HOW HAVE States Designed Their School Education BUDGETS?





This document is for private circulation and is not a priced publication. Reproduction of this publication for educational and other non-commercial purposes is authorised, without prior written permission, provided the source is fully acknowledged.

Copyright @2016 Centre for Budget and Governance Accountability (CBGA) and Child Rights and You (CRY)

Study Team:

Protiva Kundu, Gaurav Singh, Surajita Rout, Khwaja Mobeen Ur Rehman

For more information about the study, please contact: protiva@cbgaindia.org

Designed by:

How India Lives, a database and search engine for public data (www.howindialives.com)

Published by:

Centre for Budget and Governance Accountability (CBGA) B-7 Extension/110A (Ground Floor), Harsukh Marg, Safdarjung Enclave, New Delhi-110029 Tel: +91-11-49200400/401/402 Email: info@cbgaindia.org Website: www.cbgaindia.org

and

Child Rights and You (CRY) 189/A, Anand Estate, Sane Guruji Marg, Mumbai-400011 Website: www.cry.org

Financial support for the study:

This study has been carried out with financial support from CRY and IDRC-Think Tank Initiative (from the institutional support provided to CBGA).

Views expressed in this report are those of the authors and do not necessarily represent the positions of CRY or IDRC.

Cover image: Freepik

HOW HAVE STATES DESIGNED THEIR School Education BUDGETS?





WWW.Cry.Org Ensuring lasting change for children



Contents

Abbreviations	3
List of Graphs, Matrices and Tables	4
Message from CBGA	6
Message from CRY	7
Acknowledgements	9
Executive Summary	10
I. Introduction	14
II. Comparative Analysis of Educational Outcomes Across Select States	18
III. Overall Fiscal Space with the States	22
IV. How Much are States Spending on School Education?	24
V. Priorities Within School-Education Budgets Across States	27
V. a. Component-Wise Distribution of School-Education Budget Across States	27
V. b. Component-Wise Distribution of School-Education Budget Within States	32
VI. How Inclusive is School Education: An Exploration from a Budgetary Lens	43
VI. a. Intervention for Marginalised Children	43
VI. b. Intervention for Girl Child	44
VI. c. Intervention for Out-of-School Children (OOSC)	45
VII: Governance and Stakeholders	47
VII. a. How much Government is Spending to Enhance Community Engagement with Schools?	47
VII. b. How Much do Budgets Contribute Towards Non-Government Schools?	48
VIII: Concluding Remarks and Policy Implications	50
References	54
Annexures	56

Abbreviations

A	Actuals	NEP	New Education Policy
ASER	Annual Status of Education Report	NER	Net Enrolment Rate
BE	Budget Estimates	OBC	Other Backward Class
CABE	Central Advisory Board of Education	OOSC	Out of School Children
CAG	Comptroller and Auditor General	PAB	Project Approval Board
DDGs	Detailed Demand for Grants	PTR	Pupil Teacher Ratio
DIET	District Institutes of Education and	RE	Revised Estimates
		RMSA	Rashtriya Madhyamik Shiksha Abhiyan
DISE	District Information System for Education	RTE	Right to Education
GDP	Gross Domestic Product	SB	Supplementary Budget
GER	Gross Enrolment Rate	SC	Scheduled Caste
GNP	Gross National Product	SCR	Student Clearcom Datio
GSDP	Gross State Domestic Product	SUK	Student Classroom Ratio
KGBV	Kasturba Gandhi Balika Vidvalava	SCSP	Scheduled Cate Sub-Plan
		SMC	School Management Committee
MDM	Mid Day Meal	SSA	Sarva Shiksha Abhiyan
NAR	Net Attendance Ratio	ST	Scheduled Tribe
NCERT	National Centre for Education Research and Training	TSP	Tribal Sub Plan
NCLP	National Child Labour Project	UP	Uttar Pradesh

List of Graphs, Matrices & Tables

List of graphs

Figure 1	Composition of India's Budgetary Expenditure on Education	15
Figure 2	Share of State Revenue Receipts in GSDP	22
Figure 3a	Patterns of School-Education Budget	24
Figure 3b	Patterns of School-Education Budget	24
Figure 4	Trends of Financing School Education in Select States	25
Figure 5	Change in Expenditure on Elementary, Secondary and School Education Between 2012-13 and 2015-16 (BE)	26
Figure 6	States with High Number of Teacher Vacancies	27
Figure 7	Share of Regular Teachers in Total Teachers	29
Figure 8	Share of Teacher Salary in School-Education Budget	29
Figure 9a	Share of Professionally-Trained Teachers	29
Figure 9b	Share of Teacher's Training in School-Education Budget	30
Figure 10	Share of Inspection and Monitoring in School-Education Budget	30
Figure 11	Share of Infrastructure in School-Education Budget	30
Figure 12	Share of Incentives in School-Education Budget	31
Figure 13	Component-Wise Distribution of School-Education Budget: Bihar	32
Figure 14	Component-Wise Distribution of School-Education Budget: Chhattisgarh	33
Figure 15	Component-Wise Distribution of School-Education Budget: Jharkhand	34
Figure 16	Component-Wise Distribution of School-Education Budget: Karnataka	35
Figure 17	Component-Wise Distribution of School-Education Budget: Madhya Pradesh	36
Figure 18	Component-Wise Distribution of School-Education Budget: Maharashtra	38
Figure 19	Component-Wise Distribution of School-Education Budget: Odisha	39
Figure 20	Component-Wise Distribution of School-Education Budget: Rajasthan	40
Figure 21	Component-Wise Distribution of School-Education Budget: Tamil Nadu	41
Figure 22	Component-Wise Distribution of School-Education Budget: Uttar Pradesh	42

Figure 23	Out-of-School Children by Socio-Economic Category	43
Figure 24	Share of Spending on Educational Intervention for Marginalised Children in School-Education Budget	44
Figure 25	Share of Spending on Educational Intervention for Girls in School-Education Budget	45
Figure 26	Out-of-School Children at Elementary Level	46
Figure 27	Share of Expenditure to Mainstream Out-of-School Children in SSA Budget	46
Figure 28	Share of Expenditure on Community Mobilisation and SMC/PRI Training in SSA Budget	47
Figure 29	Distribution of Schools by Management	48
Figure 30	Assistance to Non-Government Schools in School-Education Budget	49

List of matrices

Matrix 1	Performance of Select States at Elementary Level of Education	20
Matrix 2	Performance of Select States at Secondary Level of Education	20
Matrix 3	Categorisation of Components of School-Education Budget	28
Matrix 4	Schools Meeting Select RTE Norms on Infrastructure in 2013-14	31
Matrix 5	Net Attendance Ratio for Girls at Various Levels of Education	45

Table

Table 1	Allocation for School Education by Level	56
Table 2	State-wise Revenue Surplus (+)/Revenue Deficit (-) as % of GSDP	57

Мар

Map 1	Study States	18

Message from CBGA

ver the last couple of decades, a lot of substantive research has been done on public financing of education in India. In recent years, we have also seen some insightful and pertinent research on the gaps in implementation of prominent Central schemes for school education. Yet, in the policy debates on the issue of adequacy of public resources for school education in the country, the evidence cited with regard to quantum of budgetary spending has largely been at the aggregate levels. We, at CBGA, have felt that the intense debates on government financing of school education in India have happened with a somewhat limited set of evidence; the evidence used in these important discussions has been especially narrow with respect to the composition of school-education budgets in different states.

This could have been due to the limited attention paid to questions like: how different states are designing the quantum of budget available for school education—in terms of priorities across different components—and the implications of the design of school-education budgets on different parameters, including quality of teaching and learning in government schools. In such a context, CBGA and CRY have taken an initiative to analyse the budgets for school education across all states, covering all those departments that spend on school education-related services or interventions, and at a disaggregated level of spending.

We are presenting the findings of this study in the form of a Fact Sheet, which shares some of the key trends and numbers for all states, and this Study Report, which unpacks the composition of the budget for school education across 10 selected states. These two study outputs address only a few of the questions in the domain of government financing of school education in India; but they point towards a number of other pertinent issues that require deeper scrutiny and discussion.

However, the findings of this study indicate clearly that India's prevailing quantum of budgetary spending on education is inadequate not just because it falls short of the benchmark recommended decades ago by the Kothari Commission, but also because the paucity of funds for almost all important areas of public provisioning of school education—be it availability of teachers, their training, their monitoring, interventions for children from marginalised sections or those for strengthening community engagement with schools—is glaring in most of the poorer states. The overall deficiency in public financing of school education could not only be held responsible for gaps in coverage, and quality of outputs and services being delivered through government schools, but it could also be a major causal factor underlying the weak linkages between outlays, outputs and outcomes in this sector.

A mere reprioritisation of the existing quantum of budgets for school education would certainly not help most states address the deficiencies in their government schools system; there is clearly a need for a significant enhancement of the overall resource envelope for this sector. But when a state does move towards an expanded budget for school education, it would need to allocate the additional resources across the various components/ areas of provisioning in a manner that addresses the requirements more comprehensively.

We sincerely hope this Study Report and the Fact Sheet would provide some useful evidence for deepening the policy discourse in the country on school education. We will be grateful for suggestions on how we can add more value through our work in the coming years.

With regards, Subrat Das Executive Director, Centre for Budget and Governance Accountability

Message from CRY

his year, India completes 25 years of the New Economic Policy whose stated purpose was to improve our country's fiscal health towards growth and progress for all, including our most vulnerable citizens: children. The budget, both at the national and state level, is a concrete expression of the government's intentions and performance towards its citizens. Children comprise 40 percent of the total population, and yet they receive a mere 4 per cent of the nation's gross domestic product (GDP) to themselves. India's education budget has been stagnant for over the last 5 years, except a relative boost brought about by the Right to Free and Compulsory Education Act (RTE), 2009.

It is a matter of grave concern that we have lakhs of children still out of the fold of education, and, of those in school, only 33 children out of every 100 children enrolled tend to complete Class XII. Along with addressing various socio-cultural aspects related to education, it is equally important to make adequate budgetary allocations to ensure all children are in school and availing quality education. The recognition of child as a distinct stakeholder in the public discourse on budgeting, as well as a measure of state accountability, started only a decade ago. It still remains a significant area of inquiry, as change for children has been incremental, and resource deficiency has been central to the debate.

The year 2015-16 has been significant for the country with policy measures that have changed the fiscal architecture of India. These are likely to have a direct impact on public provisioning of education at the state level. It is pertinent at this juncture to examine how states are prioritising their budgets in terms of allocations, estimations and revisions for school education.

We, at CRY, strongly believe that adequacy of resources, including sufficient budgetary investments for 333 million children (6 to 18 years), has tremendous potential in shaping India's children. In fact, when CRY was started in 1979, by Rippan Kapur, the very first project it supported was on teacher training and education. Ever since, CRY has spread its mission to enable the realisation of rights of more than 20 lakh under privileged children across 23 states in India. The learning from these experiences has only strengthened our conviction that education helps in creating a sound foundation and is, therefore, crucial for a happy, healthy and creative childhood.

CRY is pleased to initiate a study series with CBGA that examines public expenditure on school education in the post-RTE era. It is interesting to note that all government departments administering funds for education are scrutinised in this study, which I am sure will shed new light on the way the state is planning and allocating financial resources towards ensuring the rights of its great citizens, our children.

With Faith and Goodwill, Puja Marwaha Chief Executive, CRY-Child Rights and You

Acknowledgements

e would like to thank Mr. Basanta Nayak, Mr. Daya Ram, Dr. Nesar Ahmad, Ms. Pooja Parvati, Mr. Prasanta Pradhan, Prof. Praveen Jha, Prof. R. Govinda, Mr. Ravi Duggal, Prof. Tapas Sen and Mr. Vikash Singh for their valuable comments on the draft version of the report. Their insightful comments and suggestions on the draft report, in the discussion held on October 19, 2016, have helped us immensely in addressing some of the lacunae in our analysis. However, we have not been able to incorporate a number of very substantive suggestions made by them, which we will pursue as important ideas for deepening our research in this field in the coming years.

We extend our gratitude to Ms. Puja Marwaha, Ms. Rajni Bakshi, Ms. Vijayalakshmi Arora, and a number of other colleagues from CRY for their very helpful inputs and suggestions over the course of this study.

We would like to thank Mr. Abdul Muiz, Mr. Adnan Ul Hasan, Mr. Apoorv Jain, Ms. Devyani Singh, Mr. Imran Ansari, Mr. Khwaja Mohd. Wamiq, Mr. Khwaja Mohd. Zaid, Mr. Mohammad Arsalam, Ms. Nomy Katta, Mr. Rajkumar Byahut and Mr. Ramgati Singh for their invaluable contribution towards compilation of data for this study.

We convey our special acknowledgement to the library of NIPFP.

We would remain ever grateful to Dr. Komal Ganotra, Ms. Anuja Shah and Ms. Sangeeta M. from CRY for their constant guidance, support and encouragement.

Finally, we would like to thank all our colleagues at CBGA for their rich insights and suggestions, which have helped us a lot in deepening our analysis.

However, any errors or omissions are solely our responsibility.

Study Team

Executive Summary

Background

The Ministry of Human Resource Development (MHRD) will soon bring out a New Education Policy (NEP). The first National Policy on Education was framed in 1986 and modified in 1992. The Sarva Shiksha Abhiyan (SSA) was launched in 2002, and in these 15 years, the Indian education system has seen several changes in educational demand, structure, financing and outcomes. To address these changing dynamics, the MHRD has called for a revision of the policy. The broader focus of the NEP is to improve quality of education and create avenues for gainful employment.

In 1966, the Kothari Commission recommended that total government spending on education be raised to 6 percent of Gross National Product (GNP) by 1986. The NEP endorsed this target, both in the original policy in 1986 and the modified version in 1992. Yet, at present, the Union and states collectively spend less than 4 percent of GDP on education.

Although a substantial proportion of public resources for education come from State Governments, one-third of resources are allocated by the Union Government. An earlier calculation on spending by 25 states on elementary education showed that State Governments spent 1.17 percent of India's GDP and the Union Government 0.38 percent of GDP in 2012-13 (BE) (Jha, Parvati, 2014).

A consistent decline in the Union Government's share in the country's budgetary spending on education has shifted the responsibility progressively towards states. Further, in the resource-sharing process, states compete for a larger share of resources from the Union Government. Since the size of the cake from which each state's share of education is to be sliced is relatively small, this competition sometimes results in confrontation between State Governments and the Union Government on the question of devolution of resources (Varghese & Tilak, 1991).

The year 2015-16 was vital for the country in the domain of fiscal policy. Certain fundamental policy measures have changed the federal fiscal architecture of India. These include acceptance of the 14th Finance Commission's recommendation on increased devolution of central taxes to states, reduction in the Union Government's Plan grants for states, abolition of Planning Commission, etc. It is implicit the changed fiscal architecture will directly impact public provisioning for education at the state level. At this juncture, it is pertinent to examine how states are prioritising their budgets and allocating for school education. As per the latest available data from MHRD, about 68 percent of the total education budget goes towards school education. The remaining 32 percent goes towards university and higher education, technical education and adult education. In spite of school education receiving the higher share in the total education budget, India is yet to universalise elementary education; the situation is worse in secondary education (in 2014, the net attendance ratio [NAR] at this level was 52 percent). This implies that policy pronouncements for school education might not be translating into strong government interventions on the ground. This is possible if there are major gaps at the budgeting stage for the policy concerned or at the implementation stage.

In this context, it is pertinent to question how states are financing school education and how has this changed following the alterations to India's fiscal architecture.

Rationale

Till date, there is limited information available in the public domain on the composition of state level spending on school education. The information available is mostly at the aggregate level. There is less information on major deficiencies/gaps in allocation of budgets for school education across different states, as well as across different components within public provisioning for school education. An appropriate analysis of all these aspects can generate insights needed to suggest corrective policy measures at different levels.

This study is an effort to unpack the structure and composition of school-education budgets across states. The study tries to answer some basic questions like:

- How much is a State Government spending on school education?
- What budgetary resources have been allocated for/spent on different components of school education?
- What are the implications of the prevailing composition of school-education budgets across states?

After the implementation of the Right of Children to Free and Compulsory Education Act (RTE) in 2010, states have brought about some improvement in school education in terms of infrastructure, enrolment, attainment, etc. The study examines whether states have injected more money into elementary education to accomplish the goal of RTE or it is routine incremental budgeting. The study also tries to answer larger questions like how inclusive is the public provisioning for education. While designing their budgets, in the planning and budgeting process, are states taking into consideration the requirements of socially- and economically-weaker sections of children like girls, Scheduled Castes (SCs), Scheduled Tribes (STs) and Muslims?

Scope

The study tries to answer these questions through **a detailed analysis of budgets of 10 states.** The mix of states is intended to represent the four main regions of India, and cover both better- and poor-performing states in the education sector. The 10 states, in alphabetical order, are: Bihar, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Uttar Pradesh.

Initially, education was the responsibility of states. But, in 1976, education was placed in the Concurrent List, and became a joint responsibility of both the Union Government and State Governments. At both levels, besides the Department of School Education, many other departments incur substantial amounts of expenditure on education.

Our analysis covers expenditure by all such departments that report spending on school education in their budgets. These departments include Department of Women and Child Development, Department of Social Security and Welfare, Department of Minority Welfare, Department of Tribal Welfare, Department of Rural Development, Department of Urban Development, Panchayati Raj Department, Department of Public Works, Department of Drinking Water and Sanitation, and Department of Planning.

The study analyses the expenditure on school education for 10 states at the most disaggregated level. Hence, the Detailed Demand for Grants (DDGs) of all the above-mentioned departments have been analysed to capture relevant data for four years: 2012-13 (Actuals), 2013-14 (Actuals), 2014-15 (Budget Estimates), 2014-15 (Revised Estimates) and 2015-16 (Budget Estimates).

Findings and Policy Implications

How a state designs its resources for school education depends on several factors. Good policy measures draw upon an appropriate balance between different types of input, output and outcome indicators so as to establish the link between means and ends. Hence, before analysing the budgetary pattern of school education, the study mapped the 10 states in the educational attainment ladder on five dimensions of education: management, infrastructure, access, quality and learning enhancement. The resources available in a state's exchequer is an important determinant of its spending capacity. Since expenditure on education is more in the nature of revenue expenditure, the study looked at revenue receipts of the 10 states for the last four years to gauge the fiscal space available to a state relative to the size of its economy. All 10 states show an increase in revenue receipts in absolute terms, but the situation varies when compared with their respective Gross State Domestic Product (GSDP).

While the pattern of devolution of resources may indirectly address national priorities for education, their actual utilisation is the responsibility of State Governments. The pattern of financing of school education and the question of its position in the overall development framework has been answered by looking at the three prominent indicators: school education budget as percentage of GSDP, school education budget as percentage of state budget, and per child and per student spending.

Although the study shows that, in all 10 states, the expenditure on school education has increased in the last four years, a break up shows that in states other than Karnataka and Uttar Pradesh, the growth of expenditure in secondary education is higher than that in elementary education.

States having higher GSDP like Karnataka, Maharashtra and Tamil Nadu are spending lower levels on school education as compared to the size of their economy, whereas economically-backward states like Bihar, Uttar Pradesh, Rajasthan and Odisha are spending 4-5 percent of their GSDP on school education.

A similar pattern is observed when the school-education budget of a state is compared with its total budget. It can be argued that states with better outputs and outcomes in school education are not prioritising school education in their budgets now. On the contrary, **relatively poor-performing states are prioritising education in their budget**. These states are also realising the importance of secondary education, **and prioritising secondary education over elementary education**.

Per child spending in most states is above Rs. 10,000 per annum. There is huge debate over learning outcomes in private schools as compared to government schools, vis-à-vis lower per student spending in private schools as compared to government schools. However, Kendriya Vidyalayas and Navodaya Vidyalayas, which are considered as 'model' government-run schools in terms of providing quality education, spend Rs. 27,150 and Rs. 85,000, respectively, per student per annum at the elementary level, which are much higher than per student spending by the states.

Financing of school education-total school-education

budget and pattern of expenditure—provides a partial picture about a state's education policy. However, educational performance of states has a direct relation to the design of their school-education budgets. The study tries to capture how states are allocating and spending on different components of school education: mainly teacher salary, teacher training, inspection and monitoring, incentives to children, school infrastructure and Mid-Day Meal (MDM).

Teachers are the core of any school and thus their role in quality improvement is paramount. Teaching is a demanding and constantly evolving profession. Hence, regular training of teachers is an imperative for quality education. For all 10 states, teacher salary constitutes the largest share of school education budget. But, **economically-weaker states like Bihar, Jharkhand, Odisha and Chhattisgarh spend less than 60 percent of their school education budget on teacher salary.** This figure is above 70 percent for Uttar Pradesh and Karnataka, and around 80 percent for Rajasthan. Incidentally, Uttar Pradesh, Bihar, Jharkhand, Odisha and Madhya Pradesh are the five states with a huge number of teacher vacancies.

According to an MHRD report, about 20 percent of government-school teachers are untrained and the proportion of trained qualified teachers has been almost stagnant for the last five years. Despite the lack of trained teachers, spending on teacher's training is being neglected by most State Governments. In fact, **Bihar is the only state to allocate 1.6 percent of its school-education budget to teacher's training; in other states, it varies from 0.2 percent to 0.6 percent**.

Along with teachers, infrastructure in a school plays a key role in quality education. It includes not only the availability of facilities but also the extent to which they are utilised. The study shows that most government schools in these 10 states have failed to meet all RTE-mandated infrastructure requirements even after four years of implementation of the Act. Karnataka, Tamil Nadu and Maharashtra, which are already doing relatively better in school education, are also the states that have fulfilled or are nearing fulfillment of RTE norms for different indicators in all their schools. Although the share of expenditure on infrastructure varies from 2.5 percent to 13.5 percent across different states, **a higher share of allocation for infrastructure is observed in most states in 2015-16** on account of trying to meet the deadline of RTE compliance for infrastructure.

The last few years have seen debates on teacher accountability, student performance and poor implementation of schemes across states. Better inspection and monitoring is a crucial determinant to address this issue. However, state budget analysis shows inspection and monitoring is another component that is severely resource-starved. There is extensive literature that shows programmes like monetary and non-monetary incentives to children, and MDM, have played a very important role in improving school enrolment, attendance and retention of specific groups in schools. In the recent past, every state has taken several policy initiatives to promote education, especially among sociallyand economically-weaker sections of children.

In this respect, Bihar's case is significant: the state is spending around 22 percent of its school-education budget on incentives. Some other educationally-backward states like Uttar Pradesh, Odisha, Madhya Pradesh and Jharkhand are also spending around 10 percent or more of their total schooleducation budget to incentivise children. However, in all states other than Karnataka, the share of MDM in the schooleducation budget has fallen between 2012-13 and 2015-16 (BE).

Better designing of school-education budget does not necessarily translate into universal quality education. It depends on how inclusive is the education system. India's population consists of 16 percent SCs, 9 percent STs and 13 percent Muslims. Around 28 percent of the population is below the poverty line. The Indian Constitution acknowledged the centuries of social, economic and educational deprivation suffered by the marginalised sections. In order to protect these communities, specific provisions were incorporated in the Constitution, and states were directed to promote educational and economic interest of the people belonging to these communities.

The study analyses how the school-education budget is designed to promote education for children from SC, ST, Other Backward Class (OBC) and minority community, students from economically-weaker sections and students with special needs. The study also looked at two other most vulnerable groups, girl children and out-of-school children (OOSC), and the budgetary interventions that states are making to promote their education.

In the last few years, almost every state has introduced a number of schemes to promote education among girls and marginalised children. With the introduction of SSA, provisions have also been made to bring out-of-school children back into mainstream education. However, findings from the study reveal that the higher number of policy interventions have not been supported by higher budgetary allocations.

Even for the state that spends the highest on this component of the budget, the intervention for girls comprises less than 6 percent of the school-education budget. Major shares of public expenditure on education of SCs and STs are carried out from the Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan (TSP), respectively. Bihar, Jharkhand, Odisha and Chhattisgarh are four states where more than 20 percent of the school-education budget is being spent on children from the marginalised sections. Chhattisgarh, with a high share of SC and ST population, spends around 50 percent of its school-education budget on SC and ST children.

Other than SSA, no other interventions for OOSC are found in the budgets of the 10 states. **Bihar and Chhattisgarh**, where the proportion of OOSC is high, are spending about 5 percent of their SSA budget on OOSC. In other states, the spending is less than 1 percent of the total SSA budget.

Better governance, both at the level of planning, and management and monitoring, is a pre-requisite for smooth and efficient functioning of schools. Schools having greater local decision-making authority and accountability show better educational outcomes. School Management Committees (SMCs), set up under the RTE Act, have been assigned substantial powers to improve school functioning through monitoring, community mobilisation, participation in schoollevel planning and budgeting. However, **no state has spent even 1 percent of its SSA budget to empower SMCs and strengthen community participation.**

Private schools, too, are an important beneficiary of government financing for school education. The government provides grants to privately-aided schools (both elementary and secondary) in the form of teacher salaries, and other overheads like expenditure on teacher training, incentives, administration and management, curriculum development, examination system, etc.

Besides grants to privately-aided schools, government resources also go to private-unaided schools. The RTE Act, 2009, mandates that non-minority, private-unaided schools should reserve at least 25 percent of their seats in entry-level grades for children from economically-weaker and disadvantaged backgrounds. Such schools are to be reimbursed by State Governments at the rate of per child expenditure incurred in government schools or the school fees (section 12(1) (c)). Hence, based on the seat filled rate, privateunaided schools receive funds from the State Government as compensation for admitting children from economicallyweaker sections. **The proportion of school-education budget going to private schools varies from 2.1 percent in**

Chhattisgarh to 49.7 percent in Uttar Pradesh.

The study concludes the school education system is plagued by inadequate resources, shortage of trained teachers, poor infrastructure and overall poor learning outcomes. The challenges are common to states, though the depth and scale of these problems differ. Since states have been struggling with limited fiscal space for long, and hence have a limited resource envelope for education, skewed allocation of resources within their school-education budgets poses a major concern.

The availability of financial resources is inadequate or deficient for all components of school education, including teacher salary. However, the shortage of resources seems even more acute for recruitment of additional teachers, teacher training, building adequate school infrastructure and regular monitoring, among other things. Saving funds by reducing teacher salaries and benefits, or cutting down the number of teachers and other staff, is counterproductive, as it discourages good teachers from wanting to enter or remain in the profession.

The immediate need of the hour is to enhance the fiscal space available to the Union and State Governments for public spending on school education. Since education is in the Concurrent List, which implies a shared responsibility of the Union and State Governments, concerted efforts should be made by both levels to step up public investment in school education. **Thus, it is necessary to enhance the overall quantum of budgets for school education in the country.**

In terms of designing their school-education budgets better, states need to allocate more funds for teacher training, inspection and monitoring, infrastructure strengthening, and interventions aimed at marginalised children, especially those with disabilities. Better governance and better implementation can be achieved through effective participation of the community in the education system. Along with better and efficient management of material resources, it is essential to address the issue of shortage in human resources to raise the quality of the education system. A substantially improved process of decentralised planning, smoothening of fund flows, addressing the bottlenecks in the fund utilisation process and constant monitoring can help bridge the gaps between resource needs, budget allocations and actual spending.

CHAPTER I

Introduction

round 68 years ago, India began its journey towards the goal of universal and free basic education. The Union Government initiated a number of programmes to achieve the goal of Universalisation of Elementary Education, the most significant of which is the SSA, launched in 2001. Legislative response finally came through the Right of Children to Free and Compulsory Education (RTE) Act, 2009, which came into force on April 1, 2010, to provide free and compulsory education to children in the age group of 6-14 years in a neighbourhood school. In spite of these Government interventions, the story of India's educational achievements is one of limited success.

Although India has made some encouraging progress in increasing school participation, more than 10 million children in the 5-14 years age group are out of school (as per Census 2011). The situation is dire in secondary education as government spending at this level remains substantially low. In 2009, MHRD launched a centrally sponsored scheme (CSS)¹ called Rashtriya Madhyamik Shiksha Abhiyan (RMSA) to increase access to, and improve quality of, secondary education. Yet in 2012, the gross enrolment ratio (GER) in secondary education was 75 percent.

Given the country's potential 'demographic dividend', it is critical India's policy response in the domain of public education be accorded higher priority. For a long time, systemlevel reforms implemented through pan-India projects have been the chosen means of improving learning outcomes. Even under SSA, it continues more or less the same way. This approach has to give way to a clear recognition of the individual school as the primary unit for improvement action. Another shift in approach needed is to design more contextualised and prioritised action strategies. Generic inputs to schools can help only to a limited extent; merely adding more of such inputs do not guarantee change and improvement (Govinda and Bandyopadhyay, 2010).

The year 2015-16 was crucial for the country in the domain of fiscal policy. Certain fundamental policy measures like acceptance of the 14th Finance Commission's recommendations on increased devolution of central taxes to states, reduction in Union Government's Plan grants for states and abolition of the Planning Commission, among others, have changed the overall fiscal architecture of India.

In a spirit of strengthening federal governance and cooperative federalism, the Union Government has accepted the recommendations of the 14th Finance Commission to increase devolution of the divisible pool of central taxes to the states from 32 percent to 42 percent. At the same time, the Union Government has slashed its grants to states for plan expenditure. Due to this, the Union Government's share on education spending has reduced further. Since the Union accounts for a smaller share than the states in the country's total budgetary spending on education, it is implicit the new fiscal architecture will have a direct impact on the public provisioning of education at the state level.

Rationale

Budgets are important policy instruments in the hands of the government to fulfill promises and commitments towards different sectors and sections of the population. Hence, the responsiveness of government's policies and budgets to the rights, needs and priorities of children is a critical aspect of governance.

Policy pronouncements, in any sector, might not translate into strong government interventions on the ground if:

- i. there are major gaps in the budgeting stage for the policy concerned and/or;
- ii. there are major gaps in the implementation of the programmes/schemes that are meant to translate the policy into concrete interventions on the ground.

Several policy reports and research studies cite limited resource absorption capacity of states, lack of transparency in financial management, weak accountability mechanisms and weak decentralised planning processes as some of the major reasons for poor implementation of schemes (CBGA, 2011).

At present, a reasonable amount of information is available in the public domain on issues related to implementation of schemes meant to improve educational

¹ CSS are funded by both Union and State governments: resources are shared in a specific ratio between Union and state, and are implemented by the state government.

attainments of children. These include Sarva Shiksha Abhiyan (SSA), Mid-Day Meal (MDM) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA). (SSA is also being viewed as the main vehicle to channelise public resources for implementation of the RTE Act.)

However, we have limited information on in-depth insights on the possible gaps/flaws in budgeting for this sector. The information available is mostly at the aggregate level. For example, we know the total public spending on education

Figure 1: Composition of India's Budgetary Expenditure on Education



Elemer Adult e	Elementary education Secondary education Adult education Technical education				Universi	ty & higher e	education
12.0	7.7	8.8	14.4	12.0	13.3	14.6	15.0
-0.3-	-0.2-	0.2	0.3	-0.3-	0.3	-0.3-	<u> </u>
19.3	24.5	24.3	19.3	21.3	16.1	14.7	15.3
23.3	23.0	24.2	25.0	24.3	25.6	25.2	24.9
45.2	44.6	42.5	41.0	42.1	44.7	45.2	44.6
2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	(012-13 (RE)	:013-14 (BE)

Note: Figures in percent

Source: Analysis of Budgeted Expenditure on Education, various years, Planning and Monitoring Unit, Department of Higher Education, MHRD (2013); GDP figures are from National Account Statistics, 2014, CSO

is around 3.9 percent of GDP, which is much below what the Kothari Commission recommended in 1966—it should increase to 6 percent of GNP by 1986. We know the share of school education in the total education budget has been around 68 percent. We know the Union-State resource sharing for education is skewed, with states contributing two-thirds or more of the total budget for education (Figure 1).

However, we don't know in detail some of the major deficiencies/gaps in allocation of budgets for school education:

- (a) across different states (i.e. which states have spent lesser amounts on school education than others and why);
- (b) across different components within public provisioning of school education (i.e. salaries of teachers and other human resources, training of teachers, teaching learning materials, scholarships, textbooks and uniforms, infrastructure, etc.); and
- (c) vis-à-vis the various norms and provisions of the RTE Act, 2009.

Objective

The study has been carried out for 10 select states: Bihar, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Uttar Pradesh. They represent a combination of better- and poorperforming states in education, representing four main regions of the country.

The study has addressed a set of simple questions to unpack the structure and nature of school-education budgets for each of the 10 study states over the last four years: 2012-13, 2013-14, 2014-15 (RE) and 2015-16 (BE). A comprehensive analysis of these aspects would generate the insights needed to suggest corrective policy measures at different levels in the select states. The questions are:

- 1. What is the overall resource envelope of the state?
- 2. How much does the state government spend on school education?
- 3. How much budgetary resources have been allocated/spent for different components of school education in the state?
- 4. How inclusive is school education? Is there any government intervention for marginalised sections, girls or OOSC in the state budget?
- 5. How much does the state government spend on 'Enhancing the Community Engagement with Schools'?
- 6. How much does the government contribute towards nongovernment schools?

Methodology

Public expenditure on school education covers expenditure at three levels: elementary, secondary and senior secondary. The sources include expenditure by the Union Government, state governments, local bodies and foreign aid (which is transferred primarily through government budgets).

Initially, education was the responsibility of states. But in 1976, it was placed in the Concurrent List, and became the joint responsibility of both the Union and State Governments. Both at the Union and the state level, along with the Department of School Education, many other departments incur a substantial amount of expenditure on education. This analysis covers expenditure by all such departments that report spending on school education in their budgets. These include Department of Women and Child Development, Department of Social Security and Welfare, Department of Minority Welfare, Department of Tribal Welfare, Department of Rural Development, Department of Urban Development, Panchayati Raj Department, Department of Public Works, Department of Drinking Water and Sanitation, and Department of Planning.

The Ministry of Human Resource Development at the Union level and the Department of Education at the state level together finance more than 80 percent of the school-education budget (elementary and secondary together). There is some expenditure by the Department of Education of states that is not earmarked exclusively for elementary or secondary education; it is spent on schools as a whole or for school administration or the education secretariat. The analysis presented here includes these amounts in the figures for total expenditure on school education.

The expenditure incurred by other departments is also designed mostly to cater to children studying in classes I to X, or post-matric students, or students of classes I-XII altogether. As a result, a sizable amount of government expenditure on schools and students is considered at an overall level, and the figures (presented in this report) for budgetary expenditure at the elementary and secondary levels are underestimations. Nonetheless, as explained earlier, the figures for total budgetary expenditure on school education are far more comprehensive.

In order to capture the total budgetary spending on school education, both the Union and state budgets have been analysed at the most disaggregated level. Hence, DDGs of all the departments mentioned above have been analysed for four years: 2012-13 (Actuals), 2013-14 (Actuals), 2014-15 (Budget Estimates), 2014-15 (Revised Estimates) and 2015-16 (Budget Estimates).

The 2015-16 figures include the supplementary budgets that states presented that year. It was important to capture this information as, following changes in the Union-state sharing of resources (as per recommendations of the 14th Finance Commission and the NITI Aayog's sub-group of Chief Ministers in 2015), most states depended on supplementary budgets to adapt to the new fiscal arrangements that started in 2015-16.

Following the 73rd and 74th constitutional amendments, besides Union and State Governments, both rural and urban local bodies are also responsible for providing elementary education. Expenditure on elementary education by local bodies can be financed by any of three possible sources:

- (a) funds disbursed to them by the Union Government or State Government departments (i.e. funds meant specifically for elementary education;
- (b) expenditure financed from untied funds devolved to local bodies;
- (c) expenditure financed from revenue sources mobilised by local bodies.

The analysis presented here includes (a), but not (b) and (c). Having said that, both the level of devolution of untied funds to local bodies and revenues mobilised by them from their own sources differ widely across states; and, barring a few states, these are low in most cases. Hence, the analysis has not excluded any significant proportion of public spending on education at the level of local bodies.

Until 2013-14, state budgets did not include the Union Government's share of funds for the two major CSS for school education: SSA and RMSA. This is because the money was flowing directly from the Union Government to SSA and RMSA societies, bypassing the state treasuries, and hence the state budgets. From 2014-15 onwards, the fund flow mechanism has changed, and the Union Government's expenditure on SSA and RMSA is reflected in the state budget. However, in some states, this reporting process was not observed in 2014-15 (BE).

In order to capture the total SSA and RMSA expenditure in a state (i.e. the Union and State Government shares combined) for 2012-13 and 2013-14, data on funds released to different states for SSA and RMSA by the Union Government were collected from the SSA portal and the MHRD portal. The states' budgetary expenditure on SSA and RMSA (reflected in State Budgets) were added to the Union Government releases to arrive at the total SSA and RMSA expenditure figures. Thus, for 2012-13 and 2013-14, there is some approximation in arriving at the total 'actual' expenditure figures for SSA and RMSA, since the state's share of expenditure is actual while the Union's share of expenditure is funds 'released'. However, for 2014-15 and 2015-16, the figures are entirely from the State Budget documents, and hence no such approximation is involved there.

In order to assess the relative resource availability for school education across states, this report has calculated the

'per child spending' on education. The analysis is done for the 6-17 years age group (school going age), the thinking being that governments design policy on the basis of a population, not a sample. However, 'per student expenditure' figures have also been provided for comparison. A rider: since data for children of this age group was not available for the study period, the projected population data for this age group provided by MHRD has been used for calculation.

Structure of the study

This report is presented in eight sections, including the

introduction. Section II presents a comparative picture of educational performance of the 10 study states at the elementary and secondary levels. Section III examines the size of the resource envelope of states before and after the changed fiscal architecture. Section IV analyses each state's spending on school education. Section V provides the composition of school-education budget across states and within the state. Section VI raises the question of inclusivity of the school-education system from the budgetary lens. Section VII tracks the issue of governance and stakeholders from budgetary perspectives. The study concludes with research findings and policy recommendations.

CHAPTER II

Comparative Analysis of Educational Outcomes Across Select States

n education indicator shines light on one or more aspects of the education system. How a state designs and allocates its resources for school education depends on a number of indicators. Good policy measures strike a judicious balance between different types of input, output and outcome indicators to establish the link between means and ends.

Map 1: Study States



Before examining the budgetary pattern of school education, this section maps the position of the 10 study states in the education ladder. A set of indicators representing different dimensions of education such as management, infrastructure, access, quality and learning enhancement have been used to gauge a state's performance in school education (See Matrix 1 for elementary level and Matrix 2 for secondary level).

Management refers to the pattern of the existing governing system. Infrastructure (percentage of schools having drinking water facility, percentage of schools having girls hostel) is an input indicator, which determines accessibility and quality of education. Access (net attendance ratio, percentage of girls' enrolment, distance of school from household) determines the use and accessibility of school education. Quality is a combination of input and output variables (drop-out rate, transition rate, pupil-teacher ratio) that explain the factors that determine the quality of education. Learning enhancement is an outcome indicator that represents educational achievement.

Management

Literature shows better management quality provides better educational outcomes (Bloom et.al. 2014). A number of studies find that, even after eight years of schooling, children in government schools in India don't acquire basic literacy and numeracy skills (PROBE 1999, Pandey et al, 2008; ASER 2014).

It is widely perceived that privately-managed schools deliver better learning outcomes than government-run schools, and are hence preferred by parents. The PROBE Report (1999, page 63) notes: "In a private school, teachers are accountable to the manager (who can fire them), and, through him or her, to parents (who can withdraw their children). In a government school, the chain of accountability is much weaker, as teachers have a permanent job with salaries and promotions unrelated to performance. This contrast is perceived with crystal clarity by the vast majority of parents." However, studies have also shown that in both private and government schools, the overall quality is low and learning gains from one grade to the next are small (Goyal and Pandey, 2010). Nonetheless, in the last 10 years, the numbers of privately-managed schools have increased substantially and continue to be on the rise.

In India, about 75 percent of elementary schools are run either by the state government or the Union Government or local bodies. In Bihar, Chhattisgarh, Odisha, Jharkhand and Madhya Pradesh, more than 80 percent of elementary schools are managed by the government. By comparison, a relatively higher number of privately-managed schools are situated in Rajasthan (35 percent), Uttar Pradesh (34 percent), Tamil Nadu (34 percent) and Maharashtra (30 percent). The share of privately-managed schools (includes both government-aided and government-unaided) is quite high at the secondary level: above 90 percent in Uttar Pradesh and above 80 percent in Maharashtra.

Infrastructure

Infrastructure is an input indicator that determines accessibility and quality of education. Basic infrastructure is the primary requisite for any school. It includes not only the availability of facilities, but also the extent to which they are utilised and hence become easier to monitor.

The RTE Act has clearly specified norms for school infrastructure. The Act states that each school should have:

- 1. At least one classroom for every teacher
- 2. Office-cum-store-cum-head teacher's room
- 3. Separate, usable toilets for girls and boys
- 4. Safe and adequate drinking water facility
- 5. Kitchen where mid-day-meal is cooked in the school
- 6. Playground
- 7. Arrangements to secure the school building by boundary wall or fencing

The Supreme Court, too, has ruled that separate toilets for boys and girls, as well as drinking water facilities, should be in all schools, including those run by minority communities, to ensure RTE (Tol, 2014). Most states are able to provide for drinking water in schools. However, a separate toilet for girls in all schools is still a distant dream for many states. In Bihar, 30 percent schools at the elementary level don't have girls' toilets. Moreover, the existence of a separate toilet does not ensure functional toilets.

Access

India has achieved near-universal enrolment at the elementary level. But when examined against attendance of age-specific population, the data shows sizable variation across states. Although all 10 states shows a NAR at the elementary level of above 80, only Tamil Nadu, Karnataka and Maharashtra have an NAR above the national average (87). The gaps become wider at the secondary level: Karnataka has the highest NAR (74), but it's below 50 for Uttar Pradesh, Jharkhand, Rajasthan, Bihar and Madhya Pradesh.

Although female enrolment has shown a significant increase, especially at the elementary level, the disparity in enrolment does not seem to have reduced much at the secondary level. In Rajasthan, 41 percent of girls are enrolled at the secondary level, which would be lower if measured by attendance.

To improve access, it was mandated under RTE that every household should have a primary school within 1 km of habitation, and under RMSA, a secondary school within 5-7 km of habitation. In all 10 states, more than 90 percent of households have an elementary school within 1 km and more than 75 percent households have a secondary school within 5 km.

Quality

RTE mandates a pupil-teacher ratio (PTR) of 30:1 in order to ensure better learning outcomes in classrooms. The ratio is 32: 1 for secondary education, as envisaged for RMSA. Bihar, Jharkhand and Uttar Pradesh have not yet achieved the PTR mandated under RTE, with Bihar having the highest PTR at the elementary level, of 50. The same three states also show a high PTR at the secondary level (DISE 2014-15).

The average drop-out rate and transition across levels of education indicate the quality of education provided in schools. In spite of substantial improvement in retention after RTE, the incidence of drop-out is still high in Madhya Pradesh, Rajasthan and Uttar Pradesh. The incidence is higher at the secondary level. While the average drop-out rate at the secondary level is 18 percent, it is as high as 50 percent in Odisha. In most states, the transition rate from primary to upper primary is much higher than from secondary to higher secondary. For example, in Bihar, the transition rate from primary to upper primary is 82 percent, but only 44 percent from secondary to higher secondary (DISE, 2014-15).

Learning enhancement

Learning outcomes are often used as a proxy for the quality of education provided. The most cited source in this regard is the ASER survey at the elementary level and National Achievement Survey (NAS) by NCERT at the secondary level¹. The matrix for elementary education shows that in Uttar Pradesh, Madhya Pradesh, Jharkhand and Bihar, 50 percent children in standard IV cannot read a standard I text book. The best-performing state is Maharashtra, but here too only 69 percent children have passed the test.

In the absence of any regular achievement test at the secondary level, the NAS conducted in a few states is the only source of information on how states are performing on learning outcomes. Karnataka is the best-performing state, with 45 percent of items questioned in English being correctly answered by students of class X.

A mapping of all 10 states on 10 indicators, representing five dimensions of the education system, portrays a mixed picture of performance (Matrix 1 and Matrix 2). There are two consistent features. One, in most cases, all BIMARU states, which are also economically poor/backward, perform below the national average at all levels of education. Two, states like Karnataka, Maharashtra and Tamil Nadu show better performance on input, output and indicators.

¹ ASER: Annual Status of Education Report (Rural), a survey by an NGO called PRATHAM; NCERT: National Council of Educational Research and Training



Matrix 1: Performance of Select States at Elementary Level of Education

Note: States arranged in alphabetical order

20

Source: DISE 2014-15 (management, infrastructure and quality), NSS 71st Round, 2014 (access), ASER (learning outcomes)

Matrix 2: Performance of Select States at Secondary Level of Education

	Management	Infrastru	cture	Access			
	Secondary schools managed by government (%)	Schools with drinking water facility (%)	Secondary schools with girls toilet facility (%)	Net Attendance Ratio at secondary level	Girls enrolled in secondary education (%)		
Bihar	76.9	98.4	86.1	44.0	47.9		
Chhattisgarh	68.8	97.1	91.0	55.0	49.8		
Jharkhand	88.5	<mark>9</mark> 6.7	91.9	43.0	48.4		
Karnataka	71.2	99.6	98.6	74.0	48.8		
Madhya Pradesh	52.4	97.9	90.6	47.0	45.8		
Maharashtra	17.5	100.0	99.6	62.0	45.7		
Odisha	54.6	99.2	90.2	67.0	49.4		
Rajasthan	49.8	98.8	99.5	43.0	41.1		
Tamil Nadu	51.9	99.5	99.9	69.0	50.6		
Uttar Pradesh	8.7	99.4	99.5	<mark>3</mark> 6.0	47.2		
India	43.3	98.5	96.3	52.0	47.3		

Note: States arranged in alphabetical order; Source: DISE 2014-15 (management, infrastructure, quality and girls enrolment), NSS 71st Round, 2014 (access, except girls enrolment), National Achievement Survey, NCERT (learning outcomes)





Note: States arranged in alphabetical order

Source: DISE 2014-15 (management, infrastructure and quality), NSS 71st Round, 2014 (access), ASER (learning outcomes)

Matrix 2: Performance of Select States at Secondary Level of Education

		Quality		Learning outcomes
Households living within 5 km of secondary school (%)	Average drop-out rate at secondary level (%)	Transition Rate: secondary to higher secondary (%)	Pupil-teacher ratio	Items correctly answered in English in Class X (%)
86.1	25.3	44.4	48	NA
91.0	23.4	58.5	33	NA
81.2	23.2	59.3	66	NA
76.6	27.6	45.7	19	45.0
77.3	26.5	56.8	40	30.0
85.0	14.5	82.8	28	41.0
87.6	49.5	2.3	20	38.0
92.0	18.8	64.4	28	33.0
85.5	12.2	79.8	23	30.0
89.0	7.3	80.5	72	NA
87.8	17.9	68.3	31	41.0

Note: States arranged in alphabetical order; Source: DISE 2014-15 (management, infrastructure, quality and girls enrolment), NSS 71st Round, 2014 (access, except girls enrolment), National Achievement Survey, NCERT (learning outcomes)

CHAPTER III

Overall Fiscal Space with the States

he International Monetary Fund (IMF) defines 'fiscal space' as "room in a government's budget that allows it to provide resources for a desired purpose without jeopardising the sustainability of its financial position or the stability of the economy." (Marcel, 2012.) The United Nations (UN) defines it as "the financing available to a government as a result of concrete policy actions for enhancing resource mobilisation, and the reforms necessary to secure the enabling governance, institutional and economic environment for these policy actions to be effective, for a specified set of development objectives." (Roy, Heuty and Letouze, 2007). It is implicit from these definitions that enhanced fiscal space can create additional resource flow for education, without affecting expenditure in other sectors needed to achieve other development objectives.

In India, historically and constitutionally, the fiscal space for states has been limited by their modest resourcegenerating capacity. The 'committed expenditure' on interest payment, pensions and other liabilities consumes a sizeable chunk of resources available with states. After this, there are limited resources left to meet other expenditure priorities.

In the context of fiscal resources, 2015-16 marked a number of significant changes. Fundamental policy measures like acceptance of the 14th Finance Commission's



Figure 2: Share of State Revenue Receipts in GSDP

■ 2012-13 ■ 2013-14 ■ 2014-15 (BE) ■ 2014-15 (RE) ■ 2015-16 (BE)

Note:

22

1. Figures in percent

2. GSDP: Gross State Domestic Product

3. States arranged in alphabetical order

4. To enable easy reading of the graph, values have been given for each state for the latest year only

Source: Budget at a Glance, State Budget Document, 2014-15 and 2015-16

recommendations on increased devolution of central taxes to states from 32 percent to 42 percent, reduction in Union Government's Plan grants for states, and abolition of the Planning Commission have changed the fiscal architecture in India.

In the spirit of strengthening cooperative federalism in the country, the Union Government accepted the recommendations of the 14th Finance Commission. The increase in devolution of untied resources to states is a noteworthy policy measure as it will help them design and implement schemes as per their priorities and needs. At the same time, to tackle its own fiscal deficit, the Union Government secured its fiscal consolidation path through expenditure compression: there was a drastic cut in Central assistance to State Plans in 2015-16.

The largest share of social sector expenditure from budgets goes to education. Since social sector expenditure is more in the nature of revenue expenditure, and the existing Fiscal Responsibility & Budget Management (FRBM) Act framework needs states to eliminate revenue deficit, there is a high probability that many states, particularly the poorer ones, will fail to prioritise adequate budgetary resources for programmes targeted towards social sectors, including the education sector.

In this backdrop, it is important to examine whether the changed fiscal architecture has helped states expand their resource envelop. Overall revenue receipts of a state (including its own generated revenue and revenue receipt from the Union) as a proportion of GSDP has been calculated for the 10 study states to understand the fiscal space of a state in comparison to the size of its economy. Here, we have taken only the revenue receipts and not the capital receipts too, since the states' spending on education sector is largely in the revenue expenditure category, and, with the tendency witnessed across most of the poorer states to not only eliminate their Revenue Deficit but rather maintain a Surplus in the revenue account of their budgets, the fiscal space available for spending on education depends almost entirely on the quantum of revenue receipts available with the states.

Figure 2 shows that, between 2012-13 and 2014-15 (RE), barring Maharashtra and Tamil Nadu, all other states

show an increase in the magnitude of total revenue receipts as a proportion of GSDP. One of the reasons underlying this visible jump in the quantum of revenue receipts available to states in 2014-15, as compared to the previous years, was the change in the route through which Union Ministries have been sending funds to states for a host of central schemes. In case of most central schemes, the Union Government's share of funds used to bypass the State Budgets, and transferred directly to autonomous bank accounts of the societies set up for implementing those schemes, until 2013-14. This practice has been discontinued and all kinds of funds provided by the Union Government are being sent to states through the State Budgets since 2014-15.

Between 2014-15 (RE) and 2015-16 (BE), in absolute terms, there is an increase in revenue receipts in all 10 states, but the situation varies in case of relative comparison with GSDP. Nine out of the 10 states show a decline in the magnitude of revenue receipts as percent of GSDP in 2015-16 (BE) as compared to 2014-15 (RE). In Bihar and Madhya Pradesh, the decline is more than 2 percentage points of GSDP; Chhattisgarh is the only state where the revenue receipt to GSDP ratio has improved by 0.4 percentage point.

Another important observation is that while more economically-advanced states like Maharashtra and Tamil Nadu projected a Revenue Deficit in 2015-16 (BE), other states that are economically weaker, projected a Surplus in their Revenue Account for 2015-16 (See Annexure, Table 2). It implies the poorer states tried to finance a part of their Capital Expenditure from their Revenue Account Surplus instead of increasing their quantum of borrowing for financing the whole of their Capital Expenditure. However, these states also need to step up their public spending on education and other social sectors, very large proportions of which are reported in the Revenue Account of the budget. Hence, the 'fiscal consolidation' being pursued by some of the poorer states might be taking place at the cost of checking the growth of expenditure on social sectors.

In such a scenario, there is a need for both the Union and State Governments to adopt policy measures to expand the public resource envelop in the country. Along with measures in a host of areas, it would require a significant stepping up of the country's tax-GDP ratio.

CHAPTER IV

How Much are States Spending on School Education?

he pattern of financing of school education and the question of its position in the overall development framework has been answered by analysing the schooleducation budget for the 10 states on these four aspects:

- a. School-education budget as a percentage of GSDP, which will show whether states are spending on school education as per the size of their economy.
- b. School-education budget as a percentage of state budget, which will reveal a state's priority for the education sector in general and school education in particular.
- c. Per child spending, which will capture relative resource availability across states, given the variation in student population across states.
- d. Per student spending, which will capture resource availability for each enrolled child in school.

In all 10 states, the Ministry of Human Resource

Figure 3a: Patterns of School-Education Budget



Note

24

2. States arranged in decreasing order of school-education budget as % of GSDP Source: State Budgets for 2015-16, Supplementary Budget Documents

Development at the Union level and Department of Education at the state level together financed more than 80 percent of the school-education budget (elementary and secondary together) (See Annexure). There is some expenditure incurred by the state Education Department that is not exclusively targeted for elementary or secondary education, but is spent on schools as a whole or for school administration or for the education secretariat.

Expenditure financed by other departments is also mostly designed to cater to either children studying in class I-X or post-matric or students of class I-XII altogether. Due to this sizeable amount of common expenditure incurred on school and children, an analysis of education budget specifically at the elementary or secondary level will always be an underestimation. Therefore, the study analyses the entire budget for school education of the 10 states, instead of

Figure 3b: Patterns of School-Education Budget

Per child spending at Per student spending school level in 2015-16 (Rs.) in 2014-15 (Rs.) 28.630 Maharashtra 18.035 Chhattisgarh 17,223 19,190 16,939 23,617 Tamil Nadu 15,335 Odisha 14.277 Rajasthan 12.606 13,512 12,503 22,856 Karnataka 11,771 Madhya Pradesh 11,330 7,613 9.167 Uttar Pradesh 9,451 Jharkhand 9.159 9,583 Bihar 8,526

Note:

1. States arranged in decreasing order of per child spending at school level in 2015-16 2. Figures include supplementary budgets

Source: State Budgets for 2015-16, Supplementary Budget Documents; DISE (2015), MHRD (2015)

^{1.} Figures for 2015-16 (BE+SB)

Figure 4: Trends of Financing School Education in Select States

School-education budget as % of state budget

	2012-13	2013-14	2014-15 (BE)	2014-15 (RE)	2015-16 (BE)	2015-16 (BE+SB)	Trend in study period
Bihar	19.3	16.9	20.2	18.1	18.0	17.7	
Chhattisgarh	18.3	18.0	14.8	18.9	17.2	17.0	
Jharkhand	13.7	12.5	15.9	13.4	13.9	13.2	
Karnataka	13.4	13.8	13.1	14.2	12.6	10.8	
Madhya Pradesh	20.7	22.8	17.7	14.6	14.8	15.9	
Maharashtra	19.2	20.3	17.5	17.9	19.0	18.0	
Odisha	15.0	14.1	13.7	13.2	14.2	14.0	
Rajasthan	16.8	16.1	17.8	16.1	17.1	16.7	
Tamil Nadu	13.9	14.4	13.0	13.8	13.3	13.4	
Uttar Pradesh	19.8	17.2	15.3	15.3	16.8	17.2	

School-education budget as % of GSDP

	2012-13	2013-14	2014-15 (BE)	2014-15 (RE)	2015-16 (BE)	2015-16 (BE+SB)	Trend in study period
Bihar	4.5	4.0	6.2	6.2	4.8	5.6	
Chhattisgarh	3.7	3.3	3.8	4.9	4.6	4.6	
Jharkhand	2.8	2.2	4.1	3.5	3.4	3.6	
Karnataka	2.4	2.4	2.5	2.7	2.3	2.2	
Madhya Pradesh	4.6	4.3	4.1	3.4	3.3	3.7	
Maharashtra	2.3	2.4	2.2	2.3	2.3	2.3	
Odisha	2.8	2.9	3.5	3.3	3.5	3.9	
Rajasthan	2.9	2.9	4.1	3.5	3.5	3.5	
Tamil Nadu	2.1	2.2	2.0	2.3	2.1	2.1	
Uttar Pradesh	4.4	4.0	4.3	4.1	4.6	5.0	

Note: 1. SB: Supplementary Budget; BE: Budget Estimates; RE: Revised Estimates 2. States arranged in alphabetical order Source: State Budget Documents for 2014-15 and 2015-16, Supplementary Budget Documents for 2015-16

segregating it into elementary and secondary levels.

As per the latest state budget (2015-16), Bihar and Uttar Pradesh, two economically-poor states, are spending 5.6 percent and 5 percent of GSDP on education, respectively. By comparison, economically-advanced states like Tamil Nadu, Karnataka and Maharashtra are spending less on school education (2.09 percent to 2.28 percent). This implies the level of economic development does not necessarily translate into higher public spending on education.

A similar picture is observed from the share of school education in the total state budget. For some educationallybackward states like Bihar, Uttar Pradesh, Chhattisgarh, Rajasthan and Madhya Pradesh, this figure is higher than economically-advanced states like Karnataka and Tamil Nadu. However, it cannot be concluded from this indicator alone that such educationally-backward states are spending higher amounts on school education. That's because if the overall resource envelop of a state is small, even a marginal increase in expenditure on school education will translate into a higher share in the total state budget. Higher per child spending in Tamil Nadu and Maharashtra can explain this incidence to some extent, though per child spending also depends on the number of children in the 6-17 years age group in the respective states. Figure 3b shows that states other than Bihar, Jharkhand and Uttar Pradesh spend above Rs. 10,000 per child per annum on education at the school level.

The same is the case with per student spending. Bihar, Jharkhand and Uttar Pradesh spend below Rs. 10,000 per child per annum. Maharashtra and Tamil Nadu are the two highest- spending states: they spent Rs. 28,630 and Rs. 23,617, respectively, on each enrolled student in 2014-15. In this context, it is also important to highlight the Kendriya Vidyalayas and Navodaya Vidyalayas, which are considered 'model' government-run schools in terms of providing quality education: they spent Rs. 27,150 and Rs. 85,000 per student, respectively, at the elementary level in 2015-16 (Tol, 2015).

For a holistic picture of school-education financing, it is important to look at the trend along with the level of education. Figure 4 traces school-education financing in the

Figure 5: Change in Expenditure on Elementary, Secondary and School Education Between 2012-13 and 2015-16 (BE)



Note: 1. Figures in percent 2. 2015-16 (BE) includes Supplementary Budget, BE: Budget Estimate 3. States arranged in alphabetical order Source: State Budget Documents for 2014-15 and 2015-16, Supplementary Budget Documents for 2015-16

10 states for the last four years: 2012-13, 2013-14, 2014-15 (BE), 2014-15 (RE) and 2015-16 (BE). The numbers include supplementary grants proposed after the presentation of budget estimates. The trends have been analysed for two indicators: school-education budget as a percentage of GSDP and school-education budget as a percentage of state budget.

The trend analysis highlights three key findings:

- In Madhya Pradesh and Karnataka, the share of schooleducation budget in GSDP has declined between 2012-13 and 2015-16 (BE+SB). In other states, the share has increased in varying magnitudes. The share of increase is above 1 percentage point in Bihar and Odisha.
- 2. Between 2012-13 and 2015-16 (BE+SB), in all 10 states, the share of school-education budget in the total state budget has declined.
- 3. In the study period, post the acceptance of the 14th Finance Commission recommendations, states have had to reprioritise their allocation pattern. Governments of all study states have addressed this issue by injecting supplementary grants to the allocated resources. However, the increased resource envelop has reduced the initial share of school-education budget in the total state budget in 2015-16 (BE). The share has increased marginally in Tamil Nadu, Uttar Pradesh and Madhya Pradesh.

The change in the share of school-education budget in the total state budget and the state's GSDP also depends on the growth rate of GSDP and the state budget. In all 10 states in the last four years (between 2012-13 and 2015-16), the expenditure on elementary, secondary and overall school education has increased in absolute terms. However, it is important to examine which states are showing higher growth, and whether the increase in total school-education budget is due to an increase in the elementary-education budget (brought on the implementation of the RTE Act) or an increase in the secondary-education budget.

Figure 5 traces the change in expenditure on elementary, secondary and school education between 2012-13 and 2015-16 (BE). The change in spending on elementary education varies from 26 percent (Bihar) to 80 percent (Uttar Pradesh). For secondary education, the range is 13.8 percent (Uttar Pradesh) to 150 percent (Jharkhand).

Between 2012-13 and 2015-16 (BE), growth in expenditure for elementary education has exceeded that for secondary education in only Karnataka and Uttar Pradesh. For Bihar, the growth in expenditure for secondary education is about six times higher than elementary education; for Chhattisgarh and Jharkhand, it's about three times.

Thus, it is clear that higher growth in school-education expenditure is mostly because of secondary-education expenditure. However, since the study does not capture the expenditure pattern in elementary education before 2010 (prior to the RTE period), it is difficult to conclude whether this is regular incremental growth or a direct impact of RTE implementation.

CHAPTER V

Priorities Within School-Education Budgets Across States

his section looks at how states are designing their school-education budgets. The analysis has been done for two parameters, namely:

- a. Distribution of school-education budget across states
- b. Distribution of school-education budget within states

To make the analysis easier to comprehend, the expenditure on school education reported by various departments/ministries under DDGs for every state has been broadly classified into seven categories: teacher salary, teacher training, inspection and monitoring, incentives, infrastructure, mid-day meal and others. Matrix 3 (on the next page) gives the list of components covered under these seven categories.

V.a.: Component-Wise Distribution of School-Education Budget Across States Teacher salary

Teachers are facilitators of learning and are central to the effective functioning of any school. Thus, their role in quality improvement is paramount. However, a common feature of the Indian education system is a shortage of qualified teachers. There is a shortage of more than 5 lakh teachers in elementary schools. About 14 percent of government secondary schools do not have the prescribed minimum six teachers (Committee for Evolution of the New Education Policy Report, 2016).

Recruitment of additional teachers has not kept pace with rapidly-growing enrolments. In Bihar and Odisha, no regular teacher recruitments have happened in a long time. According to the District Information System for Education (DISE) of the Ministry of Human Resource Development, India had 7.6 lakh primary-only schools in academic year 2014-15. Of these, 41.5 percent had only two teachers, 11.6 percent only one teacher and 0.84 percent (6,404 schools) did not have any teacher at all.

According to MHRD data, Uttar Pradesh and Bihar have the highest backlog of teacher recruitment, followed by Jharkhand, Odisha and Chhattisgarh (See Figure 6). A recent MHRD report shows that about 1.05 lakh government elementary and secondary schools are single-teacher schools.

Figure 6: States with High Number of Teacher Vacancies



Note: 1. Vacancies: shortfall in teachers over total posts sanctioned 2. SSA: Sarva Shiksha Abhiyan 3. States arranged in decreasing order of total vacancies Source: Education for All towards Quality with Equity, MHRD, 2104

Madhya Pradesh had the worst record on this count, with 17,874 institutions in the state having just one teacher each (Tol, 2016). Limited fiscal space available to states could be a factor in this low/no recruitment situation.

Teacher salaries account for the largest share of the school-education budget in India. Recent times have seen pitched debates over current salary levels of teachers. It is argued that private schools, despite lower per student spending than government schools, deliver better learning outcomes.

Higher salaries of government teachers is one of the major reasons for higher per capita spending in government schools (Dongre, Kapur & Tewary, 2014). It is also argued that high costs and ineffectiveness makes government school teachers a wasteful expenditure. The total fiscal cost from excess payments to government teachers is roughly Rs 90,000 crore. Lower salaries to government teachers has been recommended to save resources and ensure teacher accountability in the government school system (Pritchett & Aiyar, 2015). However, the generalisation that regular teachers in government schools draw higher salaries than private schoolteachers is misleading (Bhatty, Dey and Roy, 2015).

Matrix 3: Categorisation of Components of School-Education Budget

BROAD CATEGORY	COMPONENTS
Teachers salary	Grant-in-aid (salary), salaries, travel and medical allowances, professional and special services
Teacher training	All expenses related to training like administrative expenses to run teacher-training institutions, salary and allowances for trainers, materials and supplies, printing and publications for training, etc.
Inspection and monitoring	Establishment costs related to inspection, salary and allowances of inspectors, maintenance of MIS, etc.
Incentives for students: non-monetary	Uniforms, textbooks, food materials in hostels, laptops, bicycles, etc.
Incentives for students: monetary	Scholarships and stipends, education vouchers, assistance to SCs for subsidised hostels, compensation to private-unaided schools for admission of economically-weaker students under RTE.
Mid-Day Meal	All costs (administrative, infrastructure, food, salary and honorarium of cooking staff, etc.) related to providing meal in school under MDM scheme; any intervention by states under state plan to provide meal to children at school.
Infrastructure (construction, maintenance & repairs)	All expenses related to construction, maintenance and repair of schools, hostels, library, laboratory, etc.
Others	Expenses on direction and administration (rent rate and taxes, water charge, electricity bills, miscellaneous charges, print and stationery, salaries on operation of ashram/hostels, grants-in-aid (non-salary), grants to local bodies (unspecified) and other expenditure

Source: Authors

A teacher's salary is directly linked to the number of recruited teachers in a state. A mapping of the share of regular teachers (Figure 7) and the share of teacher salary in the school-education budget (Figure 8) shows that, by and large, states with a relatively smaller proportion of regular teachers have a lower share of teacher salary in the budget pie.

However, this is not the case in Madhya Pradesh and Chhattisgarh: in spite of having a larger proportion of regular teachers, the share of teacher salary in their total schooleducation budget is much lower compared to some other study states with similar characteristics. This may be due to inconsistency in teacher salaries across states. In Jharkhand, Bihar, Chhattisgarh and Odisha, the share of teacher salary in the school-education budget is around 60 percent or less. By comparison, in Uttar Pradesh, Karnataka and Rajasthan, it is above 70 percent (Figure 8).

International experience shows wage premium paid to teachers in public schools contributes more significantly to the growth in per student expenditure. The effect is stronger in middle-income countries and in countries with larger

Figure 7: Share of Regular Teachers in Total Teachers



Share of regular teachers in total teachers (Percent)

Note: 1. Figures for 2015-16 2. States arranged in increasing order of metric shown Source: DISE, 2014-15; State Budget, 2015-16 (BE), including supplementary grants

Figure 8: Share of Teacher Salary in School-Education Budget

Share of teacher salary in school-education budget (Percent)



Note: 1. Figures for 2015-16

2. States arranged in increasing order of metric shown

Source: DISE, 2014-15; State Budget, 2015-16 (BE), including supplementary grants

classroom sizes (Nose, Manabu, 2015). A similar picture is observed in Organisation for Economic Co-operation and Development (OECD) countries. At the primary, secondary and post-secondary, non-tertiary levels of education, OECD countries spend an average of 79 percent of current expenditure to compensate education personnel (OECD, 2014).

Teacher Training

Teaching is a demanding and constantly evolving profession. Developing capacities of primary-school teachers, with a deep understanding of the content they teach and how students absorb that content, underpins the success of primary schools in the best education systems (NCEE, 2016). Hence, regular training of teachers is an imperative for quality education. Among existing teachers in government schools, about 20 percent are untrained and the proportion of trained, qualified teachers has been almost stagnant in the last five years (MHRD, 2014). The share of professionally-trained teachers varies from 52.2 percent in Bihar to 99 percent in Maharashtra (DISE, 2015-16).

In recent years, to reduce fiscal deficit, most states have adopted the policy of appointing contractual teachers instead of recruiting them in the regular cadre. The last 15 years have seen an enormous expansion of contractual teachers in several states. In 2013-14, there were 5.08 lakh contractual teachers at the elementary level, accounting for 6.5 percent of the total teacher strength (DISE, 2014-15). Among them, only 60 percent had professional teacher training (DISE, 2014-15). The CABE sub-committee of teachers and teaching had pointed out that even in 2012, Assam, Bihar, Jharkhand, Chhattisgarh, Odisha, Uttar Pradesh, Jammu & Kashmir and West Bengal together accounted for 6.06 lakh untrained teachers.

The District Institutes of Education and Training (DIETs), conceived as teacher training and curriculum development institutions, have failed to live up to their roles. Studies have shown that 17 percent of the DIETs don't have their own building, 40 percent don't have their own hostel facility and 70 percent have no librarian. There is also about 80 percent vacancy in faculty positions in some states. Most DIETs are located in remote places. Staff and faculty members are not adequately trained. Training programmes lack innovation and faculty members have not undergone any capacity building in the last five years (Azim Premji Foundation, 2010). This reflects in the results of the Teachers Eligibility Test (TET), an essential criterion for teacher recruitment started in 2011 under the RTE Act: only 15 per cent of candidates managed to clear this test (Hindustan Times, 2015).

Figure 9a: Share of Professionally-Trained Teachers

Share of professionally-trained teachers in total teachers (Percent)



Figure 9b: Share of Teacher's Training in School-Education Budget

Share of teacher's training in school-education budget (Percent)



Note: 1. Figures for 2015-16

2. States arranged in increasing order of metric shown

Source: U-DISE, School Education in India, 2015-16; State Budget, 2015-16 (BE), including supplementary grants

Despite the lack of trained teachers, spending on teacher training is constantly neglected by most governments. Bihar leads the 10 study states in allocations, directing 1.6 percent of its school-education budget to teacher training. In the other nine states, it varies from 0.2 percent to 0.6 percent.

Inspection and Monitoring

In calculating the fiscal cost of teachers' absence, a study shows that investing in better governance by hiring more school inspectors is over 10 times more costeffective in increasing teacher-student contact time (net of teacher absence) than hiring more teachers (Muralidharan et.al, 2014).

Figure 10: Share of Inspection and Monitoring in School-Education Budget



Share of inspection & monitoring in school-education budget (Percent)

Note: 1. Figures for 2015-16

2. States arranged in increasing order of metric shown Source: State Budget, 2015-16 (BE), including supplementary grants The last few years have seen several debates on teacher accountability, student performance and poor implementation of schemes across states. In terms of resource allocation, inspection and monitoring remains another neglected area by policymakers. In 2015-16 (BE), Tamil Nadu and Odisha made the highest share of allocations from their schooleducation budget, while Chhattisgarh did not allocate anything (Figure 10).

Infrastructure

Schools with better infrastructural attributes signal an overall interest in, and commitment to, providing quality education, thereby demonstrating improved learning outcomes (Glewwe, et al. 2011). However, there are wide variations across states in the availability of basic facilities such as school buildings, classrooms, drinking water,

Figure 11: Share of Infrastructure in School-Education Budget

Share of infrastructure in school-education budget (Percent)



Note: 1. Figures for 2015-16 2. States arranged in increasing order of metric shown Source: State Budget, 2015-16 (BE), including supplementary grants

electricity, toilets and hostels. RTE mandates at least one classroom for every teacher and an office-cum-store-cumhead teacher's room, safe and adequate drinking water facility for all children, separate toilets for boys and girls, and arrangements for securing the school building by boundary wall or fencing. RTE also mandates a functional library and a kitchen shed to run MDM. The RTE-mandated infrastructure requirements are resource-intensive, and government schools have failed to meet these requirements even after four years of implementation of the Act (See Matrix 4).

Following the commencement of RTE, there was a rush to develop/build infrastructure to meet RTE norms by 2015. This is reflected in the relatively high share of infrastructure in the school-education budget: in 2015-16 (BE), this ranges from 2.6 percent (Tamil Nadu) to 13.3 percent (Odisha).



Matrix 4: Schools Meeting Select RTE Norms on Infrastructure in 2013-14

Note: States arranged in alphabetical order Source: RTE 4th Year status Report, MHRD, 2014

Incentives

In India, incentives are given either through direct cash award (scholarship/stipends) or through non-monetary means like textbooks, uniforms, laptops, etc. to children or incentives to households (usually to parents). Educational incentives are given to increase school enrolment, attendance and retention of specific groups in schools by accommodating some of their school-related expenses (or disbursing the actual items), etc.

Figure 12: Share of Incentives in School-Education Budget

Share of incentives in school-education budget (Percent)



Note: 1. Figures for 2015-16 2. States arranged in increasing order of metric shown Source: State Budget, 2015-16 (BE), including supplementary grants

In addition to the Union Government's interventions, every state has several policy initiatives to promote education, especially among the socially- and economically-weaker sections of children. For example, the Chief Minister's Bicycle scheme in Bihar has increased girls' age-appropriate enrolment in secondary school by 30 percent and reduced the gender gap in age-appropriate secondary school enrolment by 40 percent (Muralidharan & Prakash, 2013).

International experience too illustrates the effectiveness of such interventions. In Bangladesh, China, India, Morocco and Pakistan, introduction of specific interventions for girls separate latrines, female teachers, reducing the distance from school, flexible school schedule, double sessions and evening school hours—were very effective (Glewwe et. al, 2011).

Educationally-backward states like Bihar, Uttar Pradesh, Odisha, Madhya Pradesh and Jharkhand are spending around 10 percent or more of their school-education budget to provide incentives to children. Bihar has recently taken several policy initiatives to make education more affordable and accessible to children. This is reflected in the 22 percent share of incentives in its school-education budget in 2015-16 (BE).

By comparison, Maharashtra and Karnataka spent less than 5 percent of their school-education budget on monetary and non-monetary incentives for children (Figure 12). An incentive only offers temporary and partial relief. Good quality education for all children is the biggest incentive and educational incentives should not be assumed to be a substitute for poor learning environment in schools (Ramchandran et.al, 2007; Nawani, 2014).

V.b.: Component-Wise Distribution of School-Education Budget Within States

A state-level comparative analysis of distribution of schooleducation budget across select components raise several questions. How does a state design its school-education budget over time? Is teacher salary appropriating allocations required for other components? Have states reprioritised their allocations across different components in the last four years? When the share of teacher salary is decreasing, is the share of other components increasing significantly?

To get a holistic picture, in this section, the paper analyses the distribution of components of school education in the total school-education budget for each state for the last four years.

Bihar

In recent years, Bihar has prioritised education and worked to erase the backlog of schooling provisions that had accumulated after years of neglect. In a short period of time, over 3 lakh teachers have been recruited, about 1 lakh new classrooms built, textbooks are being delivered in time and MDM are being served in school. Special efforts have been made to enable girls across the state to continue in school past the elementary stage, notably distributing bicycles to girls going to secondary school. Special efforts have also been made to target the neediest children.

Yet, Bihar has a shortage of 1.14 lakh primary-school teachers. At the secondary level, the pupil- teacher ratio is 57, against the norm of 35. The student-classroom ratio in government secondary-schools is 103. As per the Project Approval Board (PAB) minutes of RMSA (2015), there was approval for training of 2,214 new teachers, but no process had begun till December-end. Similarly, only 25 percent of training of trainers was completed by December 2015.

As per a report of the Comptroller and Auditor General (CAG), Bihar has failed to achieve universalisation of primary education: 9.5 lakh children at the elementary level are still out of school (CAG, 2014). The report also highlighted the grim state of school infrastructure: 13 per cent of schools were operating without buildings and 45 percent did not have a toilet facility for girls.

It is important to analyse how states have designed their school-education budget in the last four years: whether they have reprioritised to address persistent bottlenecks or followed simple incremental budgeting.

Figure 13 shows that teacher salary constitutes the largest share of the Bihar school-education budget. In 2014-15



Figure 13: Component-Wise Distribution of School-Education Budget: Bihar

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Bihar State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16



Figure 14: Component-Wise Distribution of School-Education Budget: Chhattisgarh

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Chhattisgarh State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

(RE), its share was around 62 percent, which has become 52 percent in 2015-16 (BE), a 10 percentage point drop.

The Plan of Action of the National Policy of Education (1992) emphasised the significance of Universalisation of Elementary Education. It suggested providing adequate incentives for children of SC, ST and other backward sections, especially girls, in the form of scholarships, uniforms, textbooks and stationery and MDM in consultation with the State Government.

In the last few years, Bihar has taken several policy initiatives to make education more accessible and affordable to children. These initiatives have focused on reducing the 'opportunity cost' of schooling through incentives like the Mukhyamantri Balak/Balika Cycle Yojana, Mukhyamantri Poshak Yojana, Chief Minister Student Incentive Scheme, Girls Hostel, Scholarships for marginalised children (SC, ST, OBC, minorities, girls), etc. This reflects in the incentive component exceeding 15 percent in the budget pie; its share was as high as 25 percent in 2013-14.

MDM, which is also an incentive for children to increase and retain enrolment, has been considered as a separate component in this analysis. In Bihar, MDM is functioning as 'Dopahar' in 70,238 schools, covering about 10 million children from class I to VIII. In addition to this centrally-sponsored scheme, the component also includes nutritional interventions by State Governments in schools under their state plans. Unfortunately, in Bihar, the share of MDM in school-education budget has decreased from 10.5 percent in 2012-13 to 8.3 percent in 2015-16 (BE).

In Bihar, the share of expenditure on infrastructure has increased over time, mainly to fulfill the RTE norms of school infrastructure. There is negligible allocation for 'inspection and monitoring', with expenditure mostly pertaining to administrative cost and salary of inspector. The spending on teacher training has improved over time, but was below 1 percent of school-education budget till 2014-15 (RE). In 2015-16 (BE), this has increased to 1.6 percent.

Chhattisgarh

In Chhattisgarh, the government manages around 89 percent of elementary schools and 69 percent of secondary schools. However, in the last four years, in spite of an increase in the number of government schools, enrolment has dropped: GER has reduced from 101 in 2012-13 to 91 in 2015-16. So has the transition rate from upper primary to secondary level, from 92 percent in 2012-13 to 86 percent in 2015-16.

There is 32 percent vacancy of teachers in government schools. In 2015-16, under RMSA, against the 1,356 sanctioned posts of multi-task staff, only six were in position. Only 69 percent teachers in government secondary schools are professionally qualified. Besides a shortage of qualified teachers, schools are also suffering from the absence of basic school infrastructure. Around 20 percent schools in Chhattisgarh don't have a drinking water facility, only 53 percent have usable separate toilets for girls and 11 percent have no library (ASER, 2014).



Figure 15: Component-Wise Distribution of School-Education Budget: Jharkhand

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Jharkhand State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

Like Bihar, Chhattisgarh also spends around 60 percent of its school-education budget on teacher salaries. The year 2013-14 was an exception, and the state spent 67 percent of its total budget on salary and allowances to teachers, possibly because of a smaller total budget than other years.

Elsewhere, in 2015-16 (BE), about 19 percent of the school-education budget was allocated under 'other' expenditure, which consists of direction and administration cost, as well as expenditure where the purpose for which the money is allocated is not specified (Figure 14). CAG has been critical of such unspecified spending and has suggested doing away with it. However, in Chhattisgarh, a major share of this 'other' component is unspecified spending.

More than 45 percent of school-going children in Chhattisgarh belongs to Scheduled Tribes. Therefore, a major part of incentives goes to ST children as scholarships and stipends. The state also provides incentives through schemes like Saraswati Cycle Yojana, free textbooks, free uniforms and student accident insurance scheme. However, in the absence of allocations for pre-matric and post-matric scholarships in 2015-16 (BE), the share of incentives has reduced as compared to 2012-13, 2013-14 and 2014-15 (RE).

Chhattisgarh has made no allocation for inspection and monitoring in the last four years. In 2014-15, Rs 1,073 crore was allocated under SSA to create capital assets in school, which increased the share of infrastructure in the total schooleducation budget. However, this share has since fallen by 7.5 percentage points between 2014-15 (RE) and 2015-16 (BE). As in Bihar, the expenditure on MDM in Chhattisgarh has also

34

decreased: from 10 percent in 2012-13 to 5.4 percent in 2015-16 (BE).

Jharkhand

The performance of secondary education in Jharkhand is deteriorating compared to elementary education. Between 2012-13 and 2015-16, the transition rate from elementary to secondary level has dropped from 83 percent to 79 percent, and the dropout rate has increased from 4 percent to 9 percent. About 78 percent posts of regular teachers in government secondary schools lie vacant, resulting in the PTR increasing to 93 in 2015-16.

Although the situation is better at the elementary level, there is an urgent need to review enrolment rates in Jharkhand in relation to PTR and Student Class Ratio (SCR). As much as 65.3 per cent of its enrolment in primary schools (against the national average of 40.8 percent) is in schools with PTR above 30. Likewise, at the upper primary level, with 62.9 percent of enrolment in schools (against the national average of 31 per cent) with PTR above 35 (Rustagi & Menon, 2013).

Jharkhand has failed to achieve RTE norms for infrastructure. Although 80 percent of schools have drinking water facility, only 53 percent have usable toilets and 48 percent have a separate toilet for girls.

In Jharkhand, half the school-education budget goes towards teacher salary. However, its spending on teacher training is the lowest. Between 2012-13 and 2015-16 (BE), though, the share of teacher training has increased from 0.2 percent to 0.4 percent. Like Bihar and Chhattisgarh, in Jharkhand too, the nutritional intervention for school children is on the decline: expenditure on MDM in total schooleducation budget dropped from 14.2 percent in 2012-13 to 9.3 percent in 2015-16 (BE).

Other than scholarships from the Union Government, the state also allocates a substantial amount as monetary and non-monetary incentives to students, especially at the secondary level. State plan schemes include the Mukhyamantri Ekikrita Bal Chatravritti Yojana; school bags/sweaters, shoes and socks in residential schools; free distribution of dress, textbooks and solar lamps to girl students of class IX-XII; and scholarships to minority and OBC students. The share of incentives in the school-education budget was 9.6 percent in 2015-16 (BE), an increase of 1.5 percentage points over 2012-13 (Figure 15). An increasing trend is also observed in the 'others' category, a large amount of which is reported as 'assistance grants (non-salary)'.

Karnataka

Two-thirds of the population of Karnataka is literate. The nodal ministry for school education in Karnataka is the Minister for Primary and Secondary Education. Some facilitative functions are also managed by Department for Backward Classes and Minorities, Department of Social Welfare, Department of Women and Child Development, and Department of Rural Development and Panchayati Raj.

There are 74,953 schools in the state: 26,057 lower primary, 34,427 higher primary and 14,469 high schools. Four

out of seven elementary schools are either run or supported by the government (RMSA Annual report, 2014-15). As per official data, 41 percent of school-going children in Karnataka are in schools funded by the Department of Education. Enrolment and retention of students in Karnataka is high. There is, however, a large difference in the SCR across districts: for example, Hassan has 42 students in a class, but Belagum has 136.

Karnataka schools perform well on infrastructural facilities such as classrooms, electricity, drinking water facility, common toilets, toilets for girls and ramps for children with special needs. More than 99 percent schools in Karnataka have provisions for drinking water and separate toilet for girls.

Schools in Karnataka, however, face a huge teacher shortage. According to DISE, 2015-16, 767 schools have no teacher, 5,503 have only one and 14,667 have just two. Five educational districts (Kalaburgi, Bengaluru South, Tumakuru, Chikkamangaluru and Mysuru) have more than 100 schools with no teacher.

Following the 2015-16 main budget announcements, Karnataka announced two supplementary budgets of Rs. 10,708 crore. However, the state reduced its allocation for school education in 2015-16 after the supplementary grant allocation. Although not a normal practice, there is no explanation for this budget cut in any government notice or budget document.

Around 70-80 percent of Karnataka's school-education budget goes towards teacher salaries. However, in the last four

Figure 16: Component-Wise Distribution of School-Education Budget: Karnataka



Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Karnataka State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

years, the government has failed to spend on teacher training, and monitoring and inspection, two key components of quality education (Figure 16).

The share of expenditure on infrastructure has increased from 4.7 percent in 2012-13 to 10.2 percent in 2015-16 (BE). Most of this expenditure went towards constructing and maintaining residential school buildings and hostels for SC, ST and OBC students, and was done by the Social Welfare Department through the State Development Plan.

Karnataka has also increased its spending on student incentives, from 2.7 percent in 2012-13 to 4.5 percent in 2015-16 (BE). Some major policy initiatives aimed at reducing the cost of education for children include the Vidya Vikash Scheme, scholarships to Jain community students, scholarships to persons with disabilities, and financial assistance and reimbursement of fees to children studying in Sainik Schools at the secondary level.

MDM, which run as 'Akshara Dasoha' in Karnataka, also covers children of class IX and X of government- and government-aided schools, and provides milk to students of class I to X thrice a week. Karnataka is the only state where the share of MDM in the school-education budget has increased, from 8.2 percent in 2012-13 to 9.5 percent in 2015-16 (BE).

Madhya Pradesh

36

For several years, Madhya Pradesh was one of the poorperforming states in the education ladder. As per ASER data, about 35 percent children in class VIII could not even read class II textbooks (ASER, 2014). The situation is even more dismal in government schools. An acute shortage of professionallyqualified teachers and absence of infrastructure are the main reasons for this poor performance.

In Madhya Pradesh, the government manages 80 percent of elementary schools and 53 percent of secondary schools. There are 19,269 (or 13.5 percent) single-teacher schools in the state. This number varies across districts: from 58 schools in Neemuch to 1,587 schools in Rewa. Only 48 percent elementary schools meet the norm of 30:1 pupilteacher ratio.

Around 77 percent of teachers in Karnataka are professionally-trained. The situation is more dismal at the secondary level. Under RMSA, only 28 percent posts for headmasters and 49 percent posts for regular teachers were filled by 2015. The drop-out rate at the secondary level has increased to 16.6 percent in 2015-16. Infrastructure, too, is deficient: 25 percent schools don't have a provision for drinking water, 59 percent don't have a separate, usable toilet for girls, and 10 percent don't have kitchen shed for MDM.

From 2012-13 to 2014-15 (RE), around 70 percent of the state's school-education budget was spent on teacher salaries. This fell to 64 percent in 2015-16 (BE). Besides paying teacher salaries in state-run schools, the state government also provides a substantial amount of resources as grants to urban and rural local bodies for teacher salaries. Since Madhya Pradesh has a high proportion of SC and ST population, it also

Figure 17: Component-Wise Distribution of School-Education Budget: Madhya Pradesh



Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Madhya Pradesh State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

has a large number of Ashram schools, Kasturba Gandhi Balika Vidyalaya (KGBV), or residential schools for SC and ST girls. Hence, a part of the teacher salary also goes towards these special-purpose schools.

About 42 percent of the enrolment at the elementary level and 30 percent at the secondary level is from the SC and ST category (DISE, 2014-15). Incentives for students are mostly targeted towards girls and children from the scheduled categories. As the incidence of drop-out is high among girls, the government has initiated a number of interventions like Kanya Shiksha Parisar , transport facilities, free bicycle, free uniform and scholarship for girl students of class IX to XI to retain them in schools. A major portion of this incentive component is for reimbursement to non-government schools for admission under RTE, and admission of SC and ST children at the secondary level in Sainik Schools and non-government schools. The share of incentives in the Madhya Pradesh school-education budget is stagnant at around 10 percent in the last three years. The exception was 2013-14, when it was 7.3 percent.

The Panchayat and Rural Development Department in Madhya Pradesh is the nodal agency for MDM. Presently, the scheme covers around 71 lakh children of governmentand government-aided primary and upper primary schools, National Child Labour Project (NCLP) schools and Madrasas. Although there is an increase in enrolment, and hence coverage of MDM, in the last four years, the share of MDM in the total school-education budget has dropped from 8.8 percent in 2012-13 to 7.2 percent in 2012-13.

The share of infrastructure in the school-education budget is increasing. In 2014-15 (RE) and 2015-16 (BE), the government spent mostly on completion of incomplete schools under SSA, management and establishment of model schools under RMSA and the 13th Finance Commission's grant on construction work. Unfortunately, the share of teacher training, and inspection and monitoring, has been stagnant, and together constitutes less than 0.5 percent of the schooleducation budget.

Maharashtra

Private-aided and private-unaided schools dominate the school education system in Maharashtra. At the elementary level, the government runs 69 percent of schools, but only 17 percent at the secondary level. Although Maharashtra has registered an increase in GER at both the elementary and secondary levels in the last four years, the performance audit of 'Implementation of SSA' for the period 2010-14 revealed inadequate institutional arrangements in the state for effective implementation of the SSA-RTE Act. The overall shortfall of teachers vis-a-vis sanctioned posts under SSA, as of March 2014, was 63 percent.

The State Government has provided inclusive education to all identified children with special needs (CWSN) during 2010-14 either through enrolment in general schools or through home-based education. But there were shortfalls in providing barrier-free access and toilet facilities to CWSN in 4,669 schools and 15,947 schools, respectively, out of 66,444 schools in the state (CAG, 2015). Monitoring of the SSA-RTE Act suffered from various kinds of shortfalls: meetings by School Management Committees at the school level, inspection of schools by Block Education Officers at the block level and meetings by the Governing Body and the Executive Committee of Maharashtra Prathamik Shikshan Parishad at the state level.

As at the elementary level, vacancies are also seen at the secondary level. Under RMSA, the headmaster's post is vacant in 52 percent schools, and there's 9 percent vacancy for teachers in secondary school. The gender parity index has declined in last one year. A major reason for this is the absence of girl's hostels: as per RMSA PAB minutes, in 2015, against the approved number of 43 girl's hostels, work has been taken up in only seven and none is functional.

Like all other states, the largest share of Maharashtra's school-education budget goes towards teacher salaries: 78 percent in 2012-13, falling to 69 percent in 2015-16 (BE) (Figure 18). In order to motivate schoolteachers, the government has taken policy measures like giving awards to primary teachers for enrolment of girls in schools, free education to children of primary teachers, delinked insurance scheme for staff of aided non-government primary schools and awards to outstanding primary schools in rural areas. However, there is marginal or zero allocation under these schemes in the last two years.

Teacher training and inspection and monitoring, two important components of quality education, are ill-funded: the share of each component was below 0.5 percent in each of the last four years. A component 'evaluation of all schemes by other network' in the education budget document seems to have been introduced to monitor schemes designed for improvement in elementary education. Unfortunately, in the last four years, there is no allocation or expenditure incurred under this head.

The share of infrastructure in the school-education budget shows an increasing trend. The major share of expenditure under 'infrastructure' is going towards construction and maintenance of Ashram schools, post basic ashramshala and residential schools/hostels for SC students and new Boudhas in societies, and maintenance grant to nongovernment schools.

Most scholarships and stipends to SC, ST and OBC children come under Central Sector schemes. In addition,



Figure 18: Component-Wise Distribution of School-Education Budget: Maharashtra

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Maharashtra State Budget Documents 2014-15: 2015-16 and Supplementary Budget documents for 2015-16

Source: Maharashtra State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

under the state plan, Maharashtra has introduced several policy initiatives like attendance allowance to girls from economically-weaker sections, free education to children of freedom fighters, education concessions to children (up to class XII) of Vidarbha farmers to avoid parent suicides, scholarships to tribal girls to reduce drop-outs, especially among girls. The government also provides some nonmonetary incentives to students through policy initiatives like book banks, production of books in tribal dialects, increase in amenities in residential ashramshalas and hostels for vimuktajati and nomadic tribe students etc. The share of MDM in the school-education budget is stagnant at 4 percent for the last two years.

Odisha

Sarva Shiksha Abhiyan (SSA) and Kasturba Gandhi Balika Vidyalaya (KGBV) are the two major schemes in Odisha to meet elementary education needs. Although the number of government schools in the state has increased in the last four years, overall enrolment and GER have fallen. As of March 2015, there were 59,047 primary and upper primary schools, and 9,491 secondary schools, functioning in the state.

However, enrolment dropped from 65 lakh in 2010 to 63 lakh in 2015, and GER at the primary level fell from 99 in 2010-11 to 92.7 in 2014-15. Between 2012 and 2015, enrolment of girl child has improved, and the drop-out rate in both elementary and secondary levels has decreased. However, class-wise data of enrolment shows that between 2009-10 and 2013-14, only 78 percent children who studied between class V and VIII went on to complete class IX and X; further, 9.58 percent girl children dropped out (CAG, 2014).

In order to encourage girls to study at the elementary level, under SSA, Odisha had appointed 50 percent women teachers. According to CAG, between 2009 and 2015, the recruitment of women teachers at the elementary level across districts varies from 24.3 percent to 49.3 percent. In 2015-16, under RMSA, there is 37 percent vacancy for the post of headmasters and 66 percent vacancy for the post of regular teachers.

Although the state government is looking to recruit more teachers, there is a severe shortage of trained teachers. Very few candidates cleared the mandatory TET test and the existing teacher-training institutes meet just 12 percent of the total teacher requirement. Despite a large number of out-ofschool children, between 2009 and 2014, the government mainstreamed only 55 percent girl children enrolled under NCLP school.

The last four years have seen a marginal improvement in most schools in terms of infrastructure building under RTE norms. PTR has increased from 28 percent in 2012 to 38.6 percent in 2014. About 19 percent schools did not have a drinking water facility, 47 percent had no provision for separate toilets for girls, 12 percent did not have a library (ASER, 2014).

Odisha spends 50-60 percent of its total schooleducation budget on teacher salary (Figure 19); this share has



Figure 19: Component-Wise Distribution of School-Education Budget: Odisha

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Odisha State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

reduced from 60 percent in 2012-13 to 54 percent in 2015-16 (BE). This reprioratisation of budgets has increased expenditure on other components of school education like infrastructure, incentives, and inspection and monitoring. During 2015-16, the Union Government stopped funding the State Government for infrastructure development in upper primary schools. Funds for only 82 schools were released under the RMSA during the year and a large numbers of toilets have remained incomplete. Later, through its supplementary budget, the State Government allocated an additional Rs. 380 crore for infrastructure development.

In the last four years, the share of incentives in the school-education budget has increased from 7 percent to 12 percent. Besides free textbooks, the State Government has directed resources to the secondary level: these include distribution of free bicycles to all Class X girl students in government- and government-aided high schools; supply of free uniform to ST/SC students of class IX to XII of high schools and higher secondary schools under ST & SC Development Department, promotion of 100 ST/SC students to study in the best residential schools in the state.

Although the State Government spends over 1 percent of its school-education budget on inspection and monitoring, the expenditure goes mainly towards salaries of inspectors and official expenses. Odisha is another state where the share of MDM in the school-education budget has declined in the last two years.

Rajasthan

About 66 percent of elementary schools and 50 percent of secondary schools in Rajasthan are run by the government. However, their condition is dismal. Around 33 percent schools don't meet the RTE norm on pupil-teacher ratio. As per DISE, the state has 49,853 primary schools, 51,955 upper primary schools, 15,503 secondary schools and 8,144 senior secondary schools.

They have over 4 lakh teachers, which is about 70,000 less than needed to meet the RTE standard (DISE, 2014). In order to address this shortage, Rajasthan has started appointing contractual teachers known as 'shiksha karmis'. However, till date, only two TETs have been conducted in the state. In the teacher's training programme, the state achieved a target of just 39 percent under RMSA in 2014.

Infrastructure is also an issue across school categories. There's no power supply in 60,000 schools, no separate usable toilets for girls in 23 percent schools and no provision for drinking water in 27 percent schools (ASER, 2014). The state also shows slow progress in civil works, especially at the secondary level.

Teacher salaries account for above 80 percent of Rajasthan's school-education budget in the last four years. Other important components—infrastructure, teacher training, inspection and monitoring, MDM and incentives together constitute 12-15 percent, with the remaining going towards administrative costs and miscellaneous expenditure (Figure 20).



Figure 20: Component-Wise Distribution of School-Education Budget: Rajasthan

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Rajasthan State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

MDM is operational in 71,000 elementary schools in Rajasthan and services 72.5 lakh children. While the share of infrastructure in the school-education budget has increased marginally, the shares of MDM and incentives has fallen.

In order to reduce the cost of schooling for parents, Rajasthan has launched several state plan schemes to provide monetary and non-monetary incentives to children, especially for girls in tribal areas. These include distribution of transport vouchers to girl students in rural areas of ST region, Accidental Bima Scheme for students of ST Region, fixed deposits for class X to XII girl students in KGBV, health insurance scheme at the elementary school level, Sikshakkaapna Vidyalaya (education voucher) for class I to V in non-government schools, residential schools for children whose families are involved in the cattle trade. So far, major spending under incentives has been towards free laptops and uniforms, reimbursement of fees to non-government schools for admitting students from economically-weaker sections, and admission of SC/ST children at the secondary level.

Tamil Nadu

Over time, the enrolment pattern in Tamil Nadu has shifted from government schools to private schools. Currently, the government runs 66 percent of elementary schools and 52 percent of secondary schools in Tamil Nadu. The state is one of the greater achievers in education, as reflected in its high literacy rate (80.3 percent), high GER at the elementary level (96) and high transition rate from primary to upper primary (95 percent).

Tamil Nadu has 5.58 lakh teachers at the elementary and secondary levels. As per Education Department data for 2014-15, there was a shortage of 32,888 teachers at the primary level and 5,063 teachers at the high-school level. The government has tried to bridge this shortfall by appointing 15,980 guest teachers for primary classes and 1,727 guest teachers for high schools during this period, and it is still appointing contractual teachers.

In 2015-16, there were 78 percent regular teachers and 21 percent contractual teachers, and about 97 percent teachers were professionally trained (DISE, 2015-16). Compared to other states, Tamil Nadu performs better at the secondary level. There is no headmaster vacancy and only 7 percent posts for regular teachers are vacant under RMSA.

In Tamil Nadu, government schools are faring better than their private peers on learning outcomes, though both categories show a decline in standards. Tamil Nadu is also performing better on basic school infrastructure: around 80 percent of schools have drinking water facility, 69 percent have separate usable toilets for girls, 98 percent have kitchen shed for MDM and 87 percent have library facilities (ASER, 2014).

In terms of budget composition, the largest share of Tamil Nadu's school-education budget goes towards teacher salaries: 76 percent in 2012-13 and 67 percent in 2015-16 (BE) (Figure 21). This not only includes salaries of teachers in government schools, but also those in government-aided



Figure 21: Component-Wise Distribution of School-Education Budget: Tamil Nadu

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Tamil Nadu State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

Source. Tartin Nadu State Budget Documents, 2014-13, 2015-10 and Supplementary Budget documents for 2015-1

high schools and higher secondary schools, schools for the differently-abled and denotified community schools. The government has also introduced a special provident fund and gratuity scheme for municipal and corporate elementary schools, and aided educational institutions.

Among other budget components, Tamil Nadu spends a relatively higher amount on incentives. It has launched several schemes in the last 10 years to increase enrolment and reduce the cost of schooling for parents. The government provides financial aid to children whose parents are dead or permanently incapacitated; children of migrant workers; children of prisoners; children of poorer widows; or under the chief minister's farmer security scheme, to children who have passed class X.

Among the 10 study states, Tamil Nadu shows higher spend on differently-abled children. The state also provides non-monetary incentives to students like free bags, sweaters, uniforms, bicycles, footwear, computers and transport facilities to students from hilly or remotely-located areas. The government has tried to address the issue of lingual diversity by printing textbooks in Tamil, English, Urdu and Braille. In the last four years, to promote sports in schools, the government has organised various sports and chess competitions at the national and state levels.

The MDM Scheme in Tamil Nadu, which is popularly known as 'Puratchi Thalaivar MGR Meal Programme' is one of the largest in coverage: about 470 lakh children benefitted in 2013. The scheme was initially launched for class I to V students, but later extended to class X. The scheme also covers working children in 16 districts through the NCLP project. While the Education Department is the nodal agency in most states for MDM, in Tamil Nadu, it is the Social Welfare and Nutritious Meal Programme Department. The government has also introduced a scheme called 'new programme for feeding poor children in the age group of 10-15 years in the denotified community school'. However, there is meagre allocation to this scheme in the last four years. For all its successes, the share of MDM in Tamil Nadu's school-education budget is decreasing over time.

Uttar Pradesh

About 66 percent of elementary schools and 8 percent of secondary schools in Uttar Pradesh (UP) are managed by the government (DISE, 2014-15). Current patterns of enrolment indicate a shift in preference from government schools to private schools. Around 41 percent children in the 6-14 years age group are enrolled in government schools and 52 percent in privately-managed schools (ASER, 2014).

In the initial years of SSA, the thrust in UP was on bridging gaps in school infrastructure. However, 15 percent schools still don't have a drinking water facility, 51 percent don't have separate usable toilets for girls and 26 percent don't have a library (ASER, 2014). These infrastructural bottlenecks may be one of the reasons for the large number of out-ofschool children.

Among the 10 study states, UP has the maximum



Figure 22: Component-Wise Distribution of School-Education Budget: Uttar Pradesh

Note: 1. Figures in percent 2. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 3. To enable easy reading of the graph, values have been given for each component for the latest year only Source: Uttar Pradesh State Budget Documents, 2014-15, 2015-16 and Supplementary Budget documents for 2015-16

number of school teachers. In 2014-15, there were around 2.5 lakh schools in the state, and 8.98 lakh regular teachers and 1.3 lakh para-teachers (familiar as 'shikshamitra'). At the same time, UP has the second-highest number of single-teacher schools: 17,602 primary and secondary schools (Tol, 2016).

Teacher salaries constitute the largest share of UP's school-education budget. This component also includes grants to subject experts of non-government higher secondary schools as honorarium. In 2013-14 and 2014-15, the 'Kanya Vidya Dhan Scheme' for girls who are unable to pursue higher education due to financial problems and the 'free distribution of tablets and laptops to class X and XII students' scheme were launched. However, both were not being implemented in 2014-15 and 2015-16, which may be a reason for the share of incentives in the school-education budget falling in 2014-15 (RE) and 2015-16 (BE). The State Government also has a scheme to provide grants for marriage and further education of Class X pass Muslim girls in below poverty line families. But the lens through which this policy has been framed is skewed and questionable.

Over time, UP has been able to increase the share of

infrastructure in its total school-education budget. In 2015-16 (BE), it allocated Rs 342 crore from the SSA budget to create infrastructure in primary and upper primary schools, probably to meet infrastructure norms mandated under RTE. Due to the higher percentage of Muslim children in UP, the government also spends substantial amount on schemes like minority scholarships, construction of hostels for minority students, modernisation of Madrasas, and construction and running of schools under the Multi Sectoral Development Programme (MSDP).

As per state records, 1.78 crore children of Class I to VIII studying in government schools, government-aided schools, NCLP schools and Madrasas are covered under MDM. In the last four years, the coverage has increased by 40 percent. The State Government has launched a unique scheme called 'Cloud Telephony' to monitor whether daily mid-day meals are being delivered in government schools or not. However, like most other study states, UP too has seen the share of MDM in its school-education budget decline, from 4.6 percent in 2012-13 to 3.2 percent in 2015-16 (BE). And its spend on teacher training, and school inspection and monitoring, is nominal.

CHAPTER VI

How Inclusive is School Education: An Exploration from a Budgetary Lens

his part of the report scrutinises how inclusive budgetary allocations are in different states. The analysis examines inclusion for three of the most deprived sections of children:

- a. Socially- and economically-weaker children
- b. Girl children
- c. Out-of-school children (OOSC)

VI.a. Intervention for Marginalised Children

The Indian population consists of 16 percent SCs, 9 percent STs and 13 percent Muslim population (Census, 2011). Around 22 percent of population is below poverty line (Planning Commission, 2014). The Indian Constitution acknowledges centuries of social, economic and educational deprivation suffered by SCs, STs, OBCs and religious minorities. Specific provisions were incorporated into the Constitution, and states were directed to promote the educational and economic interest of people from these communities. In spite of the government's intentions, the progress of schooling among children of these communities has been relatively poor

Figure 23: Out-of-School Children by Socio-Economic Category

Percentage of out-of-school children in category



*6-13 years; Source: SRI-IMRB, 2014

compared to that of the general population.

Literature shows SC children have an 'intrinsic disadvantage': they are less likely to go to school than other children, even after controlling for household wealth, parental education and motivation, school quality and related variables. This suggests a persistence of an overall bias against SC children in the schooling system, in spite of positive discrimination in pupil incentives (Dreze and Kingdon, 1999).

It's not just socially- or economically-deprived children. Even children with special needs are not being adequately covered and they have not benefited from basic education. A recent survey shows that 2.97 percent of children in the 6-13 years age group are out of school. Religion data shows that Muslims have the highest proportion of OOSC (4.43 percent), followed by Hindus (2.73 percent). A disaggregation by social groups shows that STs have the highest proportion of OOSC (4.2 percent) followed by SCs (3.24 percent) (Figure 23).

This section examines how the school-education budget is designed to promote education for children from SC, ST, OBC and minority communities, those from economicallyweaker sections and those with special needs.

In all 10 study states, the major share of public expenditure on education for SCs/STs is carried out from the SCSP and TSP. In addition, the Department of Social Welfare and Department of Minority Welfare also spend a substantial amount towards such expenditure. Resources from these departments are generally allocated for various scholarship schemes, and construction of residential schools and hostels. In most states, the Department of School Education or Department of Social Welfare is also responsible for education of children with disabilities. The exception is Tamil Nadu, which has a dedicated Department for Welfare of Differently Abled Persons.

Figure 24: Share of Spending on Educational Intervention for Marginalised Children in School-Education Budget



Educational intervention for marginalised children as % of school-education budget

Note: 1. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 2. States arranged in alphabetical order 3. To enable easy reading of the graph, values have been given for each state for the latest year only Source: State Budget Documents, 2014-15, 2015-16 and Supplementary Budget Documents for 2015-16

Figure 24 shows Bihar, Jharkhand, Odisha and Chhattisgarh are spending more than 20 percent of their school-education budget on marginalised children. Chhattisgarh, which has a high share of SC/ST population, spends around 50 percent. In Karnataka, Bihar and Jharkhand, the share of this allocation has increased by more than 5 percentage points in the last four years. By comparison, in Uttar Pradesh, the share of this allocation has halved.

VI.b. Intervention for Girl Child

The last two decades have seen several policy measures to promote girls' education. Yet, gender disparities in education persist. Although the gender gap has narrowed at the elementary level, it remains significant at the secondary and higher education levels (Matrix 5).

Government interventions to promote access, enrolment or retention also benefits girls. However, evidence shows that general interventions are insufficient to address gender inequality. Additional and specific interventions for girls are needed. Therefore, it is important to see the nature of interventions these 10 states are making while designing their school-education budget.

Figure 25 shows that, in 2015-16 (BE), Odisha spends the highest on girls' education, followed by Rajasthan. However, even the highest-spending states are allocating less than 6 percent of their school-education budget to promote girls' education. In Odisha, some of the interventions where a relatively greater amount has being allocated are the construction of hostels for ST girls under special plan for undivided Koraput, Bolangir and Kalahandi (KBK) district; distribution of free bicycles to all girls of class X in government and government-aided high schools; and Department for International Development-assisted top-up pre-matric scholarship for ST girls.

In Rajasthan, the largest share of budget for girls' education is spent at the secondary level on girls schools and hostels. Besides that, a substantial amount is spent on construction and maintenance of hostels for SC/ST girls.

Between 2012-13 and 2015-16 (BE), Jharkhand has increased the share of this spend by 1.6 percentage points. It has mostly spent on construction and maintenance of Indira Gandhi Residential girls' school and support to KGBV in civil works. Its Minority Welfare Department has made several interventions for girls, including the construction of minority hostels and distribution of cycles to minority girls. In the last two years, a substantial amount is being allocated under special component plan for Babu Jagjivan Ram Girls hostel and free education for girls up to intermediate level.

The withdrawal of the Kanya Vidya Dhan Scheme probably explains the reduction in the share of intervention for girls in the Uttar Pradesh school-education budget. In the last four years, only Jharkhand, Odisha and Maharashtra have



Figure 25: Share of Spending on Educational Intervention for Girls in School-Education Budget

Educational intervention for girls as % of school-education budget

Note: 1. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 2. States arranged in alphabetical order 3. To enable easy reading of the graph, values have been given for each state for the latest year only Source: State Budget Documents, 2014-15, 2015-16 and Supplementary Budget Documents for 2015-16

Matrix 5: Net Attendance Ratio for Girls at Various Levels of Education



Note: States arranged in alphabetical order; Source: NSSO (2014)

increased the share of school-education resources for girls. In six states, there is a reduction, and Rajasthan has been stagnant at 5.8 percent.

VI.c. Intervention for out-of-school children

In India, there is a debate over the definition of OOSC, and hence their number. Whatever the methodology, India has the largest number of OOSC in Asia.

However, the government is half-hearted in its policies and in providing the required infrastructure to schools to accommodate OOSC, especially children who

work as labourers (Sinha, 2006). The RTE Act made it mandatory for all children in the 6-14 years age group to attend formal schools and complete eight years of education. In order to mainstream the large number of OOSC, special training has been taken up as a critical initiative under SSA to enable them to enrol in age-appropriate grades in government schools. For example, Bihar has drawn a comprehensive plan to cover all OOSC by direct enrolment, through residential special training (3, 6, 9 and 12 months), non-residential special training (3, 6 and 9 months), and mainstreaming migrating children within the state through worksite centres.

Figure 26: Out-of-School Children at Elementary Level

Out-of-school children at elementary level (Percent)



Note: States arranged in decreasing order of metric Source: Authors' calculation based on Census 2011

In most states, special training facility for ageappropriate admission of OOSC was approved on the condition that all children are enrolled in regular schools and the school headmaster reviews the centres at regular intervals.

Most states conduct household surveys every year, as part of SSA, to identify children who are out of school. However, their estimates of OOSC are much lower than estimates from sample surveys.

In all 10 study states, barring MDM to NCLP School, no other interventions from the State Plan have been made to mainstream OOSC. Karnataka has initiated several campaigns¹ to enroll all children in schools: for example, *Baa Marali Shaalege* (come back to school), *Coolyinda Shaalege* (from labour to school), *Chinnara Angala* (a bridge course), *Samudayadatta Shaale* (school towards the community) and *Baa Baale Shaalege* (calling the girl child to school). However, the Karnataka school-education budget does not report any of these campaigns.

SSA is the only scheme with some provision to mainstream OOSC. Bihar, a state with high OOSC, has spent the largest share from its SSA budget to bring back children to schools, followed by Chhattisgarh (Figure 27).

In spite of the relatively higher spending, PAB² minutes of Bihar report that against the target of 60,000 OOSC sanctioned in 2013-14, the state could cover only 29,000 under special training. Of this, only 7,000 children (24 percent) were mainstreamed in age-appropriate classes and there was no mechanism to track mainstreamed children.

While there is a small attempt to bring back OOSC at the elementary level, no mainstreaming policy at the state or Union levels is seen for children in the 14-17 years age group, who are either child labour or school drop-outs.

Figure 27: Share of Expenditure to Mainstream Out-of-School Children in SSA Budget

Share of expenditure to mainstream out-of-school children in total budget (Percent)



Note: States arranged in alphabetical order

Source: Financial Management Portal, Audit Reports, SSA website (Link: http://ssa.nic.in/financial-management/audit-reports)

¹ (http://www.schooleducation.kar.nic.in) ². Project Approval Board

CHAPTER VII

Governance and Stakeholders

n this section, an attempt has been made to examine whether school-education budgets contribute to strengthening community engagement with schools. The analysis also looks at how much state governments contribute towards private actors' participation in school education.

VII.a. How much Government is Spending to Enhance Community Engagement with Schools?

Promoting community participation in school management is a common intervention in the developing world. While this type of programme is generally believed to be effective, actual evidence is insufficient to inform policymakers on how community participation works to improve educational outcomes. Randomised evaluation of an education programme in Burkina Faso was designed to build trust among community members and teachers, and encourage them to work together in school management. Results show the intervention increased student enrolment, and reduced student repetition and teacher absence. They also indicate a strong impact on class repetition by 6th grade boys, presumably reflecting parental priorities. This suggests that community participation can improve educational outcomes by empowering the community and enhancing social capital, but whether idealised results can be gained depends on the perception and knowledge of community members.

As per RTE Act 2009, Section 21, all government, government-aided and special category schools have to constitute a School Management Committee (SMC), whose major functions are:

- 1. Monitoring the working of the school.
- 2. Prepare and recommend a School Development Plan, which should form the basis of plans and grants to be made by the appropriate government or authority.
- 3. Monitor utilisation of grants received from appropriate government, local authority or other sources.

In eight of 10 states, more than 98 percent schools have

Figure 28: Share of Expenditure on Community Mobilisation and SMC/PRI Training in SSA Budget

Share of expenditure on community mobilisation and SMC/PRI training in SSA budget (Percent)

2013-14 2014-15 0.05 Bihar 0.12 1.49 Chhattisgarh 0.22 0.36 Jharkhand 0.44 0.82 Karnataka 0.12 0.01 Madhya Pradesh 0.08 1.84 Maharashtra 0.86 0.46 Odisha 0.55 0.06 Rajasthan 0.12 0.16 Tamil Nadu 0.36 0.13 0.39 Uttar Pradesh

Note: States arranged in alphabetical order Source: Financial Management Portal, Audit Reports, SSA website

(Link: http://ssa.nic.in/financial-management/audit-reports)

formed an SMC. The exceptions are Karnataka and Tamil Nadu, where the proportion is around 92 percent (DISE, 2015-16). Being the vehicle of RTE, SSA has a provision for community mobilisation and training of SMC members. Figure 28 shows that both activities constitute less than 1 percent of the SSA budget. In 2013-14, Maharashtra and Chhattisgarh spent around 1.5 percent of their SSA budget to empower community participation. However, in 2014-15, there is a drastic cut in the expenditure of both states.

VII.b. How Much do Budgets Contribute Towards Non-Government Schools?

The deteriorating quality of learning in government schools is a serious issue in public provisioning for the education sector. This has created a bias towards private schooling, the perception being they provide better quality of learning. While the debate on efficiency of private schools over government schools, quality of education in public schools versus private schools continues, the number of private schools vis-à-vis public schools is increasing over time. The heterogeneity of the private sector in schooling determines the nature of funding of these schools. Privateunaided schools, unless run on a philanthropic basis, are managed and mostly funded by owners. For private-aided schools, 90-95 percent funds come from the government (De et.al., 2000), but the management is private.

This composition of schools by management varies across states. Bihar, Chhattisgarh, Odisha and Madhya Pradesh have less than 1 percent of private-aided schools at the elementary level, whereas the figure is above 15 percent for Maharashtra and Tamil Nadu (Figure 29). For all states,



Figure 29: Distribution of Schools by Management



Note: States arranged in decreasing order of share of private-aided schools Source: DISE, 2013-14

the proportion of private-aided and private-unaided schools is higher at the secondary level than at the elementary level. Uttar Pradesh has the maximum private schools, followed by Maharashtra and Rajasthan. Surprisingly, there are no private-aided schools in Rajasthan, at both the elementary and secondary levels.

The number of private-aided and private-unaided schools determines the amount a state government provides as assistance to private schools. Government provides grants to private-aided schools (both elementary and secondary) in the form of teacher salaries, and overheads like expenditure on teacher training, incentives, administration and management, curriculum development, examination system, etc.

Besides grants to private-aided schools, government resources also go to private-unaided schools. The RTE Act, 2009, mandates that non-minority, private-unaided schools should reserve at least 25 percent of their seats in entrylevel grades for children from economically-weaker and disadvantaged backgrounds (Section 12(1) (c)). The schools are to be reimbursed by state governments at the rate of per student expenditure incurred in government schools or the school fees charged by the private school, whichever is lower (Section 12(2)).

Figure 30 shows the pattern of spending by states on non-government schools in the last four financial years.

In the 10 study states, in 2015-16 (BE), the proportion of school-education budget going to private schools varies from 2.1 percent (Chhattisgarh) to 49.7 percent (Uttar Pradesh). Barring Madhya Pradesh, Chhattisgarh, Karnataka and Bihar, other states have seen a decline in the share of grants to nongovernment schools in the school-education budget between 2012-13 and 2015-16 (BE).

For Rajasthan, the pattern of spending on nongovernment schools is uneven. In 2014-15 (RE), the state spent about 20 percent of its school-education budget as assistance to non-government schools. This may be because a substantial amount was reported under grants-in-aid for salary and assistance to create capital assets in non-government institutions, which was not reported in 2015-16 (BE).

Although Uttar Pradesh shows the highest share of school-education budget as assistance to non-government schools, according to a report, "not a single child belonging to weaker or disadvantaged groups is enrolled in class I in unaided primary schools in 46 districts of Uttar Pradesh. Another 26 districts do not have concrete information on the number of such children enrolled. Only three out of 75 districts—Firozabad, Pilibhit and Badaun—have 26, 5 and 19 children, respectively, studying in class I in private-unaided schools" (Tol, 21st Jan, 2014). This implies that most of the assistance to non-government schools in Uttar Pradesh is going as aid to private elementary and secondary schools.

Figure 30: Assistance to Non-Government Schools in School-Education Budget

Assistance to non-government schools as % of school-education budget



Note: 1. 2012-13 and 2013-14 figures: Actuals; 2014-15: Revised Estimates; 2015-16: Budget Estimates, including Supplementary Budgets 2. States arranged in alphabetical order 3. To enable easy reading of the graph, values have been given for each state for the latest year only Source: Calculated from State Budget Documents

CHAPTER VIII

Concluding Remarks and Policy Implications

ndia's education system presents a mixed picture: some milestones achieved and some problems yet to be addressed. Even after 68 years of independence, the sector faces challenges pertaining to basic issues like access, enrolment and retention.

This indicates that policy pronouncements in the sector have been unable to optimally translate government efforts into effective outcomes on the ground. Gaps at the planning and budgeting stage, and not just at the implementation stage, are a major reason for this.

In spite of the Government of India recognising education as a top priority, the pattern of allocation of resources to education in general and school education in particular are far from satisfactory. State governments already account for twothirds of the country's total budgetary spending on education. In 2015-16, recommendations of the 14th Finance Commission and restructuring of the Union Budget have placed more burden of investment on states. Till date, the recommendation of the Kothari Commission for public spending on education at 6 percent of GNP every year has not been met.

Given the limited resource envelop, it is imperative to look at how states are designing their school-education budgets, which components are facing a shortage of funds, is there any scope for reprioritisation of funds between different components, how inclusive is growth for education, and how inclusive is the budget in providing education to marginalised children. This study has analysed all these aspects for school education across 10 select states. In light of the findings, the study suggests nine possible—and immediate—policy measures that the Union Government and states can implement to provide quality school education that is accessible to all sections of society.

1. Enhance the Overall Fiscal Space Available to States

The resources available in a state's exchequer are an important determinant of its spending capacity. Since expenditure on education is more in the nature of revenue expenditure, the study looked at revenue receipts of the select states for the last four years. It also calculated the share of revenue receipts to a state's GSDP to gauge the fiscal space of a state in comparison to the size of its economy.

In absolute terms, there is an increase in revenue receipts in all 10 states, but the situation varies in case of relative comparison with GSDP. In 2015-16 (BE), except for Chhattisgarh, other nine states show a fall in revenue receipts as percent of GSDP over 2014-15 (RE), even more so over 2014-15 (BE). In Bihar and Madhya Pradesh, the decline exceeds 2 percentage points of GSDP.

Thus, even after a greater share of devolution from the divisible pool, states' share of revenue receipts in GSDP has not shown an increase. Hence, both the Union Government and state governments need to consider policy measures to increase their resource envelop by increasing their tax revenue mobilisation.

Since most direct taxes are with the Union Government, there is a need to increase the central taxes-to-GDP ratio so that it ultimately results in an increased divisible pool and states benefit from the recent increase in the taxsharing formula. Hence, it is imperative states protect and increase—the fiscal space for public spending on school education. Both the Union Government and state governments should increase their resource envelops by increasing the tax-GDP ratio.

2. Increase Budgetary Allocations for Universal Public Provisioning of School Education

While the pattern of devolution of resources may indirectly service national priorities for education, utilisation of funds is the responsibility of state governments (Varghese & Tilak, 1991). In 2015-16 (BE), the pattern of spending at the state level shows that more than 5 percent of GSDP is being allocated for school education in Bihar and Uttar Pradesh. The share varies from 3.5 percent to 4.6 percent of GSDP in Rajasthan, Jharkhand, Madhya Pradesh, Odisha and Chhattisgarh.

Karnataka, Maharashtra and Tamil Nadu, which have a higher GSDP, spent around 2.2 percent of GSDP on school education.

A similar pattern is observed when comparing the school-education budget with the total state budget. In 2015-16 (BE), Maharashtra tops the spending ladder, allocating 18 percent of its total budget to school education. Weaker states like Bihar, Uttar Pradesh and Chhattisgarh have also allocated more than 17 percent of their state budget to school education.

However, between 2012-13 and 2015-16 (BE), in all 10 states, the share of school-education budget in the total state budget has declined. Education is in the Concurrent List, which implies a shared responsibility of the Union Government and state governments towards this sector. It is, therefore, critical for both levels of government to step up public investment in school education, especially at the secondary level, to make education free to all children in the age group of 6-17 years.

3. Immediate Recruitment of Qualified Teachers

A common feature of the Indian education system at the current juncture is a shortage of qualified teachers. All 10 states lack an adequate number of professionally-qualified and trained teachers. Although teacher salary constitutes the largest share of school-education budgets, economicallyweaker states like Bihar, Jharkhand, Odisha and Chhattisgarh spend less than 60 percent of their school-education budget on teacher salary.

The share of teacher salary in the school-education budget is above 70 percent in Uttar Pradesh and Karnataka, and around 80 percent in Rajasthan. However, this does not imply these states are over-spending on teacher salary. Even in OECD countries, on an average, governments spend 79 percent of their current expenditure on education personnel at the primary, secondary and post-secondary, non-tertiary levels of education. In fact, reduction in salaries and benefits, or reducing the number of teachers and other administrative staff, can be counter-productive, as it will discourage good teachers from wanting to enter or remain in the profession. There is a pressing need to address the issue of teacher shortage by recruiting a cadre of qualified teachers.

4. Prioritise Teacher's Education, and Inspection and Monitoring in Education Financing

Access to quality education is critical. And poor quality of school education is directly related to poor quality of

teacher's training, and poor inspection and monitoring at the school level. There are also concerns over the quality of teacher training and skill of trainers in training institutions. An analysis of the state budget shows that teacher's training, and inspection and monitoring, are two components that are severely resource-starved.

Bihar is allocating the highest share to teacher's training in 2015-16: 1.6 percent of its school-education budget. In other nine states, it varies from 0.2 percent to 0.6 percent. Although Departments of Education have acknowledged the low academic performance of children at the school level, especially in government schools, the pattern of spending on the inspection and monitoring component shows complete negligence. In 2015-16 (BE), Tamil Nadu and Odisha allocated the highest share of their school-education budget to inspection and monitoring. At the other end, Madhya Pradesh allocated 0.2 percent and Chhattisgarh nothing.

Improvement in learning outcomes can be achieved if states allocate substantial resources for infrastructure of teacher's training and training of trainers for teacher education. Investment is also required to recruit an adequate number of school inspectors to monitor and evaluate performance of schools regularly. Madhya Pradesh and Chhattisgarh should allocate more resources for these two components in their school-education budget.

5. Investment in Basic School Infrastructure

Basic infrastructure is crucial for the effective functioning of a school. It includes not only the availability of facilities, but also the extent to which they are utilised. In spite of a significant expansion in school infrastructure, a number of schools still don't have buildings, adequate number of classrooms, drinking water, toilets, ramps, electricity, etc.

This study shows that most government schools in the 10 study states have failed to meet all RTE-mandated infrastructure requirements, even four years after implementation of the Act. Karnataka, Tamil Nadu and Maharashtra, which are already relatively better in school education, are also the states that have met, or are close to meeting, RTE norms for different infrastructure indicators in all their schools. Hence, their expenditure on school infrastructure is much lower than poor-performing states like Jharkhand, Odhisa, Madhya Pradesh and Bihar. Although the share of infrastructure in the total school-education budget varies from 2.5 percent to 13.5 percent across states, a higher share is seen in most states in 2015-16 (BE) on account of trying to meet the deadline of RTE compliance of infrastructure. Hence, states should increase allocations to basic infrastructure like school buildings within a specified distance, drinking water, separate toilets for boys and girls, and set targets to achieve RTE-specified norms in a time-bound manner. States should also financially support schools by giving them space to set and implement their infrastructure norms according to their needs.

6. Expand Outreach Efforts to Disseminate Information on Incentives to Target Groups

Studies show that goal-based incentives for students are effective. Further input-based incentives (like books and bicycles) are more effective than output-based incentives (like grades and test scores). Bihar, Uttar Pradesh, Odisha, Madhya Pradesh and Jharkhand are spending around 10 percent or more of their school-education budget to provide incentives to children. In Maharashtra and Karnataka, the share is below 5 percent.

Along with incentives, states should also spend on the information, education and communication (IEC) component to generate awareness about entitlements and incentives under their schemes and programmes. However, it is important to recognise that an incentive only offers temporary and partial relief. A policy to provide educational incentives to children cannot substitute a poor learning environment in schools.

7. Increase Allocations to Mid-Day Meal Scheme to Cover All Children at the Elementary Level and Extend the Scheme to the Secondary Level

Evidence shows that the MDM scheme is one of the most successful policy measures by the Union Government. Over time, the scheme has expanded to all children studying in primary and upper primary classes in government and government-aided schools, *madrasas* and *maqtabs* under SSA programme, and NCLP schools.

However, state-wise spending patterns show that, barring Karnataka, the share of MDM in the school-education budget fell in the other nine states between 2012-13 and 2015-16 (BE). There is a need to increase allocation for MDM in step with enrolments and raise unit costs regularly. This is missing in the present state budgets—the share of MDM is not increasing over the years. It is also important that states ensure all children at the elementary level receive hot, cooked and nutritious meals in schools. Measures should also be taken to extend the scheme to the secondary level.

8. Ensure Inclusive School Education

An inclusive approach towards education is a pre-requisite for holistic development of the Indian education system. In the last few years, almost every state has introduced several schemes to promote education among girls and children belonging to marginalised sections of the population. With the implementation of SSA, provisions have also been made to bring back OOSC into mainstream education.

However, policy interventions have not been reciprocated by higher allocations. Even for the highest-spending state, Odisha, the intervention for girls comprises less than 6 percent of its school-education budget. In Karnataka, Maharashtra, Uttar Pradesh, Tamil Nadu, Madhya Pradesh and Chhattisgarh, the expenditure on girls' education remains less than 1 percent of school education for the last two years.

States should design and implement policies for girl children that are aimed at achieving desired outcomes. Planning should be implemented through gender-responsive budgeting, which can help improve girls' education. All states, and not just the current few, should release a gender budget statement.

In all 10 study states, the major share of public expenditure on education for SCs and STs is made from SCSP and TSP. In Bihar, Jharkhand, Odisha and Chhattisgarh, more than 20 percent of the school-education budget is spent on marginalised children. In Chhattisgarh, which has a high share of SC and ST population, the figure is around 50 percent.

More intervention towards children from SCs, STs, Muslims and economically-weaker sections will make the education system more inclusive. In terms of financing, among all marginalised children, persons with disabilities are the most vulnerable. Very few interventions have been designed for them. Financing should be made based on the physical disabilities of children, along with their learning disabilities. States should allocate funds based on the number of children and the categories they fall under.

Except for noon meals to NCLP Schools, no other intervention from the state plan is observed for children working as labourers or OOSC. SSA is the only resource to bring them into the mainstream. Bihar and Chhattisgarh are allocating the highest share to OOSC from their SSA budget, around 5 percent. Other states are spending less than 1 percent.

There is no policy, and hence spending, observed at the state level for children in the age group of 13-17 years who have dropped out or are working. **Hence, states should design their**

policies to cater to children who drop out at the secondary level. There should be an increase in SSA allocations for mainstreaming OOSC. Policy measures must be seen in conjunction with the child labour law, especially with regard to the girl child.

9. Empower School Management Committee Members and Community Members for Better Governance

Studies have established that schools with greater local decision-making authority and accountability deliver better educational outcomes. SMCs set up under the RTE Act have been assigned substantial powers to improve school functioning through monitoring, community mobilisation, participating in school-level planning and budgeting. There is a separate provision under SSA for SMC training and community mobilisation. However, **none of the states prioritise SMC trainings on a regular basis, and allocate adequate funds for**

training programmes and community mobilisation.

In conclusion, the challenges are common to states, but their depth and scale differ. However, for each state, there is an immediate need to increase allocation for school education. States should design their school-education budgets to allocate more funds towards teachers' training, inspection and monitoring, infrastructure building, and interventions towards marginalised children, especially children with disabilities.

Better implementation and better governance can be achieved with effective participation of the community in the whole education system. Along with better and efficient management of material resources, it is essential to address the issue of shortage in human resources to raise the quality of the education system. Overall, effective planning, participation of all stakeholders, a robust system of fund flow and utilisation processes, and constant monitoring can help bridge the gap between allocations, spending and needs.

References

Azim Premji Foundation (2010): "Status of District Institutes of Education and Training", September

Banerji. Rukmini: 'Elementary Education: Learning the Hard Way' (2013), in the book 'The New Bihar', edited by N.K Singh and Nicholas Stern (pg-172-185)

Centre for Budget and Governance Accountability (2011): "Budgeting for change-Sarva Shiksha Abhiyan (SSA)" in Budgeting for change series, Unicef and CBGA

De. Anuradha, Manavi Majumdar, Meera Samson and Claire Naronha (2000): "Role of Private Schools in Basic Education", MHRD and NIPEA

De. Anuradha, Kiran Bhatty and Rathin Roy (2015): "The Public Education System and What the Costs Imply", Economic and Political Weekly, Vol. 50, Issue No. 31, 1st August

Dreze. Jean & Geeta Gandhi Kingdon (1999):"School Participation in Rural India", DEDPS no. 18, The Development Economics Discussion Paper Series, August

Bloom. N, Lemos, Reneta et.al. (2014) "Does Management Matter in Schools", NBER Working Paper No. 20667, November

Dongre, Ambrish, Avani Kapur and Vibhu Tiwary (2014): "How Much Does India Spend Per Student on Elementary Education?," workingpaper Series 1, Accountability Initiative

Glewwe, P.W., E.A. Hanushek, S.D. Humpage, and R. Ravina (2014)." School Resources and Educational Outcomes in Developing Countries: A review of the literature from 1990 to 2010"

Government of Maharashtra (2015): "Press Brief on the Report of the Comptroller and Auditor General of India for the year ended March 2014

Government of Odisha (2015): "Report of the Comptroller and Auditor General of India General and Social sector for the year ended March 2014", Report no. 2 Govinda, R. & Bandyopadhyay, M. (2010) Educational Access in Madhya Pradesh and Chhattisgarh, Country Research Summary. CREATE, Delhi/Brighton: NUEPA/University of Sussex

Jha. Praveen, Subrat Das, Siba Sankar Mohanty and Nandan Kumar Jha. (2008). "Public Provisioning for Elementary Education in India", Sage Publication, ISBN: 978-0-7619-3666-4

Jha. Praveen & Pooja Parvati(2014). "Assessing Progress on Universal Elementary Education in India, A Note on Some Key Constraints", Economic & Political Weekly, volxIIX no 16, April 19

Kingdon.Geeta.G. "Private versus Public Schooling in India", web published at http://www.india-seminar. com/2011/627/627_geeta_gandhi_kingdon.htm

Kohli. Namita (2015). "Not In The Class: A Story of India's Missing Teachers", Hindustan Times, 6th April (link: http:// www.hindustantimes.com/india/not-in-the-class-a-story-ofindia-s-missing-teachers/story-8HITtop9bbJbL18cGC5U7H. html)

Kozuka. E, Sawada and Todo.(2016), "How Can Community Participation Improve Educational Outcomes? Experimental Evidence from a School-Based Management Project in Burkina Faso", JICA-RI working paper no. 112, June. (Link: http://d. repec.org/n?u=RePEc:jic:wpaper:112&r=edu)

Kumar. Yogesh (2016): "Over 1 lakh schools in India have just 1 teacher", Times of India, 9th August, (Link:http://timesofindia. indiatimes.com/Over-1-lakh-schools-in-India-have-just-1-teacher/articleshow/53608274.cms)

Marcel. Mario (2012). "Budgeting for Fiscal Space and Government Performance beyond the Great Recession", OECD (http://www.oecd.org/eco/public-finance/ budgetingforfiscalspace.pdf)

Mehrotra. S (2006): "What Ails the Educationally Backward States? The Challenges of Public Finance, Private Provision and Household Costs", The Economics of Elementary Education in India The Challenge of Public Finance, Private Provision and Household Costs, edited by Santosh Mehrotra, Sage India

Ministry of Finance (2014): "'Report of the Fourteenth Finance Commission", Directorate of Economic affairs, Government of India, 14th December

Muralidharan, Karthik.(2013). "Priorities for Primary Education Policy in India's 12th Five-year Plan." India Policy Forum no. 9:1-46

Muralidharan. K & Nishith Prakash Prakash (2013). "Cycling to School: Increasing Secondary School Enrolment for Girls in India", Working Paper 2013-24, University of Connecticut

Nagarajan Rema (2015). "Government spends Rs 85,000 on each Navodaya student annually", Times of India, 21st June. Access at (http://timesofindia.indiatimes.com/home/ education/Government-spends-Rs-85000-on-each-Navodayastudent-annually/articleshow/47754083.cms)

National Sample Survey Office (2014). "Education in India", Report no. 575, NSS 71st Round, January-June, 2014, MOSPI, GOI

National University of Educational Planning and Administration.(2016). "Elementary Education in India: Where Do We stand?" State Report Cards, U-DISE, 2015-16

National University of Educational Planning and Administration.(2015). 'School Education in India', U-DISE, 2014-15, Flash Statistics

Nawani, Disha. (2014): "The Elusive Nature of Educational Incentives", Economic and Political Weekly, September 13, 2014 vol xlix no 37

NITI Aayog (2015). "Report of the sub-group of chief ministers on rationalisation of centrally sponsored schemes", Government of India, October

Planning Commission (2014): "Report of the Expert Group

to Review the Methodology for Measurement of Poverty", Government of India, June

Public Report on Basic Education in India (PROBE), (1999) New Delhi: Oxford University Press.

Ramachandran, V, K Jandhyala and N Mehrotra (2007): "Incentives in Elementary Education: Do They Make a Difference", Journal of Educational Planning and Administration, Volume XXI, pp 141-53.

Roy, R., A. Heuty, E. Letouzé (2006), "Fiscal Space for Public Investment: Towards A Human Development Approach". UNDP

Rustagi, Preet and Rajini Menon (2013): "Literacy and elementary education status in Jharkhand: Challenges to Universalisation, Journal of Economic & Social Development, Vol - IX, No. ISSN 0973 - 886X, 2 nd December

Sinha.Shantha (2006). "Battle for School", lecture delivered at the India International Union, New Delhi under NCERT-IIC lecture series on 3.7.2006.

Social and Rural Research Institute (2014). "National Sample Survey of Estimation of Out-of-School Children in the Age 6-13 in India", Educational consultants India Itd. (edcil)

Times of India (2014). "Toilet, water must in schools: Supreme Court", 11th May (Link: http://timesofindia.indiatimes. com/india/Toilet-water-must-in-schools-Supreme-Court/ articleshow/34945462.cms)

Times of India (2014). "Govt in a fix over shortage of trained science teachersAsks Centre To Relax minimum Qualification, 17th August, (Link: http://timesofindia.indiatimes.com/city/ bhubaneswar/Govt-in-a-fix-over-shortage-of-trained-scienceteachers-Asks-Centre-To-Relax-Minimum-Qualification/ articleshow/40319216.cms?)

Varghese.N.V and Tilak.J.B.G (1991). "The Financing of Education in India", IIEP Research report no. 92, International Institute of Educational Planning

Annexures

Table 1: Allocation for School Education by Level (Rs crore)

	Level	2012-13 (Actuals)	2013-14 (Actuals)	2014-15 (BE)	2014-15 (RE)	2015-16 (BE)	2015-16 (SB)	2015-16 (BE+SB)
	Elementary education	9,781	8,636	15,369	16,138	13,327	2,205	15,782
Bihar	Secondary education	1,980	2,793	4,569	4,767	4,376	678	5,249
	Total school education	13,350	13,564	23,651	23,931	21,778	3,791	25,569
	Elementary education	4,715	4,978	4,445	6,525	6,953	16	6,969
Chhattisgarh	Secondary education	1,686	2,385	3,478	3,758	4,127	85	4,212
	Total school education	7,466	7,916	8,089	10,380	11,166	100	11,266
	Elementary education	3,159	2,634	6,124	4,914	5,522	246	5,767
Jharkhand	Secondary education	524	656	1,140	1,058	1,245	66	1,311
	Total school education	4,173	3,813	8,017	6,811	7,725	311	8,036
	Elementary education	7,484	8,397	10,311	9,871	10,584	-826	9,758
Karnataka	Secondary education	4,297	4,606	5,567	5,583	5,785	-632	5,153
	Total school education	12,420	14,724	17,191	18,162	17,219	-1,345	15,873
	Elementary education	6,498	8,755	11,814	13,441	10,682	860	11,542
Madhya Pradesh	Secondary education	2,282	1,440	4,647	2,622	3,289	298	3,587
·····	Total school education	11,442	12,370	20,580	19,601	17,783	1,618	19,401
	Elementary education	16,961	19,923	19,991	21,238	23,412	301	23,714
Maharashtra	Secondary education	12,845	14,489	16,322	15,951	18,187	127	18,313
	Total school education	30,234	35,815	37,180	39,294	43,787	429	44,216
	Elementary education	3,963	4,551	6,120	5,782	7,041	169	7,210
Odisha	Secondary education	1,849	2,073	3,042	2,992	2,826	849	3,675
	Total school education	7,082	7,909	10,975	10,164	11,960	1,435	13,395
	Elementary education	7,557	8,465	12,684	11,750	13,615	0	13,615
Rajasthan	Secondary education	4,108	5,318	8,276	7,113	8,331	0	8,331
	Total school education	13,668	15,155	23,365	20,349	23,528	0	23,528
	Elementary education	7,784	9,386	9,747	11,778	11,801	97	11,898
Tamil Nadu	Secondary Education	7,165	8,569	9,327	9,546	10,608	193	10,801
	Total school education	15,457	18,576	19,919	22,159	23,285	290	23,574
	Elementary education	18,414	19,858	27,236	27,346	36,499	3,338	39,837
Uttar Pradesh	Secondary education	7,737	9,199	7,918	7,212	9,015	45	9,060
	Total school education	34,496	34,541	42,020	40,199	50,941	4,622	55,562

Note: Elementary and secondary education figures include expenditure made by Department of Education; figures for total school education include expenditure made by Education Department as well as other departments on school education (Class I-XII). Source: Detailed Demand for Grants for 2014-15 and 2015-16 for these 10 states

	2014-15 (BE)	2014-15 (RE)	2015-16 (BE)						
States showing a Revenue Surplus in 2015-16 (BE)									
Uttar Pradesh	2.97	3.32	3.08						
Bihar	2.65	(-) 1.18	2.63						
Jharkhand	2.00	1.94	2.07						
Chhattisgarh	1.17	1.13	1.85						
Odisha	1.37	1.09	1.47						
Madhya Pradesh	1.00	1.38	1.00						
Rajasthan	0.13	(-) 0.73	0.08						
States showing a Revenue Deficit in 2015-16 (BE)									
Maharashtra	(-) 0.31	(-) 0.82	(-) 0.20						
Tamil Nadu	0.03	(-) 0.38	(-) 0.44						

Table 2: State-wise Revenue Surplus (+)/Revenue Deficit (-) as % of GSDP

States arranged in decreasing order of surplus Source: State Budgets for 2015-16



About CBGA

CBGA is an independent, non-profit policy research organisation based in New Delhi. It strives to inform public discourses through rigorous analysis of government budgets in India; it also tries to foster people's participation on a range of policy issues by demystifying them. For further information about CBGA's work, please visit www.cbgaindia.org or write at: info@cbgaindia.org.





About CRY

CRY – Child Rights and You (formerly known as Child Relief and You) is an Indian NGO that believes in every child's right to a childhood – to live, to learn, grow and play. For over 30 years, CRY and its partners have worked with parents and communities to ensure Lasting Change in the lives of more than 20 lakh underprivileged children. For further information about CRY's work, please visit www.cry.org.