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Strengthening the Discourse for Public Provisioning of Secondary Education for Girls through Research and Evidence

CHILD RIGHTS AND YOU

CBGA

Author

Protiva Kundu

For further information please contact: protiva@cbgaindia.org

Technical Inputs

Priti Mahara (CRY), Shreya Ghosh (CRY), Nilachala Acharya (CBGA)

Research Support

Aishwarya Bhuta, Ajay Pal Singh and Azharuddin

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CRY

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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)

632, Lane No.3, Westend Marg, Near Saket Metro Station,
Saiyad-ul-Ajaib, New Delhi-110030
Tel: +91-11-29533451/52/53
Email : cryinfo.del@crymail.org
Website: www.cry.org

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

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List of Acronyms

AWP&B	Annual Workplans and Budgets
BE	Budgetary Estimates
CABE	Central Advisory Bord of Education
CPWD	Central Public Works Department
CSR	Corporate Social Responsibility
CSS	Common School System
CWSN	Children with Special Needs
DDGs	Detailed Demand for Grants
DIET	District Institute of Education and Training
EBBs	Educationally Backward Blocks
FC	Finance Commission
GBS	Gender Budget Statement
GDP	Gross Domestic Product
KGBV	*Kasturba Gandhi Balika Vidyalaya*
KV	*Kendriya Vidyalaya*
MDG	Millennium Development Goals
MIS	Management Information System
MoE	Ministry of Education
MoMA	Ministry of Minority Affairs
MOSPI	Ministry of Statistics and Programme Implementation
MoTA	Ministry of Tribal Affairs
MSJE	Ministry of Social Justice and Empowerment
NEP	National Education Policy
NER	Net Enrolment Ratio
NSS	National Sample Survey
OOSG	Out of School Girls
PAB	Project Approval Board
RE	Revised Estimates
RMSA	*Rashtriya Madhyamik Shiksha Abhiyan*
RTE	Right to Education
SHEC	Secondary and Higher Education Cess
SMDC	School Management Development Committee
SMSA	*Samagra Shiksha Abhiyan*
SSA	*Sarva Shiksha Abhiyan*
SSOR	States' Schedule of Rates
TGT	Trained Graduate Teachers
UDISE	Unified District Information System for Education
UT	Union Territories
WASH	Water, Sanitation & Hygiene

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Chapter 1: Introduction

Education is accorded a high priority in development policy in most countries, including India. Consistent efforts have been made towards improving the status and quality of education through various policy initiatives at the national level and through international commitments. Despite such efforts, the expansion of education in the country has been slow compared to certain other developing countries. India's poor record in the educating girls bogs down the country's performance in education as a whole.

India had committed to attaining the target related to gender equity and empowerment by 2015, embodied in the Millennium Development Goals (MDGs). However, gender parity in school education as one of the MDGs remains elusive. In 2015, India signed the 2030 agenda for sustainable development containing 17 goals. Goal 4 pertains to quality education while target 4.1. states: 'by 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes'.

With the implementation of several policy measures and introduction of Right to Education (RTE) Act in 2009 for children in the age group of 6-14 years, the gender gap has narrowed at the elementary level. Yet, gender disparities in education persist and is especially visible at the secondary level (IX-XII).

Global trends too show that girls are twice less likely as boys to receive at least four years of schooling (UNESCO, 2019) while 30 per cent of girls from economically disadvantaged groups have never set foot inside a classroom (Imchen & Ndem, 2020). In India, while average drop-out rate of girls at upper primary level is three per cent it is 15 per cent at secondary level; While the transition rate from elementary to secondary level is 90 per cent, it drops down to 73 per cent from the secondary to higher secondary level (Unified District Information System for Education+ 2019-20). The proportion of rural girls in the age group of 15-18 years not attending school varies from 14 per cent in Kerala to 61 per cent in Odisha (Ministry of Statistics and Programme Implementation, 2016). The most cited reasons for dropping out of girls are financial constraints and the need to help in household chores (MOSPI, 2019). Around 30.2 per cent of girls reported that they discontinued education due to their engagement in domestic activities. This was higher in rural (31.9%) than urban (26.7%) areas (MOSPI, 2019).

An extensive body of literature backs up and supports the need to educate girls. Many important challenges in human development can be addressed by educating girls, with innumerable social and economic benefits accruing to societies and nations. Arguments for educating girls revolve around the 'social reform for economic growth' paradigm. For example, a 10 per cent increase in girls' attendance in school can increase the gross domestic product (GDP) growth by three percentage points (USAID, 2018). A girl with at least 12 years of schooling is less likely to undergo teenage pregnancy, less likely to bear children at shorter intervals and also less likely to have more than two children during her lifetime (Yadavar, 2018), etc. While these arguments are important, education needs to be seen more than being a vehicle for economic growth. It needs to be a process of and a pathway to empowerment. A girl needs to go through this process of education because it is her right to gain the intrinsic benefits of education so that she can live her life fully with an ability to make informed choices, backed by a set of skills which can help her negotiate important life decisions. Given the crucial role that education plays in accelerating socio-economic development, public provisioning of education has been an important area of government intervention in the country. Over time, different departments and ministries have implemented various schemes specific to girls' education mostly in the form of monetary and non-

monetary incentives, hostel facilities etc. Besides, the development of model schools in clusters, appointment of female teachers, gender sensitisation of teachers, providing girls' toilets, developing gender-sensitive learning materials, and providing need-based incentives for girls have helped governments to enrol more girls in schools (Kundu, 2019).

Two major centrally sponsored schemes for school education, *Sarva Shiksha Abhiyan* (SSA) and *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) were designed to prioritise girls' education. After implementation of SSA and RMSA (currently subsumed under *Samagra Shiksha Abhiyan* (SMSA)) and the RTE Act, the enrolment of girls in schools has significantly increased. Over 4000 *Kasturba Gandhi Balika Vidyalayas* (KGBVs) or residential schools were set up for underprivileged girls in Educationally Backward Blocks (EBBs) where rural female literacy is below the national average and the gender gap in literacy is above national average. To improve the retention of girls at the secondary level, a new initiative under SMSA targets the expansion of KGBVs from class IX to XII which is also in line with the provisions of the National Education Policy (NEP) 2020.

The NEP recognises the enormous benefits associated with girls' education and emphasises the need for quality school education as well as higher education for all girls. The policy has recommended constitution of a 'gender-inclusion fund' by Government of India to ensure equitable quality education for all girls.

The NEP also acknowledges the need for higher investment in education and rightly envisions that to reap maximum benefits from this investment; financing should be largely from public sources (Kundu, 2019). To reinforce this objective, the policy reaffirms the benchmark of six per cent of GDP as the minimum required public investment for education.

At present, India spends 2.8 per cent of GDP on school education of which almost two-thirds goes towards elementary education. A key factor for India's unsatisfactory performance in providing secondary education is inadequate public spending in the sector. Since the last 10 years, government expenditure on secondary education has remained stagnant, at one per cent of GDP (Kundu, 2018). Undoubtedly though, interventions through different schemes and programmes at the secondary level have improved the situation a great deal during the last 15 years, there remains a need for greater intervention since providing universal and quality education and retaining all girls at the secondary and higher secondary levels requires significant financial resources.

Unlike the RTE Act under which the government must provide free and compulsory elementary education to all children between 6–14 years, there is no such legal obligation at the secondary level. In 2012, the Central Advisory Board of Education (CABE) committee recommended that the scope of RTE be expanded to include secondary education, i.e., until class X. The report said that “although implementation of RTE in general faces a lot of obstacles at elementary stage of schooling, yet extension of RTE to secondary school is a must to ensure its effective implementation' (MHRD, 2013). The NEP 2020 (Section 8.8) proposed “free, compulsory and universal access to high quality and equitable schooling from early childhood care education to higher education” especially for socio-economically disadvantaged children including girls. This requires all states to commit towards providing for free secondary education for girls.

While NEP 2020 talks about universalisation of school education from 3-18 years, without making it a legal right, the draft NEP 2019 had explicitly mentioned this. Currently, there is no mandatory mechanism for the Union and state governments to make it a reality. In the absence of such a mandate, spending on secondary education is solely at the government's discretion.

As education beyond elementary level is not free, parents need to spend substantial amounts on their children's education after completion of elementary education. As of 2017-18, average out of pocket expenditure for secondary and higher secondary education was Rs. 4078 and Rs. 7001 per student per annum respectively in government schools. The amounts increase to Rs. 20,804 and Rs. 25,852 per student per annum in case of children attending private schools (MOSPI, 2019). According to some studies, parents believe that private schools offer better education leading to improved career prospects (Azim Premji foundation, 2019). Hence, they are more willing to pay for their sons' education in private schools than daughters. Government financing for school education is therefore even more crucial for girl children and it becomes ever more imperative for states to provide quality secondary education accessible to all girls.

Objective, scope of the study and research questions

There are various debates related to the probable nature of interventions: whether states should provide universal compulsory education or universal opportunities; whether secondary education should be fully free, merely compulsory, or both free and compulsory. Whatever the mode of intervention, a well-conceived plan for universalising secondary education for girls and its effective implementation will have cost implications. Building on the present status of government financing of secondary education, a thorough and accurate cost analysis is required. Given this backdrop, the objective of this study is two-fold.

I. Examining the present status of public financing for secondary education with a focus on girls.

II. Examining the budgetary implications of free and incentivised public secondary education for all girls.

Scope of the study

The study analyses the macro status of public provisioning for secondary education both at the Union level and for all 30 states. It compares the pattern of financing between elementary and secondary level to gauge policy priorities.

Analysis at the Union and state levels has been carried out for the last five financial years – 2017-18(Actual-A), 2018-19(A), 2019-20(A), 2020-21(Revised Estimates-RE) and 2021-22(Budgetary Estimates-BE).

Research questions

The study addresses a set of simple questions to unpack the nature of public financing for secondary education focusing on girls. The questions are as follows

1. How many ministries/departments spend on secondary education?
2. What is the current overall resource envelope for secondary education in India?
3. What is the trend and pattern of financing of secondary education by the Union Government?
4. What is the trend and pattern of financing of secondary education at the level of states?
5. How have budgetary resources been allocated/spent for different components of secondary education?
6. How are resources for secondary education being allocated under *Samagra Shiksha Abhiyan* (SMSA)?

7. What interventions have the Union government made for girls' education at the secondary level?
8. What would be the resource implications of free secondary education for girls?

Methodology

Public expenditure on school education includes expenditure at the elementary, secondary and senior secondary levels. The sources include expenditure by the government, state government, local bodies, and foreign aid which is primarily transferred through government budgets.

At the Union and the state levels, other than the Department of Education, many other departments too incur a substantial amount of expenditure on education. This analysis covers expenditure by all such departments that report expenditure on school education in their budgets. These departments include Department of Women and Child Welfare, 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.

In order to capture the total budgetary spending on secondary education for girls, the budgets of Department of Education at the Union and state level have been separately analysed. Analysis was done for 10 years for the Union Government. The Ministry of Education's publication 'Analysis of Budgeted Expenditure on Education' and the Detailed Demand for Grants (DDGs) of the Department of Education have been analysed for examining the trends of financing of Union and State governments.

To capture the Union government's spending specific to girls, Gender Budget Statements (GBS) of the Union Government (Statement 13) for the last 10 years have also been analysed.

At the schematic level, the analysis of resource allocation under SMSA has been done for 2020-21. The minutes of the meetings of Project Approval Board (PAB) for all states were scrutinised to analyse the pattern of approved allocation for the secondary education component under SMSA.

Additional resource requirements for providing free and incentivised public secondary education were estimated by analysing different interventions and unit costs in the existing models (a detailed methodology is provided in Chapter 3).

Limitations and assumptions

While the study attempts to provide a holistic picture, there are certain limitations related to data availability. These limitations include

1. Though very few urban local bodies spend on school education from the revenue exchequer, in the absence of data in the public domain, the study could not capture the expenditure incurred by urban local bodies.
2. The only available source to capture the total public (Centre and States) spending on secondary education is Analysis of Budgeted Expenditure on Education. Owing to lagged publication, the latest figures were available for 2018-19 (BE).
3. The detailed budget estimates of Department of Education, Punjab for the fiscal year 2021-22 are not available in the public domain. Therefore, the budget estimate for secondary education for 2020-21 has been used as estimated budget for 2021-22.
4. Telangana budget documents for 2018-19 do not report actual expenditure by the state in 2016-17. Budget estimates for 2016-17 have been used as proxy expenditure for that year.

5. The detailed budget book for 2019-20 for Delhi government is not available in the public domain. Hence, instead of actual expenditure in 2017-18 revised estimates in 2017-18 have been used.
6. The component wise expenditure of secondary education under SMSA is not available in the public domain. Therefore, instead of expenditure, the analysis had to rely on approved outlays by the PAB of SMSA, which could be an over-estimation.
7. To calculate the required resource envelope for providing secondary education for all girls, a number of assumptions have been made. Unlike RTE which lays down specific norms for elementary education, there are no specific norms for secondary education and its different components and activities at the Centre. For example, the norms are different for Kendriya Vidyalaya and SMSA (earlier RMSA). Moreover, the norms for SMSA also vary across states depending on the location and nature of activities. To address this issue, the analysis has made a series of assumptions, discussed in detail in Chapter 3.

Structure of the report

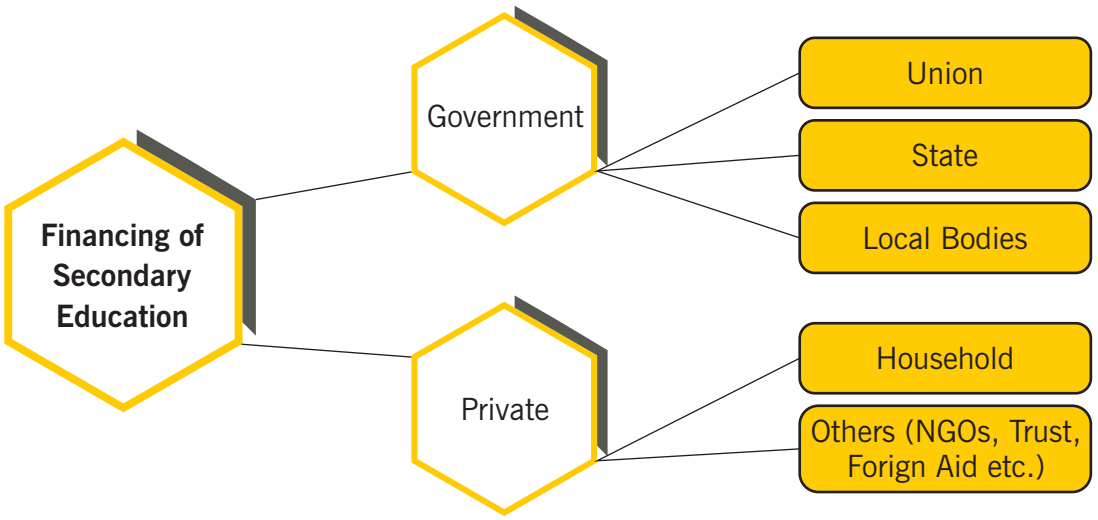
The report is presented in five chapters. Chapter 1 which is the introduction discusses in detail the background and rationale of the study, objectives and research questions, the methodology, and also highlights the limitations and assumptions of the study. Chapter 2 lays out the landscape of government financing of secondary education in India. Chapter 3 is a step-by-step discussion of the framework used for costing of universalisation of secondary education in India. Chapter 4 discusses the results of the costing analysis in detail. Chapter 5 concludes with policy recommendations.

Chapter 2: Landscape of Government Financing of Secondary Education in India

With the enactment of RTE bill in 2009, elementary education in India has become compulsory and free for all children aged 6-14. Since a similar legislative backing does not exist for secondary education, it is neither free nor compulsory. Nonetheless, as education is a subject in the concurrent list, both Union and state governments are responsible for financing secondary education.

While secondary education gets financed both by public and private sources (larger contributor is out of pocket expenditure by households) (Figure 2.1), in the absence of publicly available data on private spending, it is difficult to estimate how much is being spent on secondary education in the country.

Figure 2.1: Sources of financing for secondary education



Source: Compiled from various sources.

With the expansion of elementary education while the demand for secondary education rises, there is also a need felt to bring secondary education under the ambit of RTE. However, free public provisioning of secondary education has resource implications and given the fiscal state of the country with a limited resource envelope, this isn't easy to implement. Before further policy measures are taken, it is important to take stock of the magnitude of resources that the government is currently spending on secondary education and how money is distributed across critical components of secondary schooling. This will not only help to identify components which require more allocation but also in estimating additional resource requirements for expansion of secondary education coverage. This chapter provides an overview of government financing of secondary education in India.

As of 2019-20, there are around two crore girls studying at the secondary level in government and government-aided schools. There is a substantial improvement in gender equality in secondary education as the Net Enrolment Ratio (NER) for girls is 50.03 per cent at the secondary level and 33 per cent at the higher secondary level. However, the total dropout rate is 16 per cent of which girls and boys comprise 15 per cent and 17 per cent respectively (see Table 2.1).

On one hand, a comparison of statistics between 2018-19 and 2019-20 shows improvement in a few key indicators including girls' enrolment, promotion and retention rates and teachers' recruitment. On the other hand, there is a substantial drop in the number of functional schools along with some basic school infrastructure.

Table 2.1: Select basic indicators on secondary education in India

Indicator	2018-2019	2019-2020
Number of government and govt-aided schools (All)	11,92,406	11,40,609
Number of government and govt-aided schools provides secondary education/ (as % of all schools in parentheses)	2,72,515 (23%)	1,58,934 (14%)
Share of government and govt-aided schools with functional girls' toilet (only schools with secondary sections)	13.4%	14.2%
Number of government and govt-aided schools with incinerator (only schools with secondary sections)	52,757	47,361
Total enrolment of girls in government and govt-aided schools	2,03,57,593	2,02,83,790
Net Enrolment Ratio (NER) - girls	Secondary 48.24%, higher secondary 29.9%	Secondary 50.03%, higher secondary 33.3%
Total enrolment of girls with special needs) (grades IX-XII)	1,45,359	1,51,968
Promotion rate (secondary)	80.08%	82.25%
Repetition rate (secondary)	2.87%	2.70%
Dropout rate (secondary)	17.05%	15.05%
Total number of teachers in government and govt-aided schools (all schools)	64,31,078	66,97,325
Number of teachers in government and government-aided schools for secondary education (as % of all teachers in parentheses)	16,43,167 (26%)	18,16,406 (27%)

Source: UDISE+ database, 2018-19, 2019-20 accessed on 7th August, 2021.

Government spending is a critical component of a country's performance in any sector. A cross-country comparison of public spending on secondary education places India in the category of the lowest spending countries. Of the 15 countries listed in Table 2.2, some of the better performing countries like Finland and Brazil spend more than two per cent of their GDP on secondary education, while India's expenditure has been hovering around one per cent of GDP since the last five years.

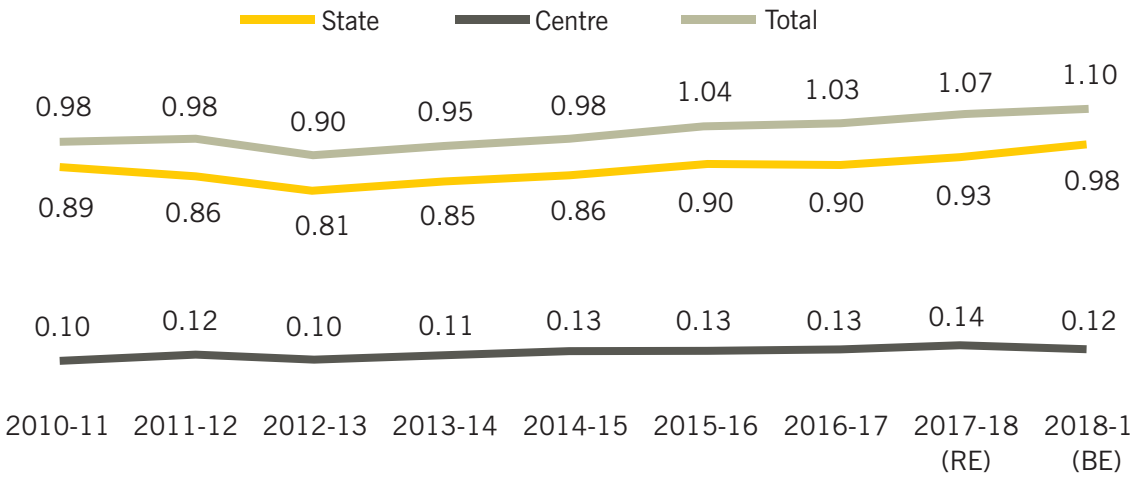
Table 2.2: Public spending on secondary education as per cent of GDP: An international comparison

Country	2014	2015	2016	2017	2018	2019
Afghanistan	0.9	0.8	0.9	0.9	..	..
Bangladesh	..	..	1.0	..	..	0.8
Bhutan	3.4	3.1	..	..	..	..
Brazil	2.6	2.6	2.6	2.5	..	..
Finland	2.7	2.6	2.5	2.3	..	..
India	1.0	1.0	1.0	1.1	1.1	..
Indonesia	0.9	1.0	..	..	..	..
Mexico	1.7	1.7	1.6	1.5	..	..
Nepal	1.3	1.2	..	..	..	..
Pakistan	0.8	1.0	..	..	..	..
Singapore	..	..	0.7	0.7	0.7	..
South Africa	1.9	1.8	..	1.8	1.9	1.9
Sri Lanka	0.9	1.0	1.7	1.4	1.0	0.8
United Kingdom	2.3	2.3	2.1	2.0	..	..
United States of America	1.7	1.7	1.7	1.7	..	..

Source: UNESCO database accessed on 6th June 2021; the data for India has been calculated from Analysis of Budgeted Expenditure on Education, various years.

An annual publication of the Union Ministry of Education (MoE), 'Analysis of Budgeted Expenditure on Education', provides information on government expenditure by levels of education. The latest MoE data shows that until 2018-19 (BE), total public spending on secondary education in the country — including expenditure not just by education departments at the Centre and state level, but also by other departments that spend on educational services — worked out to 1.1 per cent of the GDP (Figure 2.1).

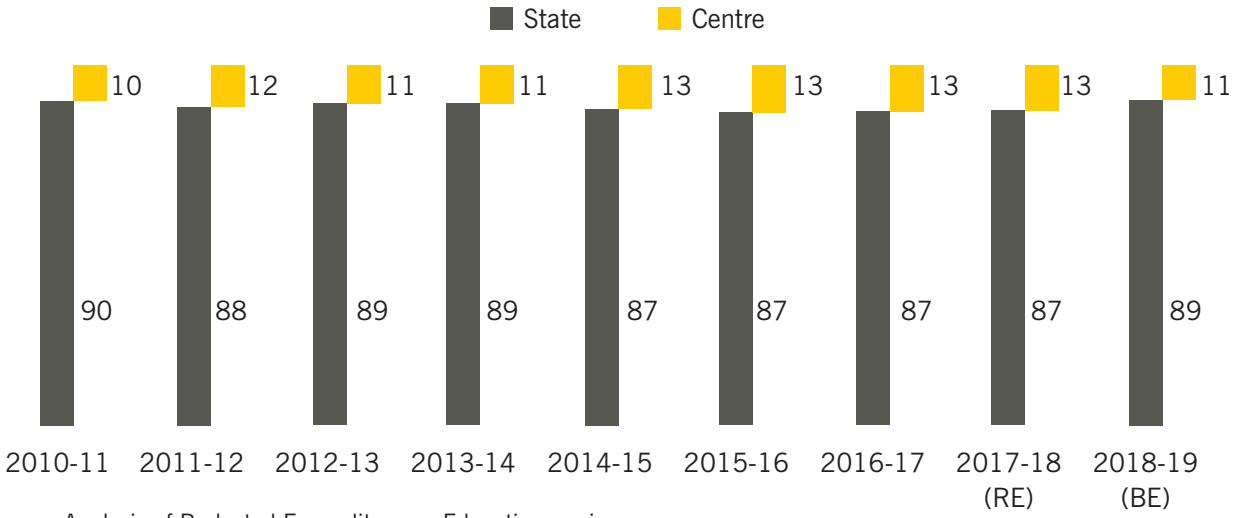
Figure 2.2: Government financing of education as percentage of the GDP



Source: Analysis of Budgeted Expenditure on Education, various years.

The figure 2.2 shows that of the total government expenditure on education, almost 90 per cent is borne by States and 10 per cent by Union government, with the pattern marginally varying over the years (Figure 2.3). While the Union government's share increased between 2010-11 and 2015-16, it started falling from 2016-17 onwards.

Figure 2.3: Fund sharing pattern between Centre and States



Source: Analysis of Budgeted Expenditure on Education, various years.

Table 2.3: Schemes of Union ministries for promotion of secondary education

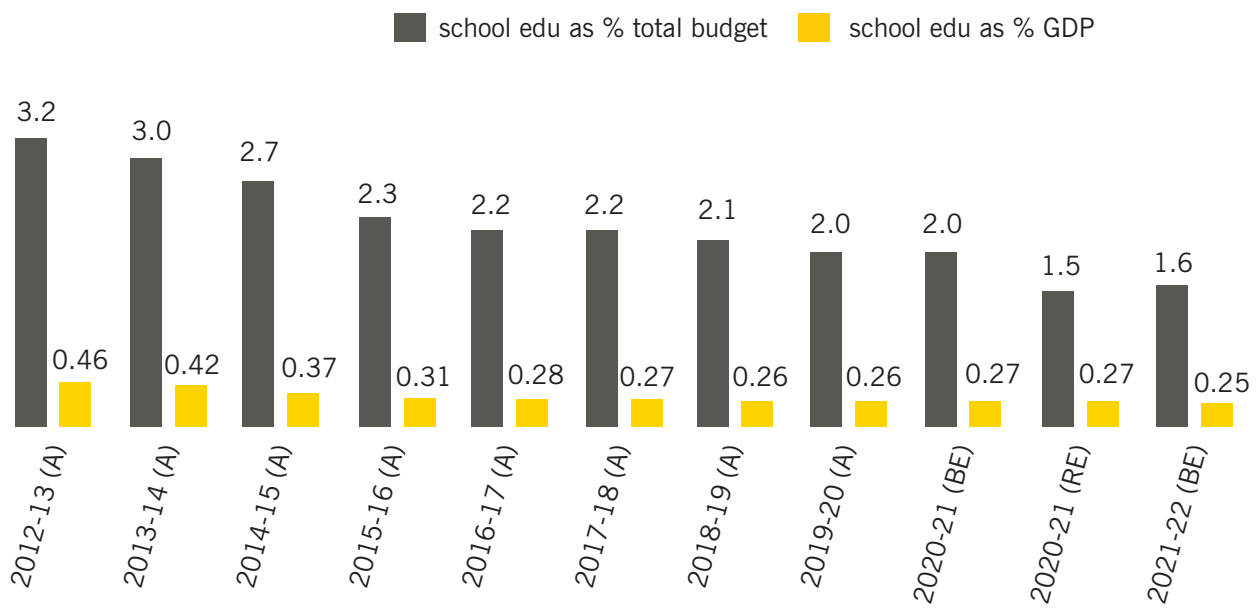
- *Samagra Shiksha Abhiyan*
- National Means-cum-Merit Scholarship Scheme
- National Award to Teachers
- National Scheme of Incentive to Girls for Secondary Education
- *Kendriya Vidyalaya Sangathan*
- *Navodaya Vidyalaya Samiti*
- Appointment of Language Teachers
- National Council of Educational Research and Training
- National Bal Bhawan
- Central Tibetan School Administration
- Operation Digital Board
- Strengthening Teaching-Learning and Results for States (STARS)
- Pre-matric Scholarship for Scheduled Castes (SC), Children of those engaged in unclean occupation, Scheduled Tribes (ST) Other Backward Classes (OBC), Minorities and Denotified Tribes
- Post-matric Scholarship for SC, ST, OBC and Minorities
- Scholarship for children with disabilities
- Boys and girl hostels for SCs and OBCs.
- Scheme of Residential Education for Students in High School in Targeted Areas (SHRESHTA) for Scs
- *Eklavya* Model Residential Schools

Source: Allocations for Welfare of Children (Statement 12), Union Budget, 2021-22.

The schemes/programmes listed in Table 2.3 are largely implemented by Ministry of Education (MoE), Ministry of Social Justice and Empowerment (MSJE), Ministry of Tribal Affairs (MoTA) and Ministry of Minority Affairs (MoMA). Most programmes are designed for overall promotion of school education, where secondary education is one of the components. Earlier, the RMSA and presently three additional schemes - National Means-cum-Merit Scholarship Scheme, National Scheme of Incentive to Girls for Secondary Education and Operation Digital Board under MoE and pre-matric scholarships under MSJE, MoTA, and MoMA are exclusively designed for children in secondary education. However, It is difficult to gather disaggregated data on how much the Union Government is allocating or spending exclusively on secondary education.

Since MoE is the nodal ministry for secondary education, its expenditure pattern on school education (elementary and secondary) gives an approximate idea about the size of the resource envelope for secondary education. Figure 2.4 shows a declining trend in the Union Government's expenditure on school education over time, both in terms of share in the total Union Budget and the country's GDP.

Figure 2.4: Union Government spending on school education

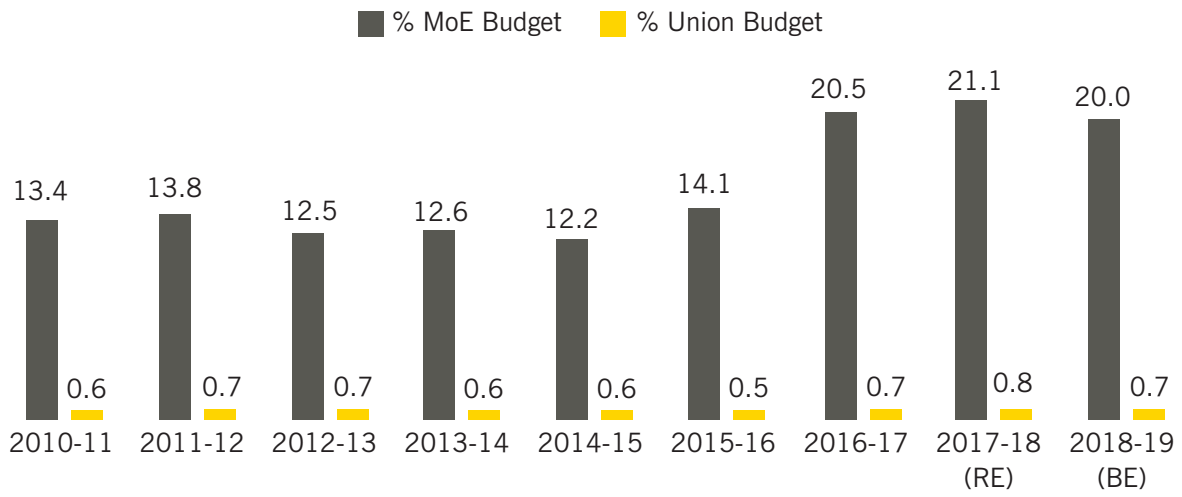


Source: Union Budget, various years.

While disaggregated level information is not available from Union Budget documents, Analysis of Budgeted Expenditure on Education provides disaggregated statistics for MoE spending on secondary education. Since the publication comes with a time lag, the latest available data is for 2018-19 (BE).

Figure 2.5 shows that in the last three years, only around 20 per cent of the total education budget of the MoE was for secondary education, which is 0.7 per cent of the total Union Budget. A comparison of the corresponding year data for school education as share of Union Budget in Figure 2.4 reveals that only one-third of the total school education budget of MoE goes towards secondary education.

Figure 2.5: Union Government spending on secondary education



Source: Analysis of Budgeted Expenditure on Education, various years.

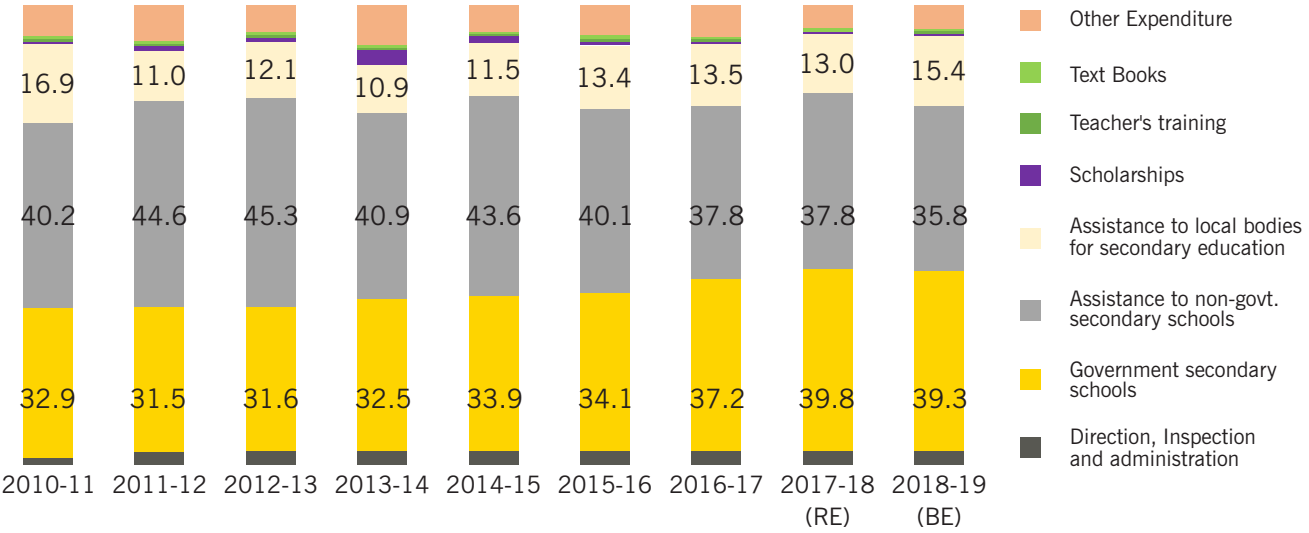
Knowing the pattern of budgetary allocation for secondary education is not enough to understand the planning and budgeting associated with resource allocation. It is important to look at how governments are allocating resources for different components of secondary education. State budget documents provide information regarding the allocation to and expenditure on secondary education, under eight main budget heads. These are (i) direction, inspection, and administration (ii) government secondary schools (iii) assistance to non-government secondary schools, (iv) assistance to local bodies for secondary education (v) scholarships (vi) teacher training (vii) textbooks (viii) other expenses.

A comparative analysis of the distribution of the secondary education budget across these eight components helps in answering the following questions:

1. How has India designed its secondary education budget over the last few years?
2. Have states reprioritised their allocations across different components during this time?

To get a holistic picture, this section analyses distribution across components of the secondary education budget from 2010-11 to 2018-19 (BE).

Figure 2.6: Component-wise distribution of expenditure on secondary education



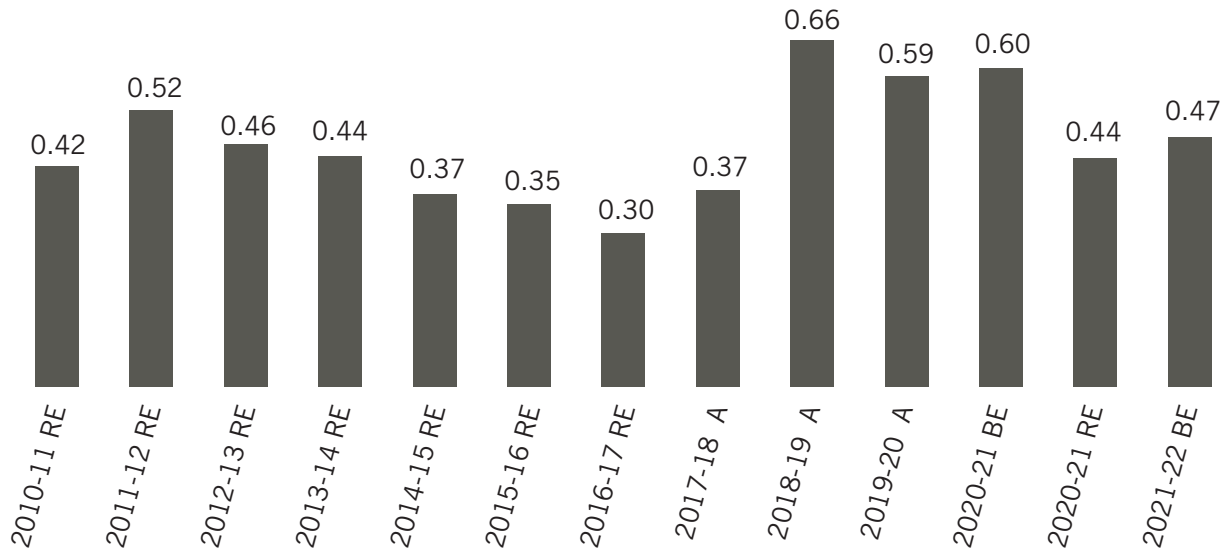
Source: Analysis of Budgeted Expenditure on Education, various years.

The disaggregated expenditure (Figure 2.6) reveals that non-government schools are the largest beneficiaries of government financing for secondary education since a major share of the secondary education budget goes towards supporting non-governmental secondary schools. Funds for non-government schools are in the form of grants for teachers' salaries and other overheads like teacher training, incentives, administration and management, curriculum development and examination systems. Over the last six years, this share has made up more than 40 per cent of the total expenditure.

The second largest component is government secondary schools. Around one-third of the total secondary education budget goes to government schools for expenditure related to teachers' salaries, infrastructure development and maintenance. The pattern has slightly changed in the last two years as there is a reprioritisation of resources from non-government schools to government schools.

Teacher training, despite its direct bearing on quality of education, is a resource-starved component of education. A stagnant 0.25 per cent of the secondary education budget is allocated for teacher training. It is important to note that text books and scholarships — two crucial components for girls' enrolment and retention — witnessed a budget cut in the last three years.

Figure 2.7: Union Government spending on girls' secondary education as per cent of Union Budget



Source: Gender Budget Statement, Union Budget, various years.

Figure 2.7 captures Union Government allocation on secondary education for girls from the GBS. The allocation is for schemes exclusively designed for girls with 100 per cent allocation, reported in Part A of the GBS and schemes with (30%-99%) allocation on girls reported in Part B. Besides the MoE, many other ministries like the MSJE, MoTA, MoMA, Ministry of Skill Development and Entrepreneurship too report expenditure on secondary education. At present, the only scheme being reported under Part A is National Scheme of Incentives to Girls for Secondary Education by MoE. No other interventions by the above-mentioned ministries are exclusively designed for girls. Though the pattern of reporting under GBS is debatable, it does give a rough idea of the gender responsive aspects of the secondary education budget. Figure 2.7 shows no particular pattern of investment for girls' education. However, is important to note that other than 2018-19, the expenditure never cross 0.6 per cent of the total Union Budget.

While the above discussion largely focuses on the pattern of Union Government and state government spending at the aggregate level, it is important to reflect on how each of the states are financing secondary education.

Table 2.4: State-wise spending on secondary education by Department of Education as a per cent of total State Budget

	2016-17 (A)	2017-18 (A)	2018-19 (A)	2019-20 (A)	2020-21 (BE)	2020-21 (RE)	2021-22 (BE)
ANDHRA PRADESH	3.8	4.8	5.0	4.9	5.8	7.0	6.3
ASSAM	5.2	5.3	5.4	4.9	4.6	4.2	4.8
BIHAR	2.4	2.9	2.5	1.7	2.8	2.9	3.0
CHHATTISGARH	6.1	6.7	6.1	7.1	7.5	7.4	7.5
DELHI#	13.0	15.0	15.1	15.9	15.0	13.5	15.2
Goa	5.5	5.7	6.2	6.7	4.9	5.2	4.5
GUJARAT	3.2	3.1	3.2	3.1	3.1	3.4	3.1
HARYANA	3.5	3.6	3.3	3.5	4.9	3.5	3.8
HIMACHAL PRADESH	5.0	6.2	5.6	5.6	6.0	5.1	6.2
JHARKHAND	0.7	1.3	1.2	1.8	2.6	2.7	3.0
KARNATAKA	3.9	3.4	3.3	3.4	3.2	3.3	3.1
KERALA	6.0	6.1	5.4	4.8	4.8	3.8	4.4
MADHYA PRADESH	1.4	4.3	6.5	3.8	2.9	2.6	2.5
MAHARASHTRA	6.4	6.2	5.6	6.0	5.8	5.2	5.3
ODISHA	3.6	4.3	4.4	4.0	3.8	3.7	3.6
PUNJAB	6.2	5.3	5.0	NA	NA	NA	NA
RAJASTHAN	7.4	8.0	9.4	9.0	9.2	8.5	9.5
TAMIL NADU	5.4	5.9	5.7	6.0	5.6	5.0	5.2
**TELANGANA	2.6	3.8	3.4	3.0	2.8	3.1	2.7
TRIPURA	0.6	0.8	10.2	9.8	6.6	7.2	6.6
UTTAR PRADESH	2.1	2.4	2.1	2.4	2.3	2.3	2.3
UTTARAKHAND	6.9	6.8	6.8	8.7	9.1	9.1	8.8
WEST BENGAL	6.3	5.7	5.6	6.9	5.9	7.2	6.6

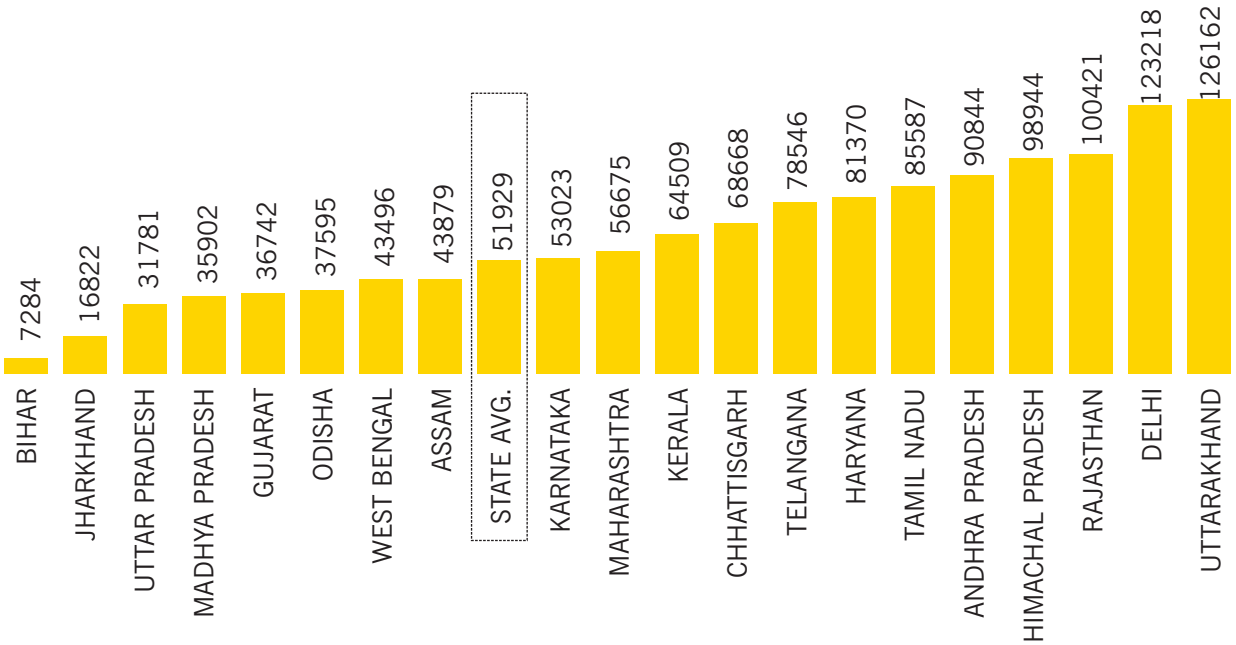
Note: **Telangana 2016-17(A) /(RE) was unavailable, therefore BE figures for 2016-17 have been taken. # Delhi data for 2017-18(A) was unavailable therefore revised estimates for 2017-18 have been used. The recent budget of Punjab for 2021-22 not available.

Source: State Budget documents.

The state level expenditure pattern on secondary education during the last six years shows that Delhi spent the highest share on secondary education followed by Rajasthan, Uttarakhand, Chhattisgarh, West Bengal and Tripura. The lowest spending states are Uttar Pradesh, Bihar, Gujarat, Madhya Pradesh and Telangana. It is to be noted that states including Andhra Pradesh, Bihar, Chhattisgarh, Delhi, Jharkhand, Rajasthan, Tripura, Uttarakhand, Uttar Pradesh and West Bengal increased or maintained their share of spending in secondary education consistently. On the other hand, Assam, Karnataka, Kerala, Madhya Pradesh and Maharashtra witnessed a drop in the share of the secondary education budget of the total budget in last five years. The increase in secondary education budgets in some states could be attributed to the 14th Finance Commission (FC) and 15th FC recommendations for which states received increased autonomy and additional flexi-funds since the last eight years.

The variation in spending patterns among states also reflects the varying per student spending in the states. While per student spending across states depends on multiple factors including demography and geographical differences, the huge variation in the unit cost indicates the persistence of inequality in public provisioning of secondary education. Figure 2.8 shows that in 2019-2020, Bihar spent lesser than Rs. 10,000 per student while the highest spending state was Uttarakhand, which spent 17 times more than Bihar. On an average, Department of Education spent Rs. 51,929 per student enrolled in a government or government-aided school.

Figure 2.8: State-wise spending per student (in government and govt-aided schools) on secondary education for 2019-20 (in Rs.)

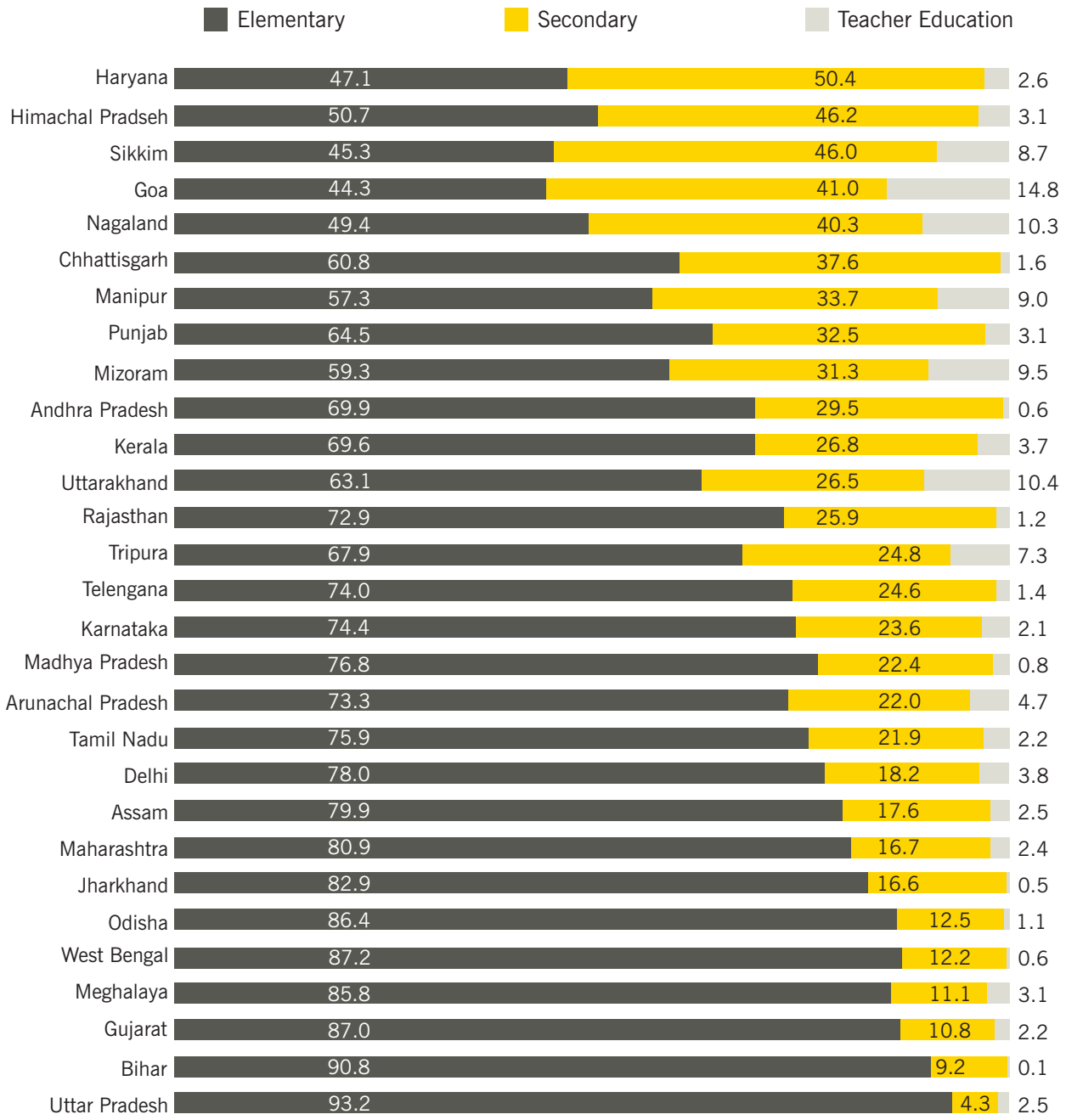


Source: UDISE+2019-20, State Budget documents, 2021-22.

States spend the largest share of their secondary education budgets on teachers' salary, which is largely non-plan expenditure (Kundu, 2018). However, among the schemes which constitute plan expenditures[1] of the government, SMSA is the key centrally sponsored scheme through which both Union and State governments implement various activities related to school education.

[1] The plan and non-plan nomenclature are no longer used in budget reporting following the 14th Finance Commission recommendations.

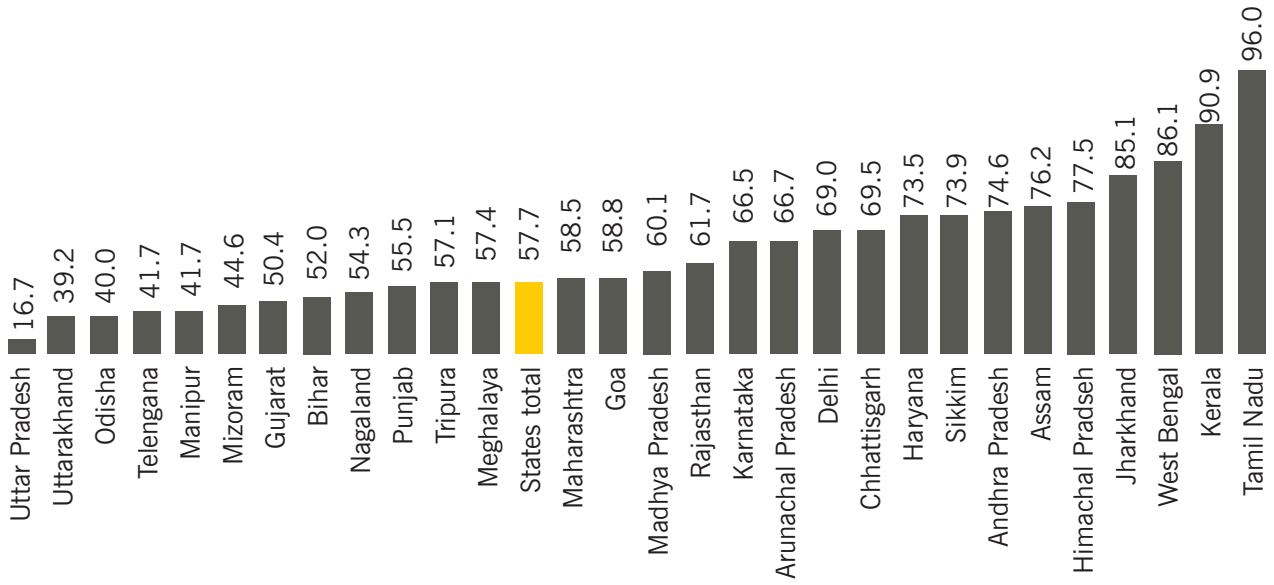
Figure 2.9: State-wise distribution of SMSA allocation by categories, 2020-21



Source: Minutes of PAB meetings, 2020-21.

As SMSA is an integration of the erstwhile SSA, RMSA and teacher education, a certain proportion of resources under SMSA is allocated for secondary education in line with the demand for resources by states. However, the distribution of SMSA allocations in all 30 states across the three major components shows that the largest share of approved allocation goes towards elementary education. The only exception is Haryana, where the allocation for secondary education was higher than elementary education (PAB, 2020-21). In Uttar Pradesh and Bihar, the share is not even 10 per cent of total SMSA outlay (Figure 2.9).

Figure 2.10: Unutilised funds at secondary level as per cent of total unutilised SMSA funds (non- recurring)



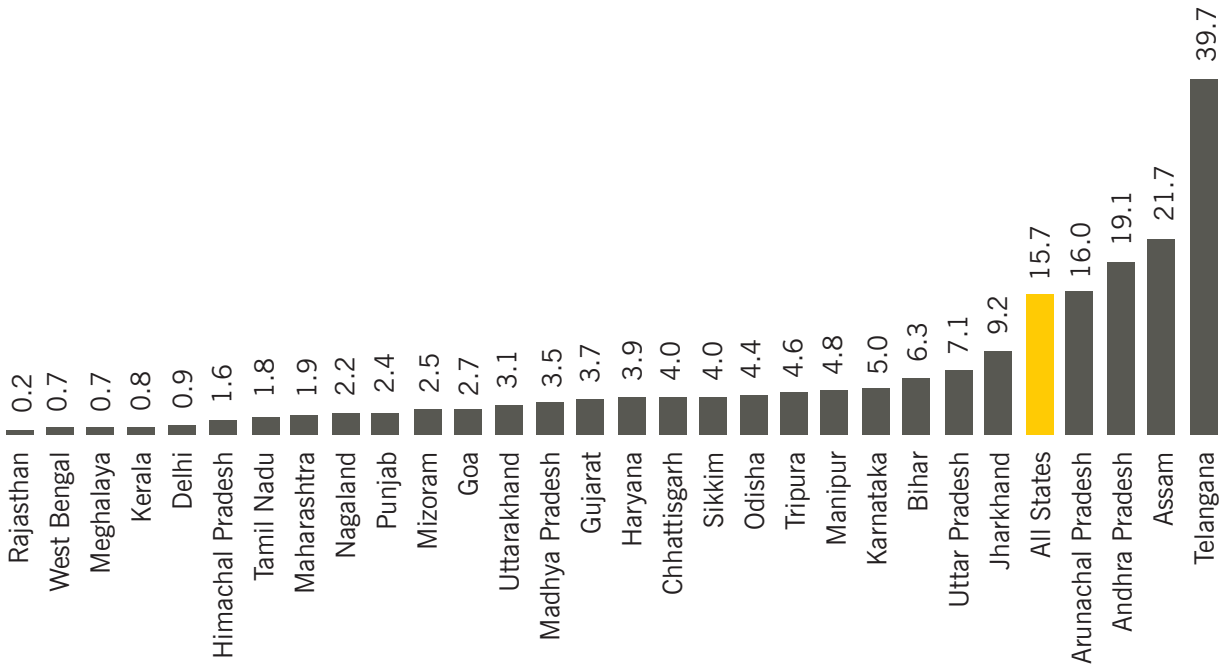
Source: Minutes of PAB meetings, 2020-21.

The pattern of resource distribution under SMSA shows that secondary education is still not a priority for a majority of states. Unfortunately, even what is getting allocated is not being utilised properly, especially non-recurring expenditure which is largely for the purpose of civil works. Figure 2.10 shows that the amount of spill over under SMSA is largely because of huge spill under the secondary education component. The major reason for inefficient fund utilisation is low States' Schedule of Rates (SSOR) for civil works. A minute study of detailed cost sheets submitted by every state under their Annual Workplans and Budgets (AWP&B) shows that unutilised resources are mainly on account of construction of KGBVs.

The incidence of under allocation and under-utilisation of funds directly impacts girls' education. The SMSA framework recognises gender as a critical cross-cutting equity issue. Bridging gender and social category gaps at all levels of school education is a major objective of the scheme.

The AWP&B shows that state budget resources specific to girls' education is mostly under the budget head 'Gender and Equity'. The interventions under this head include construction and strengthening of KGBV and interventions to promote girls' empowerment especially adolescent girls through training in martial arts/self-defence, career guidance programs for girls, etc. Other than this, under the secondary education component of SMSA, states also allocate resources for provisions like hostels and some monetary and non-monetary incentives to girl children to increase retention rates.

Figure 2.11: Approved budget for 'gender & equity' component in total SMSA budget (%)



Source: Minutes of PAB meetings, 2020-21, SE-Shagun portal.

Figure 2.11 reveals state priorities for 'Gender & Equity' in terms of resource allocation. The share varies from 0.2 per cent in Rajasthan to 39.7 per cent in Telangana, while the all-India average allocation is 16 per cent. It is important to recall here that Rajasthan is among the states which spends the biggest chunk of its education budget on secondary education while Telangana is one of the lowest.

A thorough analysis of government financing status for secondary education reveals that secondary education receives less priority even when the country is about to reach near universalisation in elementary education. Since the achievement of girls at the secondary level is quite promising, corresponding government efforts in terms of higher investment towards girls and an overall gender responsiveness in planning and budgeting is needed to increase the momentum for girls' education. Since girls, especially from marginalised communities, largely depend on public provisioning of education, it is the responsibility of governments to ensure they receive complete school education.

The next chapters attempt to measure the total resource requirements for public provisioning of free secondary education for girls.

Chapter 3: Cost of universalisation of secondary education in India: A note on methodology

This chapter estimates the additional resource requirement for universalising secondary education for all girls. It is to be noted that not all existing schools offering secondary education function optimally. Therefore, systemic reform is a pre-condition for extension of free education till the secondary level. This requires improvement in human resources (teaching & non-teaching staff), physical infrastructure, academic and evaluation aspects, processes, and management. However, in the absence of disaggregated data at the implementation level, it is difficult to estimate the magnitude of resources required to improve the existing system. Therefore, this analysis solely focuses on estimating additional expenditures required to bring out of school girls (OOSG) into the secondary education system.

Steps:

I. Determining the number of eligible beneficiaries

1. Total number of girls in the age group of 15-19 years in 2021 (projected)
2. Total enrolment of girls at secondary and higher secondary level (current)
3. Total number out of school girls in the age group of 15-19 years = (Projected population – total enrolment)

Scenario I: All girls aged 15-19 years currently out of school are eligible for age specific grades of secondary education

In this scenario, the total number of eligible beneficiaries would be derived from Step 3.

Scenario II: All girls aged 15-19 years dropped out after completing elementary education and above (i.e., those who completed grades VIII/ IX/ X/ XI and then dropped out).

In this case, to derive the number of eligible beneficiaries, the analysis has used NSS unit level data.

As per the 75th round of National Sample Survey (NSS) data (2017-18) of the total OOSG aged 15-19 years, 19.8 per cent completed grade VIII and then dropped out; 9.8 per cent completed class X before dropping out, 21.7 per cent completed class XI before dropping out and 2.1 per cent completed class XII before dropping out. This implies 53.4 per cent of OOSG are eligible for secondary education.

II. Determining platform for accommodating additional enrolment

There are four possible platforms for accommodating additional enrolment

1) Opening of new schools
2) Upgrading existing elementary schools to secondary schools
3) Opening additional secondary sections in existing high schools
4) Education through open and distance learning mode

Section 7.7 of NEP proposes establishing a grouping structure called the school complex, consisting of one secondary school together with all other schools offering junior grades in the neighbourhood including *anganwadis*, in a radius of five to ten kilometres. While the idea of resource (both human and financial) sharing across complexes can bring efficiency and effective functioning, it requires thorough planning without diluting the distance norms specified under RTE and SMSA.

Opening of new schools involves substantial cost including land cost. As per the common school system report (CSS, 2007) each senior secondary school should have a minimum of 1158 square metres (0.29 acres) of land for physical infrastructure. In addition, the school should have 1.58 acres of land for playfields. Given huge geographical variations and varied market rates of land, it is not appropriate to apply a centralised cost of land.

Moreover, it is rational and cost effective for a school building to offer classes from pre-nursery to senior secondary. As the analysis focuses exclusively on secondary education, costing for a school till senior secondary level would be over-estimation. Therefore, this study deliberately does not choose the first option for analysis.

Similarly, while UDISE+ provides information about the number of schools with secondary and higher secondary sections, it does not provide information about the number of sections at each level and associated infrastructure facilities. As the Central Public Works Department (CPWD) has specific construction norms regarding the number of sections at each level, without specific information, it is difficult to assess the present availability and existing gaps. Thus, it is difficult to estimate costs for requirements for additional section in existing schools.

Though open schooling and distant learning are important and constitute necessary alternatives for some children, this is not the first preference. The most preferred policy option for bringing out of school children back in schools is through mainstream education. Therefore, this study chooses option 2, i.e, 'upgrading existing elementary schools to secondary schools' as the most suitable for scaling up secondary education. The CABE committee on expanding the RTE Act to include secondary education and the recently released NEP implementation plan SARTHAQ also emphasises strengthening of existing systems instead of new building construction.

Task 65 of the SARTHAQ states that by 2023, states/Union Territories are to prepare a comprehensive ten-year projection report or need analysis in terms of budget requirement, upgrading and enlarging existing schools, adding infrastructure, building new schools, transportation facility and hostels for children, especially girls. SARTHAQ Task 81 also mentions that “States/UTs will need to prepare guidelines for developing their own models for encouraging involvement of Government and Non-Government philanthropic organisations to build schools keeping in mind the local variations…” The NEP lays significant emphasis on multi-stakeholder engagement in education delivery. Increasing public expenditure on education would significantly reduce the existing resource crunch, enhance availability, access and quality of school education in India. Leveraging funds through non-government/philanthropic organisations should be with a view to fill gaps in public investment and enhance the quality of secondary education.

School Infrastructure

III. Determining number of additional classrooms required

As per the SMSA framework, the student classroom ratio should be 40:1. Applying this ratio on the number of eligible beneficiaries provides the total number of required additional classrooms.

IV. Determining number of elementary schools which need to be upgraded and associated cost

i) Each section should ideally cater to 40 girls as per SMSA norm

ii) As per CPWD norms/SMSA framework each grade should have two sections and for XI and XII, maximum two sections are needed for each stream i.e., Science, Arts and Commerce.

Table 3.1: Maximum strength of girls in a secondary school

Norm	Class IX - 2 sections	Class X - 2 sections	Class XI - 2 sections for each stream (3 streams)	Class XII - 2 sections for each stream (3 streams)	Total
Maximum 40 girls/section	80	80	240	240	640

The table implies that upgradation of an elementary school to high school in its optimal capacity could cater to maximum 640 students (Table 3.1).

Hence, total number of elementary schools need upgradation = (total number of eligible beneficiaries/640)

The SMSA framework does not provide any financial norms for strengthening an elementary school., It is suggested that CPWD/States' Schedule of Rates (SSOR) norms be used, whichever is lower. However, as per the RMSA framework, the unit cost for strengthening elementary schools is Rs. 61.5 lakh. This includes construction of 16 classrooms, office headmaster rooms, library, two laboratories, computer room, arts and crafts room, toilets, drinking water facilities and essential classroom furniture. This analysis uses RMSA norm for cost estimation. However, RMSA norms include the cost for only one unit of toilet facilities, while the requirement varies as per the nature of schools, number of enrolments, breaks provided between classes etc. Therefore, this analysis has estimated the cost of required Water, Sanitation and Hygiene (WASH) facilities separately.

V. Determining number of required toilets, WASH facilities and associated costs

Two scenarios have been created for estimating the number of girls' toilets.

According to the SMSA design, one toilet block consists of 5 toilets, 1 lavatory, wash basin and incinerator.

1. As per CPWD/KV norms, 1 toilet can be used by 25 girls, which means a toilet block can serve 125 girls.
2. As per SMSA norms, 1 toilet can be used by up to 40 girls, which means a toilet block can serve maximum 200 girls.

According to CPWD norms, every school should have at least one toilet which CWSN can access. Otherwise, an existing toilet can be converted to a CWSN-friendly toilet and funds for conversion may be sought.

As per SSA norms, the unit cost of one unit toilet block for girls is Rs 1.3 lakh and modification of a toilet for disabled children would cost around Rs 50,000. Therefore, one unit of toilet block is estimated to cost Rs. 1.8 lakh.

School should have toilets for teaching and non-teaching staff.

As per SMSA norms, the teacher to student ratio should be 1:30. This implies that a school requires at least 21 teachers to teach 640 students. Therefore, two units of toilet blocks per school for teachers would serve the purpose.

Each school should have 1 drinking water fountain for 100 children, with a unit cost of Rs. 1.2 lakh per fountain (CPWD/KV norms).

VI. Maintenance grant

SMSA guidelines provide composite grants to all government schools on an annual basis for replacing non-functional school equipment and for other recurring costs such as consumables, play material, games, sports equipment, laboratories, electricity charges, internet, water, teaching aids, etc. The grant also includes expenditure on annual maintenance and repairs of existing school buildings, toilets and other facilities.

The grant varies across schools on the basis of the enrolment. The norms are as follows:

<100 students: Rs. 25000 (including at least Rs. 2500 for *Swachhta* Action Plan)

>100 to <250 students: Rs. 50,000 (including at least Rs. 5000 for *Swachhta* Action Plan)

>250 to <1000 students: Rs. 75,000 (including at least Rs. 7,500 for *Swachhta* Action Plan) and

>1000 students: Rs. 1,00,000/- (including at least Rs. 10,000 for *Swachhta* Action Plan)

Since in an optimal scenario, an upgraded elementary school can cater up to 640 students, the composite grant would be Rs. 75000/school/annum in our scaled-up model.

Besides maintenance grants, SMSA also provides library grants of Rs. 15,000/annum for schools with grades XI-XII for strengthening school libraries including purchase of books.

VII. Residential schools-cum-hostel facilities:

To improve the accessibility of education in the tribal remote areas, the MoE is implementing various schemes in Educationally Backward Blocks (EBBs) such as Model Schools, construction of girls' hostels, *Kasturba Gandhi Balika Vidyalaya* (KGBVs) etc.

The CABE sub-committee constituted in 2017 has recommended that to promote girls' education, there should be "residential schooling facility for girls and upgradation of existing KGBVs up to class XII". The National Education Policy 2020 (Section 6.9) too reiterates "... *Kasturba Gandhi Balika Vidyalayas* will be strengthened and expanded to increase the participation in quality schools (up to grade XII) of girls from socio-economically disadvantaged backgrounds.'

India currently has 3479 EBBs. As per SMSA guidelines, there should be at least one residential school for girls from grades VI-XII in every EBB, unless residential schools already exist through any other scheme of the MSJE, MoTA or the State Government. SMSA prioritises KGBV and highlights the need for KGBVs to be extended up to Class XII for smooth transitioning of girls from elementary to the senior secondary level. Scheme guidelines also state that girls' hostels sanctioned under the erstwhile RMSA scheme for EBBs should be integrated with KGBVs. Priority will be given for upgradation of KGBVs where a girls' hostel has not been established in the same campus and where there is no secondary/senior secondary school in the vicinity, as per neighbourhood norms.

Girls in the age group of 10-18 years aspiring to study in grades VI to XII and belonging to SC, ST, OBC, minority communities and below poverty line (BPL) families are the targeted beneficiaries under KGBV.

Four possible models of KGBVs have been suggested under SMSA, of which three types of models support secondary education.

Type-I: For existing KGBVs for grades VI-VIII

Type-II: KGBVs for grades VI-X

Type- III: KGBVs for grades VI-XII and

Type- IV: Existing Girls' Hostels for grades IX-XII

However, there is no disaggregated data on enrolment for different types of KGBVs and it is also difficult to calculate how many KGBVs are required for secondary education of the marginalised children. While the choice of KGBV model will depend on the need of the specific EBB, for the sake of simplicity in calculation, we have adopted the Type I model for upgradation till Class XII. As of 2019, there are 2173 Type-I KGBVs (Lok Sabha, 2019) Therefore, it can be assumed that upgradation of elementary schools (Step IV in methodology) also includes upgradation of these 2173 KGBVs.

Under SMSA, KGBVs also receive a separate recurring grant which includes cost of food, lodging, skill training as well as manpower costs like salaries of wardens, cooks, peons, security guards, etc. The recurring grant of Rs. 25 lakh/KGBV for stand-alone girls' hostels for grades IX to XII (as the focus of this study is secondary education) has been taken as the unit cost for this analysis.

VIII. Sports and Physical Education

A holistic education with physical, social, emotional and mental development of children requires substantial investment in sports and physical education. In NEP 2020, physical education, fitness, wellness and sports have been given adequate importance. The policy states that this skill “should be learned by all students to become good, successful, innovative, adaptable, and productive human beings in today's rapidly changing world” (Section 4.23). Schools should have adequate physical education teachers, playgrounds and sports equipment for indoor and outdoor games.

Under SMSA, there is no provision for building playgrounds. However, as per UDISE + data for 2019-20, around 24 per cent of government and government-aided elementary schools, i.e., around 1.5 lakh elementary schools which are eligible for expansion till the secondary level, lack playgrounds. Earlier, under RMSA, there was a provision of Rs 10,000 per school for developing playgrounds. We have used this unit cost for our analysis, assuming that elementary schools that would be upgraded don't have playgrounds.

Besides a one-time grant, SMSA provides Rs. 25,000 per annum to secondary and senior secondary schools for purchasing of sports equipment.

IX. ICT and digital initiatives

In the times of COVID-19, the dependence on digital medium has significantly increased and the pandemic also highlighted the need for bridging the digital divide. In Part-III of the NEP 2020 integration of technology with the education system and online and digital education have been discussed to a larger extent. In the whole policy document, this is the only area of discussion where the pandemic has a reference point (Kundu, 2020). The policy reads:

"The recent rise in epidemics and pandemics necessitates that we are ready with alternative modes of quality education whenever and wherever traditional and in-person modes of education are not possible." (Section 24.1)

The policy envisages technology as an integral part of education planning, management, administration, teaching, learning, assessment, teachers' training, and professional development.

At present, SMSA provides for a onetime grant of Rs. 6.4 lakh for building digital infrastructure in schools with grades VI to XII. Besides, there is also a provision for a recurring grant of up to Rs. 2.40 lakh per school per annum for a period of 5 years. We have applied these norms in estimating the cost of digital initiatives in schools.

Teachers

Teachers are a crucial component of quality education. NEP 2020 identifies teachers as one of the critical components towards 'equitable high-quality education for underprivileged and socio-economically disadvantaged groups.' Teacher education and continuing professional development of teachers is another thrust area which calls for long term financial support (Section 26.3 and 26.4). Teachers' salaries have been a subject of much discussion and debate in public policy. Keeping this in mind, the analysis offers multiple scenarios.

For determining additional teachers' requirement, the analysis has applied the following two norms

1) As per CABE committee (2005) there should be 1.5 teachers for each additional classroom,
2) As per the SMSA framework, the teacher student ratio should be 1:30
3) The analysis assumes that all the elementary schools will be upgraded till secondary level have headmaster in position and hence, recruitment of headmaster is not required in those schools.

X. Teacher salary

For estimating teacher salaries for both the scenarios, two sets of unit costs have been assigned.

1) Salary of a Trained Graduate Teacher (TGT) of Kendriya Vidyalaya as per the Seventh Pay Commission @ Rs.50,610 per month
2) Salary as per SMSA framework @ Rs 25,000 per month

XI. Teacher Training

The financial norms under SMSA for in-service refresher training and induction training have been used for estimating the costs of teacher training.

- Refresher in-service training up to 10 days for all teachers @ Rs. 500 per teacher per day.
- Residential Induction training for newly recruited teachers for 30 days @ Rs. 500 per day

XII. Incentives for teachers

Absence of female teachers in secondary and higher secondary schools is a major reasons for girls dropping out. To incentivise rural teachers, RMSA had a provision for rural posting allowance of Rs 300 per month per teacher. Though, there is no such provision in SMSA. Nevertheless, the analysis incorporates this component as an effective policy intervention.

In the absence of statistics on the number of rural teachers at the secondary level in government and government-aided schools, we have applied the following methodology.

As of 2019-20, 67 per cent of total girls enrolled were in government and government-aided schools in rural areas while 39 per cent of teachers teaching in government and government-aided schools at the secondary level were females. Both ratios have been applied to derive the required number of rural teachers.

XIII. Inclusive Education

Universalisation does not only mean scaling up of the system in quantity, but the system should also be inclusive irrespective of caste, class, religion, gender or disability.

Under the RTE/SMSA framework, the terminology 'inclusive education' is used to highlight the inclusion of mostly CWSN.

The Rights of Persons with Disabilities Act, 2016 states that i) The appropriate Government and the local authorities are to establish adequate numbers of resource centres to support educational institutions at all levels of school education (Section 17(d)). The Act also talks about training of professionals and staff to support inclusive education at all levels of school education (Section 17(e)).

The NEP 2020 also recognises 'the importance of creating enabling mechanisms for providing CWSN, the same opportunities of obtaining quality education as any other child' (Section 6.2.5). The policy also underlines the role of special educators in subject teaching for CWSN at the secondary school level, including teaching for specific learning disabilities (Section 5.21).

Population figures are not available for disabled children aged 15-19. However, as per Census 2011, two per cent of girls in the age group of 10-19 years have some form of disabilities. In the absence of projected CWSN population in the age group of 15 to 19 years for 2021-22, following Census 2011, two per cent of total projected beneficiaries are assumed as CWSN girls, eligible for secondary education.

The following components are included to estimate the cost of inclusive education.

1) Provision for CWSN, which includes aids and appliances, teaching materials and stipends for girls @ Rs 3500/ annum (as per the SMSA framework)

2) SMSA framework does not provide any specific norms for special educators. However, as per Inclusive Education of the Disabled at Secondary Stage (IEDSS) (a programme under RMSA) the ratio of special educator to student should be 1:5. Based on this norm the additional number of special educators has been derived and a unit cost of Rs. 25000 per month has been assigned as salary as per SMSA framework.

3) Training of a special educator for 15 days @Rs 500/day as per SMSA framework

XIV. Incentives for girls

Studies have shown that even opening new schools does not always help in bringing girls to school or retaining them. Policy measures like providing incentives – both monetary and non-monetary – are among the strongest enablers to keep girls in schools. The estimations have tried to capture all possible components directly impact girls' schooling. The following table shows the components incorporated under estimation of incentives and their unit costs.

Table 3.2: Incentive for girls

Item	Unit cost in Rs. (Per child per annum)	Comment
Textbooks	650	SMSA (based on RTE) framework
Additional textbooks (bridging material)	200	Currently 8.6% of total girls enrolled are from ST community, Applied the same ratio on the projected OOSG to derive the number of ST beneficiaries who would be eligble for schooling; Primers/textbooks are developed for tribal languages with bridging materials to facilitate a transition to the State language of instruction and English (SMSA framework)
Uniforms	600	SMSA framework
Transport allowance	6000	SMSA framework
Mid-day meal	1639	Annual unit cost calculated as per GOI revised Mid Day Meal (MDM) rates for upper primary schools as of 2021: Cooking costs are Rs. 7.45 per day for 220 working days (MDM guidelines following NEP recommendation)
Bicycle (only to those entering grade IX)	3000	As per scenario-I, all 15-19 years age group out of school girls are eligible for age specific grade, i.e, a 15 years old girl is eligible for IX th standard and hence is eligible for bi-cycle; For scenario II, 19.8% girls of total (15-19) OOS girls have completed class VIII and dropped out and hence eligible for grade IX admission (The unit cost applied is average of state spending on a bicycle)
Wheel chair	8000	As per Census 2011, 2% of girls in the 10-19 years bracket are CWSN. Of these, 13.7% have disabilities related to mobility; the same share has been applied to estimate the number of children needing wheelchairs (Market rate)
Sanitary napkins	120	10 napkins/student/month @ Re. 1/napkin (State PAB on SMSA)
Self-defence training	9000	Provision for up to Rs. 3000 per month for 3 months per school; for schools with grades VI to XII (SMSA framework)

Source: Different programme guidelines.

While the SMSA framework suggests a number of interventions for children with disabilities, these are not at par with provisions in the Rights of Persons with Disabilities Act, 2016. Therefore, in addition to suggested interventions in Table 3.2, strengthening existing norms too would have implications on budgetary allocations and expenditure.

XV. Institutional Training

There is a need for professionally qualified teachers to meet the growing demand for secondary education. This requires strengthening of pre-service teacher education institutions. Therefore, this study tries to estimate probable costs for institutional building for pre-service teacher education. District Institute of Education and Training (DIET) and Colleges for Teachers Education are responsible institutes for both in-service and pre-service teachers' education. Unfortunately, there is not adequate information available for these institutes in the public domain.

Ideally, each district should have one DIET. While currently there are 742 districts in India, only 555 DIETs are operational against 571 sanctioned DIETs (MHRD, 2012). As per the SMSA framework, a standard DIET has a capacity intake of 40-100 students along with 25 staff — 19 academic and 6 other staff. As per our estimation of additional teachers' requirements, the government needs to construct around 7500-10,000 DIETs to educate all the newly recruited teachers at a time, which is not possible. Moreover, the construction of new DIETs is conditional. New DIETs are sanctioned only to those States/UTs where all previously sanctioned DIETs are functional. Therefore, it is difficult to arrive at a figure on how many additional DIETS could be constructed.

Thus, as a proxy, the analysis estimates the recurring costs required for strengthening existing DIETS. As per answer of Lok Sabha question (2017), 6649 academic posts are vacant in existing DIETs. The study has estimated required resources to fill vacant posts on account of salary and training of academic staff. It is to be noted that other than regular pedagogy, trainings need to strengthen teaching capacities on inclusive education, child protection and pedagogy by reinvigorating DIETs as envisioned in the NEP, 2020.

The financial norms for salary applied are the same as stipulated for Trained Graduate Teachers (TGT) and mentioned in Step X and Step XI.

XVI. Monitoring

Monitoring of schools and students' performance is an integral part of quality improvement. Besides school governance, community too plays an important role in universalising girls' education. Under the SMSA framework, community mobilisation has been given priority for effective planning and implementation of interventions in schools and proper monitoring, evaluation and ownership of government programmes. School Management Development Committees (SMDCs) are the bridge between parents and teachers. Active participation of SMDC members is crucial to encourage community involvement in monitoring of education delivery and to ensure aspects of child protection and awareness generation among parents to address attitude related barriers to girls' education.

To estimate monitoring costs, the analysis covers two critical components.

1. Developing Management Information System (MIS) as per the SMSA framework with a unit cost of Rs. 2 per student.
2. Training of SMDC members in each school as provisioned in SMSA with a unit cost of Rs. 3000 per school per annum.

XVII. Other than these recurring and one-time costs, there are certain administrative and monitoring costs that need to be incurred at different levels of governance. For example, costs for strengthening NCERT, SCERT and costs at the secretariat level. As these institutions are already in place, it has been assumed that no additional resources are required for this purpose.

XVIII. Steps III to XVI have been added to derive the total additional resources required for universalising secondary education. A range of total costs has been enumerated based on varying numbers of projected beneficiaries.

XIX. Estimated costs are presented as a share of GDP as well as in per child terms.

Chapter 4: Additional resource requirements for providing secondary education to all girls

Findings

Based on the methodology discussed in Chapter 3, this chapter estimates the total resource requirement to bring out of school girls into secondary level of education. As discussed earlier, the estimation of costs has been done for two scenarios.

Scenario A: All girls in the age group of 15-19 years who are currently out of school and considered eligible for age specific grades of secondary education.

Scenario B: All girls in the age group of 15-19 years who have completed elementary education and above, but not all four years of secondary education, are considered as eligible beneficiaries. Scenario A is a relatively optimistic situation where we assume that all girls have completed elementary education. This is not the case as even now 30 per cent of girls have never attended school.

As per population projections by Ministry of Health and Family Welfare (2020) the total projected population of girls in the age group of 15-19 years is 5.94 crore. The following table (Table 4.1) provides the latest data on girls' enrolment by grades and different categories.

Table 4.1: Total girls' enrolment by grades and different categories

Category	Class-IX	Class-X	Class-XI	Class-XII	Total
General	26,17,504	24,21,412	19,52,073	18,58,598	88,49,587
OBC	42,03,466	40,33,695	28,85,725	27,56,808	1,38,79,694
SC	17,64,460	16,18,029	11,42,119	10,64,227	55,88,835
ST	9,40,735	7,92,776	4,95,469	46,11,92	26,90,172
Total	95,26,165	88,65,912	64,75,386	61,40,825	3,10,08,288

Source: UDISE+, 2019-20.

Based on the two above assumptions related to eligible beneficiaries, the total number of eligible beneficiaries for scenario A and B are 2.84 crore and 1.51 crore respectively (See Table 4.2).

Table 4.2: Total eligible girls for secondary education

Scenario A	Scenario B
All girls in the age group of 15-19 years currently out of school are eligible for age specific grades of secondary education	Girls in the age group of 15-19 years who dropped out after completing elementary education & above
2,84,11,712	1,51,71,854

Source: Author's calculation.

4.1. Physical and financial resource requirements for scenario A

This section derives the additional physical resource requirements vis-a-vis financial resource requirements to bring all OOSGs in the age group of 15-19 years into mainstream education at the secondary level. Tables 4.3 and 4.4 have been constructed following component specific norms largely based on KV, CPWD, SMSA and RMSA norms (discussed in detail in Chapter 3). In Table 4.3, Scenario-1 suggests the requirement of toilet blocks following CPWD norms and Scenario-2 suggests requirements based on SMSA norms. Similarly, requirements for additional teachers have been estimated as per CABE committee recommendations and RMSA norms in Scenario-1 and Scenario-2 respectively. The remaining components presented under Scenario-1 would be the same for Scenario-2.

Table 4.4 provides a range of costs based on alternative scenarios (Table 4.3) that have been created using different financial norms for estimating number of teachers and toilet facilities in schools.

Table 4.3: Additional physical resource requirements for scenario A

Components	Scenario-1	Scenario-2
Additional classroom	7,10,293	7,10,293
Number of elementary schools need to be upgraded	44,393	44,393
Number of toilet blocks for students	2,27,294 (CPWD)	1,42,059 (SMSA)
Number of toilet blocks for staff	88,787	88,787
Drinking water fountain	1,20,300	1,20,300
Additional teachers	10,65,439 (CABE, 2005)	9,47,057 (RMSA)
Teachers eligible for rural posting allowance	2,47,466	2,47,466
Playground required	44,393	44,393
Eligible CWSN beneficiaries	5,68,234	5,68,234
Number of special educators	1,13,647	1,13,647
Eligible girls for textbooks, uniforms, sanitary napkins, transport allowance, mid-day meals and self-defence training	2,84,11,712	2,84,11,712
Eligible girls for bridging materials	24,43,407	24,43,407
Eligible girls for bicycles	31,85,835	31,85,835
Eligible girls for wheelchairs	77,848	77,848
KGBVs to be upgraded	2473	2473
Number of schools to have ICT	44,393	44,393
DIET academic faculty	6649	6649

Source: Author's calculation.

Table 4.4: Additional financial resource requirements for scenario A

Cost heads	Total cost (Rs. crore) Scenario-1	Scenario-2	Total cost range (Rs. crore)
Teachers' salary per annum (as per KV norms)	57,517-64,706		28,501-64,795*
Teachers' salary per annum (as per SMSA norms)		28,412-31,963	
Rural Teachers' posting allowance	89		
In-service teachers' training per annum (KV/SMSA)	2131	1894	1894-2131
Institutional teacher education costs (KV/SMSA)	407	203	203-407
School infrastructure (strengthening elementary schools)	27,701		27,701
WASH facilities (KV/SMSA)	10,697	9163	9163-10,697
Residential school facilities	618		618
Sports and physical education	155		155
Inclusive education	3694		3694
Incentives for girls	22,512		22,512
Monitoring	19		19
ICT & digital initiatives	3907		3907
Total			**98,366-1,36,636**

Note: * includes rural posting allowance.
Source: Author's calculation.

4.2. Physical and financial resource requirement for scenario B

This section derives the additional physical resources requirement vis-a-vis financial resource requirements for OOSG in the 15-19 years age bracket who are eligible for specific level of secondary education between grades IX to XII. Costing has been done assuming that access to school for the girls would be through mainstream schooling and not open schooling. Like scenario A, multiple norms have also been applied here for cost calculation. As in Scenario A, a similar method has been applied to construct Table 4.5 and Table 4.6 for Scenario B. Table 4.5 and Table 4.6 provide the component wise details of additionally required human and physical resources and financial resources respectively. A range of costs have been offered based on alternative scenarios created for estimating the number of teachers and toilet facilities in schools (Table 4.6).

Table 4.5: Additional physical resource requirements for scenario B

Components	Scenario-1	Scenario-2
Additional classrooms	3,79,296	3,79,296
Number of elementary schools which need to be upgraded	23,706	23,706
Number of toilet blocks for students	1,21,375 (CPWD/KV)	75,859 (SMSA)
Number of toilet blocks for staff	47,412	47,412
Drinking water fountains	1,51,719	1,51,719
Additional teachers	5,68,945 (CABE, 2005)	5,05,728 (RMSA)
Teachers eligible for rural posting allowance	1,32,147	1,32,147
Required playgrounds	23,706	23,706
Eligible CWSN beneficiaries	3,03,437	3,03,437
Number of Special educators	60,687	60,687
Eligible girls for textbooks, uniforms, sanitary napkins, transport allowance, mid-day meal and self-defence training	1,51,71,854	1,51,71,854
Eligible girls for bridging materials	13,04,779	13,04,779
Eligible girls for bicycles	56,25,519	56,25,519
Eligible girls for wheelchairs	41,571	41,571
KGBVs to be upgraded	2473	2473
Number of schools to have ICT	23,706	23,706
DIET academic faculty	6649	6649

Source: Author's calculation.

Table 4.6: Additional financial resource requirements for scenario B

Cost heads	Total cost (Rs. crore)		Total cost range (Rs. crore)
	Scenario-1	Scenario-2	
Teachers' salary per annum (as per KV norms)	30,714-34,553		15,219-34,601*
Teachers' salary per annum (as per SMSA norms)		15,172-17,068	
Rural Teachers' posting allowance	48		
In-service teachers' training per annum (KV/SMSA)	1138	1011	1011-1138
Institutional training costs (KV/SMSA)	407	203	203-407
School infrastructure (strengthening elementary schools)	14,793		14,793
WASH facilities (KV/SMSA)	5712	4893	4893-5712
Hostel facilities	618		618
Sports and physical education	83		83
Inclusive education	1972		1972
Incentives for girls	13,199		13,199
Monitoring	10		10
ICT & digital initiatives	2086		2086
Total			**54,088-74,619**

Note: * includes rural posting allowance.
Source: Author's calculation.

Table 4.7 provides a summary of estimations. The table shows that if the government wants to provide free secondary education to all girls who are out of school, it needs to incur a cost equivalent to 0.4%-0.6% of the GDP. In terms of per child (girl) costs, this ranges from Rs. 34,622-Rs.48,092. Scenario B which offers a cost for near-universalisation of girls' secondary education will cost the government around 0.2%-0.3% of GDP. Per girl cost would range from Rs. 35,650- Rs.49,182.

Table 4.7: Additional resource requirement for universalisation of secondary education for girls

Scenarios	Total (Rs. crore)	Per girl expenditure (Rs.)	As % of GDP
All OOSG in the age group of 15-19 years are eligible beneficiaries	9,83,66-1,36,636	34,622-48,092	0.4%-0.6%
Girls in the age group of 15-19 years who dropped out after completing elementary education and above are eligible beneficiaries	54,088-74,619	35,650-49,182	0.2%-0.3%

Note: GDP is Rs 2,22,87,379 crore as projected in 2021-22 Union Budget in current market prices.
Source: Author's calculation.

Chapters 2 and 4 together portray a holistic measurement of cost for providing quality secondary education to all girls in India. The estimation for universal quality secondary education for girls shows the need for an additional 0.2%- 0.6% of GDP depending on the number of eligible beneficiaries. While cost estimation has been carried out for different scenarios, it is observed that a bare minimum cost of 0.2%-0.3% of GDP is required for enrolling girls in the age group of 15-19 years i.e., those who have completed elementary education but are currently not enrolled in schools.

Estimations have been done here assuming that the policy would be implemented in one year. However, the cost could be distributed if interventions are undertaken in a phased manner within a defined timeline. However, suggestions on what would be the basis of resource distribution or what could be the feasible/optimal time frame to make the policy fully functional is beyond the scope of this report. In this connection, it is to be noted here that some basic indicators required for a cost estimation of secondary schooling like school age population, enrolment and drop-out rate are fluid variables and subject to change every year. Thus, there would always be a need for adjustment in the estimation of requirement of physical and human resources, if the policy is to be implemented in a phased manner.

This analysis helps to identify critical interventions required for quality secondary education which are inclusive in nature and also highlights the budgetary implications for free quality secondary education for girls. As India's current spending on secondary education is 1.1 per cent of the GDP, which is way below requirements, investing on secondary education is unavoidable. While NEP 2020 has accorded a higher priority for universalisation of school education, the policy should be backed by adequate resources. As education is in the concurrent list, both Union and state governments need to assume shared responsibility. Whatever platforms are chosen for expansion of schools, the analysis shows that government needs to gradually increase its spending towards girls' education and this requires a clear financial roadmap.

Chapter 5: Conclusion and Policy Recommendations

Free provisioning of secondary education for girls has the potential to act as a powerful equalizer. To successfully achieve Sustainable Development Goals 4 and 5 in a stipulated time, adequate government financing for universalisation of secondary education is imperative. Our analysis has shown that expansion of secondary education is hampered not only because of under-allocation, but because of stagnation in funding year after year. Since the last 10 years, India has been spending around one per cent of its GDP on secondary education, making it one of the lowest among BRICSAM[2] countries. This indicates a lack of due priority for secondary education.

This directly affects girls' education as the enrolment pattern shows a larger share of girls in government schools at the secondary level. As out-of-pocket spending is quite high for education in private schools, households prefer to send girls to government schools and boys to private schools.

It has also been observed that if girls receive opportunities to study at a higher level, they are more likely than boys to complete secondary school. As secondary education is not under the purview of RTE act, it is not legally binding on the government to make it free and accessible to all children. However, if states are to implement the recommendation of 'free, compulsory and universal access to high quality and equitable schooling from early childhood care education to higher education', a well thought out plan with adequate resource support is a pre-requisite. This needs a thorough examination of the present status of government financing for secondary education. It is also important to examine the extent of inclusiveness of the education policy. In this backdrop, this study reflects on whether powerful tools like budgets are prioritising or neglecting essential needs like girls' education. Are they propagating the movement of resources in transformative directions or falling short?

Besides a systemic review of present fiscal architecture for secondary education, the study also attempted to estimate the additional resources that the government would require, to make secondary education free for all girls. Creating different scenarios, the report offers a range of cost estimations, which suggest the need for additional resources amounting to 0.2 per cent- 0.6 per cent of the GDP depending on the number of eligible beneficiaries. While the estimation has been done assuming that the policy would be implemented in one year, costs could be distributed if interventions are undertaken in a phased manner.

In the light of analysis of the present scenario as well as future estimates, the study suggests some policy measures that the Union Government and states can implement to provide quality secondary education that is accessible to all girl children studying in schools. As a way forward, the report also indicates a number of avenues through which governments can fund girls' education.

Need to adopt a holistic approach in policy design

Applying a gender lens to the process of policy development, implementation and policy appraisal is imperative for addressing gender inequality in education. It is evident that retaining girls in school costs more than retaining boys. Because, in addition to systemic bottlenecks and process related challenges of the education system, socio-economic and cultural barriers are also a major challenge towards girls' education. Therefore, higher investment for secondary education would not be enough, unless it is gender-responsive. Gender-responsive budgeting across schemes and programmes by different

[2] Brazil, Russia, India, China, South Africa and Mexico are collectively known as BRICSAM countries.

departments is of immediate necessity. The NEP Implementation Plan SARTHAQ sets a deadline of 2022-23 for the Ministry of Education to prepare guidelines and set up a Gender Inclusion Fund especially for girls and transgender students. States and UTs are required to set up gender and equity cell and special cell for inclusive education. It is important to gather information on the experience of and challenges relating to education so that allocations for the Gender Inclusion Fund at the Central level as well as roles and responsibilities of the gender and equity cells at the state level can be responsive to girls' needs.

While 'gender and equity' is a thrust area under SMSA, the pattern of financing for this component across states presents a completely different picture. A review of the SMSA framework indicates a continuation of existing interventions under RMSA for promoting girls' secondary education. The discourse on girls' education in SMSA is still greatly restricted to measuring improvements in indicators like gender parity in enrolment, drop-out rate or retention rate (Kundu, 2019). The reasons for gender disparity and high drop-out of girls are significantly related to health, nutrition, violence and socio-cultural and economic frameworks. These must be taken into account as well.

Need to enhance unit cost for girls' specific interventions: As the data for resource allocation and utilisation across different interventions for girls' education under SMSA not available as yet, it is difficult to comment on the success of the scheme in optimal utilisation of budgetary and human resources. However, a comparative analysis of the unit cost of different interventions under RMSA and SMSA reveals that other than free uniforms, the new scheme has adopted similar financial norms as under RMSA. It has already been shown that low unit cost under RMSA is a major bottleneck for inefficient fund utilisation and hence poor implementation of schemes. This is conspicuous in the case of civil works during 2020-21, when states could not take up major infrastructure works due to low unit cost for civil work. This was reflected in a higher spill over amount under the secondary education component of SMSA. Therefore, there is a need to enhance the unit cost for better functioning of the scheme.

Need for availability of disaggregated physical as well as financial data at each level of governance

A robust data system is an important component for better governance of education. Disaggregated physical and financial data is crucial for all aspects of policy making including planning, budgeting and monitoring. However, our analysis of cost estimation for secondary education reveals data paucity at every level of governance – the problem is more acute at the school level. For example, despite a huge database under the UDISE+, we still do not have information on drop-out rates in various classes, teachers serving in rural schools, number of non-teaching faculty, etc.

This becomes even more significant in the case of education finance data. Getting information related to teachers' salary and salary of other staff is a long-term challenge. In some cases, the available information either lacks clarity or is incomplete. For example, while Gender Budget Statements (GBS) report gender-specific as well as gender sensitive expenditure on education by different departments, it does not mention interventions for which respective departments are spending money.

In the absence of information related to the size of private investment in school education and amount of corporate social responsibility (CSR) funds, it is even more difficult to get an overall landscape of resource envelope for secondary education in India.

In line with recommendations under NEP 2020 (Section 23.4), the government should work on developing a data repository related to all aspects of school education. This could help to make an informed intervention through efficient planning and budgeting.

Way forward: Alternative avenues for sustainable financing

It is undeniable that to reach the required additional 0.6 per cent of GDP for universalisation of girls' education, there is a need for sustainable financing strategies from alternative sources within and outside the government.

The first and foremost required policy action is a substantial increase in gross budgetary support. Given the limited resource envelope of states as well as the Centre, the increase in gross budgetary support also needs substantial increase in the country's tax revenues. Probable long-term solutions are increase in direct tax to GDP ratio[3] or deficit financing through borrowing. However, the process of resource allocation and programme implementation should start immediately. As a short-term measure, possible avenues through which the government can finance girls' education include:

- **Financing through unutilised cess:** A large part of school education is being financed through education cess collected from income taxes and corporation taxes. Till 2018-19, the government was collecting two per cent primary education cess and one per cent Secondary and Higher Education Cess (SHEC). Later, these two cesses were replaced by a new cess called 'Health and Education Cess' at the rate of 4 per cent. As per the recent Comptroller and Auditor General (CAG) Report, 2020, the total collection during 2018-19 under the above cesses was Rs. 41,309 crore. While a dedicated fund for SHEC was created in 2016-17, due to non-operationalisation of the fund, it was difficult to ascertain whether the collected amounts were spent for the purpose for which it was collected. The CAG audit also showed that a total of Rs. 2.75 lakh crore was collected by the Union Government from as many as 35 different cesses, levies and charges. However, only around Rs.1.64 lakh crore was remitted to specific reserve funds for which these cesses were levied. Over the last 10 years, Rs. 1.25 lakh crore of cess was collected on crude oil but it remains with the Consolidated Fund of India as it was never transferred to the designated reserve fund. The unutilised cess fund (40% as of 2018-19) or the part retained in the Consolidated Fund of India can be used for financing secondary education. Besides, the SHEC reserve fund should be made functional so that there would be transparency on how cess money for secondary education is being utilised.
- **Implementation of 15th Finance Commission recommendations to improve secondary education:** The 15th Central Finance Commission (FC) recommendations for 2021-2026 have significant budgetary implications for the education sector. The commission has recommended 41 per cent share of states in Central taxes for the 2021-2026 period. As this fund is flexible in nature, it provides autonomy to the states to prioritise funding as per their requirements. A part of this money could be used for institution building under secondary education. The FC also recommended sector specific grants which are conditional upon performance of the states on a number of select indicators. States should take this opportunity to improve the quality of secondary education with a larger focus on girls' education related indicators. State Finance Commission grants (both flexible and top up grants for education in some states) could also be used to strengthen secondary education.
- **Financing through unspent balance under different programmes:** An efficient utilisation of resources under different programmes could help the government to better finance the components of secondary education. For example, as per the CAG report, Rs. 43,104 crore was saved in 2018-19 because of shortfalls in performance in schemes and activities due to factors like finalisation of fewer spending proposals; non-receipt of viable proposals from States; non-receipt of utilisation

[3] Revenue collection through indirect tax is regressive in nature and it has potential to increase inequalities.

certificates and delays in grant of approvals, etc. (CAG, 2020). Another report shows that Rs. 6200 crore was unspent under SMSA in 2020-21 (Nanda, 2020). As mobility of funds under centrally sponsored schemes and central sector schemes are mostly conditional, it is difficult to utilise unspent funds from one sector/ one scheme for another. The government can make the programmes more flexible and channelise the unspent funds to sectors which deserves more.

- **Financing through Corporate Social Responsibility (CSR):** Despite education being a priority area for CSR funders, such funds are largely spent on initiatives like improving primary education, provision of mid-day meals in schools, WASH initiatives and menstrual hygiene. Only a miniscule part of CSR funds is spent on improving quality in the secondary education sector. An increase in collective contribution by the CSR community on secondary education and vocational education for girls can help in the process of universal access.

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Annexures

Tables: Physical and financial norms for select interventions used in estimating resource requirements for universalising secondary education

Additional Classrooms required	
Additional enrolment of girls (Projected population -Present enrolment)	Total classrooms required (Total additional enrolment/40 as classroom-student ratio is 1:40 as per SMSA framework)

Maximum strength of girls in a secondary school					
	Class IX - 2 sections	Class X - 2 sections	Class XI - 2 sections for each stream (3 streams)	Class XII - 2 sections for each stream (3 streams)	Total
Max. 40 girls/ section (SMSA framework)	80	80	240	240	640

Wash facilities		
	Infrastructure norm	Cost norm
Scenario 1	Urinal 1 for 25 students as per CPWD+ 1 lavatory+wash basin +incinerator	1 toilet block costs Rs.1.3 lakh as per RMSA norm+ Rs. 50,000 for modifying one unit for CWSN
Scenario 2	Urinal @1:40 as per SMSA+ 1 lavatory+wash basin +incinerator	1 toilet block costs 1.3 lakh as per RMSA norm+ Rs. 50,000 for modifying one unit for CWSN)
	Toilet for staff@2 per school	1 toilet block costs 1.3 lakh as per RMSA norm+ Rs. 50,000 for modifying one unit for CWSN)
	Drinking water fountain @1for 100 student (KV norm)	Rs. 1.2 lakh

School Infrastructure		
Intervention	Unit cost (Rs.)	Comment
Upgradation of elementary school to secondary school. Non-recurring	61,50,000	Unit cost as per RMSA framework, It includes construction of 16 classrooms, office room, headmaster room, library, 2 laboratory, computer room, Art/craft room facilities)
Upgradation of elementary school to secondary school - Recurring (per annum)	75,000	As per SMSA framework Rs. 75,000/- (including at-least Rs 7500 for *Swachhta* action plan) as composite grant (maintenance grant) for enrolment between 250 and 1000 (since in optimal scenario an upgraded elementary school caters to 640 students)
Library grant (recurring)/annum	15,000	Rs. 15,000/- for composite secondary schools as per SMSA framework library grant is for (grades XI-XII) strengthening of school libraries including purchase of books

Sports and Physical Education		
Item	Unit cost per school (Rs.)	Comment
Playground (non-recurring)	10,000	RMSA norms
Recurring grant (annual)	25,000	SMSA norms

Additional Teachers Required		
	Physical norm	Financial norm
Scenario 1	Addnl. Classrooms reqd. x 1.5 (as per CABE committee)	• Annual salary (KV TGT gross salary as per 7th CPC)@ Rs. 50,610/month • Alternative norm: Annual Salary @ Rs. 25000/month as per SMSA norm
Scenario 2	PTR 1:30 (as per RMSA)	• Annual salary (KV TGT gross salary as per 7th CPC)@ Rs. 50,610/month • Alternative norm: Annual Salary @ Rs. 25,000/month as per SMSA norm

In-service Training	
Physical norms	Financial norms
Refresher in-service training for 10 days	Rs. 500 per day as per SMSA framework
Induction training for 30 days	Rs. 500 per day as per SMSA framework

Inclusive Education		
Item	Unit cost /annum (Rs.)	Comment
Provision for children with special needs (SMSA norm)	3500	This will include aids and appliances, teaching material, stipend for CWSN girls @ Rs. 200 per month for 10 months
Special educators (annual salary)	3,00,000	As per IEDSS norm, special educator to student ratio is 1:5; ideally each school where disabled children are enrolled should have one special educator
Special educators training - 15 days @Rs. 500	7500	SMSA framework

Incentives		
Item	Unit cost in Rs. (per child per annum as per SMSA framework)	Comment
Textbooks	650	SMSA (based on RTE)
Additional textbooks (bridging material)	200	Primers/textbooks developed for tribal languages with bridging materials to facilitate a transition to the State language of instruction and English (SMSA)
Uniforms	600	SMSA
Transport allowance	6000	SMSA
Mid-day meal	1639	Annual unit cost calculated as per GOI revised MDM rate as on 2021: Rs. 7.45 cooking costs, avg. 220 working days
Bicycle (only to those entering grade IX)	3000	Market price
Wheel chair	8000	Market price
Sanitary napkins	120	10 napkins/student/month @ Rs. 1/napkin
Self-defence training	9000	Provision for upto Rs. 3000 per month for 3 months per school for schools with grades VI to XII (SMSA framework)

ICT and digital initiatives		
Physical norms	Unit cost	Comment
Non-recurring grant (non-recurring grant of up to Rs. 6.40 lakh per school)	6,40,000	ICT and digital initiatives (only for govt schools from VI to XII) (SMSA framework)
Recurring grant	2,40,000	Recurring grant of up to Rs. 2.40 lakh per school per annum for a period of 5 years (SMSA framework)

CRY – Child Rights and You

632, Lane No.3, Westend Marg,
Near Saket Metro Station,
Saiyad-ul-Ajaib, New Delhi - 110030

Tel: +91-11-29533451/52/53

Email : cryinfo.del@crymail.org

Website: www.cry.org

Centre for Budget and Governance Accountability

B-7 Extn/110A (Ground Floor) Harsukh Marg,
Safdarjung Enclave, New Delhi - 110029, India

Tel: +91-11-49200400/401/402

Email: info@cbgaindia.org

Website: www.cbgaindia.org