

## Public Expenditure on Education in India by the Union Government and Roadmap for the Future

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India is undergoing a historic demographic transition where the majority of the population is below the age of 25. It is increasingly being recognised that education will play a major role in the country for reaping the expected ‘demographic dividend’ over the next decades. In this background, the 10<sup>th</sup> and 11<sup>th</sup> Plan periods corresponding to the last 10 years (2002–12) have witnessed a concerted effort to provide a thrust towards the universalisation of elementary education and significantly expanding access to secondary and higher education. This has mainly come about through the intervention of the central government in elementary education, which was traditionally in the domain of the states, having significant implications for the structure of financing the education sector in general, and the fiscal responsibilities between the centre and the states in particular. Comparatively, adult and technical education sectors have lacked a coherent strategy, although it is being recognised that they form an integral part of improving literacy among the general population and upgrading their skills (Mukherjee 2007). In 2009, the parliament passed the historic Right to Education (RTE) Act, which provides the framework for policy in the years to come.

The budget for the fiscal year 2011–12 was also the last budget for the 11<sup>th</sup> Plan, and the latest (2012–13) is the first one for the 12<sup>th</sup> Plan. This provides an opportunity to review the objectives of the Plan and how they have been translated into budgetary allocation by the Government of India over the last five years. The education budget of the government can be disaggregated into five broad components:

- (a) elementary;
- (b) secondary;
- (c) university, higher and distance learning;
- (d) technical education; and
- (e) others, which includes adult education, promotion of language, etc.

This paper provides an analysis of the expenditure in the Department of School Education and Literacy and the Department of Higher Education, under the Ministry of Human Resource and Development (MHRD), which constitutes over 90 per cent of the total education budget of the Government of India.

The objective of this paper is to provide a comprehensive assessment of the allocations made by the Government of India through its budgetary provision in the education sector over the 11<sup>th</sup> Plan period. The initial (2007–08) and last years (2011–12) of the Plan have been compared and a trend analysis of the increase in union government expenditure on education provided. In the next stage, schemes have been categorised according to their purpose — administrative expenditure, increasing enrolment and reducing dropout, improving quality, ensuring equity, support to institutions of learning, etc. Then an analysis of the size of the schemes (above 5,000 million to less than 500 million) has been given, and their distribution, both within the education sub-sector (such as elementary education) and across the five sub-sectors explained earlier, has been tracked. Moreover, by classifying schemes in this manner a two-way analysis has been undertaken of the share of resources going to each sub-sector and the scheme category. The analysis, therefore, would provide a broad overview of the quantum, purpose and distribution of the expenditure on education by the Government of India through the MHRD. The paper concludes with some policy recommendations arising out of the analysis.

### OBJECTIVES OF THE 11<sup>TH</sup> FIVE-YEAR PLAN AND ALLOCATIONS FOR EDUCATION

Among the 27 targets set by the 11<sup>th</sup> Five-Year Plan at the national level, those in education were:

- (a) Reduction in the dropout rates of children at the elementary level from 52.2 per cent in 2003–04 to 20 per cent by 2011–12.
- (b) Developing minimum standards of educational attainment in elementary schools, to ensure quality education.
- (c) Increasing the literacy rate for persons of age 7 years or more to 85 per cent by 2011–12.
- (d) Reducing the gender gap in literacy to 10 percentage points by 2011–12.
- (e) Increasing the percentage of each cohort going to higher education from the present 10 per cent to 15 per cent by 2011–12 (Planning Commission 2008: 23).

While a comprehensive evaluation of these broad targets is not within the scope of this paper, the census data for 2011 indicate an increase in the literacy rate and reduction of the gender gap. However, the latest National Sample Survey Organisation (NSSO) data indicate that dropout rates are higher than 20 per cent in most states, and the percentage of each cohort going to higher education is also much less than the 11<sup>th</sup> Plan targets envisaged (Sikdar and Mukherjee 2012). The major developments during the 11<sup>th</sup> Plan period have been:

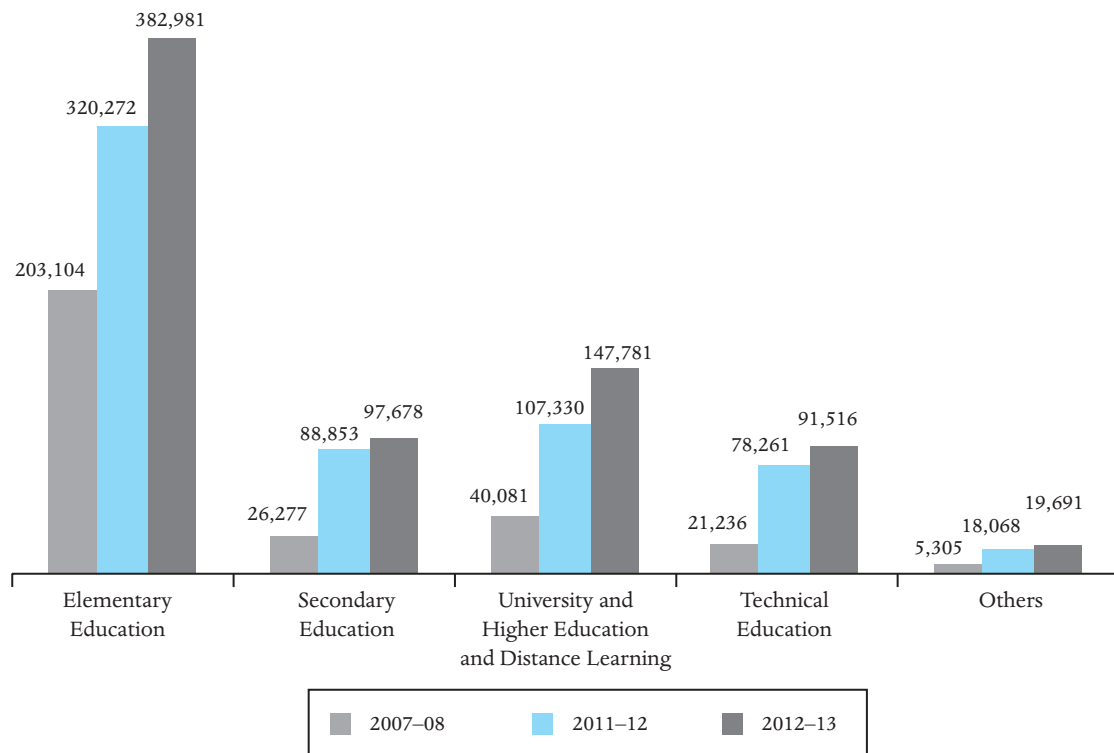
- (a) expansion of Sarva Shiksha Abhiyan (SSA) as the vehicle of universal elementary education;

- (b) extension of the Mid-Day Meal scheme (MDM) to all elementary schools;
- (c) enactment of the RTE Act, 2009;
- (d) establishment of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA); and
- (e) enhancement of allocation for higher education through the establishment of Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs) and National Institutes of Technology (NITs). The period also saw the initiation of reforms in higher education through the National Commission for Higher Education and Research (NCHER) Bill which is currently before the parliament.

Corresponding to these developments, the budgetary allocation and expenditure by the central government has increased significantly between 2007–08 and 2011–12. Budgetary allocation has doubled in the case of elementary education, and has risen by more than three times for secondary and higher education (Figure 2.1).

One major factor augmenting the resources available for elementary education in India is the revenue mobilised on account of the education cess. Initially levied at 2 per cent of all taxes collected by the central government, the education cess was increased to 3 per cent onwards with the extra 1 per cent earmarked for secondary and higher education

FIGURE 2.1 Central Expenditure in Education During the 11<sup>th</sup> Plan (₹in million)



Source: Gol (2011).

on all central taxes other than corporation and income tax. The last Plan period also saw a period of high growth, an economic slowdown on account of the global financial crisis, and recovery during the last two fiscal years. The initial years of the 11<sup>th</sup> Plan, therefore, saw rapid increase in tax collection, which translated into higher growth of revenues on account of education cess, while the rate of growth of cess collection slowed towards the end of the Plan. Table 2.1 provides a detailed report of the revenues collected through cess and its share in financing the different levels of education by the Government of India.

It has to be noted that the elementary education cess is earmarked for only two programmes — SSA and MDM. No such programme-wise earmarking is done for secondary and higher education cess, although most of the funds from the RMSA should be raised from that channel.

## EXPENDITURE BY TYPE OF SCHEME

Almost the entire allocation in the budget for education by the central government is spent through different schemes. These range from large system-wide interventions, such as SSA, to particular organisations and institutions such as the Kendriya Vidyalaya Sangathan (KVS), to targeted scholarship schemes for girl students. Most schemes have a particular motivation, a funding structure and a delivery mechanism. These range from direct expenditure by the central government (funding for University Grants Commission [UGC], for example), expenditure through state governments, and pooling resources between centre and states (SSA and RMSA). The list is not exhaustive, and several intermediate arrangements also exist. The complete list of schemes is provided in Tables 2A and 2B.

Moreover, it is difficult to characterise the schemes into one type or the other — a scheme such as the SSA has several components and hence can be described as either increasing enrolment or improving quality. Similarly, a large scheme

such as the MDM has several externalities — although the scheme provides nutrition, it also has an impact on increasing enrolment and reducing dropout. Given these limitations, the expenditure of the central government has been categorised into five major groups according to their motivation: increasing enrolment, reducing dropout, improving quality, ensuring equity, institutional allowances and grants to north-eastern states (Table 2.2). Since all centrally-sponsored schemes have a north-east component, the allocations for the region have been separated to provide an estimate of the quantum of resources solely focused on improving education in the north-eastern states of India.

One implication of the data from Table 2.1 is the fact that the size of the schemes vary significantly. For example, there are six schemes to increase enrolment with a total outlay of over ₹200,000 million (of which SSA is the major recipient). On the other hand, there are 11 schemes with an equity focus with a total outlay of ₹11,670 million in 2011–12. Similarly, the number of funding schemes that have been earmarked for the north-east increased from 19 to 29 during the 11<sup>th</sup> Plan period.

**Summary:** During the 11<sup>th</sup> Plan, education financing by the central government has reflected the focus on increasing enrolment and reducing dropouts. Institutional grants for higher education, either directly or through the UGC, have shown significant increase in allocations.

## DISTRIBUTION OF SCHEMES IN EXPENDITURE GROUPS

Multiplicity of schemes with similar objectives often suffers from inadequate administrative attention and capacity. Therefore, it is important to understand whether the plethora of schemes funded through the central government has shown any signs of consolidation. From a policy and financial management perspective, it is generally advisable to devote adequate resources to a particular scheme, rather

TABLE 2.1 Contribution of Education Cess to Elementary and Secondary/Higher Education Expenditure (₹ in million)

	2007–08				2011–12			
	Expenditure	Cess <sup>a</sup>	Cess Going to SSA and MDM (per cent)	Expenditure Met by Cess (per cent)	Expenditure	Cess <sup>a</sup>	Cess Going to SSA and MDM (per cent)	Expenditure Met by Cess (per cent)
Sarva Shiksha Abhiyan	131,710	83,160	74.7	63.1	210,000	119,920	65.4	57.1
Mid-Day Meal	66,780	28,120	25.3	42.1	103,800	63,420	34.6	61.1
Secondary/Higher	92,900	27,160		29.2	292,510	42,920		14.7

Source: GoI (2011).

Note: <sup>a</sup> indicates allocation through Prarambhik Shiksha Kosh (PSK).

TABLE 2.2 Distribution of Government of India Education Expenditure, by Type

		2007–08 (RE)		2011–12 (RE)	
		Number of Schemes	Allocation (₹ in million)	Number of Schemes	Allocation (₹ in million)
Group I	Enrolment Increasing Scheme	7	122,382.2	6	213,930.0
Group II	Dropout Reducing Scheme	7	61,794.2	8	103,047.3
Group III	Quality Improving Scheme	19	7,356.2	17	20,314.6
Group IV	Equity in Education	8	3,103.0	11	11,678.9
Group V	Institutional Grant	40	76,501.3	43	212,943.7
Group Va	School Education	5	20,228.8	6	50,129.3
Group Vb	Higher Education	35	56,272.5	37	162,814.4
Group Vb(i)	University Grants Commission	1	35,819.4	1	89,274.1
Group Vb(ii)	Non-Technical Higher Education	16	4,236.6	15	16,140.7
Group Vb(iii)	Technical Higher Education	18	16,216.5	21	57,399.6
Group VI	Grant for North-East State	19	23,661.0	29	49,707.0
Group VII	Other Administrative Expenditure		844.1		2,029.9

Source: GoI (2007, 2011).

than introducing new schemes for the same objective, which lead to fragmentation and mismanagement.

In this analysis, schemes have been grouped together according to their allocation size for different sectors of education, with four groups for every sector. Group I contains schemes with allocation of ₹5,000 million or more, Group II comprises those between ₹1,000–5,000 million, Group III covers those between ₹500–1,000 million, and Group IV those below ₹500 million (Table 2.3). The complete list of schemes is provided in Table 2C.

**Summary:** Table 2.3 illustrates the within-group and across-group divergence in the size of the resource allocation. For

all education sectors the number of schemes has increased in Group I (highest allocation category) and decreased in Group IV (lowest allocation category) from 2007–08 to 2011–12. This reflects a move towards consolidation of resources in ‘flagship’ schemes during the 11<sup>th</sup> Plan period, which is a welcome development.

### Details of Allocation across Existing and New Schemes during 12<sup>th</sup> Plan

The policy objective of universal elementary education is primarily reflected in the consolidation of the large Centrally Sponsored Schemes (CSSs). In 2011–12, apart from

TABLE 2.3 Number of Schemes According to Scheme Sizes

Size of Scheme	Elementary Education		Secondary Education		University, Higher Education and Distance Learning		Technical Education		Others	
	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12
	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)
Group I (Schemes above ₹5,000 million)	2	2	2	5	1	3	2	5	0	1
Group II (Schemes between ₹1,000 million to less than ₹5,000 million)	2	2	2	4	1	1	2	7	1	1
Group III (Schemes between ₹500 million to less than ₹1,000 million)	0	2	2	1	1	3	3	7	2	3
Group IV (Below ₹500 million)	3	1	8	6	15	10	22	14	20	21
Total	7	7	14	16	18	17	29	33	23	26

Source: GoI (2007, 2011).

the SSA) and the MDM, a new scheme — Strengthening of Teachers Training Institutions — has been introduced under the first group. The Scheme to Provide Quality Education in Madrassas (SPQEM) is the only scheme in Group II with an increased allocation in 2011–12. The SPQEM was launched in 2009–10, and the District Primary Education Programme (DPEP) was stopped in the same year. The Kasturba Gandhi Balika Vidyalaya, which was continuing from the 10<sup>th</sup> Plan as a separate scheme, was merged with the SSA after 2006–07. The Mahila Samakhya and the Scheme for Infrastructure Development in Minority Institute (IDMI), with ₹500 million allocation come under Group III. The ‘National Bal Bhawan, New Delhi’ is the only scheme in elementary education, whose allocation is less than ₹500 million.

For secondary education, five schemes come under Group I in 2011–12, instead of two schemes in 2007–08. The RMSA and the Model School Scheme are two new ones in the 11<sup>th</sup> Plan with a large allocation. Apart from these, allocation for Information and Communication Technology (ICT) in School scheme has been increased significantly in 2011–12 from what it had been in 2007–08. The KVS and the Navodaya Vidyalaya Samiti are two other schemes with an allocation of more than ₹5,000 million in the union budgets in both 2007–08 and 2011–12. The Scheme for Construction and Running of Girls’ Hostels for Students of Secondary and Higher Secondary Schools, the National Council of Educational Research and Training (NCERT) and the Inclusive Education for the Disabled at Secondary Stage (IEDSS) are three schemes that come under Group II in the 2011–12 budget. IEDSS, which was earlier known as the Integrated Education for Disabled Children (IEDC), has become a new scheme from 2009–10. The National Merit-cum-Means Scholarship (NMMS) and the National Scheme of Incentive to Girls for Secondary Education are the two new schemes

of the 11<sup>th</sup> Plan that come under Group III in 2011–12. In Group IV, only one new scheme — Appointment of Language Teachers — was introduced in 2009–10 and the allocation is only ₹50 million in 2011–12 (Table 2.4). The lowest scheme in terms of allocation is Access and Equity with only ₹1 million in 2011–12.

For university and higher education and distance learning, four schemes come under Group I. These are due to high allocation for the UGC, which was necessitated by the revision in salary scales of university and college teachers. The educational loan interest subsidy, introduced in 2008–09, comes under Group I in 2011–12. The Scholarship for College and University Students was started in 2007–08 and it comes under Group II with an increased allocation. Apart from the Indira Gandhi National Open University (IGNOU), the Indian Council of Social Science Research (ICSSR) and the Establishment of Tribunals, Accreditation Authority, NCHER and National Finance Corporation come under Group III in 2011–12. The Group IV schemes in university and higher education and distance learning were more or less same in 2007–08 and 2011–12. The only change was that the Area Intensive and Madrassa Modernisation Programme was closed after 2008–09 and the Assistance to State Governments for Degree Colleges introduced in the Union Budget 2011–12 with an allocation of ₹100 million.

## PROPORTION OF EXPENDITURE IN DIFFERENT SCHEME CATEGORIES

Analysis of group-wise expenditure in Table 2.5 indicates that there are increments in expenditure in the first three groups for every level of education (except Group II allocation in elementary education and Group III allocation in secondary

TABLE 2.4 Continuing and New Schemes — Comparison of 10<sup>th</sup> and 11<sup>th</sup> Plans

Scheme Size as of 2011–12	Continuing from 10 <sup>th</sup> Plan	Introduced in 11 <sup>th</sup> Plan	Schemes Withdrawn after 10 <sup>th</sup> Plan
Over ₹5,000 million	Sarva Shiksha Abhiyan (SSA), National Programme of Mid-Day Meals in Schools, Navodaya Vidyalaya Samiti, Kendriya Vidyalaya Sangathan	Rashtriya Madhyamik Shiksha Abhiyan (RMSA); Scheme for Setting up of 6,000 Model Schools at Block-Level	
Between ₹1,000–5,000 million	Strengthening of Teachers Training Institutions; Information and Communication Technology in Schools	Scheme for Providing Quality Education in Madrassas (SPQEM)	District Primary Education Programme (DPEP), Kasturba Gandhi Balika Vidyalaya (included in SSA), Continuing Education for Neo-Literates
Between ₹500–1,000 million	Mahila Samakhya		
Below ₹500 million		Appointment of Language Teachers	National Council for Teacher Education (NCTE)

Source: Compiled by the authors from GoI (2007, 2011).

education) and decrease in expenditure in Group IV schemes (except at secondary and technical education levels).

The decrease in elementary education expenditure in Group II is due to two reasons. First, the Strengthening of Teachers Training Institutions scheme has been upgraded from Group II to Group I due to the increase in allocation to above ₹5,000 million in the Union Budget 2011–12. Second, the Kasturba Gandhi Balika Vidyalaya, which was started as a separate scheme during the 10<sup>th</sup> Plan, was merged with the SSA in 2007–08. The SPQEM is the only scheme in Group II of elementary education in Union Budget 2011–12 with an allocation of ₹1,500 million. Similarly, the NCERT and the ICT in schools were in Group III of secondary education in

2007–08, but had higher allowances in the 11<sup>th</sup> Plan and were upgraded to Group I.

Looking at the percentage distribution of expenditure within each categories of education in Table 2.6, we find that the proportion has increased in Group I and decreased in other groups, barring a slight increment in Group II for secondary education.

**Summary:** From the analysis carried out in this section, it is evident that the government has tended to focus on schemes with higher allocation. Calculating the percentage of allocation of each group out of the total education expenditure and adding up all sectors, it is clear that the government has increased expenditure through Group I

TABLE 2.5 Total Expenditure, by Group (₹in million)

Size of Scheme	Elementary Education		Secondary Education		University, Higher Education and Distance Learning		Technical Education		Others	
	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12
	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)
Group I (Schemes above ₹5,000 million)	198,490.0	313,800.0	20,688.0	79,808.0	35,819.4	102,608.3	13,856.7	54,282.1	0.0	7,650.0
Group II (Schemes between ₹1,000 million to less than ₹5,000 million)	4,120.0	5,265.0	3,700.0	7,366.9	1,800.3	1,620.0	2,477.2	15,693.5	1,640.0	4,387.5
Group III (Schemes between ₹500 million to less than ₹1,000 million)	0.0	1,000.0	1,509.5	700.0	972.1	2,155.8	2,052.0	4,871.5	1,259.5	2,735.0
Group IV (Below ₹500 million)	494.0	206.5	379.3	978.0	1,489.0	946.1	2,849.8	3,414.0	1,848.7	3,295.7

Source: GoI (2007, 2011).

TABLE 2.6 Percentage of Expenditure within Education Group

Size of Scheme	Elementary Education		Secondary Education		University, Higher Education and Distance Learning		Technical Education		Others	
	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12	2007–08	2011–12
	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)
Group I (Schemes above ₹5,000 million)	97.73	97.98	78.73	89.82	89.37	95.60	65.25	69.36	0.00	42.34
Group II (Schemes between ₹1,000 million to less than ₹5,000 million)	2.03	1.64	14.08	8.29	4.49	1.51	11.67	20.05	34.54	24.28
Group III (Schemes between ₹500 million to less than ₹1,000 million)	0.00	0.31	5.74	0.79	2.43	2.01	9.66	6.22	26.53	15.14
Group IV (Below ₹500 million)	0.24	0.06	1.44	1.10	3.71	0.88	13.42	4.36	38.93	18.24
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Calculated from GoI (2007, 2011).



TABLE 2.7 Groupwise Percentage of Expenditure on Education

Size of Scheme	Elementary Education		Secondary Education		University, Higher Education and Distance Learning		Technical Education		Others		Total	
	2007–08 (RE)	2011–12 (RE)	2007–08 (RE)	2011–12 (RE)	2007–08 (RE)	2011–12 (RE)	2007–08 (RE)	2011–12 (RE)	2007–08 (RE)	2011–12 (RE)	2007–08 (RE)	2011–12 (RE)
Group I (Schemes above ₹5,000 million)	67.18	51.21	7.00	13.02	12.12	16.74	4.69	8.86	0.00	1.25	91.00	91.08
Group II (Schemes between ₹1,000 million to less than ₹5,000 million)	1.39	0.86	1.25	1.20	0.61	0.26	0.84	2.56	0.56	0.72	4.65	5.60
Group III (Schemes between ₹500 million to less than ₹1,000 million)	0.00	0.16	0.51	0.11	0.33	0.35	0.69	0.79	0.43	0.45	1.96	1.87
Group IV (Below ₹500 million)	0.17	0.03	0.13	0.16	0.50	0.15	0.96	0.56	0.63	0.54	2.39	1.44
Total	68.74	52.26	8.89	14.50	13.57	17.52	7.19	12.77	1.61	2.95	100.00	100.00

Source: GoI (2007, 2011).

schemes and reduced expenditure through other small-sized ones in other groups. This is particularly true of secondary education during the 11<sup>th</sup> Plan period. The proportion of expenditure on secondary education was 8.9 per cent of the total expenditure in 2007–08, and it has increased to 14.5 per cent of total expenditure in 2011–12.

## SUMMARY: FUTURE DIRECTIONS IN FINANCING OF EDUCATION IN INDIA

### Financing Responsibility of Union and State Governments

Education financing in India is at crossroads. As has been observed in the discussion in this chapter, the quantum of public expenditure on education by the union government has gone up significantly in the last decade. We have also analysed that the bulk of this expenditure is earmarked for a few key flagship programmes such as the SSA (the vehicle for implementation of the RTE), the MDM Scheme and the RMSA geared towards expansion of secondary education. Moreover, our study also points to the fact that a significant contribution to this increase in expenditure is through higher collection of the education cess, which now covers not only elementary education and MDM schemes, but also secondary and higher education. India is unique among other developing countries in its use of earmarked taxes for

financing public expenditure on education. It is extremely important, therefore, to see whether this increase in expenditure by the union government is ‘crowding in’ or ‘crowding out’ expenditure by the states or the private sector. Initial evidence seems to indicate that the state governments have not increased their education expenditure commensurately. They are becoming increasingly more reliant on the union government to augment their resource base for education. Consequently, education policy is increasingly being determined at the national, rather than the state level, as was originally envisaged in the Constitution. The implementation framework of the RTE and the proliferation of centrally-sponsored schemes would essentially guarantee the pre-eminence of the union government in the financing of education in the near future.

### Increasing Privatisation of Education and Implications for Financing

The NSSO has conducted a survey on the participation and expenditure in education in 2007–08. The unit-level data gives some information about student participation in government, government-aided, private-aided and private unaided schools. In our study we have clubbed government, government-aided and private aided together as ‘government-aided’, keeping private unaided schools as the other category. Figure 2.2 depict that the participation in private school is increasing with income both in rural

and urban areas, but in urban areas this increase is of a much higher order. In terms of private school enrolment in rural areas, the overall share is around 10 percent – most of them from the upper income strata. However, state-wise analysis figures from the unit level data (not presented here) indicates that in some states such as Himachal Pradesh and Uttar Pradesh, the proportion of children in rural areas from the lowest income quintile is over 25 per cent. This implies that parents of economically weaker sections are increasingly accessing private education services. This is a trend that is likely to continue, as incomes rise and the demand for quality education increases. The government system in many states might therefore suffer from over-capacity and under-utilisation. On the other hand, the problems faced by the higher education sector would be just the opposite. It is important therefore to take a pragmatic view of what would be the best use of public resources and provide innovative solutions to correct the imbalances both within and between sectors.

### Public–Private Partnership for Education in India

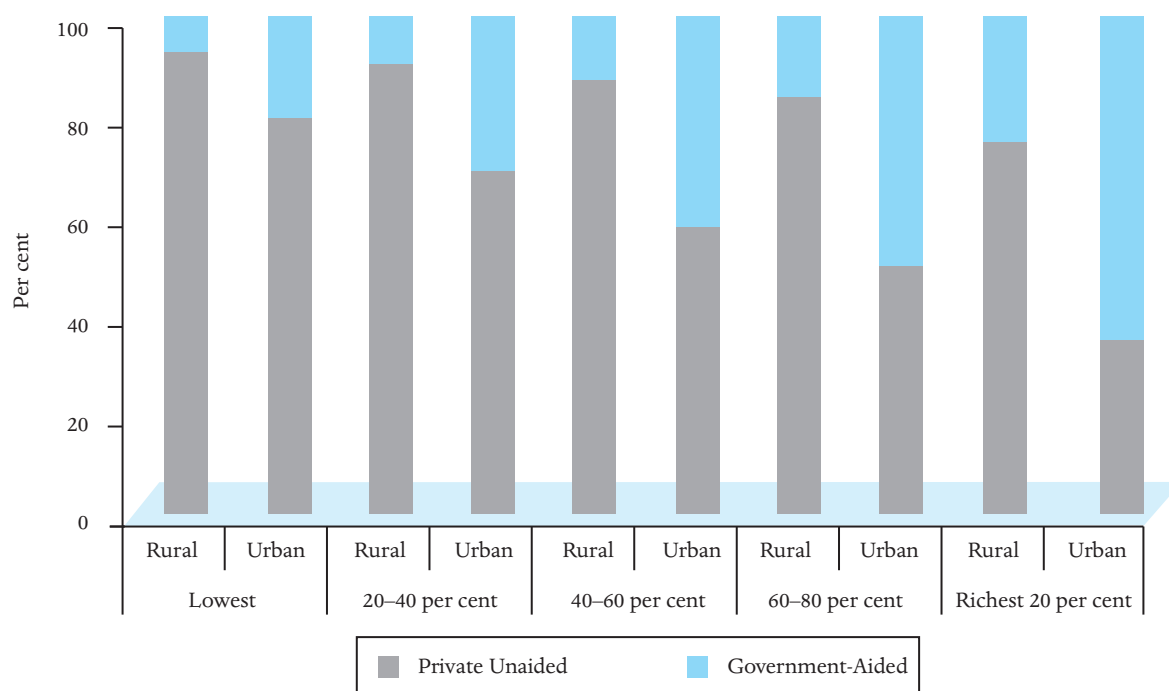
One possible solution is to enhance the scale and scope of Public–Private Partnership (PPP) in the education sector in India. In one sense, the PPP model already exists in the form of ‘government-aided’ schools, which form the

highest proportion of schools in states like Kerala and West Bengal. There was also a proposal to build ‘Model Schools’ in the PPP mode in over 6,000 blocks of the country, which would then be a catalyst for other schools to perform as per the standards set by these institutions. PPP in education, however, is difficult to implement, not least due to the divergence in incentives between public and private schools.

A well-crafted PPP strategy is not only essential, but also can make best use of resources, technology and capacity of the education system to deliver the ultimate goal — universal and equitable access to high-quality education. The first step would be to recognise the fact that the demand for education at all levels would increase manifold in the medium term. Second, public provision is a necessary but not sufficient condition for increasing enrolments, reducing dropouts and upgrading knowledge and skills at elementary, secondary and tertiary levels. Third, it is essential to ensure standards of quality in education — otherwise parents would exercise their choice as consumers to move between public and private sectors, creating overcapacity and inefficiency in resource allocation.

The PPP strategy, therefore, is a combination of projecting demand for different levels of education, separation of public goods (equity, non-discrimination, knowledge creation, research and development, etc.) from private goods

FIGURE 2.2 Student Participation in Government and Private Schools in Different Income Groups



Source: Calculated from NSSO 62<sup>nd</sup> Round data (2007–08).



(private school education, technical and professional courses, employment-oriented skill formation, etc.), and adhering to quality standards for both. The ensuing investment plan would take into account the existing stock of human and physical capital (students, teachers, schools, technical insti-

tutions, universities, etc.) and projected demand for each, filling the gaps in educational infrastructure over the next decade and beyond. That would be the most efficient way to harness our demographic dividend in the future Five-Year Plans.

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TABLE 2A List of Schemes of the Ministry of Human Resource Development, 2007–08

Elementary Education	1. Strengthening of Teachers Training Institutions 2. Mahila Samakhya 3. National Bal Bhawan, New Delhi 4. District Primary Education Programme 5. National Programme of Mid-Day Meals in Schools 6. Sarva Shiksha Abhiyan 7. National Council for Teacher Education
Secondary Education	1. National Council of Educational Research and Training 2. Kendriya Vidyalaya Sangathan 3. Navodaya Vidyalaya Samiti 4. Information and Communication Technology in Schools 5. Integrated Education for Disabled Children 6. National Institute of Open Schooling 7. Access and Equity 8. Central Tibetan Schools Administration 9. Vocationalisation of Education 10. National Scheme for Incentive to Girls for Secondary Education 11. Special Navodaya Vidyalayas 12. National Merit Scholarship Scheme 13. Upgrading 2,000 Kasturba Gandhi Balika Vidyalayas (Residential Schools, Hostels/Girls' Hostels) 14. Other Programmes
University, Higher Education and Distance Learning	1. University Grants Commission 2. Improvement in Salary Scale of University and College Teachers 3. Indian Council of Social Science Research 4. Indian Council of Historical Research 5. Rural Universities/National Council of Rural Institutes 6. Indian Institute of Advanced Study, Shimla, 7. Indian Council of Philosophical Research 8. Shastri Indo-Canadian Institute 9. Setting Up of a Refinance Corporation/Student Loan Scheme 10. National Institute of Studies in Sri Guru Granth Sahib 11. Area Intensive and Madrassa Modernisation Programme 12. Indira Gandhi National Open University 13. Commonwealth of Learning 14. Scholarship to Students from Non-Hindi Speaking States/Union Territories and Other Scholarships 15. Scholarship for College and University Students 16. Provision for University and Higher Education 17. Provision for Distance Learning (including Scholarships) 18. Other Programmes
Technical Education	1. Community Polytechnics 2. Indian Institutes of Technology 3. Scholarships/Apprenticeship Training 4. Indian Institutes of Management 5. Indian Institute of Science, Bangalore 6. All India Council for Technical Education (including National Institutes of Technology) 7. Polytechnics for Disabled Persons 8. Indian Institute of Information Technology, Gwalior 9. Indian Institute of Information Technology, Allahabad 10. Indian Institute of Information Technology, Jabalpur 11. Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram 12. National Institute for Industrial Engineering, Mumbai 13. National Institute for Foundry and Forge Technology 14. School of Planning and Architecture, Delhi, 15. National Institutes of Technical Teachers' Training and Research 16. Sant Longowal Institute of Engineering and Technology 17. Indian School of Mines, Dhanbad 18. Board of Apprenticeship Training 19. Technical Education Quality Improvement Project of Government of India 20. Central Institute of Technology, Kokrajhar 21. New Indian Institutes of Information Technology 22. New Schools of Planning and Architecture 23. Indian National Digital Library in Engineering Science and Technology 24. Setting Up of New Indian Institutes of Technology (Erstwhile Setting Up of Three New Ones) 25. Indian Institutes of Science for Education and Research 26. Upgradation of Existing/Setting Up of New Polytechnics 27. North Eastern Regional Institute of Science and Technology, Itanagar 28. Provision for Technical Education 29. Other Programmes
Others	1. Directorate of Hindi, Commission for Scientific and Technical Terminology 2. Kendriya Hindi Shikshan Mandal 3. Appointment of Language Teachers 4. National Council for Promotion of Urdu Language 5. Central Institute of Indian Languages and Regional Language Centres 6. National Council for Promotion of Sindhi Language 8. Modern Indian Languages 9. Development of Tamil Language 10. Rashtriya Sanskrit Sansthan 11. Rashtriya Ved Vidya Pratisthan 12. Education in Human Values 13. Book Promotion 14. Indian National Commission/United Nations Educational, Scientific and Cultural Organization 15. Planning Norms 16. Administration 17. Provision for Development of Languages 18. Provision for Book Promotion 19. Adult Education and Skill Development Scheme 20. Support to Non-Governmental Organisations/Institutions/State Resource Centres for Adult Education and Skill Development 21. Directorate of Adult Education 22. National Literacy Mission Authority 23. Other Programmes

Source: GoI (2007).

TABLE 2B List of Schemes of the Ministry of Human Resource Development, 2011–12

Elementary Education	1. National Programme of Mid-Day Meals in Schools 2. Sarva Shiksha Abhiyan 3. Strengthening of Teachers Training Institutions 4. Scheme for Providing Quality Education in Madrassas 5. Mahila Samakhya 6. Scheme for Infrastructure Development in Minority Institutions 7. National Bal Bhawan, New Delhi
Secondary Education	1. Rashtriya Madhyamik Shiksha Abhiyan 2. Navodaya Vidyalaya Samiti 3. Kendriya Vidyalaya Sangathan 4. Scheme for Setting Up of 6,000 Model Schools at Block Level as Benchmark of Excellence 5. Information and Communication Technology in Schools 6. Scheme for Construction and Running of Girls' Hostels for Students of Secondary and Higher Secondary Schools 7. National Council of Educational Research and Training 8. Inclusive Education of the Disabled at Secondary Stage 9. National Merit-cum-Means Scholarship Scheme 10. National Scheme for Incentive to Girls for Secondary Education 11. Central Tibetan Schools Administration 12. Vocationalisation of Education 13. National Institute of Open Schooling 14. Access and Equity 15. Appointment of Language Teachers 16. Other Programmes
University, Higher Education and Distance Learning	1. University Grants Commission 2. Improvement in Salary Scale of University and College Teachers 3. Educational Loan Interest Subsidy 4. Provision for University and Higher Education (for the Benefit of North-Eastern Areas and Sikkim) 5. Scholarship for College and University Students 6. Indira Gandhi National Open University 7. Indian Council of Social Science Research 8. Establishment of Tribunals, Accreditation Authority, National Commission of Higher Education and Research, and National Finance Corporation 9. Assistance to State Governments for Degree Colleges 10. Indian Council of Historical Research 11. Rural Universities/National Council of Rural Institutes 12. Indian Institute of Advanced Study, Shimla 13. Indian Council of Philosophical Research 14. Shastri Indo-Canadian Institute 15. Commonwealth of Learning 16. Scholarship to Students from Non-Hindi Speaking States/Union Territories and Other Scholarships 17. Provision for Distance Learning (including Scholarships) (for the Benefit of North-Eastern Areas and Sikkim) 18. Other Programmes
Technical Education	1. Indian Institutes of Technology 2. National Institutes of Technology 3. Assistance to States for Upgradation of Existing/Setting Up of New Polytechnics 4. Indian Institutes of Science for Education and Research 5. Setting Up of New Indian Institutes of Technology (Erstwhile Setting Up of Three New Ones) 6. Provision for Technical Education (for the Benefit of North-Eastern Areas and Sikkim) 7. Indian Institute of Science, Bangalore 8. Technical Education Quality Improvement Project of Government of India 9. All India Council for Technical Education 10. Indian Institutes of Management 11. Community Polytechnics 12. Indian School of Mines, Dhanbad 13. Women's Hostels in Polytechnics 14. National Institutes of Technical Teachers' Training and Research 15. National Institute for Industrial Engineering, Mumbai 16. Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram 17. Setting Up of New Indian Institutes of Management 18. Scholarships/Apprenticeship Training 19. Indian Institute of Information Technology, Allahabad 20. Polytechnics for Disabled Persons 21. Indian Institute of Information Technology, Gwalior 22. Indian Institute of Information Technology, Jabalpur 23. National for Foundry and Forge Technology 24. School of Planning and Architecture, Delhi 25. Sant Longowal Institute of Engineering and Technology 26. Board of Apprenticeship Training 27. Central Institute of Technology, Kokrajhar 28. New Indian Institutes of Information Technology 29. New Schools of Planning and Architecture 30. Indian National Digital Library in Engineering Science and Technology 31. Setting Up of New National Institutes of Technology 32. Training and Research in Frontier Areas 33. Expansion and Upgradation of State Engineering Institutions 34. Setting Up of Indian Institute of Engineering, Science and Technology 35. North Eastern Regional Institute of Science and Technology, Itanagar 36. Other Programmes
Others	1. National Mission in Education through Information and Communication Technology 2. Adult Education and Skill Development Scheme 3. Support to Non-Governmental Organisations/Institutions/State Resource Centres for Adult Education and Skill Development 4. Provision for Information and Communication Technology (for the Benefit of North-Eastern Areas and Sikkim) 5. Rashtriya Sanskrit Sansthan 6. Directorate of Adult Education 7. National Literacy Mission Authority 8. Directorate of Hindi 9. Appointment of Language Teachers 10. Kendriya Hindi Shikshan Mandal 11. National Council for Promotion of Urdu Language 12. Central Institute of Indian Languages and Regional Language Centres 13. National Council for Promotion of Sindhi Language 14. Central Institute of Classical Tamil, Chennai 15. Rashtriya Ved Vidya Pratisthan 16. Provision for Development of Languages (for the Benefit of North-Eastern Areas and Sikkim) 17. Book Promotion 18. Indian National Commission/ United Nations Educational, Scientific and Cultural Organization 19. Planning Norms 20. Administration 21. Other Programmes

Source: GoI (2011).

TABLE 2C List of Schemes of the Ministry of Human Resource Development, by Group

		2007-08	2011-12
Group I	Enrolment Increasing Scheme	1. National Bal Bhawan, New Delhi 2. District Primary Education Programme 3. Sarva Shiksha Abhiyan 4. National Institute of Open Schooling 5. Access and Equity 6. Scheme for Universal Access and Quality at the Secondary Stage 7. Indira Gandhi National Open University	1. National Bal Bhawan, New Delhi 2. Sarva Shiksha Abhiyan 3. Rashtriya Madhyamik Shiksha Abhiyan 4. National Institute of Open Schooling 5. Access and Equity 6. Indira Gandhi National Open University
Group II	Dropout Reducing Scheme	1. National Programme of Mid-Day Meals in Schools 2. National Merit Scholarship Scheme 3. Scholarship to Students from Non-Hindi Speaking States/Union Territories and Other Scholarships 4. Scholarship for College and University Students 5. Book Promotion 6. Scholarships/Apprenticeship Training 7. Setting Up of a Refinance Corporation/Student Loan Scheme	1. National Programme of Mid-Day Meals in Schools 2. National Merit-cum-Means Scholarship Scheme 3. Educational Loan Interest Subsidy 4. Commonwealth of Learning 5. Scholarship to Students from Non-Hindi Speaking States/Union Territories and Other Scholarships 6. Scholarship for College and University Students 7. Book Promotion 8. Scholarships/Apprenticeship Training
Group III	Quality Improving Scheme	1. Strengthening of Teachers Training Institutions 2. National Council for Teacher Education 3. National Council of Educational Research and Training 4. Information and Communication Technology in Schools 5. Vocationalisation of Education 6. Scheme for Universal Access and Quality at the Secondary Stage 7. National Mission in Education through Information and Communication Technology 8. Directorate of Hindi 9. Kendriya Hindi Shikshan Mandal 10. Appointment of Language Teachers 11. National Council for Promotion of Urdu Language 12. Central Institute of Indian Languages and Regional Language Centres 13. National Council for Promotion of Sindhi Language 14. Modern Indian Languages 15. Development of Tamil Language 16. Central Institute of Classical Tamil, Chennai 17. Rashtriya Sanskrit Sansthan 18. Rashtriya Ved Vidya Pratisthan 19. Education in Human Values	1. Strengthening of Teachers Training Institutions 2. National Council of Educational Research and Training 3. Information and Communication Technology in Schools 4. Vocationalisation of Education 5. Appointment of Language Teachers 6. National Mission on Teachers and Training 7. National Mission in Education through Information and Communication Technology 8. Directorate of Hindi 9. Commission for Scientific and Technical Terminology 10. Kendriya Hindi Shikshan Mandal 11. National Council for Promotion of Urdu Language 12. Central Institute of Indian Languages and Regional Language Centres 13. National Council for Promotion of Sindhi Language 14. Central Institute of Classical Tamil, Chennai 15. Rashtriya Sanskrit Sansthan 16. Rashtriya Ved Vidya Pratisthan 17. Education in Human Values
Group IV	Equity in Education	1. Mahila Samakhya 2. National Scheme for Incentive to Girls for Secondary Education 3. Integrated Education for Disabled Children 4. Polytechnics for Disabled Persons 5. Adult Education and Skill Development Scheme 6. Support to Non-Governmental Organisations/Institutions/State Resource Centres for Adult Education and Skill Development 7. National Literacy Mission Authority and 8. Other Programmes for Adult Education	1. Mahila Samakhya 2. National Scheme for Incentive to Girls for Secondary Education 3. Scheme for Construction and Running of Girls Hostels for Students of Secondary and Higher Secondary Schools 4. Women's Hostels in Polytechnics 5. Inclusive Education of the Disabled at Secondary Stage 6. Polytechnics for Disabled Persons 7. Adult Education 8. Adult Education and Skill Development Scheme 9. Support to Non-Governmental Organisations/Institutions/State Resource Centres for Adult Education and Skill Development 10. National Literacy Mission Authority 11. Other Programmes in Adult Education
Group V	Institutional Grant		

Group Va	School Education	1. Kendriya Vidyalaya Sangathan 2. Navodaya Vidyalaya Samiti 3. Central Tibetan Schools Administration 4. Special Navodaya Vidyalayas 5. Area Intensive and Madrassa Modernisation Programme	1. Scheme for Providing Quality Education in Madrassas 2. Scheme for Infrastructure Development in Minority Institutions 3. Kendriya Vidyalaya Sangathan 4. Navodaya Vidyalaya Samiti 5. Scheme for Setting Up of 6,000 Model Schools at Block Level as Benchmark of Excellence 6. Central Tibetan Schools Administration
Group Vb	Higher Education		
Group Vb(i)	University Grants Commission	University Grants Commission	University Grants Commission
Group Vb(ii)	Non-Technical Higher Education	1. Indian Council of Social Science Research 2. Indian Council of Historical Research 3. Rural Universities/National Council of Rural Institutes 4. Indian Institute of Advanced Study, Shimla 5. Indian Council of Philosophical Research 6. Shastri Indo-Canadian Institute 7. National Institute of Studies in Sri Guru Granth Sahib 8. Commonwealth of Learning 9. Indian National Commission/United Nations Educational, Scientific and Cultural Organization 10. Indian Institutes of Management 11. Indian Institute of Science, Bangalore 12. School of Planning and Architecture, Delhi 13. Indian School of Mines, Dhanbad 14. Board of Apprenticeship Training 15. New Schools of Planning and Architecture 16. Indian Institutes of Science for Education and Research	1. Indian Council of Social Science Research 2. Indian Council of Historical Research 3. Rural Universities/National Council of Rural Institutes 4. Indian Institute of Advanced Study, Shimla 5. Indian Council of Philosophical Research 6. Shastri Indo-Canadian Institute 7. Indian National Commission/United Nations Educational, Scientific and Cultural Organization 8. Indian Institutes of Management 9. Indian School of Mines, Dhanbad 10. Board of Apprenticeship Training 11. New Schools of Planning and Architecture 12. Setting Up of New Indian Institutes of Technology 13. Indian Institutes of Science for Education and Research 14. Setting Up of New Indian Institutes of Management 15. Training and Research in Frontier Areas
Group Vb(iii)	Technical Higher Education		1. Community Polytechnics 2. Indian Institutes of Technology 3. Indian Institute of Science, Bangalore 4. Indian Institute of Information Technology, Gwalior 5. Indian Institute of Information Technology, Allahabad 6. Indian Institute of Information Technology, Jabalpur 7. Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram 8. National Institute for Industrial Engineering, Mumbai 9. National Institute for Foundry and Forge Technology 10. School of Planning and Architecture, Delhi 11. National Institutes of Technical Teachers' Training and Research 12. Sant Longowal Institute of Engineering and Technology 13. Technical Education Quality Improvement Project of Government of India 14. Central Institute of Technology, Kokrajhar 15. Indian National Digital Library in Engineering Science and Technology 16. Upgradation of Existing/Setting Up of New Polytechnics 17. Assistance to States for Upgradation of Existing/Setting Up of New Polytechnics 18. Setting Up of New National Institutes of Technology 19. All India Council for Technical Education 20. National Institutes of Technology 21. North Eastern Regional Institute of Science and Technology, Itanagar