Chapter-II Performance Audit

Chapter-II

Performance Audit

Department of Primary and Secondary Education

2.1 Rashtriya Madhyamik Shiksha Abhiyan

Executive Summary

The Government of India (GoI) launched the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) with an objective to improve access, quality and equity by providing access to secondary and higher secondary schooling within reasonable distance through improved physical facilities and qualified teachers and also by giving special focus to girls, scheduled caste and tribal children and differently abled children in the age group of 14-18 years. A Performance Audit of the RMSA scheme during the period 2013-14 to 2017-18 was conducted to assess whether the above objectives were achieved and we observed the following:

Rashtriya Madhyamik Shiksha Abhiyan Samithi, Karnataka (RMSASK) could not absorb the available funds in a timely manner. The utilisation of funds during 2013-14 to 2017-18 ranged between 30 and 55 *per cent*. The scheme's intervention was mainly focused on upgradation/strengthening of schools as 56 *per cent* of allocation was towards it leading to the neglect of other components such as computer aided education, procurement of laboratory items, furniture, *etc*.

(Paragraph 2.1.6)

In order to improve access, the Perspective Plan of Karnataka envisaged that secondary and higher secondary schools to be within reasonable distance. However, as at the end of March 2018, 4,361 habitations did not have access to secondary education. In addition, the perspective plan had envisaged to realign the structure of school education with the national level pattern by 2017 but the higher secondary continued to be under the Pre-University Board. Hence, both the targets were not achieved.

(Paragraph 2.1.7.1)

The target set in the Perspective Plan for enhancing quality in secondary education through infrastructural facilities like sufficient classroom, laboratories, library, separate toilet for girls and boys *etc.*, were yet to be achieved. Due to delay in executing civil works, out of 2,396 schools taken up for upgradation/strengthening during 2009-10 to 2017-18, only 1,740 schools were completed with 140 works in progress and balance 516 yet to be taken up. As of March 2018, RMSASK had not taken up any major/minor repairs though 1,367 and 1,494 schools respectively were in need of repairs. While the classroom student ratio of the Government schools was well within the prescribed ratio of 1:40, school-wise analysis showed that out of 4,677 Government schools run by Education Department, 2,721 schools had ratio ranging between 1:41 and 1:69.

[Paragraph 2.1.8.1 (a) (c) (e)]

The Pupil Teacher Ratio (PTR) of the State was well within the prescribed ratio of 30:1. However, in 874 schools, the PTR ratio was more than 30:1 as there was no monitoring in deployment of teachers at school level. Though RMSA specified that subject-wise teachers were required to be deputed in every school, it did not ensure proper balance of teachers as 642, 491 and 500 schools out of 15,666 schools did not have teachers for core subjects *viz.*, mathematics, science and social science respectively.

[Paragraph 2.1.8.3 (b) (c)]

In 342 schools of eight test-checked districts, we noticed the following:

- lack of sufficient classrooms in 22 schools;
- ➢ 65 schools did not have both science as well as computer laboratories;
- though 199 schools claimed to have library facilities, 99 schools did not have separate library facilities;
- though all the schools except one had toilet facilities, toilets lacked maintenance in many (52 out of 163) schools; and
- in 73 out of 252 aided and unaided schools, even though the infrastructure and teaching facilities were not in accordance with the norms prescribed by the State, recognitions of the schools were renewed.

[Paragraph 2.1.8.1 (e) & 2.1.8.2]

Due to delay in construction of model schools as well as recruitment of teachers in these model schools, the schools were yet to reach the standard of Kendriya Vidyalaya. Though RMSA envisaged Vocational Education for enhancing employment opportunities, the State is yet to integrate the Vocational Education into the secondary education system as the students were neither assessed nor issued with proficiency certificate.

[Paragraph 2.1.10 (1) & (2)]

The State was able to improve the participation of children in secondary education from 75 *per cent* in 2009-10 to 82 *per cent* in 2017-18, however, it was yet to achieve the target of 100 *per cent* GER by 2017. The GER of girls, SC and ST children was at 83, 79 and 73 *per cent* respectively against GER of the State at 82 *per cent*. Though the State had not achieved target of 100 *per cent* as envisaged in the Perspective Plan of Karnataka, it had ensured almost equitable participation from the special focus group in secondary education. However, it had not monitored the participation of differently abled children in secondary education.

[Paragraph 2.1.9.2 & 2.1.11.2]

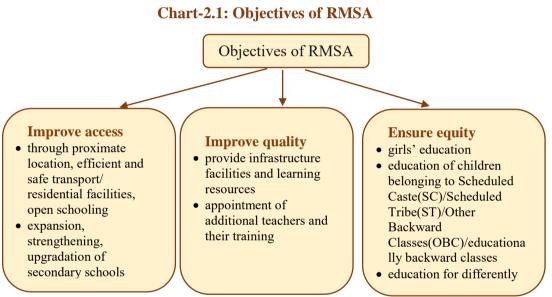
Due to ineffective bottom-up planning, the annual and perspective plans were not need based and realistic. This coupled with deficient monitoring at all levels led to non-achievement of objectives of the RMSA basically in improving access and quality of secondary education. Thus, the impact of RMSA on secondary education was not visible in terms of financial and outcome indicators when compared to State's intervention.

(Paragraph 2.1.12)

2.1.1 Introduction

In India, the enrolment of children in educational institutions is pyramidical. Enrolment at the lower classes is highest and it declines in each succeeding class and is lowest in higher education. While Classes 9 and 10 constitute the secondary stage⁵, Classes 11 and 12 are designated as higher secondary stage.

In March 2009, the Government of India (GoI) launched a country-wide secondary education development programme called the "Rashtriya Madhyamik Shiksha Abhiyan⁶ (RMSA)". From 2013-14, RMSA subsumed four⁷ existing centrally sponsored schemes into its fold. The vision of the RMSA was to provide secondary school within reasonable distance, achieve Gross Enrollment Ratio (GER) of 100 *per cent* by 2017, universal retention by 2020 and provide access to secondary education with special references to economically weaker, educationally backward, girls and differently abled children. The above vision was translated into the following objectives indicated in **Chart-2.1**.



The United Nation in its Millennium Development Goal-2 aimed to achieve universal primary education by 2015. It extended its target to secondary education in its Sustainable Development Goal (SDG) No. 4. India is committed to the United Nation's SDGs No.4 of ensuring that all boys and girls complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes (**Appendix-2.1**). Further, the said SDG aims to significantly increase access to Information and Communications Technology and strives to provide universal and affordable access to the Internet in least developed countries.

⁵ The normal age group for secondary stage is 14 to 16 years and for higher secondary stage, it is 17 to 18 years.

⁶ The objective of RMSA (scheme) was to enhance access to secondary education, improve its quality and remove gender, socio-economic and disability barriers.

⁷ (i) Scheme for Construction and Running of Girls' Hostel, (ii) Information and Communication Technology (ICT) in School, (iii) Inclusive Education for disabled in the Secondary Stage (IEDSS) and (iv) Vocational Education.

2.1.2 Organisational setup

RMSA is implemented through 'Rashtriya Madhyamik Shiksha Abhiyan Samithi-Karnataka (RMSASK), a registered society, established (May 2009) under the administrative control of the Department of Primary and Secondary Education. While the 'Governing Council' headed by the Hon'ble Chief Minister, steers the RMSA mission, the Executive Committee (EC) chaired by the Principal Secretary (Primary and Secondary Education) administers the programme. The State Project Director (SPD) who is the Member Secretary of the EC is responsible for implementation and monitoring. At the district level, the Deputy Director of Public Instruction who is the District Project Officer (DPO) implements RMSA along with the District Level Samithi, District Implementation Committee and District Resource Group. At block level, the Block Education Officer {Block Resource Centre (BRC)} implements the scheme. At village/school level, the School Development and Monitoring Committee (SDMC) is responsible for implementation.

2.1.3 Audit objectives

The Performance Audit was conducted to assess whether the primary objectives of the RMSA were achieved:

- through improved access to secondary education;
- ensuring quality in secondary education; and
- equity in secondary education.

2.1.4 Audit Criteria

The Performance Audit was benchmarked against the following:

- ➢ Karnataka Education Act, 1983 and Rules there-under;
- The broad vision of the 12th Plan Document, Millennium Development Goals and Sustainable Development Goals;
- Framework for Implementation of RMSA;
- Manual on Financial Management and Procurement for RMSA;
- Planning and Appraisal Manual for Secondary Education;
- Guidelines on various components viz. Information & Communication Technology (ICT), Inclusive Education of the Disabled at the Secondary Stage (IEDSS), Girls Hostel & Vocational Education;
- Instructions from the Government of India to States/UTs regarding the RMSA.

2.1.5 Audit scope and methodology

The Performance Audit was conducted between April and August 2018 covering the period 2013-14 to 2017-18⁸ through a test-check of records in the offices of Commissioner for Public Instruction, SPD-RMSA, DPOs in eight⁹

⁸ In respect of non-recurring expenditure like construction/upgradation/strengthening of schools, major repairs and performance indicators, the period from 2009-10 to 2017-18 *viz.*, period of RMSA has been covered.

⁹ Belagavi, Bengaluru (Urban), Chamarajanagar, Chitradurga, Hassan, Kalaburagi, Vijayapura, and Yadgir.

test-checked districts out of 30 districts in the State and 342^{10} out of 6,275 secondary schools in the eight test-checked districts. Probability proportional to size without replacement method was adopted for selection of eight districts, two from each of the four revenue divisions in the State *viz*. Belagavi, Kalaburagi, Bengaluru & Mysuru. The 342 secondary schools were selected adopting random sampling from the eight test-checked districts. In addition, eight Model Schools and seven Girls Hostels in the sampled districts have been test-checked (**Appendix-2.2**). Audit objectives, criteria and scope of audit were discussed in an entry conference (March 2018) with the Principal Secretary, Primary and Secondary Education Department.

The Government replied (February 2019) that none of the better performing districts were selected for test-check by Audit as most of them had low Human Development Indices (HDI). The reply did not consider the fact that the sampling was based on the district-wise population of children in the age group of 14-18 years as discussed in the entry conference. Further analysis of HDI revealed that the sample has fairly represented all strata in the divisions.

The methodology adopted for audit included scrutiny of files and documents, collection of data, issue of audit enquiries/questionnaires/proformae and examination of records. Besides, joint inspections along with Head master/Block Educational Officer/District Level Officer and surveys of school children and headmasters were conducted to ascertain facilities available and provided in the school.

An Exit conference was held in January 2019 with the Principal Secretary to the Government, Department of Primary and Secondary Education wherein the audit findings were discussed. The report takes into account the replies furnished by the Government.

2.1.6 Utilisation of funds

The ratio of funding pattern of RMSA between the Central and State Governments until 2014-15 and thereafter is 75:25 and 60:40 respectively. Utilisation of funds during 2009-10 to 2017-18 is indicated in **Appendix-2.3**

During the period of audit coverage *viz.*, 2013-14 to 2017-18, the percentage of utilisation ranged between 30 and 55 indicating that the RMSASK could not absorb the available funds in a timely manner. The reasons for non-utilisation are brought out in the paragraphs discussed subsequently. The non-utilisation of funds impacted achievement of the objective of enhancing quality of secondary education discussed in paragraph 2.1.8.1(a).

The Government while accepting that RMSA could not completely utilise the funds, stated that utilisation of substantial amount of funds provided under non-recurring grant was delayed. The non-utilisation of funds impacted achievement of the objective of enhancing quality of secondary education discussed in paragraph 2.1.8.1(a).

¹⁰ Out of 363 which were selected for test-check, 21 schools were either non-working or non-responsive to Audit. Hence, Audit test-checked only 342 schools.

Further, component wise analysis of the allocation of funds¹¹ showed that while 56 *per cent* of allocation was towards upgradation/strengthening of schools, 27 *per cent* was towards salary and trai ning of teachers. The balance was distributed between other components which is indicated in the **Chart-2.2** below.

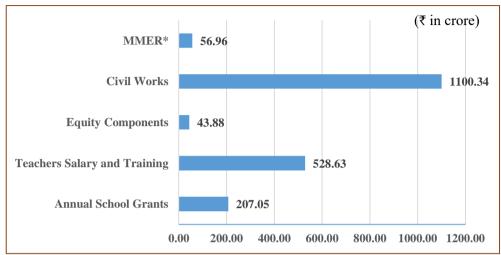


Chart-2.2: Component-wise allocation of funds under RMSA

*Management, Monitoring, Evaluation and Research (MMER)

Thus, RMSA's intervention was mostly towards physical infrastructure.

Audit findings

The data on number of secondary schools in the State and the enrolment of children in the secondary schools, the GER, and the retention rate before commencement of RMSA *i.e.*, as on September 2008, commencement of audit period *i.e.*, end of March 2014 and after 10 years of implementation of RMSA *i.e.*, as at the end of March 2018 is indicated in the **Table-2.1**.

Categories	2008	2014	2018
Number of schools	11,753	14,469	15,666 ¹²
Enrolment in schools	15,57,708	16,84,704	17,59,737
Enrolment of girls	7,47,660	8,09,890	8,42,943
Enrolment of SC/ST	3,67,722	4,09,352	4,45,829
Enrolment of differently abled	NA	14,084	9,818
children			
GER	68.4	76*	82.37
Retention rate	NA	82.7	88

 Table-2.1: Trend in the parameters

Source: Information furnished by State Project Director, RMSA *2014-15

From the Table, it is evident that though there is an increasing trend in almost all the parameters, we noticed that the targets of RMSA were yet to be achieved in the State. While the State's effort in attaining GER of 82 *per cent* and

¹¹ Component wise expenditure not available with RMSASK. Hence audit analysed on the allocation of funds.

¹² Government schools-5,330; Aided schools-3,803; Unaided schools-6,533.

retention rate of 88 *per cent* as at the end of March 2018 was commendable, it however, needs to put in additional and sustained effort to achieve the vision of the scheme. The reasons for non-achievement of RMSA outputs and its outcome are discussed objective wise in this report.

2.1.7 Improved access to secondary education

RMSA aimed to improve access to secondary education through decreasing the distance a child has to travel to reach a secondary and higher secondary school, improvement in transport facilities and open schooling.

The Perspective Plan for expanding secondary education for 2009-2017 for Karnataka (Perspective Plan of Karnataka) envisaged all secondary and higher secondary schooling within reasonable distance and realignment of the structure of school education with the National level pattern by 2017. However, we noticed that both the targets were not achieved. Further observations on accessibility is discussed in the subsequent paragraphs.

2.1.7.1 Coverage of Habitation

The major objective of the RMSA was to improve access to secondary schooling through proximate location *i.e.*, Secondary Schools within 5 kms and Higher Secondary Schools within 7-10 kms. The Perspective Plan of Karnataka¹³ envisaged secondary schooling within five kms of all habitations by 2011-12. The following are the audit observations:

- RMSASK had not maintained either the list of all the habitations in the State or the habitations with secondary schools. Hence, audit could not assess whether all the habitations had secondary schooling within five kms. From the information furnished by RMSASK to audit, we noticed that as at the end of 2010-11 and 2017-18, 11,609 and 4,361 habitations respectively did not have access to secondary education within five kms. Thus, though the habitations without access to secondary education had decreased from 11,609 to 4,361, the target as per the Perspective Plan of Karnataka was not achieved. Further, analysis of the data showed that the RMSASK had accelerated its pace in providing secondary education during its initial years of implementation of the RMSA and thereafter the pace had almost stagnated. Due to non-availability of the list of habitations with secondary schools, audit could not verify the veracity of information on habitations produced to audit.
- RMSASK had not carried out any exercise to ascertain the availability of higher secondary schools, in accordance with the specified norm of seven km radius of habitation.

Thus, children of all habitations did not get secondary/higher secondary schooling within reasonable distance.

The Government accepted (February 2019) that it was committed to make secondary and higher secondary education available for all the habitations. However, it stated that covering 93 *per cent* of the habitation was a feat in itself.

¹³ Perspective Plan for expanding secondary education for 2009-2017 for Karnataka.

It further stated that GIS mapping is being currently used for deciding location of schools.

2.1.7.2 Arrangement for transport facilities

The RMSA framework envisaged efficient and safe transport arrangements or residential schooling depending on local circumstances *viz.*, hilly regions, remote area *etc.* As already discussed in the previous paragraph, since 4,361 habitations lacked access to secondary education, identification of the habitations which required efficient and safe transport facilities or residential schools was of utmost importance. However, we noticed that no such exercise was conducted by RMSASK. As a result, RMSASK had neither provided any transportation facilities in any habitations nor had it proposed for construction of residential schools. During the survey of habitations in two districts, we observed that children from Kabanahalli, Khanapura Taluk habitation of Belagavi district and Nine¹⁴ habitations of Chamrajnagara District had to walk a minimum of six kilometers through forest area to their school since there were no transport facilities available.

Thus, due to non-identification of habitations which required access to secondary schools or transport facilities or residential schools, the children of many habitations were deprived the ease of access to secondary education and had to walk more than five kms to reach a school.

2.1.7.3 Open schooling

Open schooling plays a critical role in providing access, specially to disadvantaged groups like SC, ST, girls and differently abled children. However, we noticed that RMSASK had not assessed and identified the habitations which required open schooling nor had it maintained data on the number of children utilising the open school facilities in the State. Thus, students of disadvantaged segments, like SC/ST and girls were not identified for providing support by developing a detailed and well thought out plan for mobilisation and publicity of open schools.

The Government replied (February 2019) that open schooling was addressed by autonomous institutions including Karnataka Open University (KOU). The reply is incorrect as the KOU addresses higher education and the RMSASK is yet to assess habitations which require open schooling for secondary education.

2.1.7.4 Upgradation of schools

Increased access to schools also included expansion and strengthening of existing secondary and higher secondary schools and upgradation of upper primary schools to secondary schools or secondary schools to higher secondary schools based on school mapping. The Perspective Plan of Karnataka envisaged up-gradation of 2,000 upper primary schools by 2012.

¹⁴ Padasalanatha, Indiganatha, Thekanee, Thokere, Tulasikere, Kokkabaree, Kombudukki, Doddanee and Changadi.

We noticed that the State had proposed upgradation of only 558 schools during the period 2009-10 to 2017-18. Against the proposal, the Project Approval Board (PAB) approved a total of 488 schools for up-gradation which covered construction of physical infrastructure, procurement of furniture and laboratory items for these schools and appointment of teachers. However, out of these 488 schools, civil works were taken up only in 254 schools. Due to non-completion of the approved works, further proposals of the RMSASK were not considered by PAB. Thus, against the target of 2,000 schools to be upgraded, only 254 were taken up for upgradation physically. (Construction of schools is discussed in subsequent paragraphs).

Further, while teachers were appointed in 399 schools, 455 teachers approved by PAB for the balance 65 schools were not appointed by the Government due to non-approval of the proposal by Finance Department. As a result, these upgraded schools were functioning without adequate infrastructure as well as teaching facilities.

The functioning of four upgraded school out of 91 Government schools test-checked in audit is detailed in **Appendix-2.4**.

The Government replied (February 2019) that due to non-release of GoI funds, there was delay in execution of works. Thus, due to delay in release of funds, the upgradation of the schools was only in name and the actual upgradation of schools in terms of infrastructure and human resources did not take place. Observations on availability of infrastructure as well as human resources in upgraded schools are discussed in paragraph 2.1.8.

Recommendation-1: The State needs to undertake comprehensive school mapping in order to provide access to schooling in uncovered habitations and also to identify the requirement of each school.

2.1.7.5 Institutional reforms not taken up

The Perspective Plan of Karnataka, envisaged realigning the structure of school education with the National level pattern wherein Class-8 was to be brought into the elementary system. The State, however, did not undertake the institutional reforms envisaged in the Perspective Plan. Instead, majority of the schools in the State still followed 7+3+2 system of schooling. While, 7+3 is covered under primary and secondary education, the higher secondary is addressed through the Pre-University Board. Further, the Government had appointed (January 2012) a Committee under the Chairmanship of Dr.R.Govinda, National University of Educational Planning & Administration (NUEPA), New Delhi and Commissioner of Public Instruction as Member Secretary to report on how the system of Class-1 to Class-12 education should be functioning in the State. Though the Committee had submitted its report (August 2012), the State was yet to take a decision on its implementation. Thus, the higher secondary was not covered under RMSA. Due to this, the State lost the opportunity of receiving RMSA funds for enhancing infrastructure, access and information technology in higher secondary schools.

2.1.8 Enhancing quality of secondary education

RMSA sought to enhance quality in secondary schools through improved physical facilities, qualified teachers and learning resources at least according to the prescribed standards through financial support in case of Government/ Government aided and Local body schools and appropriate regulatory mechanism in case of other schools.

The State envisaged progressing towards 100 per cent learning achievement level by 2017. The strategies employed by the State included providing laboratory, library and computer learning facilities in the schools, ensuring Pupil Teacher Ratio (PTR) of 1:30, rationalisation of teacher deployment, recruitment of subject specific teachers, monitoring of attendance of students and teachers etc. The target of achieving the basic infrastructure facilities in all schools by 2017 was not realised even as of March 2018 due to delay in construction. While the State had a favourable PTR even at the commencement of the project, it did not succeed in rationalisation of teacher deployment. While the Perspective Plan estimated requirement of 10,000 teachers by 2017, there was significant shortfall in their recruitment. As a result, many schools suffered without subject specific teachers. While the RMSA had specified outcome indicators for monitoring the progress in quality improvement like student attendance rate, student achievement levels, availability of learning facilities etc. the required data for monitoring their progress was not collected by RMSASK. The assessment of learning achievement level by Karnataka School Quality Assessment and Accreditation Council (KSQAAC) during 2018 showed an achievement of less than 50 per cent in secondary level.

Audit observations with regard to each target for ensuring quality in secondary education are discussed below.

2.1.8.1 Infrastructure

Large-scale inputs in terms of additional schools, upgradation of schools through additional classrooms, *etc.*, need to be provided to meet the challenge of numbers and quality. Infrastructural support could include the following:

- > Opening of new schools/upgradation¹⁵ of upper primary schools
- Strengthening¹⁶ of existing secondary and higher secondary schools
- Major repairs
- Minor repairs
- > Teacher's quarters

All the above, inter alia, require assessment of existing physical infrastructure.

Audit observations on infrastructure are discussed below:

¹⁵ Providing additional secondary classes to the upper primary school along with infrastructure.

¹⁶ For existing secondary schools by providing components like additional classroom, science laboratory, computer room, arts and craft room, library, *etc*.

(₹ in crore)

(a) Opening of new schools/upgradation of upper primary schools/ strengthening of existing secondary schools

During 2009-10 to 2017-18, while upgradation and strengthening of schools were taken up, no new schools were opened under RMSA. The details of upgradation of upper primary schools/strengthening of existing secondary schools approved by PAB during 2009-10 to 2017-18 is indicated in **Table-2.2**.

	Number	of schools		Number of schools					
Year	Year Upgradation Strengthening	Amount	Con	npleted	In progress		Not taken up/ Surrendered		
	Opgradation	Strengthening		Upgraded	Strengthened	Upgraded	Strengthened	Upgraded	Strengthened
2009-12	329	1,895	741.27	230	1,510	24	116	75	269
2013-14	28	00	22.56	0	0	0	0	28	0
2014-15	66	04	52.71	0	0	0	0	66	4
2015-16	45	09	42.69	0	0	0	0	45	9
2016-17	20	00	00	0	0	0	0	20	0
2017-18	00	00	00	0	0	0	0	0	0
Total	488	1,908	859.23	230	1,510	24	116	234	282

Table-2.2: Upgradation/strengthening of schools

Source: Information furnished by State Project Director, RMSA

From the table, it is seen that 2,396 out of 4,677 Government schools have been taken up for upgradation/strengthening during 2009-10 to 2017-18. Of these, 1,740 schools have been completed and 140 works are in progress. In respect of balance 516 schools' tenders for works are yet to be called for. Further, we noticed that 1,740 works were completed only after delays of more than six years. The delay was attributed to delay in handing over of sites and drawings, non-availability of sites, *etc.* In addition, we observed that due to delay in execution of works, ₹123.74 crore sanctioned for upgradation during 2009-16 and ₹65.96 crore sanctioned during 2009-10 and 2010-11 for strengthening were surrendered (2016-17) to GoI.

Audit analysed the delay and noticed that in 2,024 out of 2,396 works, there was delay which ranged from 2 to 1,456 days in handing over the site to the contractors as the land required was not in possession of the RMSASK (Appendix-2.5). This was in violation of the Karnataka Public Works Departmental (KPWD) Code which stipulates that no works should be taken up for execution unless land required for the work is in possession of the Department concerned. According to the Agreement, the works were to be completed within the stipulated period of 20 months from the date of issue of the work order. Due to delay in handing over the site, there was delay in execution of works which ranged between one to 48 months and also risk of cost overruns. The other reasons which are attributable for time overrun was delay in issue of drawings/Bill of Quantities (BOQs) etc. As on September 2018, while 77 works were near completion, 69 works were in various stages of construction such as foundation (10), plinth level (9) lintel level (4) and ground or first or second floor (46). The delay in execution of work in all these cases was attributed to delay in issue of drawings to contractors/ BOQs etc.

In addition, PAB withdrew 77 works approved by them citing non-availability of sites and non-requirement of the work at the specified place. This indicated that RMSASK had proposed works without undertaking proper requirement analysis and also availability of land.

Irregularities noticed in the execution of the upgradation and strengthening of schools are discussed in **Appendix-2.6**.

The irregularities discussed indicate that upgradation and strengthening of works were undertaken in a highly uncontrolled manner wherein all the norms of Karnataka Transparency in Public Procurement (KTPP) Act and KPWD Code were violated *viz.*, tenders were called for without technical sanction and also BOQ, tenders were modified after opening of tender, negotiations were conducted with the tenderers *etc.*

The Government stated (February 2019) that a committee has been constituted to look into the irregularities and submit a report. It has further stated that suitable action will be taken based on the report of the committee.

(b) Quality in execution of civil works

The contract agreement provided for a defect liability period of 12 months from the date of completion of the work and on issuance of Completion Certificate by the Competent Authority. The RMSASK was to examine all the completed works and notify the contractor of any defects before the end of the defect liability period. However, from the records produced to audit, we observed that no such examination was conducted by the RMSASK except in Davanagere district. In Davanagere district, though the consulting engineers appointed had inspected 48 completed works and had reported that the general quality of the building was not satisfactory in 45 cases, RMSASK did not take any action. Instances of poor quality of construction noticed during joint inspection of schools is indicated in **Exhibit-2.1**.

The Government replied (February 2019) that corrective action would be initiated.

(c) Major and Minor repair works

RMSA provides non-recurring grants for major repairs and recurring grants for minor repairs. Grants for repair were available for existing schools with own buildings. The major repair grants were to be utilised for adaptation of existing building environment (indoor and out-door) towards new pedagogy or retrofitting the existing buildings towards hazard resistance, thermal comfort, better light and ventilation. Similarly, the grants released for minor repairs were to be utilised for repair of school building, toilets, tanks, play grounds, campus, electrical/sanitary and other fittings, furniture and fixtures *etc*.

During 2010-11, though PAB had approved ₹1.72 crore for major repairs of 113 schools, RMSASK had not undertaken any major repair work. As a result, all the 113 schools continued without better light and ventilation. Without utilising the amount released earlier, RMSASK once again proposed major repairs (272) during 2014-15. PAB turned down the request as RMSASK had not furnished the list of schools which required major repairs. However, it did not furnish the list nor proposed the works in the subsequent year's proposal. This indicated that RMSASK proposed works to PAB without analysing the requirement of the schools. Subsequently, RMSASK surrendered ₹1.72 crore during 2016-17.

Exhibit-2.1 Poor quality in execution of civil works



Adarsha Vidyalaya Bheemalli, Kalaburagi



Government High School, Andola, Kalaburagi

Exhibit-2.2 Dilapidated buildings which required major repair works



GHS, Hanchur, Alur Taluk, Hassan



GHS, Seege, Hassan Taluk

Thus, no major repairs were undertaken by RMSASK during 2013-14 to 2017-18. Further, we noticed that no minor repairs were undertaken during the above period.

Information furnished by the Department showed that 1,367 schools required major repairs and 1,494 schools required minor repairs as on March 2018.

Hence, due to non-utilisation/non-seeking of grants for major as well as minor repairs, the schools continued to function in dilapidated buildings. Instances of schools functioning in dilapidated buildings are indicated in **Exhibit-2.2**:

Recommendation-2: RMSA needs to tender the civil works as well as take up major and minor repairs in a timely manner in order to enhance quality by providing physical infrastructure facilities.

Government accepted (February 2019) the recommendation.

(d) Residential quarters for teachers

The RMSA framework envisages construction of residential quarters for teachers in remote/hilly areas/difficult terrain. However, RMSASK neither conducted a survey nor constructed residential quarters at the secondary schools in remote areas.

(e) Availability of physical infrastructure

RMSA framework envisaged building additional classrooms in every upgraded upper primary school and schools identified for strengthening. Further, it envisaged one Science Laboratory, Laboratory for vocational education, Headmaster/Principal room, Office room, computer room, Art/Craft/Culture room, Girls activity room, Library room, separate toilet blocks for boys and girls and drinking water facility in each school. In addition, all the schools should have rain water harvesting system in their building plan itself. It stipulated broad National norms for physical infrastructure based on which the States were to frame their own norms. Though the State Government had its own norms which were almost in line with the National norms, the targets set with regard to infrastructure facilities in the Perspective Plan 2009-17 were yet to be achieved as seen from the succeeding paragraphs.

Class rooms

The RMSA framework stipulates that the classroom to pupil ratio should be 1:40. The classrooms should be in such condition that the classes accommodate 40 pupil comfortably with enough space for adequate benches and desks. If the number of pupil is more than 50 in a class, there should be at least two sections.

As per the data furnished by RMSASK for the year 2016-17, the overall classroom ratio as well as district-wise classroom ratio of secondary schools was found to be within the norm of 1:40 indicating that the classrooms were sufficient to accommodate the enrolment.

However, district-wise analysis and school-wise analysis indicated a different scenario. There were 4,677 Government schools (3,877/83 *per cent* schools in rural areas and 800/17 *per cent* in urban areas) as of March 2018, which were spread across 34 educational districts in the State. The Classroom Pupil Ratio across the rural and urban areas in the State is shown in the **Table-2.3** below:

Table-2.3: Classroom to Pupil Ratio across Rural and Urban areas in the
State

Classroom-pupil ratio	Total number of schools	Number of schools (figures in bracket indica percentage)				
1410	01 5010015	Rural Areas Urban Areas				
Ratio within 1:40	1,956	1,699 (87)	257 (13)			
Ratio > 1:40	2,721	2,178 (80)	543 (20)			
Total	4,677	3,877 (83)	800 (17)			

Source: Information furnished by Commissioner of Public Instruction

Further analysis of 2,721 schools revealed that while these schools had ratio greater than the range of 1:40, 214 (8 *per cent*) schools (134 schools – 63 *per cent* in rural areas and 80 schools – 37 *per cent* in Urban areas) had ratio in the range of 1:61-69.

During joint verification of 342 schools, it was seen that 22 lacked sufficient classrooms. As a result, classes were being conducted by sharing classrooms of upper primary schools, sainik schools *etc*. **Table-2.3(a)** gives the details of the 342 schools test-checked by Audit.

Name of the test- checked districts	No. of selected schools	No. of schools where sufficient classrooms were not available	Remarks				
Belagavi	59	3	As per the norms, if the				
Bengaluru	134	11	classroom strength exceeded 50,				
Chamarajanagar	9	0	another section had to be formed.				
Chitradurga	31	0	Even though the class strength				
Hassan	28	-	ranged between 50 and 145, the				
Kalaburagi	43	2	children were accommodated in a				
Vijayapura	29	0	single class itself. As a result,				
Yadgir	9	6	there was not enough space for				
Total	342	22	benches/desks and also for children				

Table-2.3(a): Availability of classrooms in test-checked districts

Source: Information furnished by the sampled schools

The availability of other physical infrastructure in the test-checked secondary schools is indicated in charts given in **Appendix-2.7**. From the Appendix it is evident that the unaided schools are faring better than Government and aided schools.

Specific observations in the test-checked schools for other facilities are brought out in the succeeding paragraphs.

Laboratory facilities

The RMSA framework envisaged that each secondary school be provided with a science laboratory and a language laboratory.

During joint verification of 342 schools, Audit noticed that none of the test-checked schools had established language laboratory and 65 schools did not have science laboratories. As a result, the children of these schools lost the opportunity to get first hand learning experience by performing various experiments on their own and also for the teachers to teach the children through experiment. Further, due to non-establishment of language laboratory, opportunity of acquiring language quickly and easily was lost.

In addition, we observed that out of 123 items of laboratory equipment specified for the secondary schools, 26 *per cent* of test-checked schools did not possess even half of the items specified. Out of 40 specified reagents, 33 *per cent* of test-checked schools did not have half the specified reagents. Audit conducted a survey on awareness of the laboratory safety measures among the science teachers, wherein it was found that 65 *per cent* of teachers were not aware of the safety measures.

The Government replied (February 2019) that instructions would be given to teachers with regard to safety measures while handling chemical reagents in the laboratory.

Scrutiny of procurement of laboratory equipment revealed non-compliance to procedures laid down which is indicated in **Appendix-2.8**.

Computer laboratory

Information and Communication Technology is an omnibus support for the secondary education system. In this regard, RMSA emphasises provision of computer education by establishing computer laboratories in each school.

During joint verification, audit observed that 101 out of 342 schools did not have computer laboratory facilities. Further, audit analysed the availability of computers in the 342 test-checked schools. We observed that while 153 schools did not have computers at all, 74 schools had computers less than the minimum requirement of 10 computers. In all these schools, the enrollment of children ranged between 17 and 669. In the 66 selected schools of three test-checked districts, audit sought feedback from the children. The feedback of 205 out of 351 children indicated that the schools lacked computer facilities.

With the vision of computer literacy and to prepare the students for the digital future, GoI introduced the flagship scheme of Information and Communication Technology (ICT) in Schools in 2004. The scheme was implemented in three phases I, II and III. ICT phase III was implemented during 2008-09 to make computers accessible to every secondary school. The ICT scheme was implemented by the Department of State Educational, Research and Training (DSERT).

In Paragraph Number 4.11 of the Report of the Comptroller and Auditor General of India on General and Social Sector (Report No.10 of the year 2014), deficient implementation of the ICT scheme leading to cost overrun, locking up of funds and non-implementation of the scheme has been reported. Subsequently, the ICT scheme was subsumed under RMSA with effect from 2014-15. We observed that though the State had proposed various initiatives under the component during 2013-18, PAB had rejected the proposals pending rectification of the deficiencies in implementation of the ICT scheme prior to

2013-14. The details of implementation of ICT scheme are indicated in **Table-2.4**.

ICT	School	s approved	Expenditure	Remarks
ICI	Approved	Implemented	incurred	Kemarks
Phase I	480	480		-
Phase II	2,279	1,568	148.39	711 schools cancelled and as a result had to surrender ₹47.63 crore
Phase III	4,396	-	140.37	The scheme was not implemented even though expenditure was incurred towards hardware, software <i>etc</i> .

Table-2.4: Implementation of ICT scheme

Source: Information furnished by DSERT

Thus, implementation of ICT scheme in secondary schools did not take off and as a result the students of secondary schools were deprived of ICT education.

Meanwhile, Government of Karnataka re-organised (July 2016) the ICT initiatives into a comprehensive programme called Technology Assisted Learning Programme (TALP) subsuming ICT component (IT@Schools), Tele-education Scheme and Web-based UDISE System. The Programme was planned for implementation over a five-year period to cover Government primary, secondary and pre-university colleges. As per the implementation schedule, classroom teaching was to be started by November 2016 and hands-on practice for students by June 2017. However, neither classroom teaching nor hands-on practice has started to-date.

Thus, despite the launch of all these schemes to increase access to computers and improve proficiency in computers, in reality the schools did not have the requisite facilities and the children were denied the opportunity to become computer literate.

> Arts and Craft

The RMSA framework prescribes Art to be treated as a part of the curriculum and not as an extra-curricular activity. Hence, it stipulates that Art education must become both a tool for assessment of learning in all subjects and to be taught in every school up to Class X, and facilities and thereof to be provided.

In 121 schools of five¹⁷ test-checked districts, we observed that in 71 schools Arts and Craft was not part of the school curriculum, 73 schools did not have an Arts and Craft teacher, 95 schools did not have material and 109 schools did not have a separate Arts and Craft room.

➤ Library

BIS standards provide that a secondary and higher secondary school library building should have a Stack Room, a Librarian's Room and a Reading Room. In addition, the library has to provide sufficient space for reference, circulation counter, reference desk, books, periodicals, dailies *etc*.

¹⁷ Belagavi, Bengaluru (North), Hassan, Kalaburagi and Yadgir.

Out of 342 schools test-checked, 199 schools claimed that they had libraries. However, during joint physical verification of these schools, we noticed that 99 schools did not have a separate library room as indicated in **Exhibit-2.3**.

In addition, we noticed that all the libraries in the test-checked schools lacked facilities required for a library.

The analysis of the library facilities in the sampled schools of five¹⁸ test-checked districts is indicated in **Chart-2.3**.

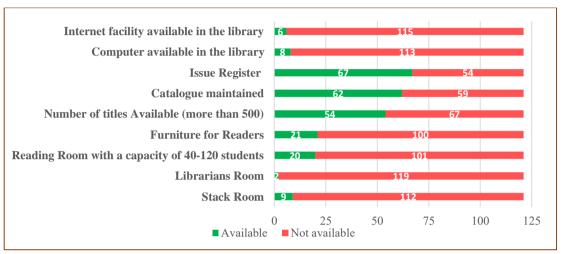


Chart-2.3: Library facilities in five test-checked districts

Since libraries are an important source of knowledge to young minds and impact positively on academic achievement, due to lack of a library in many schools, the children lost the opportunity to better their performance during examination.

The Government replied (February 2019) that due to insufficient allocation, provisions for facilities like Arts and craft-room, library-room, *etc.*, could not be made.

> Toilets

RMSA envisaged requisite number of toilet blocks in each school separately for teachers, boys, girls and differently-abled children. During 2013-14 to 2017-18, RMSASK had taken up construction of toilets in 186 schools at a cost of ₹4.32 crore. The details of construction of toilets taken up under RMSA are indicated in **Table-2.5**.

Veer	ear Particulars	Number of	Number o	f toilets	Total	Amount	
rear		Schools	Boys	Girls	Totai	released	
2014-15	New Toilets	65	58	13	71	1.26	
2014-15	2014-15 Repair of dysfunctional toilets		59	42	101	0.86	
Total		140	117	55	172	2.12	
2015-16	2015-16 Reconstruction of dysfunctional toilets		63	63	126	2.20	
Total	Total		63	63	126	2.20	
Grand To	tal	186	180	118	298	4.32	

 Table-2.5: Details of construction of toilets taken up under RMSA

Source: Information furnished by State Project Director, RMSA

¹⁸ Belagavi, Bengaluru (North), Hassan, Kalaburagi and Yadgir.

During joint verification of 342 schools, we observed that all the schools had toilet facilities except Laxman Rao Bore High School, Kalaburagi which did not have toilets for either girls or boys even though it had 110 students. However, toilets in 52 out of 163 schools in five¹⁹ test-checked districts lacked maintenance as indicated in **Exhibit-2.4**.

The Government while accepting (February 2019) replied that the funds available for maintenance of facilities at the school level was insufficient to meet the requirement. This along with behavioral pattern led to dysfunctional toilets.

Recommendation-3: Maintenance of toilets is of utmost importance as it has a visible impact on the health and hygiene of children as well as families. Hence, awareness programmes among children need to be conducted in order to stress on health and hygiene.

The Government accepted the recommendation and stated that maintenance of toilets would be attended to under Swachh Bharat Mission.

Safety in schools

A safe school environment is an enabling environment that supports a child's allround development. All Departments of the Government of Karnataka, providing services to children were to notify Operating Guidelines and Procedures to implement the provisions of the Karnataka State Child Protection Policy. However, these guidelines are yet to be finalised by the Department.

Out of 342 test-checked schools, we noticed the following:

- There was no school compound wall in 27 *per cent* of the schools (Exhibit-2.5).
- Though 43 *per cent* of the Headmasters were aware of the disaster management guidelines, 83 *per cent* of schools did not have a documented disaster management plan.
- Structural safety audit of the building was not conducted in 43 *per cent* of the schools.
- The structures/roofs in eight schools of five²⁰ districts were made of asbestos sheet without ventilation, proper doors, *etc.*, (Exhibit-2.5).
- Fire safety installations were either not available or not functional in 63 *per cent* of the private aided/unaided schools.
- Twelve schools had staircases without railings, roads passing through the school campus, open uncovered pond in the campus, electricity wire passing through the campus of the school, *etc.*, (Exhibit-2.5).

The Government replied (February 2019) that a template instructing the schools to prepare school level safety and disaster management plan was prepared and circulated to schools.

¹⁹ Bengaluru-North, Belagavi, Hassan, Kalaburagi and Yadgir.

²⁰ Bengaluru (North), Belagavi, Hassan, Kalaburagi and Yadgir.

Exhibit-2.3

Schools without separate library rooms



Shri Ravalnath H S, Shivthan, Belagavi



Swarna High School, Holenarasipur, Hassan

Exhibit-2.4

Non-maintenance of toilets



Government High School, Kolagunda, Hassan



Government High School Sangal, Belgaum



Adarsha Vidayalaya Bheemalli, Kalaburagi

Exhibit-2.5

Schools without safe school environment



GJC, Sriramanagara, Hassan without compound wall and road passing through the school campus



Sri Sai Central High School, Kalaburagi functioning in a structure made of asbestos sheet



MR Aided High school, Sakaleshpura-Staircase without railings

Exhibit-2.6 Schools functioning without furniture



Adarsha Vidyalaya, Ramdurg, Belagavi



Government High School, Pethshirooru, Kalaburagi

Audit analysed availability of infrastructure in 342 test-checked schools with regard to five²¹ basic parameters and found that only 58 schools had all the five basic infrastructural facilities. Thus, though 56 *per cent* of allocation of funds was towards infrastructural facilities, due to delay in tendering of works and non-undertaking of major and minor repairs, the intervention of RMSA in providing infrastructural facilities for improving quality in education was insufficient.

The above instances [paragraphs 2.1.8.1(a) to (e)] indicate RMSASK's lack of commitment to the objective of enhancing quality of education. As a result, there was deficiency in providing infrastructural facilities to the students.

(f) Other facilities

In addition to physical infrastructure, quality interventions under RMSA included providing furniture and fixtures, laboratory equipment and Science and Mathematics Kit. Audit observations with regard to provision of these facilities is discussed below.

Furniture and fixtures

RMSA stipulated that the existing furniture should be repaired as far as possible and actual requirement of furniture and fixtures for classrooms, laboratories, libraries and others should be worked out and projected in the Annual Plans. From the records of procurement of furniture and fixtures we observed the following:

- ✓ RMSASK did not assess the requirement of furniture and fixtures for schools. Hence, it could not seek funds in respect of schools which were not taken up for upgradation/strengthening. In respect of schools constructed/ upgraded, the furniture was procured without assessment and hence some of the furniture was rendered unusable as discussed in the next paragraph.
- ✓ Before procuring furniture the layout for placing the furniture with regard to available room space, space required for other items of furniture *etc.* should be evaluated to avoid cramping. However, it was observed that while deciding on the furniture specifications, RMSASK did not consider the room layout plans. As a result, furniture such as cots, *etc.*, procured for Girls Hostels could not be conveniently accommodated in the hostel rooms.
- ✓ The PAB approved (2009-10 and 2010-11) budget for procurement of furniture as part of the up-gradation and strengthening components and the State Government accorded (December 2016) administrative approval for ₹71.24 crore towards the purchase. The Chief Executive Officers of the Zilla Panchayats were authorised to procure furniture according to the specifications finalised by the State Project Office (SPO). We observed that out of eight test-checked districts, supply of furniture in respect of six districts was yet to be completed even though 18 months have lapsed. In addition, we observed that tenders were yet to be (October 2018) finalised in Kalaburagi. The status of procurement is indicated in Appendix-2.9. In two schools we noticed that the schools lacked chairs and desks and the children had to sit on the floor (Exhibit-2.6).

²¹ Science laboratory, library, computer laboratory, art and craft room and compound wall.

Such instances coupled with the absence of basic requirements as detailed in subsequent paragraphs are likely to affect the retention of students in these schools.

✓ The KTPP Rule, 2000 stipulates that the minimum time to be allowed for submission of tenders in excess of ₹two crore would be 60 days. Any reduction of stipulated time was to be authorised by an authority superior to the Tender Inviting Authority for reasons to be recorded in writing. This was reiterated by the Finance Department during March 2011. Disregarding the above Rule, even though the tender exceeded ₹two crore, the SPO instructed the District offices to invite short-term tenders without recording any reasons.

Recommendation-4: Procurement of furniture and fixtures and lab equipment needs to be prioritised in order to provide basic amenities to children in schools.

The Government has accepted the recommendation and stated that it would implement it by pooling the available funds.

Science and Mathematics Kits

With a view to make learning a joyful and meaningful activity and to nurture interest in Science and Mathematics among children, PAB approved (2016-18) procurement of Science Kits and Mathematics Kits worth ₹2.39 crore under the sub-component Rashtriya Avishkar Abhiyan. Kits worth ₹2.39 crore were yet to be procured. The status of implementation of the activity is indicated in **Appendix-2.10**.

> Playing facilities

RMSA framework envisages physical education and yoga for younger generation to ensure physical fitness and overall development. Hence, it stipulates that certain minimum outdoor and indoor facilities are needed in school premises.

In the 121 schools test-checked in five²² districts, there was no playground in 52 schools and playing equipment was not available in 100 schools (83 *per cent*).

2.1.8.2 Regulatory activity

RMSA has instituted a protocol in order to ensure quality education through physical facilities, staff, *etc.*, in aided and unaided private schools. Audit observations in this regard are brought out in succeeding paragraphs.

²² Belagavi, Bengaluru (North), Hassan, Kalaburagi and Yadgir.

> Non-revision of checklist

In order to assess the adequacy of infrastructure, teaching and learning facilities in private secondary schools, the Department uses a checklist with specifications for each component such as classroom, library, *etc.* We noticed that the specifications in the checklist were not revised to comply with the standards prescribed in RMSA. Hence, there was a risk of extending recognition or grant-in-aid to ineligible schools.

Renewal of recognition in routine manner

Renewal of recognition was done in a routine manner without ensuring availability of infrastructure or teaching facilities. In 73 out of 252 aided and unaided schools of test-checked districts, we noticed that though the infrastructure and teaching facilities were not in accordance with the norms prescribed by the State, the school's recognition was renewed. As a result, the recognition process did not succeed in enhancing the quality of schools in the State. In addition, we also noticed two²³ schools were functioning without renewal of recognition. This indicated lapse in monitoring and supervision.

Extension of grant-in-aid to ineligible schools

Karnataka Education Act, 1983 and amendments issued from time to time require that a private school to be admitted for grant—in-aid must have a site or land for 30 years lease in the name of the Governing Council or Managing Committee. The rules also prescribed minimum infrastructure standards, *eg*: the classrooms were to be at least 360 square feet in size, and a detailed checklist for use by the Authorities in assessing and scoring the schools before extension of grant-in-aid. According to guidelines, the schools obtaining a minimum 60 marks in the assessment would be eligible for grant-in-aid.

In four²⁴ out of eight test-checked districts, we noticed extension of grant-in-aid to 23 out of 80 aided schools which did not comply with the required norms (**Appendix-2.11**).

Thus, though the regulatory mechanism was a tool to enhance quality of education in aided and unaided sector of secondary schools, the Government did not effectively use the mechanism to achieve its goal.

The Government replied (February 2019) that better school evaluation tools were available now and the quality of aided and unaided schools would improve after implementation of these tools.

Recommendation-5: The Department needs to devise a mechanism to conduct inspection periodically in order to monitor the quality of schools which could help during renewal of recognition of schools as well as extension of grant-in-aid.

²³ Yathish English High School, Bengaluru South and Hoysala High School, Bengaluru North.

²⁴ Bengaluru (North), Chitradurga, Hassan and Vijayapura.

The Government replied (February 2019) that it would adhere to a better mechanism to monitor the quality of schools.

2.1.8.3 Human resources

In addition to infrastructure, human resources *viz.*, headmasters, teachers, lab attendants need to be provided to meet the challenge of quality. RMSA envisaged subject wise teachers as well as specialised teachers for physical education, Arts and Craft *etc.*, to be deputed in all schools. Audit observations on availability and qualification of teachers / headmasters are discussed below.

(a) Assessment of teacher requirement

In the Perspective Plan of Karnataka, it has been recorded that there are enough teachers available for secondary classes in the State. It further qualified that the teachers did not have proper in-service training facilities and professional development programmes. As a result, in the Perspective Plan of Karnataka, no targets were fixed for recruitment of additional teachers for the existing secondary schools. It, however, indicated a target of 7,000 teachers to be recruited by 2017 in respect of upgraded schools. Scrutiny revealed that while assessing requirement of teachers in the existing secondary schools, demographic changes and transition rates of both teachers and students from elementary to secondary level, movement between government and private schools, school populations and number of sections in each classes, medium of instructions, retirement of teachers, *etc.*, were not taken into account. Thus, there was no mechanism in the Department to periodically assess the requirement of teachers at the secondary school level.

(b) Availability of teachers

RMSA seeks to ensure availability of five subject specific teachers plus one head teacher. The total number of teachers across secondary schools in Karnataka is indicated in **Appendix-2.12**.

Scrutiny of records of RMSASK revealed the following:

- Against a sanctioned strength of 1,16,999 teachers, the State has a working strength of 1,02,865 teachers *i.e.*, 12 *per cent* vacancy of teachers. We noticed that the percentage of vacancy is least in the unaided private schools. The percentage of vacancy of teachers is more in aided schools than in the Government schools.
- Headmaster posts were not sanctioned in 1,712 Government and Aided schools. In addition, we noticed that though there was sanctioned post of Headmaster in 706 Government schools and 570 Aided schools, the posts remained vacant. However, recruitment for the post of headmaster was not done since 2012. Since a headmaster is responsible for drawing a school development plan, execution of the plan, distribution of the work and its co-ordination and monitoring, 2,988 out of 8,525 Government and aided schools without headmasters suffered in respect of assessment and accordingly the facilities.
- Further analysis of availability of teachers revealed that while 1,068 Government secondary schools had excess teachers, 2,566 schools had

shortage of teachers. Hence, there was no rationale in deployment of teachers across the Government schools.

• In respect of subject specific teachers, against sanctioned posts of 42,337 teachers, 5,633 were vacant (13 *per cent* deficiency) in Government schools and against sanctioned posts of 33,470 teachers, 5,909 were vacant (18 *per cent* deficiency) in aided schools. Out of 15,666 secondary schools in the State, 642, 491 and 500 did not have Mathematics, Science and Social Science teachers respectively. This trend existed in the test-checked schools also. Thus, though the RMSA norms specified proper balance of subject teachers, the Department did not ensure proper balance of subject teachers in each school.

(c) Pupil Teacher Ratio

The RMSA framework envisaged a Pupil-Teacher Ratio (PTR) of 30:1. The Perspective Plan of Karnataka targeted the said PTR to be achieved in all schools by 2017. The PTR for the State during 2013-14 to 2017-18 is indicated in **Table-2.6**.

		Government		Aided			Unaided		
Year	No of students	No of Teachers	PTR	No of students	No of Teachers	PTR	No of students	No of Teachers	PTR
2013-14	6,14,280	38,982	15.76	5,43,220	29,030	18.71	4,67,602	35,233	13.27
2014-15	6,43,112	39,113	16.44	5,59,428	28,835	19.40	5,02,368	36,573	13.74
2015-16	6,35,860	38,923	16.34	5,53,952	28,854	19.20	5,22,266	37,091	14.08
2016-17	6,30,185	38,259	16.47	5,37,792	28,545	18.84	5,64,648	37,263	15.15
2017-18	5,97,332	38,401	15.56	5,06,976	28,188	17.99	5,96,157	36,276	16.43

Table-2.6: PTR for the year 2013-14 to 2017-18

Source: Information furnished by State Project Director, RMSA

The average PTR exceeded the requirements under the RMSA in all the five years which was a positive indicator. However, as already discussed in earlier paragraphs, there was uneven deployment of teachers in 874 Government schools which resulted in schools with higher PTR ratio as indicated in **Table-2.7** below:

Pupil teacher ratio	Total number of schools	Number of schools (figures in bracket indicate percentage)			
	of schools	Rural Areas Urban Ar			
Ratio within 30:1	3,782	3,147 (83)	635 (17)		
Ratio > 30:1	874	710 (81)	164 (19)		
Total	4,656*	3,857 (83)	799 (17)		

Table-2.7: Uneven deployment of teachers

Source: Information furnished by Commissioner of Public Instruction.

* Information in respect of 21 schools was not available.

Further analysis of 874 schools revealed that 33 schools (4 *per cent*) were in the range of 100-226:1. Out of these 33 schools, we noticed that 31 schools (94 *per cent*) were in rural areas and two schools (6 *per cent*) were in urban areas. Two schools of test-checked Kalaburagi district, GHS-Dugnoor and Anjuman Urdu Girls High School-Shahbad had 249 and 206 students respectively on the rolls. Against this, only four teachers were available in both the schools.

(d) Recruitment of teaching and non-teaching staff

The Project Approval Board (PAB) approved recruitment of headmasters and subject teachers during the years mentioned there against in **Table-2.8**. The PAB had also approved financial support for the headmasters and subject teachers for years in which it was approved.

Period	Headmasters	Subject teachers	Government sanction
2009-14	333	1,970	March 2012 and February 2014
2014-15	66	330	December 2015
2015-16	45	225	Yet to be sanctioned

Table-2.8: Recruitment approved by the PAB

Source: Information furnished by Commissioner of Public Instruction.

From the Table, it is evident that there was delay in sanctioning of posts by the State Government. In addition, we observed that for the posts approved during 2009-14, the RMSASK was yet to fill up 284 posts (45 headmasters and 239 subject teachers). In respect of posts sanctioned in December 2015, recruitment process was yet to be completed. As a result, the State could not utilise the recurring assistance towards salary and allowances in respect of posts approved and lost central grant of ₹78.23 crore.

Similarly, though PAB had approved recruitment of 305 Office Assistants/MTS during 2013-14 and allocated ₹1.83 crore, no recruitment for the said post was undertaken.

The absence of a mechanism to periodically assess the requirement of teachers deprived the students of many schools of subject teachers with consequent impact on the quality of education.

The Government reply (February 2019) is as follows:

- The post of headmaster is a promotional post hence no direct recruitment to these posts could be done in RMSA period.
- Teacher deployment was done in the year 2016-17 where by excess teachers were identified and re-deployed to schools where teachers were needed.
- Permission for recruiting another 15,000 teachers has been obtained by the department including those for high schools.

Though reply can partially be accepted, in order to have Headmasters with higher qualification, the Government needs to amend the Cadre and Recruitment Rules, 1965.

(e) Qualification of the Teachers/Headmaster

The National Council for Teacher Education (NCTE) regulates the qualifications for a person to be employed as a teacher in schools including secondary and senior secondary schools as per its regulations issued during September 2001. Teachers for the State Government schools are recruited by the State Government. In respect of aided schools, teachers are recruited by the respective management after following recruitment process approved by the Department. In case of private schools, teachers are appointed by the respective private management. The Government and private managements were to

comply with the NCTE regulations. We, observed non-compliance to NCTE norms with regard to recruitment of teachers which is discussed below.

- The recruitment of teachers in Education Department was governed by the Cadre and Recruitment (C&R) Rules issued by the State Government during June 2003. However, the said C&R Rules were not in conformity with the standards prescribed by NCTE. As a result, the recruitment process of the State Government (*viz.*, 1,137 Assistant Teacher Grade and Physical Education Teacher, 444 teachers for Adarsh Vidyalayas and 146 teachers for the upgraded schools) notified during March-April 2015 was not in conformity with the standards prescribed by the NCTE.
- Subsequently, the State Government revised (September 2016) the C&R Rules granting retrospective effect from March 2015. The revised C&R Rules were partly in conformity with the standards prescribed by NCTE. Since the recruitment process was completed before revision of C&R Rules, seven teachers recruited in Government secondary schools and 20 teachers recruited in Government aided private secondary schools (**Appendix-2.13**) possessed qualifications which were less than that prescribed by NCTE.
- In the 172 private unaided schools test-checked we observed that 647 out of 3,163 teaching staff did not possess B.Ed qualification.
- The recruitment of headmasters in Education Department is governed by the C&R Rules, 1965 which has not been amended till date (October 2018). However, the State Government revised the C&R Rules for teachers in September 2016 as already discussed above wherein the qualification prescribed for teachers were more than those prescribed for the Headmaster. Hence, recruitment of Headmasters with lower qualifications than teachers could not be ruled out.

Recommendation-6: Recruitment of teachers with qualifications as prescribed in norms to be made to improve quality of education.

The Government accepted the recommendation.

2.1.9 Equity in secondary education

In order to provide equity in education, the RMSA gives special focus to groups *viz.*, girls, scheduled caste (SC) and tribal (ST) children, children from educational backward minority community and differently abled children.

The Perspective Plan of Karnataka envisaged 100 Gross Enrolment Ratio (GER) in the special focus groups by 2017. In the State, the GER of girls was at 83 *per cent* which was higher than the GER of boys (81.5 *per cent*). The GER of SC and ST was at 79 and 73 *per cent* respectively. Thus, though the State had not achieved target of 100 as envisaged in the Perspective Plan of Karnataka, it achieved substantial participation from the special focus group *i.e.*, girls and SC in education. However, further intervention in respect of ST group is necessary. Since the State has not computed GER with respect to differently abled children, it could not monitor the progress of participation of differently abled children in secondary education.

Audit observations are discussed in subsequent paragraphs.

2.1.9.1 Education for girls

Education of girls is the critical focus of RMSA. In order to bring down the dropout of girls in secondary and higher secondary schools and overcome gender disparities that persist in rural areas, GoI in co-ordination with the State Governments introduced various schemes such as hostels/residential schools, cash incentive, uniforms, books, *etc*.

(a) Girls' Hostel Scheme

The scheme envisages setting up of hostels with lodging and boarding facilities in the Educationally Backward Blocks (EBB) and areas nearing concentration of target groups so that girl students were not denied the opportunity to continue their study due to societal factors. Another objective of the scheme is to make Secondary and Senior Secondary education accessible to a larger number of girl students. The audit observations are:

- ✓ PAB sanctioned 74 Girls' Hostels for the state (62 in 2009-10 and 12 in 2013-14) out of which 66 hostels were made functional at temporary locations. The remaining eight hostels were yet to be made functional. Out of the functional 66 Hostels, though construction of buildings were completed in 47 hostels, they were yet to move to the permanent locations.
- ✓ In five²⁵ out of seven test-checked girls' hostels, we observed that against the capacity of 100 inmates, there were excess students enrolled in two girls' hostels (Holenarasipura-Hassan, Katgol-Belagavi). Further, the hostel in Chincholi did not have cooking stove and hence prepared food using firewood. In all the five hostels, the utensils for preparing food/for having food were not sufficient. The Hostels were to be provided with cots, beds, pillows, bed-sheets, *etc.* However, in all the five hostels, children were not provided with the above facilities. As a result, the children slept on the floor on mats without beds (Exhibit-2.7).

The Government replied (February 2019) that pending construction would be completed and made functional.

Recommendation-7: Infrastructure facilities to be dovetailed with construction of girls' hostels to provide all necessary basic facilities to the girl students in the hostel.

The Government accepted the recommendation and stated that action would be taken by including the cost of basic facilities along with the cost of the construction.

(b) Empowering girls with self-defence technique

As part of its efforts to enhance confidence levels among girls, and to equip them with the necessary skills to deal with a crisis, self-defence classes for high school girl students were offered. PAB approved ₹10.4 crore during the period 2013-18 under this component. The schools were required to conduct the classes on the basis of a time table/schedule of the self-defense classes. As per the schedule,

²⁵ Holenarasipura-Hassan, Katgol & Soundatti-Belagavi and Chincholi & Bheemanahalli-Kalaburagi.

Exhibit-2.7 Status of girls hostels



RMSA Girls Hostel, Chincholi, Kalaburagi where food is prepared using firewood



RMSA Girls Hostel, Bheemalli Kalaburagi where cots, bed, pillows etc., not provided



RMSA Girls Hostel, Soundatti, Belagavi where dining tables were not available

Exhibit -2.8 Disabled non-friendly ramps



Ramp without railings, Government Highschool, Bannur, Hasan District



Ramp without double railings and non-accessable through wheel chair Government High School, Belagavi



Ramp slippery and without railings Government High school, Seege, Hassan

the Schools were to conduct only two classes per week and the classes were to be conducted in the regular class timings. In the test-checked schools, audit sought feedback from the girl students and the feedback received was positive indicating that the activity was well-received among girl students. However, we observed from the records that approved time tables were not part of the payment claims and classes were shown as conducted even on Sundays in two test-checked districts (Hassan and Belagavi). Payment vouchers in Hassan and Belagavi districts indicated doubtful claims as same instructor was shown as conducting more than eight classes per day across multiple schools at the same time.

2.1.9.2 Education for children with special needs

Realising that inclusion of children and youth with disabilities is not only a human right, but also promotes the development of social skills, GoI envisaged the scheme of Inclusive Education for the Disabled at Secondary Stage (IEDSS). This scheme would enable all students with disabilities completing eight years of elementary schooling an opportunity to complete four years of secondary schooling (classes 9-12), in an inclusive and enabling environment. IEDSS would also support training programmes for general school teachers to meet the needs of children with disabilities and forms part of RMSA. The scheme stipulates that all schools should be disabled friendly.

The audit observations on implementation of the IEDSS scheme are discussed below:

✓ The details of enrolment of Children with Special Needs (CWSN) during 2013-18 in the education in the State is indicated in the Table-2.9.

Year	2013-14	2014-15	2015-16	2016-17	2017-18	
CWSN population as	3,30,781 (as per 2011 census)					
per census 2011 (5 to						
19 years)						
Number of students	1,32,467	1,25,039	1,19,734	93,251	1,01,276	
enrolled in education						
(6 to 16 years)						
Percentage	40	38	36	28	31	

Table-2.9: Enrolment of CWSN in education during 2013-2018

Source: U-Dise data

From the Table, it is evident that the ratio of the number of CWSN children enrolled in schools (both primary and secondary) to the number of CWSN children was declining. In the absence of survey by the Department for the Empowerment of Differently abled and Senior Citizens, the age-wise population in the category 13 to 18 years was not available in the State. Hence, audit could not arrive to a meaningful observation or derive a conclusion on CWSN children in secondary education.

✓ The "Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 enjoins upon the governments to create a barrier free environment for persons with disabilities and to make special provisions for the integration of persons with disabilities into the social mainstream. It *inter alia* enjoins upon the governments and local authorities to ensure, within their economic capacity provision for kerbs and slopes to be made in pavements for the easy access of wheel chair users, devising

appropriate symbols of disability and warning signals at appropriate places. Accessibility provides equal opportunity to specially-abled children by way of providing access to schools.

RMSA framework envisaged construction of ramps and disabled friendly toilets in schools along with accessible classrooms, hostel, laboratory and playgrounds. However, we noticed that the concept of barrier free access was limited mainly to provision of a ramp and concept of a barrier free school environment was not considered at all. This fact was confirmed from our assessment of 121 schools across five²⁶ test-checked districts (**Chart-2.4**).

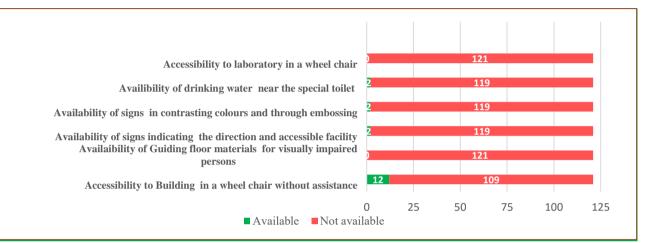


Chart-2.4: Barrier free environment in schools

In respect of provisions of ramps and disabled friendly toilets in schools, we observed that out of 15,666 secondary schools, 10,047 schools did not have disabled friendly toilets and 11,162 schools did not have ramps. Even though 4,504 schools had ramps, the ramps did not address the requirements of specially-abled children. In the test-checked districts we observed that the ramps constructed were not in the ratio of 1:12, did not have double railings, were not accessible through wheelchair and were constructed using slippery material (**Exhibit-2.8**).

- ✓ The RMSA provided for identifying every child with disabilities at the secondary level and assessing his/her educational needs. The students were to be provided with support services like special educators. We observed that ₹21.20 crore released for Special Teachers were not utilised in the State during the period 2013-14 to 2017-18 as appointment was not done. In test-checked Bengaluru North District, it was seen that the district had identified the CWSN children and assessed the requirement of Special Teachers during the five-year period 2013-18. Though proposals for recruitment were submitted to the SPO every year, no action was initiated for their recruitment.
- ✓ Based on assessment, all children requiring assistive devices should be provided with aids and appliances procured in convergence with the Ministry of Social Justice and Empowerment, State Welfare Departments, National Institutions, voluntary organisations/NGOs *etc*.

²⁶ Belagavi, Bengaluru (North), Hassan, Kalaburagi and Yadgir.

In the test-checked Belagavi District, 232 children were identified as requiring aids and appliances and 21 children were identified as requiring corrective surgeries in the medical camps organised during 2016-18. However, it was observed that only 88 children were provided with aids and assistance and no corrective surgeries were conducted for 21 identified children. Further, the aids and appliances provided to 88 children were distributed only at the end of the academic year. In Kalaburagi and Hassan, the recommendation by the doctor for aids and appliances in the medical camps as well as documentary evidence for issue of the same was not available. In Bengaluru (South), the RMSASK is yet to procure the aids and appliances for the year 2017-18 till day (August 2018).

Recommendation-8: Ramps as well as disabled friendly toilets needs to be provided across all the schools.

The Government replied (February 2019) that implementation would be guided by resource availability.

It is evident from the above that priority for education to children with special needs was not given in the State under RMSA.

2.1.9.3 Education of children belonging to Scheduled Caste/Scheduled Tribe/Other backward classes/Educationally backward minorities

The educational development of children belonging to SC/ST/Other Backward Classes (OBC) and Educationally backward minorities is a special focus in RMSA. The intervention identified under the scheme was to be based on intensive micro planning along with setting up of Government schools, provision for hostel facilities, scholarships *etc*. The State Government through its various programmes under the Education Department also by the Social Welfare Department has established schools and hostels for the benefit of SC/ST/OBC and other minorities. Scholarship scheme is also implemented in the State through Social Welfare Department. Approximately, the State is incurring an expenditure of ₹4,185.17 crore towards implementation of the above schemes.

Audit examined 11 sampled schools managed by the Social Welfare Department and observed that none of these sampled schools possessed the required level of infrastructure facilities envisaged under the RMSA. Among these, four schools were sharing schooling and residential facilities with other nearby schools. As a result, the number of children in these schools exceeded the available capacity. Hence, the available school rooms were used for teaching and learning during day time and for lodging at night time.

Convergence with Social Welfare Department was of utmost importance. However, discussed in paragraph 2.1.12.1(d) and 2.1.12.2, the RMSASK did not ensure this.

2.1.10 Other components

2.1.10.1 Vocational education

The aim of introducing vocational education at secondary level and higher secondary level is to enhance the employability of youth through demand driven competency based, modular vocational courses and at the same time reduce the dropout rate at the secondary level. PAB approved (2012-13) 250 schools for introduction of vocational education in four National Occupation Standards compliant vocational courses *viz.*, Automobile (Service Technician), IT and ITeS (IT Service Desk Attendant), Retail (Sales Associate) and Security (Unarmed Security Guard) and allocated ₹134.26 crore. While GoI released ₹22.44 crore, the State Government released ₹10.18 crore towards implementation of vocational education as at the end of March 2018. In this regard we observed the following:

- ✓ Vocational education was envisaged from Class 9 to Class 12 and hence the schools proposed should have had both secondary and higher secondary classes. Against the proposed 250 schools in the State, PAB cancelled 119 schools as the schools were either secondary or higher secondary schools. Out of the balance 131 schools, the RMSASK implemented vocational education only in 100 schools with effect from 2014-15. Further, it did not procure laboratory equipment for these schools. Hence, RMSASK did not utilise ₹13.18 crore out of ₹32.62 crore released towards the scheme.
- ✓ The students were to be assessed and issued certificates indicating their proficiency in the skills acquired. However, RMSASK had not conducted any such assessment during 2014-15 and 2015-16. In 2016-17 and 2017-18, though it assessed the students, certificates were not issued. Hence, in all the four years, proficiency in the skills acquired by students was not assessed.
- ✓ Audit assessed the availability of guidance material at the 121 test-checked schools for providing career guidance to the students and found that in 106 schools no such guidance was provided to the students.

Thus, it can be seen that the improper implementation of introduction to vocational education in the state was unlikely to serve the desired objective of enhancing the employability of the students.

The Government replied (February 2019) that it was planning to work more closely with the Directorate of Employment and Training and Skill Development Department to plug the gaps in the scheme.

2.1.10.2 Model Schools

According to the GoI scheme for Model Schools, a Model School should have infrastructure and facilities at least of the same standard as in a Kendriya Vidyalaya (KV) and with stipulations on pupil-teacher ratio, ICT usage, holistic educational environment, appropriate curriculum and emphasis on output and outcome. GoI approved (September 2009) 74 Model Schools in educationally backward blocks (EBB) in Karnataka.

The observations are discussed below:

• Status of Construction of Model Schools

The status of construction of 74 approved Model Schools is indicated in the **Table-2.10.**

					(₹ in crore)
Status of construction	Number	Estimated Amount	Contract Amount	Revised Amount	Expenditure
Completed and Handed	67	258.51	308.46	358.02	344.40
Over					
Under Progress	4	15.47	19.00	21.25	18.03
Completed & to be	3	11.22	13.67	15.88	14.73
handed over					
Total	74	285.20	341.13	395.15	377.16

Table-2.10: Status of construction of Model Schools

Source: Information furnished by State Project Director, RMSA

Though the scheme was approved in September 2009, construction of buildings commenced only during the years 2013-14 (50) and 2015-16 (24), while the Model Schools started functioning in temporary locations from the academic year 2010-11 itself. Though the construction of model schools were required to be completed within 20 months, from the Table, we noticed that construction of seven Model Schools are yet to be completed/handed over. Hence they continue to function (August 2018) in temporary locations with associated infrastructure constraints even after eight years of their commencement.

The Government replied (February 2019) that works would be completed at the earliest.

• Recruitment of teachers in Model Schools

The State Government approved (August 2010) recruitment of 592 teaching and 370 non-teaching staff in 74 Model Schools. Analysis of the teachers in model schools of three test-checked districts *i.e.*, Chamarajanagar, Kalaburagi and Vijayapura showed that:

- Out of 56 sanctioned teaching posts in four Model Schools of Chamarajanagar district, 32 (57.14 *per cent*) and 12 (21.42 *per cent*) number of teaching posts were vacant in 2013 and 2017 respectively.
- Headmaster was not posted in one out of four Model Schools of Chamarajanagar district (Adarsh Vidyalaya, Kollegal).
- In Vijayapura district, out of 70 teaching posts, 36 posts (51.42 per cent) and 10 posts (14.28 per cent) were vacant in five Model Schools during 2013 and 2017 respectively
- Head Masters were not posted in four Model Schools of Vijayapura district (Indi and Hunashayal) and Kalaburagi district (Beemalli and Bibballi).

The Government replied (February 2019) that no separate recruitment has been proposed for Model Schools.

However, the Government also needs to deploy required teachers to model schools to ensure the optimum PTR and to provide the envisaged quality of education.

• Observations in respect of model schools functioning in temporary locations

In the eight test-checked Model Schools, we observed that three Model Schools were yet to be completed and hence were functioning in temporary locations since 2010-11. The status of three constructed model schools and two model schools functioning in temporary locations are discussed in **Appendix-2.14**.

Hence, due to delay in construction of Model Schools, the children in these Schools were deprived of the facilities on par with KVs.

The Government replied (February 2019) that it would address the issues noted by audit.

2.1.11 Outcome indicators for RMSA

The RMSA provided measurable education indicators at three levels *viz.*, Key Performance Indicators, Quality Indicators and System Indicators. The performance of the State for the entire period of RMSA in respect of major indicators are discussed in the succeeding paragraphs.

2.1.11.1 Enrolment of students in Secondary Schools

Though the number of Government schools which included schools run by local bodies increased from 4,504 to 4,722 during the period 2009-10 to 2017-18, the proportion as a percentage of the total number of secondary schools decreased from 36 to 30. During the same period, the number of aided and unaided schools grew by 32 *per cent* from 7,854 to 10,336. The number of students enrolled in Government Secondary Schools decreased from 7.02 lakh to 6.57 lakh whereas the enrolment of children in aided and unaided schools increased from 9.28 lakh to 11.03 lakh (**Appendix-2.15**).

The decrease in enrolment in Government schools including local bodies, despite increase in the number of schools indicated that though a thrust had been given to opening of new schools, there had been no concrete efforts to ensure enrolment/retention of students in Government schools. This coupled with fewer facilities in Government schools led to decrease in enrolment in Government schools.

2.1.11.2 Gross Enrolment Ratio

The Gross Enrolment Ratio (GER) is an indicator of the level of enrolment of children in the schools as well as the level of out of school children. With GER of 2008-09 as baseline, the Perspective Plan of Karnataka had projected 81 *per cent* GER by 2011-12 and 100 *per cent* by 2017. The GER of the State as well as GER of SC/ST and GER of Girls/Boys which are equity indicators are given in **Appendix-2.16**.

From the Appendix-2.16, we notice that GER of the State as of 2017-18 stood at 82.37 *per cent vis-a-vis* target of 100 *per cent*. Further, the GER of girls was higher than that of boys in almost all the years indicating that interventions in the form of incentives for girls' education had an impact. In addition, GER of SC and ST showed an increasing trend.

Analysis of the district-wise GER of 2017-18 indicated that there were wide disparities among districts in comparison with the State level average. While 12 districts registered GER higher than the State average, 18 districts reported GER lower than the State average with Yadgir standing lowest at 56.49 *per cent* (**Appendix-2.17**). Further, district-wise comparison of GER of 2017-18 with that of 2009-10 indicated that in six²⁷ districts, the GER had dropped considerably. RMSASK did not conduct any analysis to ascertain the reasons for such wide variations across districts and also for the drop in five districts. Further, reasons for low level of GER in Yadgir were not examined.

In the Exit Conference, it was stated that though the State could not achieve the target of 100 *per cent*, it was well above the National GER. Further, it was stated that the GER which was at 75 *per cent* during 2009-10 had increased to 82 *per cent* during 2017-18 was an achievement. This was not acceptable as both the Perspective Plan of Karnataka and the Annual Plans had projected 84 *per cent* GER by 2017 which on past performance based calculation method without intervention of RMSA. Thus, the achievement of 82 *per cent* cannot be attributed to RMSA by the State Government's own estimate.

2.1.11.3 Efficiency Indicators

The RMSA suggested measures such as monitoring of the attendance of children, organisation of retention drives, identification of children who are out of school after 8th standard, interventions for children who cannot attend regular schools *etc*. The Perspective Plan of Karnataka targeted enhancement of the retention and transition rate to 99 *per cent* and to reduce the drop-out rate to two *per cent* by 2017. The level of drop-out²⁸, retention²⁹ and transition³⁰ rate in the secondary level as of 2017-18 are indicated in **Appendix-2.18**.

Though the dropout rate at State level showed a decreasing trend during the period 2013-14 to 2017-18 except in 2016-17, the drop-out rate even at the end of 2017 was more than six *per cent*. The dropout rate of boys continued to be more than girls during the said period except in 2016-17. Analysis of district-wise dropout rate indicated that in the districts of Haveri, Dakshina Kannada, Bagalkote, Ballari, Chikkamagalur, Gadag, Kodagu, Shivamogga and Uttara Kannada, the dropout rate was more than 10 (**Appendix-2.19**) and the reasons for high dropout in the said districts was not researched by RMSASK.

²⁷ Chamarajanagar, Chikkaballapura, Chickmagalur, Hassan, Mandya and Mysuru.

²⁸ Percentage of total number of children dropped out during the year compared against total number of children enrolled during the same year.

²⁹ Represents the degree of students in a particular academic year who continue to be in the school in the succeeding years.

³⁰ Indicates the extent by which students are able to move to the next higher level of education.

We analysed trends of drop-outs in different categories of test-checked schools (**Chart-2.5**) and we observed that the dropout in private schools were less which indicated that the interventions of the Government though RMSA and other State schemes was inadequate.

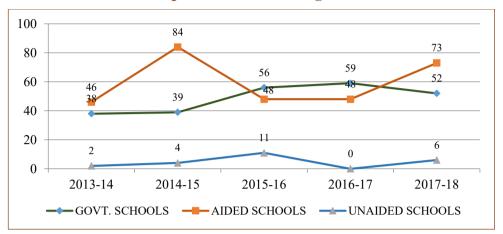


Chart-2.5: Trend in dropout in different categories of test-checked schools

PAB had emphasised (January 2010) the need for proper tracking of children passing out of Class 8. Considering the structure of school education in Karnataka which considers Class 8 to Class 10 as secondary education, the tracking of children passing out from Class 7 was most important. The field visits of schools indicate that there was no proper mechanism for tracking of children from Class 7 to Class 8 to ensure that all the children enrolled and passed out from the primary education system were brought to the secondary education system. As a result, the near universal enrolment obtained in the primary sector could not be replicated in the secondary education sector.

Thus, student retention rate of 99 *per cent*, drop-out rate of two *per cent*, student achievement level of 100 *per cent etc.*, set out in the Perspective Plan were not achieved during the project implementation period.

2.1.11.4 Examination results

The performance of the students of both Government and other schools in Class 10 Board examination, which is an indicator of quality education, was analysed to review whether RMSA's objective of providing quality education was met.

The year-wise position of Class 10 results in the State during 2009-18 is indicated in **Appendix-2.20**.

The SSLC pass percentage increased from 66.81 during 2009-10 to 85.41 during the year 2013-14. It showed a declining trend thereafter and reached the lowest level of 73.46 *per cent* during the year 2016-17 and reached a level of 78.11 *per cent* during the year 2017-18. Hence, during last nine years, there was no significant improvement in the level of achievement of the students in the SSLC results. Thus, the interventions through RMSA had insignificant impact on the SSLC results.

2.1.11.5 Achievement survey

Karnataka School Quality Assessment and Accreditation Council (KSQAAC) conducted assessment of secondary schools during 2015-16 wherein 814 Government/aided/private schools were assessed to determine the level of school facilities. In the assessment, 495 schools secured grade of less than 'C' representing less than 50 *per cent* achievement. Further, KSQAAC conducted a census based state achievement survey during the year 2017-18 which covered 35.66 lakh students of Class 4 to Class 9 of Government and Government aided private schools. The summary of the survey findings conducted during 2017-18 is indicated below:

Achievement level of students of Class 4 to Class 7	73-79 per cent
Achievement level of students of Class 8	48 per cent
Achievement level of students of Class 9	51 per cent

While the survey conducted during 2015-16 indicated that the interventions of RMSA in the secondary schools in terms of infrastructure was insufficient, the survey conducted during 2017-18 highlighted the lack of quality of teaching in the Government and Government aided private secondary schools. Since the achievement of students of secondary school was around 50 *per cent*, the Department's focus should have been on recruitment of qualified teachers, providing in-service training programmes and teaching-learning facilities *etc*. However, from the records, we observed that no action was initiated towards improvement of quality based on the achievement survey.

The Government replied (February 2019) that the performance indicators of the State *vis-a-viz.*, other states were commendable. However, the State is yet to reach its own targets indicated in the perspective plan of Karnataka. It also stated that the survey helped to rollout remedial teaching.

Recommendation-9: Government needs to have a third party evaluation of the RMSA as conducted in case of Sarva Shikshana Abhiyan.

2.1.12 Planning, Monitoring, Evaluation and Research

For success of any project or a scheme, planning and monitoring plays a vital role. The non-achievement of the goals of RMSA was mainly due to ineffective planning and monitoring which is discussed in the succeeding paragraphs.

2.1.12.1 Planning

The RMSA framework gave due importance to the preparatory activities as they would help in quality implementation of the scheme. This mainly included, comprehensive school mapping exercise, micro planning exercise which include number of studies on the baseline assessment in a district and planning such as creation of educational plans, identification of team at District level *etc*. Audit observations in this regard are discussed in subsequent paragraphs.

(a) Comprehensive school mapping

In order to have a database for identifying deficiencies in existing secondary schools/higher secondary schools, identifying secondary schools for upgradation, identifying underserved areas to establish new schools, streamlining of non-government schools *etc.*, a comprehensive school mapping exercise was essential. Thereafter the un-served areas were to be physically verified, and based on the data, prioritisation was to be done. The State was to arrive at the year-wise gap in the existing secondary schools based on which new secondary schools to be opened and other strategies like residential schools/hostel facilities/ transportation facilities *etc.*, were to be planned. Alternatively, the State could use the habitations data of National Rural Drinking Water Programme (NRDWP) of each year for undertaking habitation mapping exercise in rural areas.

However, from the records made available to Audit, evidence of such mapping and prioritisation was not forthcoming either at the State level or for the eight test-checked districts. As a result, RMSASK could not maintain database on habitations as well as coverage of habitations which was discussed in paragraph 2.1.7.1. The State, thus, failed to adopt a systematic approach for identifying access intervention.

Recommendation-10: A comprehensive school mapping exercise needs to be undertaken in order to develop a reliable database at secondary level.

(b) Planning process

In order to reflect the current situation with regard to all aspects of the RMSA scheme, the framework envisages bottom-up approach of planning which starts from the school level plan and ends at the State level plan. The school plays a critical role in the planning process wherein the Head Master and his team functions as a local resource team for planning. The School Management Committee of every identified secondary Government and aided school has to prepare a school level Perspective Plan and Annual Plan. Based on this, each district will prepare a Perspective Plan and an Annual Plan. Thus, the district will be the unit of planning for implementation of RMSA. At the district level, the starting point for planning is the creation of a Core Group of governmental and non-governmental persons which undertakes extensive visit of habitations and villages/district to ascertain educational status and educational need.

Various planning groups/committees/task forces at the State level, district level and school level are indicated in **Chart-2.6**.

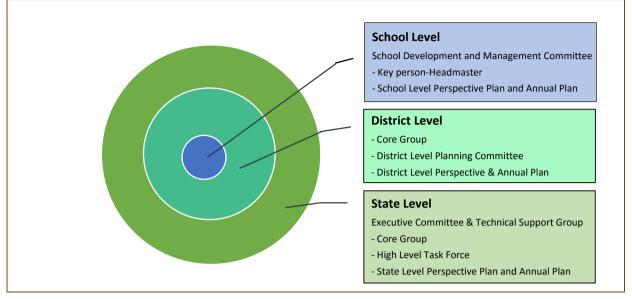


Chart-2.6: Levels of groups/committees/task forces under RMSA

The audit observations in respect of planning are as follows:

- While School Perspective Plans were not prepared in any of the test-checked schools, the Annual Plan was prepared only in 60 out of 170 Government and aided secondary schools.
- In all the eight-test checked districts as well as at the State level, a Core Group was not created.
- The District Level Planning Committee (DPC) was required to include targets in the Perspective Plan which were to be annualised and included in the Annual Plan. The plan targets were to be specified for major components of the RMSA. In addition, DPC was to identify the critical activities and develop a realistic implementation schedule. Component-wise major activities to be undertaken during the plan period along with an assessment of risks and uncertainties associated with the implementation were to be identified. However, it was noticed that DPC was not constituted in any of the districts test-checked. Hence, as a result, no targets were specified in the Annual Plans of the eight test-checked districts as well as in the State Level Plan. In addition, critical activities and implementation schedule were not identified or developed.

Thus, in the absence of planning as envisaged in the framework of RMSA, we could not ascertain whether the district level plans prepared were need based and realistic.

The Government while accepting (February 2019) that the audit findings were true, stated that an informal mechanism existed to include necessary inputs from individual schools in the district plans. However, we feel that since, the RMSA framework envisaged evidence based strategic plan, the Government needs to review the existing mechanism of planning in order to enrich the planning process.

Recommendation-11: Core groups may be constituted in the districts as well as at the State level to perform the functions contemplated in the RMSA framework. The Government accepted the recommendation and stated that it would follow in letter and spirit in implementing similar programmes.

(c) Plans for infrastructure and procurement

Civil works under RMSA should start with school-wise compilation of physical and fund requirements. Thereafter infrastructure requirement for each district needs to be assessed. Provision of additional classrooms should be considered only after exploring possibility of repairs of the existing infrastructure. Once the total requirement for the district is obtained, it needs to be ascertained as to how much of this requirement could be funded through the on-going schemes and the gaps that need to be funded through RMSA.

Audit observed that there was no evidence of such assessment of the existing buildings, their condition, and repairability before proposing works. In the test-checked districts excess creation of infrastructure was seen as indicated in **Table-2.11**.

District	Name of the school	Remarks
Belagavi	Government High School, Kadoli	One building each was constructed under Pancha Soulabya Scheme and RMSA. The building constructed under RMSA was lying vacant.
Belagavi	Government High School, Haliyal, Athani	Even though the school had its own building which was sufficient, a new building under RMSA was constructed. As a result, the earlier building was lying vacant.
Hassan	Government High School, Somanahalli	Even though the school had its own building, a new building was constructed under RMSA. Even after its completion, the new building was lying vacant as the school continued to run in old building.

 Table-2.11: Creation of excess infrastructure

Source: Information based on joint verification.

Similarly, in accordance with the provisions of the Manual on Financial Management and Procurement for RMSA, the procurement plan for a year was to be prepared at the beginning of every financial year. This was to be based on actual requirement and prepared after assessing the requirement of goods for the SPD office, district level offices and schools. However, we observed that no such procurement plan was prepared.

The Government accepted (February 2019) that no separate document existed. However, since the preparation of a separate procurement plan was mandatory the Government needs to consider the preparation of a procurement plan in order to dovetail its purchases with completion of civil works *etc*.

(d) Non-convergence with other departments and schemes

Implementation of RMSA seeks convergence and coordination with various other departments, schemes *etc.* Accordingly, the State is required to create an institutional mechanism for ensuring convergence and coordination with different departments such as Department of Social Welfare, Department of Backward Classes, Department of Youth Empowerment and Sports, Department of Women and Child Development, Department of Health and Family Welfare, *etc.*, MP LAD fund, MLA LAD fund, by including representatives of these Departments in State and District Level Planning Committees that anchor the RMSA. However, representatives from other Departments were not involved in any of these committees, and therefore were excluded from the planning process.

As a result, dovetailing of funds was not encouraged and also synergies such as transportation facilities to schools that could be provided through the Transport Department, compound walls for schools/playgrounds, *etc.*, that could be provided through MPLAD & MLALAD funds, aids and equipment to differently-abled children through Department of Empowerment of Differently Abled and Senior Citizens, *etc.*, was not explored. In addition, the RMSASK could have coopted departments such as Home, Employment & Training, Women and Child Development for creating awareness amongst children of ill effects of drug abuse, usage of internet, employment opportunities, empowerment of girls *etc.* Similarly, convergence with departments like Public Works, Fire, *etc.*, would have facilitated safety audit for preparation of disaster management plans at all levels.

2.1.12.2 Monitoring, Evaluation and Research

The RMSA Framework has stipulated various levels and also methods of monitoring, evaluation and research in order to supervise the implementation of the scheme and also to take corrective measures and strengthen implementation. Audit noticed the following deficiencies in monitoring, evaluation and research of implementation of RMSA and other subsumed schemes in the State.

• Review by Governing Council and Executive Council

The Governing Council (GC) and the Executive Council (EC) are required to conduct minimum one and four meetings per annum respectively. However, in the last eight years, while the Governing council had met only once, the Executive council had met 11 times for the period from 2009-10 to 2017-18. Further, we noticed that EC had not met even once in 2010-11 and 2014-15. It had met only once in each year during 2015-16 to 2017-18. Hence, in the absence of regular meetings of GC as well as EC, monitoring of various activities was not adequate.

Review of proceedings of meetings conducted showed that the Deputy Commissioners of the districts and the Secretary to Government of Karnataka, Social Welfare Department had not attended any of the meetings. In addition, we noticed that the targets in terms of outcome indicators were not assigned to the district level implementing agencies as well as to the State. Thus, the monitoring at the executive level was deficient.

• Monitoring by the State Government

The State Mission and the State Government were required to monitor all aspects of implementation of the RMSA including performance of all districts. In this regard, the State Government has to send a consolidated report to the GoI every six months. However, we noticed that the report was never sent for the period 2009-10 to 2017-18.

• District Level Committees

Under the provisions of Financial Management and Procurement Manual of RMSA, a District Level Committee is required to be constituted to monitor progress in implementation of various measures under RMSA. In all the eight test-checked districts, District Level Committees were not constituted and hence

implementation of all components of RMSA, progress and quality of work, its payments, *etc.*, were not monitored.

• Monitoring by Gram sabhas and Gram panchayat

The Gram sabhas and Gram panchayats were also to monitor progress of implementation of all the components of RMSA at school level. In the eight test- checked districts, we observed that none of the schools was monitored by the Gram sabhas or Gram panchayats.

• School Development Management Committee (SDMC)

As per provisions of Framework of the RMSA, the SDMC is required to monitor progress of implementation of all the components of the RMSA at the school level. Further, the SDMC has to inspect work sites, take stock of progress of non-recurring expenditure, take stock of status of education, equity aspects, quality aspects *etc*. In the test-checked 91 Government schools we observed from the records produced to Audit, that no such monitoring was done.

• Grievance redressal cell

As per RMSA guidelines, the State Government was required to set up Grievance Redressal mechanism at the State, district and school levels. However, no such cell was set up at any level and no records relating to receipt/ disposal of grievances were made available to audit.

• Evaluation

The RMSA Framework stipulates that regular evaluation and sample surveys at the district level should be conducted and the findings of the studies should be used for initiating corrective action. As already discussed in paragraph 2.1.11.5 only two surveys were conducted during the period 2015-16 to 2017-18.

• Research

The State Government was required to conduct independent research on different activities of RMSA by engaging independent institutes of repute. However, no such research studies were forthcoming from the records produced to audit.

Though there existed in-built monitoring and evaluation mechanism in the RMSA, inadequate action in this regard resulted in various lacunae in implementation of the scheme as already brought out in the earlier paragraphs.

Recommendation-12: For proper implementation of the RMSA scheme, Government needs to strengthen the inbuilt monitoring mechanism at all levels viz., constitution of district level committees, monitoring by Grama Sabha and Grama Panchayat etc.

2.1.13 Conclusion

The objective of RMSA was to improve access, quality and equity by providing access to secondary and higher secondary schooling within reasonable distance, through improved physical facilities and qualified teachers and also by giving special focus to girls, scheduled caste and tribal children and differently abled children. However, there was disparity in allocation of funds between various components of RMSA as majority of the funds were focused towards physical infrastructure alone.

Though the State was able to improve the participation of children in secondary education, it was yet to achieve the target of 100 *per cent* GER by 2017. In addition, it did not undertake necessary institutional reform to bring the higher secondary sector into the RMSA fold which deprived the children of age group 16-18 years of quality education.

The targets set by the State Government in its Perspective Plan for enhancing quality in secondary education through infrastructural facilities like sufficient classrooms, laboratories, libraries, separate toilets for girls and boys etc., were yet to be achieved. Though the PTR of the State was well within the prescribed ratio of 30:1, there were many schools which had a PTR ratio of 30:1 because there was no monitoring in deployment of teachers at school level. Though RMSA specified that subject-wise teachers were required to be deputed in every school, the RMSASK did not ensure proper balance of teachers as many schools did not have teachers for core subjects viz., mathematics, science and social science. Inordinate delay in execution of civil works in the initial years impacted provisioning of facilities in the upgraded schools as well as schools which were strengthened. ICT programme introduced in secondary schools was not implemented. In addition, many schools lacked computers and also computer laboratories. Hence, the State could not prepare the students of secondary school for the digital future.

The GER of girls, SC and ST children was at 83, 79 and 73 *per cent* respectively against GER of the State at 82 *per cent*. Though the State had not achieved the target of 100 *per cent* as envisaged in the Perspective Plan of Karnataka, it had ensured almost equitable participation from special focus groups in secondary education. However, it had not monitored the progress of participation of differently-abled children in secondary education.

Due to delay in construction of model schools as well as recruitment of teachers in these model schools, the schools were yet to reach the standard of a Kendriya Vidyalaya. Though RMSA envisaged Vocational Education for enhancing employment opportunities, the State is yet to integrate Vocational Education into the secondary education system.

Decentralised participative bottom-up planning did not materialise leading to plans which were not need based and realistic. Monitoring was deficient at all levels. This coupled with ineffective planning led to non-achievement of objectives of the RMSA. Thus, the impact of RMSA on secondary education was not visible both in terms of financial and outcome indicators compared to State intervention (₹5,100 crore approximately per year).