

**Table A4: Plan and Non-plan Expenditure on Education in Central and State Sectors**

Year	Plan Expenditure			NonPlan expenditure		
	Share of the centre (per cent)	Share of the states (per cent)	Total (Rs. crore)	Share of the centre (per cent)	Share of the states (per cent)	Total (Rs. crore)
1992-93	42.18	57.82	4009.00	5.53	94.47	21021.30
1993-94	43.22	56.78	5181.10	5.94	94.06	23098.60
1994-95	38.08	61.92	6538.70	5.13	94.87	26067.60
1995-96	44.99	55.01	8383.10	5.97	94.03	29795.00
1996-7	44.44	55.56	10305.35	5.17	94.83	33591.11
1997-8	48.49	51.51	10387.59	5.46	94.54	38164.55
1998-9	47.92	52.08	13280.29	6.86	93.14	48298.62
1999-2000	48.22	51.78	13864.91	6.93	93.07	60951.18
2000-1	45.37	54.63	13274.32	6.03	93.97	69212.16
2001-2	53.40	46.60	17902.59	7.36	92.64	61963.11
2002-3	61.19	38.81	18627.51	7.11	92.89	66879.83
2003-4	63.08	36.92	19092.33	7.23	92.77	69986.92
2004-5(RE)	57.97	42.03	27350.03	6.84	93.16	77215.97
2005-6 (BE)	62.89	37.11	37320.21	6.68	93.32	81709.67

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

**Table A5: Expenditure on Education at Constant Prices, 1993/04, Rs. Crores**

Year	Expenditure by Education departments		Expenditure by all departments on Education	
	Centre	All states/UTs	Centre	All states/UTs
1990-1	2228.72	21091.44		24511.12
1991-2	2044.02	20324.26		23745.06
1992-3	1947.39	20755.49	3092.54	24028.24
1993-4	2096.33	21316.78	3610.79	24668.80
1994-5	2276.21	21908.70	3398.54	25559.02
1995-6	2727.82	23693.07	4564.57	26831.88
1996-7	2886.88	25707.16	4964.10	29545.69
1997-8	3481.28	27474.53	5362.95	31197.39
1998-9	4494.20	31913.23	6876.73	36889.37
1999-2000	5046.54	37129.28	7506.44	43984.33
2000-1	5090.08	35049.99	6548.46	46429.37
2001-2	4982.63	35220.53	8753.58	40760.19
2002-3	5449.18	35654.85	9686.22	41577.15
2003-4	5785.94	35740.45	9721.98	40920.00
2004-5(RE)	6993.06	38685.52	11286.19	44541.90
2005-6 (BE)	9374.74	39822.94	14789.75	46063.97

Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India-various issues and Office of the Economic Adviser, Ministry of Commerce and Industry (price index from table 12.2, Index number of wholesale price average for months)

**Table A 6: Sectoral Composition of Expenditure by Education Departments, %**

Year	All state and UTS					
	Elementary	Secondary	Higher	Technical	Other	Total
1990-1	49.71	33.08	11.81	2.86	2.54	100
1991-2	49.29	33.98	11.43	2.90	2.40	100
1992-3	45.23	34.26	12.89	4.33	3.30	100
1993-4	46.22	33.14	13.26	4.35	3.04	100
1994-5	49.01	34.28	11.52	2.94	2.26	100
1995-6	49.62	33.51	11.41	3.03	2.42	100
1996-7	49.81	33.69	10.92	2.83	2.74	100
1997-8	49.76	34.44	10.75	2.83	2.23	100
1998-9	49.80	35.05	10.06	2.81	2.27	100
1999-2000	46.45	36.66	11.21	2.67	3.01	100
2000-1	48.82	34.05	12.66	2.61	1.86	100
2001-2	50.91	33.80	11.34	2.32	1.64	100
2002-3	49.12	34.91	11.95	2.42	1.59	100
2003-4	49.57	34.95	11.61	2.28	1.59	100
2004-5(RE)	50.86	33.75	11.04	2.53	1.81	100
2005-6 (BE)	51.01	33.53	11.02	2.72	1.73	100
	Centre					
1990-1	13.74	23.52	28.94	18.74	15.07	100
1991-2	16.50	23.77	28.92	18.43	12.38	100
1992-3	17.60	24.86	28.09	18.52	10.93	100
1993-4	18.59	26.72	24.53	19.33	10.83	100
1994-5	21.39	23.15	26.70	18.13	10.64	100
1995-6	39.55	19.93	19.89	14.04	6.59	100
1996-7	42.53	19.55	19.51	14.28	4.13	100
1997-8	48.37	15.08	20.29	12.77	3.49	100
1998-9	43.51	15.54	25.30	12.81	2.83	100
1999-2000	38.85	14.53	30.02	13.89	2.72	100
2000-1	39.35	14.63	28.84	13.94	3.25	100
2001-2	44.44	15.32	20.50	15.45	4.29	100
2002-3	46.87	14.17	19.27	15.19	4.50	100
2003-4	51.13	13.53	17.31	13.76	4.28	100
2004-5(RE)	54.64	10.28	15.13	10.90	9.06	100
2005-6 (BE)	61.19	8.68	11.50	8.73	9.91	100

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

**Table A 7. Distribution Of Central Expenditure Across Centrally Sponsored Schemes In Elementary Education, %**

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
Teacher Training	14.9	26.4	28.4	21.8	8.9	6.4	3.9	5.8	5.4	
NFE	14.1	14.3	46.6	37.0	12.7	10.1	8.1	5.8	5.4	
OB	62.0	49.9	7.8	6.1	22.3	17.8	13.3	11.1	10.2	
Midday Meal	0.0	0.0	0.0	0.0	36.7	51.0	47.2	51.0	51.1	
SSA (non EAP)	0	0	0	0	0	0	0	0	0	
DPEP (EAP*)	0.0	0.0	1.5	26.5	16.7	11.7	24.7	20.1	20.4	
Other EAP	0.0	0.0	7.9	5.1	2.3	2.3	2.3	2.2	2.2	
Other	8.9	9.4	7.8	3.6	0.4	0.7	0.5	4.0	5.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Srivastava (2005) in Mehrotra et al.

Note: \*Externally-aided programme

**Table A8: Statewise Distribution of CSS Funds (1990/91- 1998/99), %**

State	Operation Blackboard	Non Formal education	Teacher Education	DPEP
Maharashtra	17.4	0.5	1.4	6.1
Karnataka	10.9	0.1	8.5	6.1
Orissa	10.7	7.9	3.7	3.4
Andhra Pradesh	9.3	11.9	7.6	5.3
Rajasthan	8.6	8.8	12.0	1.5
Bihar	8.1	15.6	2.3	4.1
Uttar Pradesh	6.6	28.3	10.3	5.2
Assam	5.6	5.6	3.2	4.6
Madhya Pradesh	4.5	17.6	11.5	27.7
Gujarat	4.3	0.3	4.1	7.6
West Bengal	2.5	0.3	1.5	1.6
Himachal Pradesh	2.1	0.1	3.7	3.3
Tamil Nadu	1.3	0.8	10.2	11.1
Kerala	0.7	0.0	3.7	3.9
Haryana	0.5	0.2	2.0	5.8
Total for the period (in Rs crores)	1958.99	923.09	648.48	1307.53

Source: Bashir (2000)

**Table A 9: Per Capita Education Expenditure at Constant Prices, 1993/04, Rs**

State	Haryana	Himachal Pradesh	Kerala	Madhya Pradesh	Meghalaya	Orissa	Rajasthan
1990-91	261	479	355	179	427	190	246
1991-92	256	452	337	176	453	203	235
1992-93	270	465	331	175	449	207	251
1993-94	262	463	379	177	490	210	265
1994-95	265	443	394	170	393	219	273
1995-96	293	492	441	187	451	232	290
1996-97	312	530	402	196	618	240	310
1997-98	333	635	414	195	454	258	315
1998-99	442	761	431	234	501	295	377
1999-2000	430	824	549	259	556	352	396
2000-01	425	793	509	214	558	301	377
2001-02	416	867	471	208	592	284	369
2002-03	411	790	604		506	301	353
2003-04	409	759	519		511	284	362

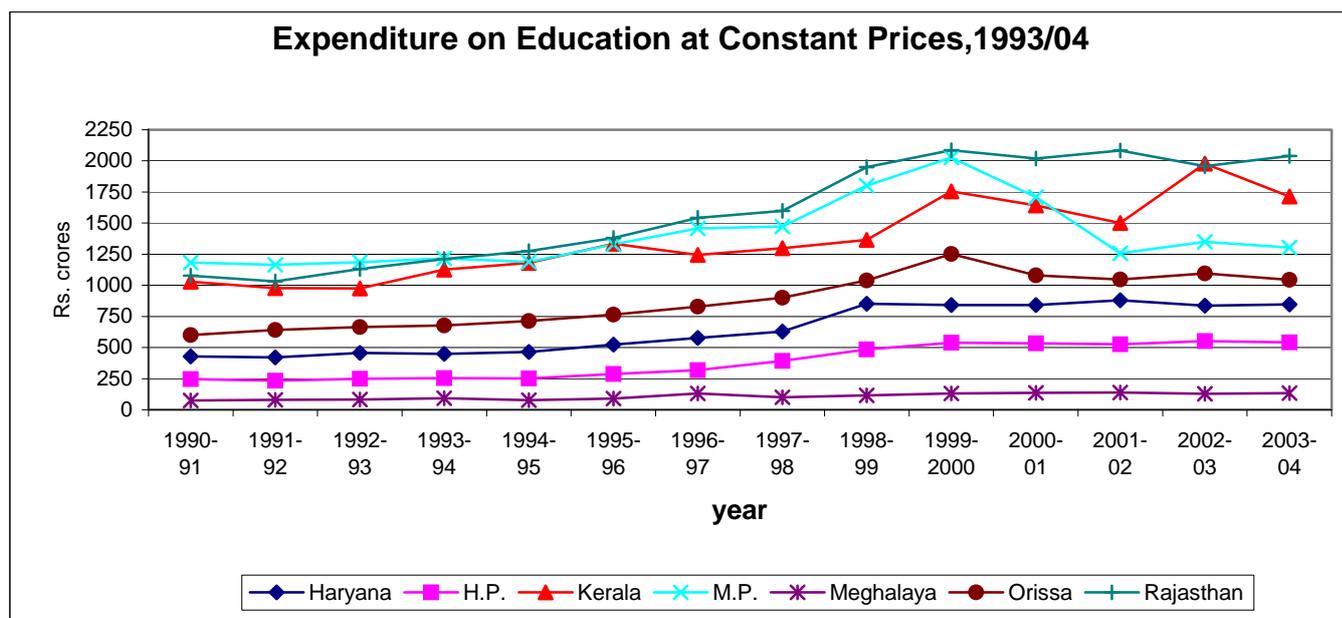
Source: Calculated from "Analysis of Budgeted Expenditure on Education", Ministry of HRD, Govt. of India-various issues, Office of the Economic Adviser, Ministry of Commerce and Industry (price index from table 12.2, Index number of wholesale price average for months), and **population**

**Table A10: Expenditure and Outcome Indicators, 2003/04**

State	Per capita NSDP (Rs.)	Per student expenditure on elem. Education (Rs.)	GER primary (6 to 10 years)		GER middle (11 to 13 years)		Gender parity index		Dropout rate (class 1 to 8)
			Boys	Girls	Boys	Girls	Primary	Middle	
Haryana	16773	1303	73.5	77.3	68.2	62.4	0.91	0.93	21.26
Himachal Pradesh	14246	2758	106.1	106.9	99.9	96.5	0.92	0.92	14.28
Kerala	13924	1751	97.3	96.6	95.7	91.5	0.97	0.93	-9.54
Madhya Pradesh	7965	880	112.1	100.7	71.8	53.9	0.90	0.72	46.81
Meghalaya	10310	1515	104.2	106.9	60.3	62.0	1.03	1.11	71.13
Orissa	7043	959	120.2	109.4	74.3	47.2	0.92	0.83	68.5
Rajasthan	88042	937	114.2	107.4	58.1	44.7	0.86	0.54	61.72

Source: Selected Educational Statistics (2003-4), NIEPA

**Graph A1**



**Table A11: Growth of Recognised Educational Institutions in India, 1990/91 – 2004/05**

Years	Primary	Upper Primary	High/Hr. Sec/ Inter /Pre. Jr. Colleges	Colleges for General Education	Colleges for Professional Education	Universities/ Deemed Univ../ Instt of National Importance
1990-91	560935	151456	79796	4862	886	184
1991-92	566744	155926	82576	5058	950	196
1992-93	571248	158498	84608	5334	989	207
1993-94	570455	162804	89226	5639	1125	213
1994-95	586810	168772	94946	6089	1230	219
1995-96	593410	174145	99274	6569	1354	226
1996-97	603646	180293	103241	6759	1770	228
1997-98	619222	185961	107140	7199	2075	229
1998-99	626737	190166	112438	7494	2113	237
1999-00	641695	198004	116820	7782	2124	244
2000-01	638738	206269	126047	7929	2223	254
2001-02	664041	219626	133492	8737	2409	272
2002-03	651382	245274	137207	9166	2610	304
2003-04	712239	262286	145362	9427	2751	304

Source: Selected Education Statistics, 2004

**Table A12: Gross Enrolment Ratios ( Ger), by School Type, 1990/91 – 2004/05**

Year	Primary(I-V)			Upper Primary (VI - VIII)			Elementary(I-VIII)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1990-91	114	85.5	100	76.6	47	62.1	100	70.8	86
1991-92	113	86.9	100	75.1	49.6	63.1	101	73.2	87.7
1992-93	95	73.5	84.6	72.5	48.9	64.1	87.7	65.7	77.2
1993-94	90	73.1	81.9	62.1	45.4	65.1	80.2	63.7	72.3
1994-95	96.6	78.2	87.7	68.9	50	66.1	87.2	68.8	78.4
1995-96	97.1	79.4	88.6	67.8	49.8	67.1	86.9	69.4	78.5
1996-97	97	80.1	88.8	65.8	49.2	68.1	85.9	69.4	78
1997-98	99.3	82.2	91.1	66.3	49.7	69.1	87.4	70.7	79.4
1998-99	101	82.9	92.1	65.3	49.1	70.1	87.6	70.6	79.4
1999-00	104	85.2	94.9	67.2	49.7	71.1	90.1	72	81.3
2000-01	105	85.9	95.7	66.7	49.9	58.6	90.3	72.4	81.6
2001-02	105	86.9	96.3	67.8	52.1	60.2	90.7	73.6	82.4
2002-03	98	93	95	65	56	61	85	79	83
2003-04	101	96	98	67	58	62	88	81	85

Source: Selected Education Statistics, 2004

**Table A 13: Increase In Number Of Teachers ('000) School Type, 1990/91 – 2004/05**

Year	Primary			Upper Primary			High / Hr. Secondary/ Intermediate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1990-91	1143	473	1616	717	356	1073	917	417	1334
1991-92	1152	492	1644	714	365	1079	931	450	1381
1992-93	1137	514	1651	709	376	1085	941	454	1395
1993-94	1110	513	1623	723	406	1124	953	492	1445
1994-95	1157	531	1688	746	410	1156	986	495	1481
1995-96	1176	558	1734	758	424	1182	1030	519	1549
1996-97	1190	566	1756	769	431	1200	1069	544	1613
1997-98	1226	597	1823	640	597	1237	1086	558	1644
1998-99*	1246	658	1904	814	464	1278	1168	579	1747
1999-00*	1236	683	1919	829	469	1298	1142	578	1720
2000-01*	1221	675	1896	820	506	1326	1184	577	1761
2001-02*	1213	715	1928	921	547	1468	1157	620	1777
2002-03	1167	746	1913	936	645	1581	1221	812	2033
2003-04	1260	837	2097	944	648	1592	1250	774	2024

\* Provisional

Source: Selected Education Statistics, 2004

**Table A14: Pupil-Teacher Ration (PTR) by School Type, 1990/91 – 2004/05**

Year	Primary	Upper Primary	Sec. /Sr. Secondary
1990-91	43	37	31
1995-96	43	37	32
1996-97	43	37	32
1997-98	42	37	32
1998-99	43	36	32
1999-00*	43	38	32
2000-01*	43	38	32
2001-02*	43	34	34
2002-03*	42	34	33
2003-04*	45	35	33
2004-05*	46	35	33

\* Provisional

Source: Selected Education Statistics, 2004

**Table A 15: Drop-Out Rates at Primary, Elementary & Secondary Stages, 1990/91 – 2004/05**

Year	Primary (I-V)			Elementary (I-VIII)			Secondary (I-X)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1990-91	40.1	46.0	42.6	59.1	65.1	60.9	67.5	76.9	71.3
1992-93	43.8	46.7	45.0	58.2	65.2	61.1	70.0	77.3	72.9
1995-96	41.4	43.0	42.1	56.6	61.7	58.8	66.7	73.7	69.6
1996-97	39.7	40.9	40.2	54.3	59.5	56.5	67.3	73.7	70.0
1997-98	37.5	41.5	39.2	53.8	59.3	56.1	66.6	73.0	69.3
1998-99	40.9	42.3	41.5	54.2	59.2	56.3	64.5	69.8	66.7
1999-00*	38.7	42.3	40.3	52.0	58.0	54.5	66.6	70.6	68.3
2000-01*	39.7	41.9	40.7	50.3	57.7	53.7	66.4	71.5	68.6
2001-02*	38.4	39.9	39.0	52.9	56.9	54.6	64.2	68.6	66.0
2002-03*	35.85	33.72	34.89	52.28	53.45	52.79	60.72	64.97	62.58
2003-04*	33.74	28.57	31.47	51.85	52.92	52.32	60.98	64.92	62.69
2004- .05*	31.81	25.42	29.00	50.49	51.28	50.84	60.41	63.88	61.92

\*provisional

Source: Selected Education Statistics, 2004

Graph A2

