**INDIA**
**RASHTRIYA MADHYAMIK SHIKSHA ABHIYAN (RMSA)**

# Third Joint Review Mission
# 13 – 27 January, 2014

# Aide Memoire

**Table of Contents**



**Annexes**

**Acronyms**

| | |
|---|---|
| **AWP&B** | Annual Work Plan and Budget |
| **ASER** | Annual Survey of Education Report |
| **ATR** | Action Taken Report |
| **BE** | Budget Estimates |
| **BRC** | Block Resource Centre |
| **CAL** | Computer Aided Learning |
| **CBSE** | Central Board of Secondary Education |
| **CCE** | Comprehensive and Continuous Evaluation |
| **COBSE** | Committee of Boards of Secondary Education |
| **CTE** | College of Teacher Education |
| **CTET** | Common Teacher Eligibility Test |
| **CTS** | Child Tracking Survey |
| **CRC** | Cluster Resource Centre |
| **CWSN** | Children with Special Needs |
| **DCF** | Data Capture Format |
| **DFID** | Department for International Development |
| **DIET** | District Institute of Education and Training |
| **DISE** | District Information System for Education |
| **DP** | Development Partner |
| **DoSEL** | Department of School Education & Literacy |
| **Ed.CIL** | Educational Consultants India Limited |
| **EMIS** | Educational Management and Information System |
| **EU** | European Union |
| **EVS** | Environmental Science |
| **FM&P** | Financial Management and Procurement |
| **GER** | Gross Enrolment Ratio |
| **GoI** | Government of India |
| **GIS** | Geographic Information System |
| **GPS** | Global Positioning System |
| **IASE** | Institute for Advanced Studies in Education |
| **ICT** | Information Communication Technology |
| **IDA** | International Development Association |
| **IEDSS** | Integrated Education of the Disabled at Secondary Stage |
| **IGNOU** | Indira Gandhi National Open University |
| **IPAI** | Institute of Public Auditors of India |
| **IRT** | Item Response Theory |
| **IT** | Information Technology |
| **ITPDP** | In-service Teacher Professional Development Programme |
| **IUFR** | Interim Unaudited Financial Report |
| **JRM** | Joint Review Mission |
| **KGBV** | Kasturba Gandhi Balika Vidyalaya |
| **MCS** | Model Cluster School |
| **MHRD** | Ministry of Human Resource Development |
| **MI** | Monitoring Institutions |
| **MS** | Mahila Samakhya |
| **NAS** | National Assessment Survey |
| **NCERT** | National Council of Educational Research & Training |
| **NCF** | National Curriculum Framework |

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|---|---|
| **NCFTE** | National Curriculum Framework for Teacher Education |
| **NCTE** | National Council for Teacher Education |
| **NE** | North East |
| **NER** | Net Enrolment Ratio |
| **NGO** | Non-Governmental Organisation |
| **NIAR** | National Institute of Administrative Research |
| **NIC** | National Informatics Centre |
| **NPE** | National Policy of Education |
| **NPEGEL** | National Program for Education of Girls' at Elementary Level |
| **NLAS** | National Learning Achievement Survey |
| **NUEPA** | National University of Educational Planning & Administration |
| **OBC** | Other Backward Caste |
| **OECD** | Organisation for Economic Co-operation and Development |
| **OOSC** | Out of School Children |
| **PAB** | Project Approval Board |
| **PGT** | Post Graduate Teacher |
| **PISA** | Programme for Student Assessment |
| **PMIS** | Project Management Information System |
| **PRI** | Panchayati Raj Institutions |
| **PTA** | Parent Teacher Association |
| **PTR** | Pupil Teacher Ratio |
| **QMT** | Quality Monitoring Tool |
| **RCI** | Rehabilitation Council of India |
| **REMS** | Research, Evaluation, Monitoring and Supervision |
| **RIE** | Regional Institute of Education |
| **RMSA** | Rashtriya Madhyamik Shiksha Abhiyan |
| **RMG** | Repair and Maintenance Grant |
| **RTE** | Right to Education |
| **SC** | Scheduled Caste |
| **SCERT** | State Council for Educational Research and Training |
| **SDP** | School Development Plan |
| **SEMIS** | Secondary Education Management Information System |
| **SES** | Selected Educational Statistics |
| **SFD** | Special Focus Districts |
| **SFG** | Special Focus Groups |
| **SIEMAT** | State Institute for Educational Management and Training |
| **SMC** | School Management Committee |
| **SMDC** | School Management and Development Committee |
| **SPO** | State Project Office |
| **SPD** | State Project Director |
| **SSA** | Sarva Shiksha Abhiyan |
| **SSHE** | School Sanitation and Hygiene Education |
| **ST** | Scheduled Tribe |
| **TCF** | Technical Cooperation Fund |
| **TE** | Teacher Education |
| **TET** | Teacher Eligibility Test |
| **TGT** | Trained Graduate Teacher |
| **TLE** | Teacher Learning Equipment |
| **TLM** | Teaching Learning Material |
| **TOR** | Terms of Reference |
| **TSC** | Total Sanitation Campaign |
| **TSG** | Technical Support Group |
| **UAM** | Universal Active Mathematics |

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|---|---|
| **UC** | Utilization Certificate |
| **UEE** | Universal Elementary Education |
| **UDISE** | Unified District Information System for Education |
| **UPS** | Upper Primary School |
| **UT** | Union Territory |
| **VEC** | Village Education Committee |
| **VER** | Village Education Register |
| **WSDP** | Whole School Development Plan |

## 1. Introduction

1.1. Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is a Programme of the Government of India, implemented in partnership with the State Governments with the main objective to make secondary education of good quality available, accessible and affordable to all young persons. The scheme seeks to enhance enrolment in classes IX and X by providing a secondary school within a reasonable distance of every habitation, to improve quality of education imparted at secondary level by ensuring all secondary schools conform to prescribed/ standard norms, to remove gender, socio-economic and disability barriers and to achieve near universal enrolment in secondary level education with the GER exceeding 90% by 2017, i.e. by the end of the 12th Five Year Plan. The Programme was launched in 2009.

1.2. RMSA is supported by domestic resources, supplemented partially by external funding from the Development Partners – the World Bank's International Development Association (IDA) and United Kingdom's Department for International Development (DFID). As per the respective Agreements, the GoI and Development Partners (DP) carry out a Joint Review Mission (JRM) twice a year. The main objective of the JRM is to review progress in the implementation of the programme with respect to RMSA's goals, with a particular emphasis on a small number of issues, and to discuss follow-up actions in the light of the Terms of Reference (TOR) agreed upon for each JRM.

1.3. The Mission put special focus on their work on the following aspects of the programme:

- Assessment of UDISE data collection, verification and recording systems from school to district level, challenges and feedback from states, and correction measures undertaken in the 2012-13 UDISE data
- Assessment of Plan and processes adopted by states for management of issues relating to teacher recruitment at secondary level, deployment, capacity building and career management.
- Assessment of the nature of government aided schools at secondary level, their funding, infrastructure, management, functioning, staffing and teacher availability, classroom processes to enable focused quality intervention under RMSA
- Learning Outcomes

1.4. This is the Third JRM of RMSA and was held from 13th to 27th January 2014. The Terms of Reference (ToR) for the Mission and details of the Mission composition are attached at Annex 1. This is a field based review, and five States (Bihar, Chhattisgarh, Karnataka, Madhya Pradesh and Nagaland) were visited by a team of 2 members each (one MHRD nominee and one Development Partner nominee, with additional procurement and financial management experts visiting Bihar and Chhattisgarh).

1.5. The Mission would like to acknowledge the great work done by the teams in MHRD, TSG, the five states visited (including the teams at district and school levels) and the detailed information made available to the Mission. The Mission has greatly benefited from the field visits and interactions with students, community, teachers, and district and state level teams. The Mission would like to put on record the Mission's gratitude to all the above mentioned.

## 2. Overview and Key Issues

### A. The Big Picture

2.1. 'Count your blessings not just your calamities' is a truth often lost sight of in public discourse. That being so, it is not surprising that interesting developments taking place in the area of educational development over the last few years did not receive the attention that they ought to have. Though little recognized, after a few decades determined efforts are being made to transform *simultaneously* all the three major sectors of education-elementary, secondary and higher education. By 2009, when the RTE Act was enacted, DPEP and its progeny SSA had together brought about a spectacular reduction in the number of out-of-school children, so much so that improvement of quality and learning achievement came to be the predominant challenge. Even as universalisation of elementary education was in sight, the RMSA was launched in 2009, the very year in which the RTE Act was enacted. From a historical perspective, the significance of RMSA lies in the fact that for the *first time ever*, the Central Government began to support the States in expansion of access to and improvement of the quality of secondary education, thereby bestowing on secondary education the attention it deserves. Figuratively, before RMSA secondary education fell between two stools, one stool of elementary education which is a constitutional obligation and the other of higher education which compels Government to pay attention by virtue of the prestige attached to noted academics as well as the evident linkage between certain areas of higher education and the competiveness and productivity of the economy. It is to the credit of RMSA that it pulled up secondary education, and accorded it its due place in educational development. Likewise, the launch of the *Rashtriya Utchattar Shiksha Abhiyan (RUSA)* would accord the State universities their due place the structural transformation of higher education.

2.2. RMSA was started about five years ago, and since then, there had been a spectacular expansion in access. Large scale in-service training of secondary education teachers made its debut; systematic efforts began to be made to improve the quality of secondary education. And, quite a few States had blazed a trail of innovation. All in all, RMSA is poised to a leap forward to a new stage which *could* culminate in universal secondary education envisaged as universal enrolment, universal retention, and universal achievement of essential levels of learning.

2.3. However, RMSA can leap to the new stage only if it is imparted a new thrust. Unlike living organisms, organizations and programmes can avoid death, but only by reinventing themselves again and again. However, without this periodic refurbishing even the best designed institutional and programme innovations get routinised, and their growth gets stunted. RMSA has reached a stage where it needs a bit of refurbishing in order to realize its full potential. Following are the major elements of refurbishing needed at this stage:

- An outcome orientation all through, in planning, appraisal, implementation, and monitoring.
- Bring in learner achievement as a major goal of RMSA and assess every year the progress towards the achievement of this goal
    - Forge strong linkage between quality improvement measures and learner achievement.
    - Ex-ante assessment and ex-post evaluation of interventions, particularly those relating to training and quality improvement.
- March in step with SSA and ensure 100% transition of every child from the upper primary to secondary stage, either in Government or private unaided schools.

    - Greater attention to children with special needs, and replicating the success of SSA in mainstreaming such children.
- Establish strong linkage with Teacher Education Mission
    - Rejuvenate and strengthen SCERT, IASE, CTE, and DIET.
    - Strengthen the infrastructure for the conduct of training.
- Greater emphasis on academic supervision.
- Greater support to and more intense supervision of poorly performing States.
- Strengthen the capacity of
    - State Education Department functionaries.
    - Functionaries of TSG, SPD, and District teams.
- Follow to the logical conclusion the decision to cover private aided schools under RMSA.

**Outcome orientation**

2.4. Above all, RMSA is about ensuring that every child learns, and learns adequately through enrolling in secondary education every child who completes upper primary education and ensuring that every child who enrolls completes secondary education of good quality. These three outcomes – enrollment, completion and learning – should inform every piece of action, be it planning, appraisal, implementation, or monitoring. RMSA cannot achieve its ultimate objective of universal secondary education without a strong focus on outcomes. Piggybacking on SSA and straightaway adapting the ongoing second generation reforms of SSA with appropriate modifications would help RMSA achieve its outcome goals faster. Almost all the actions taken or are being taken on the key recommendations of Overture to the Eighteenth Joint Review Mission of SSA could be extended to RMSA. The Action Taken Report on *Overture* is annexed for ready reference.

**Outcome Orientation**: **I. Learning outcomes as a paramount goal**

2.5. From the administrative pint of view, it is desirable to specify the competency levels to be achieved in every class and to assess not only how each student is progressing towards the attainment of the competency levels stipulated for the class but also how every school as well as every administrative units (like block, district, State and the country as a whole) is performing in the matter of ensuring that each of its students is achieving the stipulated competency levels. We also need to know whether disparities in learning achievement by gender and social groupings are increasing or decreasing. In short, we need to have data on learner achievement similar to that reported year after year by NUEPA's UDISE in regard to school facilities and participation. Without such data attempts to improve quality is like flying blindfolded without navigational aids for there is no way to judge improvement in quality, and to avoid nostrums touted for improvement of quality. However, a singular focus on measurement of learning outcomes alone is not a panacea for quality or improving learning outcomes. Therefore learner achievement surveys by themselves serve no purpose unless they are linked with attempts to improve pedagogy, training and classroom practice based on the findings of surveys. Without such linkages the surveys would like navigation aids without actual flying taking place.

2.6. It is heartening to note that NCERT has developed learning indicators to determine minimum learning outcomes of Classes III, V, and VIII and that it had conducted National Assessment Survey for Class VIII adopting the item response theory-based technique (IRT) used in internationally acclaimed studies such as OECD's PISA.

2.7. It is desirable that:

- The salient findings of the survey are communicated to the parents and teachers in all the Indian languages (used as medium of instruction) employing plain common language.
- The States should be facilitated to refine the quality improvement measures based on survey findings of NAS. MHRD/TSG should monitor the follow-up action taken up by the States.
- NCERT develops learning indicators learning indicators to determine minimum learning outcomes for Classes IX and X during the next academic year 2014-15, and conduct NAS for those classes in the academic year 2015-16.
- The processing time for publication of the findings of NAS is minimised to the maximum extent possible so that the findings could be used for quality improvement.

2.8. It is pleasing to note that a few States had laid down competency levels and began to conduct learning achievement surveys. An important objective of planning in our country had been removal of disparities in development; that being so, the objective of educational and pedagogic planning cannot be different. Therefore it is desirable to have a national frame which specifies the minimum learning indicators as well as the levels of competencies for each of the classes at secondary stage. States should be free to add-on additional competencies or stipulate extra levels to be achieved in respect of any competency so long as the add-ons do not detract from the objective of generating All India data on the achievement of basic competencies. It is desirable for the national frame to be developed through a *joint effort* of the Centre and States. The learning indicators and the competency levels that be developed by NCERT can form the bases for developing the national frame uniform methodologies should be adopted for conducting learner achievements surveying so that comparison is possible

2.9. Schools in many States had begun to implement the CCE. However, it is desirable to simplify the CCE so that the best does not become the enemy of the good, and the burden of paper work involved in CCE does not handicap the teacher for actual teaching.

2.10. Given that a considerable proportion of children enter the secondary stage without acquiring the competency level expected to be acquired at the level of the upper primary stage, it is desirable to conduct a formative baseline assessment of the reading, writing and arithmetic skills of every student and of remedying the inadequacies and preparing every student for secondary education. It is also desirable to lay down the levels of reading, writing and arithmetic required to be achieved in each class of secondary education and conduct surveys each year.

**Outcome Orientation: II. Achieving 100% transition from upper primary to secondary stage**

2.11. RMSA's challenge of universalizing enrolment is far simpler than that the corresponding challenge of SSA. Once a child is enrolled in an elementary school and completes upper primary education, it is easier to ensure that the child moves on to secondary classes. Therefore it is to the advantage of RMSA to build on the gains of SSA, and strive for 100% transition from every Government, aided and private unaided school. This measure would ensure that universal enrolment in secondary education is achieved within a year of universal completion of upper primary education. 100% transition is a more reliable measure of the performance of RMSA than GER or NER as projections of age-specific population might go awry and as a consequence flaw the estimates of GER and NER

2.12. It is important to understand more fully whether school organisation has an impact in transition. One would expect that every child who is enrolled in a composite school (Class I-X) would move to the next class unless he drops out. In contrast, moving for an upper primary school to a different secondary school might lead to disruption in schooling. Therefore, though these assumptions should be tested through study, focused attention should be paid to students of stand-alone elementary and upper primary schools. A secondary school as well as elementary and upper primary schools in its catchment area should work together to ensure that every child in the terminal upper primary class joins the secondary school. The 'child tracking' mechanisms put in place by some States as well as institutional structures such as SMDC and PTA should be harnessed to achieve the objective of 100% transition. And it is imperative that MHRD and TSG play a pro-active role in promoting the adaptation of good practices and innovation all over the country.

2.13. Timely availability of data for planning for and monitoring 100% transition, and the flow of data should be geared to ensure such availability. Usually 30th September is the date fixed for collection of enrolment data. Therefore, arrangements should be put in place for enrolment data ( terminal class of upper primary and first class of secondary education in the State) to flow to the Block/Taluk Education Office latest by 10 October, District Education Office by latest by 20 October and the State Project Office latest by end October. This flow of data should help supervising officers to undertake corrective measures in the current academic year itself should 100% transition be not achieved by all schools. Dr. Arun Mehta of NUEPA had indicated during his presentation to the Mission that by January of every academic year, every State and district could use U-DISE data to generate the transition rate of every school. This data should figure conspicuously in annual work-plans. The performance of a State in ensuring that all schools achieve 100% transition rate should be critically appraised by TSG, and should be a major item for discussion by PAB.

2.14. RTE defines an 'Elementary School 'as a school having classes till Class VIII'; all States are required to comply with this provision of the RTE Act. .However, States in which Class VII is the last class of upper primary education are moving towards the RTE stipulation at different paces. It is desirable that the transition to the uniform national pattern is effected as early as possible. Till then, all out efforts should be made all over the country to ensure that 100% transition takes place between the last class of the upper primary stage and the first class of secondary education whatever those classes might be in any given State.

**Outcome Orientation III: Special Efforts to include CWSN as well as vulnerable and marginalized children**

2.15. *Universal enrolment would be incomplete without including every child with special needs.* Given that children enter the adolescent phase during secondary education, and given that the learning burden of secondary education is higher, the challenge of inclusion which RMSA faces is more awesome than that which SSA faces, and calls for more interventions than SSA. However, one gets an uncomfortable feeling that RMSA lags behind SSA in ensuring the participation of CWSN. The imperative of sensitizing teachers, headmaster, and the class and school environment cannot be emphasized enough; as well as of providing home based instruction to children who cannot attend schools. The JRM strongly urges MHRD to expeditiously undertake a comparative study of SSA and RMSA interventions, have a hard look at IEDSS, and introduce all the interventions needed for ensuring the participation of children with special needs in secondary education. As is being done in SSA, NCERT may be requested to expeditiously develop

exemplars for curricular adaptations for children with different types of disabilities, along with the adaptations for evaluation

2.16. It has been seen that fund release for the IEDSS component of RMSA to most states have been hampered because of many reasons so that funds are released in a reimbursement mode rather than advances. States have requested MHRD to look at this funding arrangement. States and MHRD are urged to work together to ensure that the underlying reasons for funds being reimbursed instead of being advanced are removed before the next JRM. There should be no financial impediments to address the special needs of CWSN.

2.17. The measures being taken in SSA for promoting the participation of vulnerable and marginalized children like street children may be adapted by RMSA.

**Outcome Orientation: IV. Achieving 100% Retention**

2.18. Universal Secondary education would not become a reality unless every student enrolled in secondary education completes secondary education. The progress towards universal retention can be assessed only if there are reliable measures of children dropping out during the course of secondary education. To this end, drop-out rates in relation to Class I-X are of no use. Time series of the relevant drop-out rates should be constructed. It would be useful if in U-DISE Flash Statistics and Report Cards of all types, NUEPA incorporates the dropout rates.

2.19. Disaggregated Analysis should be conducted to identify distinctive reasons for dropout in the secondary stage. One such reason arises from the fact that unlike in elementary education children do not get promoted to the higher class without passing in a qualifying examination and head masters are inclined to detain underperforming students lest the aggregate performance of the schools in Class X examination should be impaired. Many children complete upper primary education without acquiring the competencies expected; in fact many do not have adequate reading and writing skills. It is therefore important to rectify the inadequacies and prepare them for secondary education. Further, it is also the desirable to provide hostel accommodation for children whose parents migrate for part of the academic year.

## B. Key next steps for the RMSA Programme

**Pupil Teacher Ratio:**

2.20. The aggregate PTR does not reflect the actual classroom size, because of the inclusion of teachers teaching non–core subjects. It is worthwhile for RMSA to refine the methodology for calculation of PTR such that it reflects accurately the classroom size and provides a more useful way to assess the needs of schools.

**Quality Control of Quality Improvement Measures**

2.21. It is heartening to note that quality improvement measures like curriculum and syllabi revision, teacher training, development and use of teaching aids, and new methods of class room transaction are being introduced in almost every State. It is essential that the relevance, adequacy and effectiveness of these measures be subjected to ex-ante

assessment and ex-post evaluation by experts lest programme managers should harbor the illusion that quality is being enhanced. This is all the more as States are being provided freedom to develop various quality improvement measures.

**Promote Development of Supplementary Reading Material**

2.22. The financial support that RMSA had been extending to schools for strengthening libraries is extremely useful for improving the quality of education. However, there is considerable scope for improving the range and quality of supplementary reading material available for procurement. As MHRD is the nodal ministry for book promotion, it would be eminently desirable for MHRD to work in association with States, organizations like the National Book Trust, and reputed publishers, and promote the enhancement of the range and improvement of the quality of supplementary reading material in all Indian languages.

**Forge Linkage with Teacher Education Mission**
**Strengthen Resource Organizations**
**Widen Institutional Networking**

2.23. NCERT, NUEPA, and RIEs have been extending commendable support to MHRD and the States in implementing RMSA. However, balance of convenience lies in broad-basing the institutional support for RMSA by enlisting university departments of education and the IIMs, the way SSA had enlisted them. The importance of forging linkages with the Teacher Education Mission cannot be emphasized enough, and the rejuvenation and strengthening of SCERTs brooks no delay. It is desirable to have a realistic State-wise assessment of the institutional arrangements for in-service support and academic supervision. In particular, DIETs which were established for improving elementary education might be overloaded by being entrusted with some of the academic aspects of RMSA.

**Bridge Inter-State Disparities in Performance**

2.24. Even in respect of relatively simple matters like the implementation reports submitted by States there is wide variation in the format as well as quality of reporting. It is a matter of concern that the performance of some States is consistently below the national average, and that entrepreneurship and innovation seem to be limited to a few States. Apart from taking steps to develop the capacity of those States below the average for implementing all aspects of RMSA and to innovate, MHRD may like to focus on these States in its reviews and mandate the Joint Review Mission to focus on such States.

**Capacity Development**

2.25. Efficiency of RMSA implementation would enhance manifold if concerted efforts are made to enhance the capacity of everyone associated with programme management of RMSA, be they MHRD-TSG consultants or State and district level functionaries or members of various groups. The professional qualification of most of the State and district functionaries is a B.Ed. degree. However, the state and content of pre-service B.Ed., training is such that it does not equip graduates of B.Ed., to hold administrative positions, manage programmes, or even undertake academic supervision. In many States education officials like Inspectors and District Education Officers are not exposed to training at any stage in their career, be it at the entry level or later mid-career; the little training is limited to equipping the recruits with administrative and financial rules and procedures. Hence it

is essential to assess the capacity building needs of different types of functionaries, and institutionalize measures for capacity development. There is a particular need to develop skills in programme management, with and to develop the outcome orientation.

**Private Aided Schools**

2.26. The decision to bring private aided schools within the fold of RMSA is a very welcome step, and it is desirable to follow up this decision to its logical conclusion. Many States had either given up the grant-in-aid system or are wary of sanctioning new aided teacher posts even if they are necessary. The limited evidence gathered during states visits indicates the learning levels in private aided schools are worse than that government schools. Therefore, improvement of quality in private aided schools could be quite challenging, and extending available RMSA support to them essential.

**School Effectiveness**

2.27. Some States like Karnataka have undertaken surveys to assess the effectiveness of schools such as *Shalegagi Navu Neevu*. Thus Karnataka School Quality Assessment and Accreditation Council assesses learning outcomes as well as accredits schools. It is desirable for MHRD to continue to support NUEPA to develop a broad framework for assessing the effectiveness of schools, with a core which is common across states; with the proviso that within such a framework or a State could add on additional indicators for assessing schools effectiveness.

**Recruiting more science and mathematics teachers**

2.28. There is a nationwide shortage of science and mathematics teachers. Not only does this mean that the present cohorts of students are not able to acquire the skills and competencies they need in these subjects, it also means that these students are less likely to seek scientifically oriented degrees and employment, which in turn further reduces the supply of such teachers. There is therefore urgency to addressing this issue, which may require some new thinking. One option to consider is to utilize graduates of engineering or technology as having the required competence to teach these subjects in school.

**Coping with greater diversity in classroom**

2.29. A preponderant proportion of classrooms are much more diverse than ever in the past, diverse in terms of the home background, and diverse in terms of learning capabilities. Therefore in-service training has to lay a strong emphasis on the need for teaching to address individual differences and the enormous diversity in a classroom.

**Strengthening TSG**

2.30. It is imperative to strengthen the TSG so that it could discharge effectively all the functions expected of it and extend robust professional support to MHRD for managing RMSA. In particular it should be capable of:

- The monitoring implementation of RMSA by the States going beyond compilation of whatever information is furnished with the analysis
- The practice of having interns, consultants or advisers from competent external organisations (such as, universities, colleges, think tanks or research organisations) in

the TSG may also be looked into.

- Support the capacity development of all functionaries of all States.
- To organize studies and evaluations, disseminate the findings, and ensure that the findings of studies are reflected in implementation, and
- Identify, evaluate and disseminate good managerial and pedagogic practices and successful innovations developed by States as well as by non-governmental actors, and encourage all States to adapt them and scale them up.

2.31. It is pleasing to note that many States had developed good practices and piloted pace-setting innovations. The Subject Teacher Forums of Karnataka is a good example. It is to the advantage of RMSA as well of the country as a whole if good practices and successful innovations are widely disseminated and all States adapt them taking into account the local circumstances. MHRD-TSG has to play a lead role in this regard. Among the measures which could be considered for dissemination of good practices and successful innovations are mounting dedicated identification missions, publication of a e- journal, annual innovation conferences and awards for best practices and innovations may be considered by MHRD.

2.32. At the very least, TSG-RMSA should discharge all the functions being discharged by TSG-SSA. MHRD-TSG may explore the possibility of enlisting the professional support of academics for TSG activities through arrangements such as offering honorary positions. Apart from offering internship positions, MHRD may also explore the possibility of introducing a fellowship scheme similar to the Prime Minister's Rural Development Fellowship Programme.

## C. Key recommendations

i. This outcome orientation should inform the whole Programme, be it planning, appraisal, implementation, or monitoring

ii. Assess every year the progress towards the achievement of learning for all. Forge strong linkage between quality improvement measures and learner achievement. Ex-ante assessment and ex-post evaluation of interventions, particularly those relating to training and quality improvement.

iii. MHRD request NCERT clarify as far is possible with existing data what an average student is able to do and make this explicit in the NAS reports. Similarly provide additional guidance on how findings can be interpreted and provide capacity building support to help use individual states use NAS data to improve their teacher training and instructional materials. NCERT to release NAS dataset so that further analysis can be conducted by interested experts

iv. Trace carefully the transitions of every child from upper primary to secondary and through secondary education, to understand how to ensure 100% at each stage.

v. Encourage states to create larger secondary schools, as these are of better quality, rather than mechanical application of the 5km rule. Expand use of residential facilities to increase catchment area of secondary schools. (This recommendation is discussed in more detail in Section 3 below.)

vi. MHRD may consider commissioning an in-depth study to understand the different types of government aided schools- their management and funding provisions, infrastructure facilities, teacher management, day to day operations and linkages with RMSA.

vii. Utilize resources under the innovation element of the RMSA programme to support new strategies for improving quality of education

viii. Seize the opportunities of convergence on training with MHRDs teacher education mission and SSA mission

ix. Greater coordination between the MHRD and the State government may be undertaken to ensure that funds are released on time so that the State is able to use the releases in the same financial year.

x. Apart from taking steps to develop the capacity of those States below the average for implementing all aspects of RMSA and to innovate, MHRD may like to focus on these States in its reviews and mandate the Joint Review Mission to focus on such States.

xi. MHRD/TSG may play an active role in identifying good practices and successful innovations in the States as well as those piloted by non-governmental actors, widely disseminate them, and encourage all States to adapt them keeping in mind the local circumstances.

xii. MHRD may promote the development of supplementary learning material in all Indian languages for the use of students and teachers in Secondary Schools.

xiii. The size/enrolment of the school may be taken into consideration while disbursing the grants to the School, subject to each school receiving a minimum allocation. MHRD may consider giving states guidance and flexibility in this regard.

## 3. Progress towards RMSA Goals

### Goal 1: To improve access to secondary schooling

3.1. Access is determined by the twin drivers of supply (classrooms, teachers, instructional materials) and demand – whether students feel it is in their interests staying in school (a function of the quality of education provided and the students' assessment of how well they are likely to do and the opportunities secondary graduation will afford). The challenge for RMSA is to address both supply and demand side constraints simultaneously - ensuring the appropriate apportioning of teachers, classrooms and instructional resources. The diversity of India makes this a tough task. As an example mission members observed both schools with chronically overcrowded classrooms, schools with excess teachers and schools with excess space relative to enrolment but shortage of specialist teachers. Securing the right mix of resources at the right places will be the exacting challenge for the future. To note the mission found larger schools were, on the whole, better able to deliver higher learning outcomes in State exams.

*Achievements and Good Practices:*

3.2. A number of good practices were seen by the mission to be improving access. These include use of a 'feeder school' cluster approach – strengthening links between the junior secondary school and the elementary schools that provide their intake (all states visited); the use of safe transport programmes to bring students to larger well equipped schools rather than invest scarce resources in small unsustainable ones (Bihar); the upgrading of junior secondary schools to high schools to achieve better teacher utilization and resourcing (Bihar); and child tracking / census research to explore the movement of students both geographically and between the private and government subsectors (Karnataka, Bihar).

*Concerns:*

3.3. Within the averages of GER and NER there is variance – in all states visited, scheduled tribe students and in the case of Bihar (scheduled tribe boys) show significantly lower rates of GER/NER. The data is similar for scheduled tribes and learning outcome performance from NAS data. While the rise in GER is welcome, there are two concerns: first, the gap between GER and NER in different states indicates that many children may be held back from taking the exam in class ten. Second, in some states visited (e.g., MP) the gap between GER and NER is rising. These issues require closer investigation.

**Gross and Net Enrolment Ratio's For States visited by the Mission**

| **STATES** | 2009-10 (SSE) | 2010-11 (SSE) | 2011-12 (SEMIS) | 2012-13 (UDISE) |
|---|---|---|---|---|
| Gross Enrolment Ratio | | | | |
| Bihar | 35.20 | 41.8 | 50.01 | 45.18 |
| Chhattisgarh | 51.49 | 61.3 | 81.86 | 78.59 |
| Karnataka | 72.05 | 73.3 | 72.80 | 74.03 |
| Madhya Pradesh | 63.72 | 67.0 | 68.78 | 64.18 |
| Nagaland | 28.40 | 28.4 | 45.55 | 54.21 |
| **INDIA** | 62.71 | 65.0 | 64.99 | 66.43 |
| Net Enrolment Ratio | | | | |
| Bihar | - | 25.31 | 31.63 | 30.13 |
| Chhattisgarh | - | 37.64 | 46.37 | 43.41 |
| Karnataka | - | 58.47 | 65.76 | 69.30 |
| Madhya Pradesh | - | 31.20 | 42.00 | 53.30 |
| Nagaland | - | 21.69 | 19.47 | 20.27 |

3.4. Across all states the 5 km school upgrading rule was identified by the Mission to be insufficiently sensitive to respond to local need. In many instances it was leading to the creation of small schools which did not achieve economies of scale and have little hope of delivering effective utilization of either teacher nor instructional resources – for example, the value of providing a fully functioning lab in a small school which will be unable to attract and retain a qualified science teacher is questionable.

3.5. In all states the value of UDISE data was noted. The value of further disaggregating data by sub groups, girls, scheduled caste, scheduled tribe etc. for transition rates and drop-out rates was noted.

3.6. Mission members observed many cases in which classrooms, labs and libraries had been built but the furnishings and equipment was not present, even though RMSA provides resources for both. States need to pay more attention to the packaging and management of civil works and equipment contracts, to ensure better coordination and sequencing.

*3.7.* In urban areas and areas in the perimeter of urban areas there appears to be a migration of students (particularly boys) from government to private schools. Ensuring that UDISE is able to track and quantify this movement and that appropriate adjustments are made to school staffing and resourcing in government schools will be increasingly important to ensure optimum deployment of resources.

3.8. The potential of residential facilities to improve access to secondary education in the most remote locations (often tribal areas) was noted. These are currently regarded as inadequate.

*Recommendations*

**For States**:

- The promotion of a hub junior secondary school and elementary feeder based cluster approach could be encouraged.
- The impediments to access to learning to tribal groups warrant particular attention.

- States would be advised to switch to use GIS based school mapping and resource allocation to enable more accurate and efficient resource deployment.

**For GOI**:

- The revision of the 5km upgrading norm needs serious attention. MHRD may consider an in-depth study to find ways in which larger and better quality secondary schools are established, and to base RMSA norms on the number of students at a school rather than distance from habitations. This study might be discussed at the next JRM with a view to revised norms for the 2015-16 AWP&B cycle. In the short term, for the current AWP&B cycle, MHRD could consider greater flexibility for states. For example, states may make proposals to use the financial allocations for two school upgradations to expand a single site, such that at least as many students who would have otherwise attended the two schools are able to attend the single, larger (and better-equipped) school. And the resources for this single larger school could be used for measures beyond the simple building of rooms. Greater flexibility also could be secured by offering norm based financial packaging around additional classrooms and additional furnishing budgets- for classrooms, labs, libraries and computer labs.
- MHRD could consider making budgetary provision for events that promote linkage between Junior Secondary schools/ high schools and their feeder schools, e.g., shared events which could include professional development and provision of 'bridge – induction courses', secondary school readiness programs for students graduating from grade 8 to high schools.
- MHRD could via TSG/TCA provide guidance and support to State administrations in the effective use of GIS technologies.
- MHRD should support NUEPA in its efforts to amalgamate and present UDISE data using GIS technology – enabling presentation of data in map based forms.
- MHRD could request NUEPA to explore the possibility of providing disaggregated data on transition and drop out as well as sample based approaches to tracking migration of students from the government to the private sector.

### Goal 2: To bridge gender and social gaps

*Achievements and Good Practices:*

3.9. The value of girls hostels in remote and particularly tribal areas (Karnataka, CHH and MP); the potential of well-designed conditional cash transfer programmes; and bicycle schemes (Bihar, Chhattisgarh, MP) were all identified. For children with special needs (CWSN) village level identification of needs (Chhattisgarh, Karnataka) and the financial support to specialist NGOs to deliver services (Karnataka) were identified as good practice.

*Concerns:*

3.10. There is a prevailing attitude that bridging social gaps only refers to access issues but greater attention is needed to evident differences in learning outcomes between social groups, between girls and boys and between children living in urban and rural locations. NAS Class VIII survey results show significantly lower performance of scheduled castes, schedules tribes, CWSN and children from rural locations.

3.11. Evidence of CWSN participation in secondary schools was very limited. The lack of disaggregated data on CWSN was a concern. The capacity and level of preparedness of teachers to adequately accommodate CWSN was also noted.

3.12. A 'one size fits all' approach focused solely on 'inclusion' for CWSN is prevalent. While inclusive education is a positive approach it cannot cater for all incidences of CWSN – particularly in an environment where the practical challenges of teaching are already great and the preparation of teachers is limited. Given existing levels of resourcing and in order to appropriately respond to the needs of some special needs children (e.g. the profoundly deaf – who would benefit from lip reading and sign language instruction) it is likely such specialist support can only be cost effectively provided in specialist schools / mobile units.

*Recommendations*

**For State**:

- States should track all children identified CWSN who completed upper primary school last year to determine whether they are currently in school and if so whether they are receiving adequate support for their learning.
- Approaches to strengthening identification of CWSN, and deploying appropriate support could be identified. This could be greatly aided by cooperation with feeder schools, SSA societies and medical support services.
- Particular attention is needed to the specific challenges of tribal groups – across all states the mission visited these recorded the lowest GERs and learning achievement outcomes.

**For GOI:**

- MHRD may consider reviewing the experience of CWSN under SSA with a view to incorporating learnings into the operation of RMSA/IEDSS**.**
- MHRD may consider convening a workshop on the challenges and solutions to providing education to tribal communities and facilitate dialogue amongst concerned states such as: Bihar, Chhattisgarh, Odisha etc. and also between concerned states and experts.
- Ensuring the smooth integration of the IEDSS within RMSA is required in combination with a disaggregated strategy for addressing needs of CWSN recognizing the different needs and economic realities of providing highly specialized services.

**Goal 3: All children retained in education system**

*Achievements and Good Practices:*

3.13. Best practices focused on practical approaches to addressing the impediments to children going to and staying in school. Hostels, safe travel schemes, conditional cash transfers and meritocratic incentive programmes were all identified as having impact.

*Concerns:*

3.14. NAS data and teacher comments point to a significant gap between the learning levels of class VIII students entering class IX junior secondary. This gap may potentially lead to students becoming demoralized and dropping out. Similarly, the relatively low state board

pass rates – commonly around 50-60 % may also lead to students questioning the value of staying in school.

3.15. While not supported by RMSA, the Mission noted that incentive programmes (commonly for girls) that are based on payment at the end-of-grade 10 are likely to disproportionately benefit girls from more well off families. Girls from poorer families may require more regular financial support throughout the year to offset the opportunity cost of keeping them in school. Similarly, incentive schemes based on end of year exams may also potentially benefit more girls from more well off families as they are more likely to already have access to extra tuition thereby boosting their chances of strong board exam performance. This is particularly pertinent when awards are shared across both government and government aided schools.

*Recommendations*

**For States:**

- The significance of learning outcome achievement by school and its likely impact on school retention and drop out warrants greater attention. School performance should be monitored (relative to school intake) – consistently poor performing schools require attention.
- Greater use of learning outcome assessments (TET, ASER, NAS etc) should be considered to inform appropriate remediation in teacher training programmes, instructional materials etc.
- States should be encouraged to use the available flexibility in the way they utilize the current in-service provision by relaxing the every teacher – 5 days continuous training per year, e.g. if aspects of maths are a particular issue – it may be more effective to offer a 2 day training on 'algebra' in advance of this aspect of the training being taught and a another training of 2 days on geometry 2 days training later in the year and timed to be when teachers are teaching this topic.

**For GOI:**

- MHRD should consider financial provision for cluster based bridge classes for grade eight students.
- MHRD could intensify its work in supporting states to use NAS data to strategically address common learning bottlenecks

**Goal 4: Education of Satisfactory Quality**

3.16. One of the major objectives of RMSA is to ensure quality of secondary education through multipronged interventions strategies. It envisages satisfactory quality secondary education to be achieved by all children by ensuring equity. The vision of the XII Five Year Plan for secondary education, "Making good quality education available, accessible and affordable to all young persons in the age group of 14-18 years". In the states visited, there was little evidence of comprehensive strategies for improving the quality of education – the 'quality interventions' labelled as such under RMSA – such as school excursions – are likely to have a relatively minor impact, especially without this comprehensive strategy. This is also an area in which Innovation resources under the RMSA programme, which are not norm-based, could be effectively used.

3.17. From mission observations the saying 'show me a good school and I will show you a good head teacher' holds true. Understanding of the importance of School Leadership in school improvement is growing in momentum. RMSA is playing its part in this and should continue to support the development of a new generation of leaders to transform schools so that every child learns and every school excels. The National Center for School Leadership has been instituted at NUEPA to cater to the leadership development of school heads. Nine states (UP, AP, HP, WB, Gujarat, Kerala, Chhattisgarh, Mizoram, and Karnataka) have initiated diverse activities on school leadership programme.

*Concerns*

3.18. Ensuring the quality of the in-service education is the major responsibility of the states. It is observed that subject specific training is perceived to upgrade the content knowledge of teachers. Teachers are to engage with the children to overcome poor basic competencies as well as developing the expected subject competencies of the desired classes. Therefore, training programmes need to build capacity not only in content but also appraising teachers with new pedagogical approaches to reach to the level of students.

3.19. The National Policy formulated in March 2012 suggest a broader ICT literacy for teachers, students and school heads and integration of ICT into teaching learning process and development of repositories of ICT resources. All state missions expressed serious concern at the level of resourcing and use of ICT both in the administration of schools and in the teaching of students. This was felt not to match the demands of the 21st century. RMSA has emphasized strengthening ICT components at secondary school level. MHRD under the ICT @ Schools Scheme is the major funding vehicle supporting the development of ICT infrastructure, development of e-content and capacity building of teachers.

3.20. Head teachers training are narrowly conceptualized to develop management competencies rather leading the school in diversified contexts.

3.21. It does not appear the innovation budget head is being used within AWPBs. This budget head would logically be the one where states can fund tailor made approaches to address learning issues specific to their own contexts.

3.22. JRM members observed that most schools have not created the library for the use of children learning. And without exception the libraries observed were non-existent or pathetically small. The construction of libraries remains far behind the approvals (see figure below). Schools do not need a separate library room to start a library – shelves in classrooms are a good place to start. Where the size of the school building permits a separate room for the library, it is important to pay attention to creating a positive ethos in this space by providing good lighting and seating arrangements.

| | Approved | Completed | Completed/ Approvals % | In progress | In progress/ Approvals % |
|---|---|---|---|---|---|
| Libraries | 26203 | 6290 | 24% | 5355 | 20% |
| Science Labs | 23769 | 6275 | 26% | 3993 | 17% |
| Computer Labs | 19781 | 4820 | 24% | 2871 | 15% |

Source: data provided to 3rd JRM

3.23. RMSA has conceptualised integrated laboratory for each school by creating provisions for Math lab kits and Science Lab Kits. In many instance it does not appear labs are being utilised as expected or practical integrated into teaching. The mission also observed that there is inadequate space for laboratory. The provision of dangerous scientific materials (such as sulphuric acid) to schools where there is no qualified science teacher is also dubious.

*Recommendations*:

**For States:**

- A well conceptualized comprehensive training programme linked to the professional development of teachers in coherence with teacher needs and based on thorough analysis (e.g. from student and teacher performance in NAS, TET and the needs as expressed by teachers) is required.
- States use competent teacher education institutions in the right perspectives (RIEs, SCERT, CTEs and IASEs for the capacity building of secondary teachers).
- The impact of all teacher training programmes and the impact they have on class room processes need to be continuously monitored and adjustments made.
- School leadership programmes for existing and future school heads should seriously considered.
- Computer terminals with internet connectivity could be provided within libraries and staff rooms to encourage use of the web for reference, securing source materials and email communication between schools and district offices etc. Where internet connectivity is problematic then the use of 'dongles' which enable remote access at low cost could be considered.
- Training of teachers in library management. State experts to assist in generating list of appropriate literature and reference books from both government and non-government sources.
- Better monitoring and support for practical science is required. In schools where there is no qualified science teacher is present the logic/safety of significant investment in practical science needs to be carefully considered, or arrangements made for peripatetic teachers of science to visit such schools on a periodic basis to provide well managed practicals.
- Utilize resources under the innovation element of the RMSA programme to support new strategies for improving quality of education

**For GOI:**

- MHRD could encourage states to utilize the innovations budget head for quality improvement initiatives within the AWPB process. Tracking the performance of this innovation and ensuring good practice is shared more widely through subsequent JRM processes could be very beneficial.
- MHRD commission a thorough and wide ranging review of ICT use in schools – both for administration/ school operation and communication and computer assisted learning. This should provide a situational analysis as well as comment on issues such as: hardware, procurement, teacher ownership, maintenance, internet connectivity (and ways to address this), purpose and relevance of curriculum, assessment of skills, student- computer individual contact time.
- Seize the opportunities of convergence on training with the teacher education mission and SSA mission

## 4. Learning Outcomes

*Achievements and Good Practices*

4.1. The learning outcomes encompass what competencies and skills a student is expected to acquire and what the student is able to do as a result of meaningful teaching and learning processes. Therefore, a significant assessment system is the core to the process of addressing the learning gaps amongst learners and diagnosing the causes there of. The National Curriculum Framework (2005) focuses on teaching learning processes, assessing learners and the learning outcomes as an integrative framework. It clearly states that "a good evaluation and examination system can become an integral part of the learning process and benefit both the learners themselves and the education system by giving credible feedback".

4.2. The Continuous and Comprehensive Evaluation (CCE) has been institutionalised by MHRD to bring shift in the evaluation and assessment process across the country. CCE has been conceptualised broadly as a pedagogic tool rather a simple approach to evaluate a child. It is considered as a continuous process aiming towards all round development of the children and informing the teacher regarding use of appropriate pedagogical strategies.

4.3. Class X public examinations by the state boards are also indicative of learning outcomes in core subject areas and valued by the system, parents and children at large. However, the public examinations results are not symptomatic of individual learning progression but only measures "How much students memorise and deliver". As CCE has not taken root in the system in true sense in many states, examination oriented teaching is largely focussed to clear or score better percentage in public examinations.

4.4. The National Achievement Survey of class VIII (conducted in 2012) measures "What students of class VIII know and can do". The survey tested over one hundred thousand students in language, mathematics, science and social sciences with the objective to keep a check on general health on school education. The NAS was conducted using a methodology which enables comparisons to be made over time and between the different assessments for different age groups. The Mission commends NCERT highly for this very important initiative and for the concrete achievement of the Class VIII assessment report, some preliminary findings from which were shared with the JRM (see Tables at the end of this section; in addition a Summary was provided to the JRM). The national average is set as 250 (out of 500 possible points), with the mean score of different states identified as statistically better or worse than the national average.

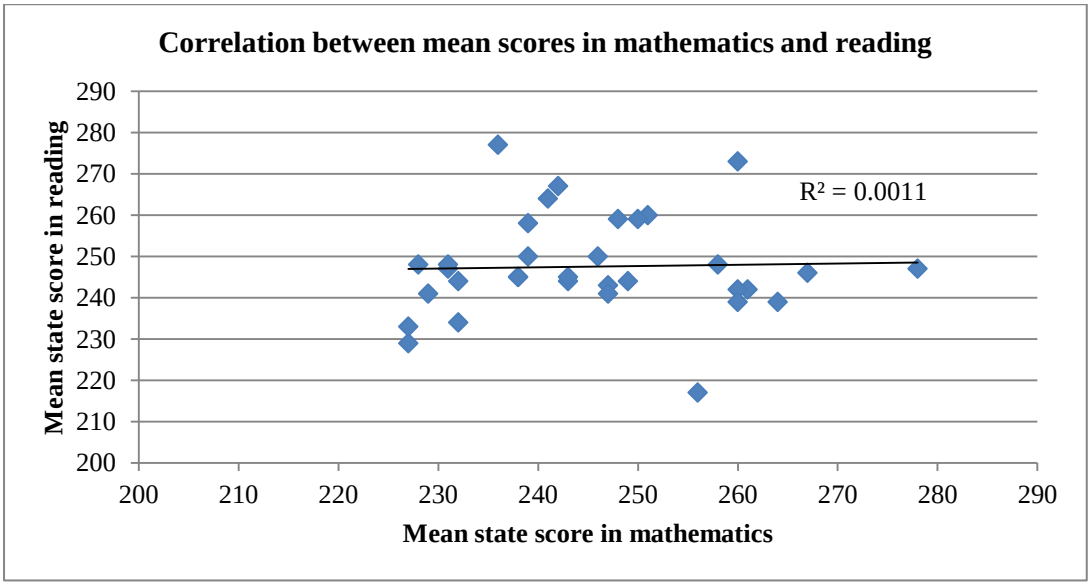
4.5. As can be seen from the tables, for example, the mathematics achievement mean score of the states S. No. 1 to 9 (UP, MP, Tripura, Bihar, Daman & Diu, Jharkhand, Manipur, Dadra Nagar Haveli and JK) are significantly above than the national average whereas the states S. No. 21 to 23 (Chandigarh, Goa, Uttarakhand, Chhattisgarh, Kerala, AP, Arunachal Pradesh, Gujarat, Sikkim, Tamil Nadu, Delhi, Meghalaya and Pudducheri) are significantly below than the national average. Furthermore, the mathematics achievement mean score of the states S. No. 10 to 20 (Punjab, WB, Mizoram, Himachal Pradesh, A & N Island, Rajasthan, Haryana, Karnataka, Odisha, Maharashtra and Nagaland) are not significantly different than the national average.

4.6. In addition, the report clearly states the critical relationship between school factors and learners achievement. These are:

- Government aided schools are performing less well than government schools

- The provisioning factors contributing towards better achievement are pucca building and co-education schooling
- The longer working days such as six day week do better than those with five days week and also more than 180 working days in a year
- Positive influence of time on task on learners' achievement
- Key role school leadership and governance on students achievement
- Incentive Schemes appears to be associated with higher achievement
- Regular checking of homework by teachers and small group learning is helping children in their learning achievement

4.7. Curiously, there is no correlation between states' mean scores in mathematics and their mean scores in reading (see figure below). This is unexpected, since one explanation for poor performance in mathematics (and science) might be that students cannot read the textbook and learn by themselves. This result therefore requires more investigation and analysis using data not available to the JRM, so appropriate responses can be designed.




Source: Mission calculations based on data provided by NCERT

4.8. Many states are also carrying out their own assessments, funded by RMSA, which is a very positive development. These assessments will enable states to develop a more fine-grained understanding of the strengths and weaknesses of their students, and to design/adjust teacher training and other programmes to help teachers address these weaknesses.

4.9. The Mission members also observed a significant number of initiatives at the state level designed to enhance student learning, especially those which had not been able successfully to acquire the competencies, skills and knowledge expected by the end of Class VIII.

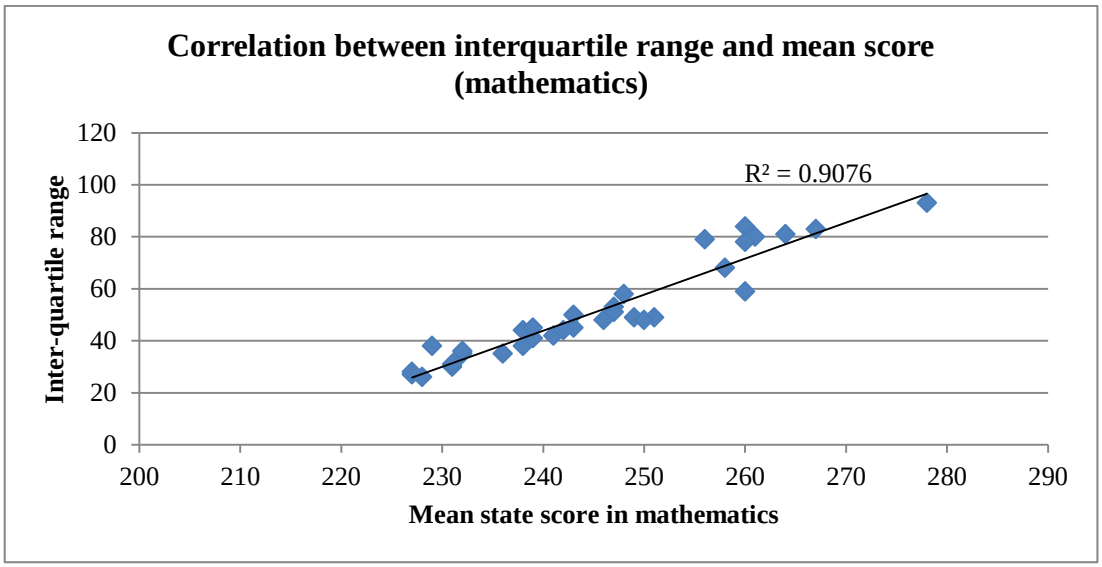
- **Madhya Pradesh**: State has introduced a comprehensive programme called as Bridge Courses and trying to address the learning gaps of Class VIII pupils through foundation courses. It is very systematic, with all districts and schools engaged. Students' engagement in self-evaluation is a new dimension added to the evaluation processes. Schools are offering continuous remedial classes to bridge the learning gap persisting from primary, upper primary and also at the secondary level.

- **Chhattisgarh** has initiated learning enhancement programme under its quality initiatives. The state conducted a survey of 3.50 lakh children out of 4 lakh children studying in class IX and administered a test to assess learning deficit and conducting coaching classes as a follow on. State intends to make this kind of assessment a regular practice and conduct such tests every year to improve learning levels of children. Results of these tests were also made available to SCERT for teacher training.
- **Karnataka** has initiated good number of programs to guarantee quality in education which has given a new dimension in different aspects of schooling and schooling processes including the state Karnataka School Quality Assessment and Accreditation Council (KSQAAC) constituted as an autonomous body by the Government from 16-11-2011.

*Concerns*

4.10. With respect to the NAS, states also vary widely in the equity of their students' performance. The inter-quartile range represents the performance of the middle 50 percent of students. A more equitable performance would result in a lower inter-quartile range. For mathematics, the inter-quartile range varies from 35 in the case of Kerala to 93 in the case of UP. These gaps are larger than the means across states, which vary from 278 to 227 – especially when one considers that the larger states are by-and-large very close to the national mean of 250. This means that the major issue is equity within rather than between states.

4.11. Moreover, there is a very strong correlation between mean score and inter-quartile score – with the higher the mean score the larger the interquartile range (see figure below). This is deeply worrying, since it seems that no state in India has been able to achieve both high performance and equitable distribution. This is in contrast to what is observed in international assessments, where, by and large, the strongest performers in terms of average scores also are able to have high levels of equity with very few poorly performing students.




Source: Mission calculations based on data provided by NCERT

4.12. While recognizing the tremendous strides made by NCERT on the NAS, particularly on making findings easier to interpret (and therefore act upon). The Mission had some observations regarding the presentation of the NAS results. Most significantly, it is not

clear how to interpret the mean result (from which inference about all other measurement refer).

4.13. All states visited had serious concerns about the low levels of performance of Class VIII students and, as noted above, are implementing large programmes to address these concerns. This level of concern cannot be seen in the mean scores presented from the NAS. For example, MP's mean performance on NAS puts it as average or better than average across the 3 subjects compared to other states, and yet they expressed concern that more than half of their students do not have the basic skills needed to be successful in secondary education. It would help if NCERT explained what average performance of 250 translates into, in terms of what students can do or not do.

4.14. States are grappling with the problems of students with low "basic competencies" in core subject areas at the transit/entry point from class VIII-IX. State have identified and acknowledged the gap existing between actual and expected learning competencies of learners at class IX level. Reasons substantiated by the state, district level officials and schools are diverse in nature- in appropriate implementation of non-detention policy, profile of learners, lack of teacher professional competencies and teaching-learning processes at the elementary level.

4.15. The major challenges in the secondary education level, therefore are many folds in relation to learning outcomes:

- Addressing the basic deficiencies in core subject areas which children carry with them from elementary level to secondary level
- Coping with the expected competencies to be acquired at the class IX and X level
- Learning performances in the core subjects like Mathematics, Science and English are substantially below the average level
- Overly-frequent examinations and testing may deter children and affect their learning progression.
- The large scale testing conducted by the system and schools and subsequent remedial provisioning do not focus on individual deficiencies and progression

4.16. The JRM shares the concerns of the states about the low levels of the learning outcomes of students. Moreover, much of the work that states are doing to address these issues consists of doing 'more of the same', by providing additional ('remedial') classes for example. But students who did not learn the material adequately over their first eight years of schooling, need a different kind of support, tailored to what exactly they did not understand and why they did not understand it. The JRM was not able to find much evidence that teachers are being given the skills or materials which will support the foundational learning of students.

*Recommendations*

**For States:**

- State governments need to work in tandem with RMSA and SSA state societies to identify and act upon the learning gaps and build progressive and coherent learning competencies with clear articulation of expected threshold performance levels for each class. States need to encourage use of NAS for improvement of student learning, use of appropriate pedagogical strategies, development of supplementary material and as feeder points for in-service training programme for teachers.

**For GOI:**

- MHRD request NCERT clarify what an average student is able to do and make this explicit in the NAS reports. Similarly provide additional guidance on how findings can be interpreted and provide capacity building support to help use individual states use NAS data to improve their teacher training and instructional materials.
- MHRD, working with NCERT, State Boards and state RMSA provide support to sensitise key actors at different levels in the educational system on the purpose of diagnostic assessment and its power in forming effective remediation strategies. This should include work to institutionalise CCE using a simpler framework of CCE.

**National Achievement Survey Class VIII, 2012**
**Mathematics Achievement**

**Source: NAS Class VIII, NCERT**

| S. No. | States/ UTs | Mean Score | Significance |
|---|---|---|---|
| 1. | Uttar Pradesh | 278 | The state average Score is significantly above that of overall (national mean) |
| 2. | Madhya Pradesh | 267 | |
| 3. | Tripura | 264 | |
| 4. | Bihar | 261 | |
| 5. | Daman & Diu | 260 | |
| 6. | Jharkhand | 260 | |
| 7. | Manipur | 260 | |
| 8. | Dadra Nagar Haveli | 258 | |
| 9. | Jammu & Kashmir | 256 | |
| 10. | Punjab | 251 | The state average Score is not significantly different to that of overall (national mean) |
| 11. | West Bengal | 250 | |
| 12. | Mizoram | 249 | |
| 13. | Himachal Pradesh | 248 | |
| 14. | A & N Island | 247 | |
| 15. | Rajasthan | 247 | |
| 16. | Haryana | 246 | |
| 17. | Karnataka | 243 | |
| 18. | Odisha | 243 | |
| 19. | Maharashtra | 242 | |
| 20. | Nagaland | 238 | |
| 21. | Chandigarh | 241 | The state average Score is significantly below that of overall (national mean) |
| 22. | Goa | 239 | |
| 23. | Uttarakhand | 239 | |
| 24. | Chhattisgarh | 238 | |
| 25. | Kerala | 236 | |
| 26. | Andhra Pradesh | 232 | |
| 27. | Arunachal Pradesh | 232 | |
| 28. | Gujarat | 231 | |
| 29. | Sikkim | 231 | |
| 30. | Tamil Nadu | 229 | |
| 31. | Delhi | 228 | |
| 32. | Meghalaya | 227 | |
| 33. | Puducherry | 227 | |

**Science Achievement**

| S. No. | States/ UTs | Mean Score | Significance |
|---|---|---|---|
| 1. | Daman & Diu | 282 | The state average Score is significantly above that of overall (national mean) |
| 2. | Dadra Nagar Haveli | 277 | |
| 3. | Goa | 265 | |
| 4. | A & N Island | 262 | |
| 5. | Manipur | 261 | |
| 6. | Kerala | 261 | |
| 7. | Sikkim | 261 | |
| 8. | Uttar Pradesh | 259 | |
| 9. | West Bengal | 257 | |
| 10. | Madhya Pradesh | 258 | The state average Score is not significantly different to that of overall (national mean) |
| 11. | Jammu & Kashmir | 256 | |
| 12. | Odisha | 256 | |
| 13. | Mizoram | 253 | |
| 14. | Himachal Pradesh | 251 | |
| 15. | Jharkhand | 250 | |
| 16. | Punjab | 250 | |
| 17. | Haryana | 250 | |
| 18. | Maharashtra | 249 | |
| 19. | Chandigarh | 249 | |
| 20. | Rajasthan | 248 | |
| 21. | Nagaland | 244 | |
| 22. | Gujarat | 247 | The state average Score is significantly below that of overall (national mean) |
| 23. | Tripura | 265 | |
| 24. | Chhattisgarh | 244 | |
| 25. | Bihar | 241 | |
| 26. | Karnataka | 241 | |
| 27. | Uttarakhand | 241 | |
| 28. | Arunachal Pradesh | 241 | |
| 29. | Andhra Pradesh | 237 | |
| 30. | Tamil Nadu | 237 | |
| 31. | Delhi | 237 | |
| 32. | Meghalaya | 232 | |
| 33. | Puducherry | 230 | |

## 5. Teacher management (planning, recruitment, and deployment)

*Achievements and Good Practices:*

5.1. Teacher recruitment is a state subject and MHRD has a limited role to play in the state recruitment policies. One standard eligibility criterion for teachers at the secondary level based on the NCTE guidelines is a graduation degree with a professional qualification of B.Ed. Many states recruit teachers directly and through promotion (qualified teachers from elementary to secondary level) appointments in equal proportion. There is also a difference among states in this regard - states with 100% direct recruitment are Bihar, Delhi, Goa, Gujarat, Jharkhand, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, Punjab, Tripura and West Bengal. Jammu & Kashmir follows 100% recruitment through promotion.

5.2. States have begun to conduct a teacher eligibility test for recruitment of secondary level teachers in addition to the criterion of academic and professional qualifications. This process should ensure that the standards for entrants into the profession are driven up.

5.3. Some states have adopted creative solutions to meet teacher shortages in the short term. In Chhattisgarh it has been addressed by appointment of guest lecturers outsourced from coaching colleges, using students of classes 11 and 12 to teach as volunteers in classes 9 and 10 in the special focus districts. Madhya Pradesh also has a system of guest teachers to fill in the teacher shortages in schools. For teacher deployment and transfers, Karnataka posts vacancies online whereby teachers can apply and post their applications. This process is quite transparent and is working well.

5.4. RMSA provides for induction training for new teachers for 10 days and an annual in-service training for 5 days for all teachers. In the states visited, it was observed that there is major variation in the design of the in-service teacher training program. In some states it is more content oriented with less stress on pedagogy and in some states attempt has been made to integrate technology with pedagogy and content. Chhattisgarh has been able to organize 10 days induction training for new teachers which is found useful by the teachers. Members also received positive feedback for five day annual teacher training. Need assessment is carried out each year before conducting training based on which the module development is done. Teachers reported such trainings to be more useful. The state has also started to conduct pre and post- tests to ascertain impact of such trainings on the knowledge and skills of teachers. The JRM team also observed an impressive in-service training program in Karnataka which incorporates ICT in the training (in some government schools teacher support is provided through an open operating system called Subject Teacher Forum under which 5000 teachers across 34 districts have learnt to use digital tool sand resources for their subject teaching). Madhya Pradesh has institutionalized subject specific training and school based teacher support is provided through a pool of resource teachers where 30 low performing schools (based on their annual exam performance) are provided academic support in a month.

*Concerns:*

5.5. **Planning**: The RMSA norm for provision for teachers is 1 headmaster and 5 subject teachers for the secondary level and for an additional enrolment of at least 30 students an extra teacher will be provided. However, it is not very clear on what basis states are planning for teachers. The planning for teachers is a complex issue especially for composite schools where secondary teachers are shared between grades 6 to 10 or between grades 9 to 12 as the case may be. In addition the shortage of math and science teachers is a challenge for schools when they plan and deploy teachers. A single math, science or English teacher in a composite school may be required to teach the upper primary and secondary classes.

During school visits, headmasters expressed that because of shortage of these subject teachers, their workload is higher than the language and social studies teachers who are more in abundance and this leads to a lot of dissatisfaction among them.

5.6. While teacher preparation does not fall within the ambit of RMSA, it has a direct impact on teacher availability. Most states have limited capacity with batch size of 100 per institution (Colleges of Teacher Education and private B.Ed colleges) for teacher preparation.

5.7. The overall PTR for government schools at the national level for 2012-13 stands at 1:30 compared to 1:27 in 2010-11 (enrolment has increased by 10% in these 3 years). However, at the secondary level, this overall PTR is not very meaningful because of the need for subject-teachers.

5.8. **Recruitment**: The status of recruitment of teachers under RMSA (based on 2012-13 SEMIS data) in new schools is 24,184 against target of 64,255 (37.6%) and additional teachers in existing schools is 21,936 out of target of 41,507 (52.8%). Teachers required beyond the RMSA norms like physical education, music, art, additional language teachers are provided by the states/UTs from their budgets. The process of recruitment of teachers under RMSA differs from state to state - some have state and some have district cadre recruitment. In the states visited, Chhattisgarh has made the local rural and urban bodies responsible for recruitment, deployment and transfer of teachers. Nagaland will conduct the first eligibility test for secondary teachers in February and conduct it in each district. The recruitment of teachers will be done within their own district. This may lead to some of the educationally backward districts suffering due to sub-optimal quality of teachers in those districts. The process of recruitment is considerable long and sometime takes up to 12-18 months to deploy teachers in schools from the time of the advertisement. This is hampering teaching learning in schools. Also, the district cadre appointment is causing some teachers to leave their jobs as it prevents inter-district deployment and transfers- this is increasing the number of vacancies.

5.9. Bihar and Madhya Pradesh have recruited uncertified teachers in the SC/ST category due to unavailability of trained teachers and will train them within a committed time frame. (Though MP now has a policy of not hiring unqualified teachers.)

5.10. The lack of progress in the recruitment of teachers has been observed to be due to several reasons. States not getting Financial Concurrence from their Finance Departments for the Posts creation, amendments in the recruitment rules, etc. It is felt that once the PAB has given approval for these posts, there should be no more hurdles created by the State (albeit by a different wing). However, it should be clear that RMSA sanctioned Teacher posts should not be substituted for the posts which the State should be recruiting as part of the State cadre post. Whatever RMSA provides should be an additionally and funds for these posts should not be diverted to pay for state cadre posts.

5.11. Salaries of the RMSA teachers are provided based on the state norms. There is wide variation between states in the service conditions and salaries of these contractual teachers- for e.g. Bihar pays a consolidated salary of Rs.11,000 per month (with contracts valid till retirement), Chhattisgarh pays Rs. 12-18,000, and Nagaland pays Rs. 20,000 (and the appointment is co-terminus with RMSA).

5.12. States are handicapped by the shortage of teachers, especially the Science and Math teachers. In most states, the current teacher qualifications for Science and Maths teachers' posts require graduation degree in Science and Maths. The JRM is of the opinion that graduates in engineering and other disciplines which have Maths and Science as core constituents may also be considered for the Secondary School Teachers' posts.

5.13. **Deployment and Transfers**: In the states visited, it was observed that there is an imbalance of teacher distribution across schools. One, the urban schools had mostly regular teachers, while the rural schools had more contract teachers than regular. Two, the rural and remote schools face acuter shortage of math, science and English teachers and there was prevalence of guest teachers in these schools (as was observed in Chhattisgarh). As a result of the construction of new schools, a number of small schools have come up with lesser enrolment (>30), yet with the prescribed strength of teachers (1 head teacher and 5 subject teachers). This may not be the most viable and optimal use of available teachers. In Nagaland, in two upgraded schools visited the enrolment in classes 9 and 10 was relatively low with 12-15 in class 9 and 4-8 in class 10.

5.14. While there are major variances between states, in the case where district cadres are in operation, the deployment and transfers of teachers are limited to within the district and this may lead to imbalance in subject teacher distribution across the state. It is not clear how states plan to fill vacancies created due to retirement the requirement for which can be projected well in advance (but does not appear to have been in the states visited).

5.15. **In-service teacher training**: The average coverage of in-service teacher training in terms of achieving annual physical targets for all states has been very low at about 29% from 2009-10 to 2012-13, according to MHRD data provided to the JRM.

5.16. The JRM did some analysis of data provided during the 2nd JRM and found that overall, states have spent 36% of their sanctioned amount between 2009-10 and 2012-13 (7% spent in 2009-10, 29% in 2010-11, 36% in 2011-12 and 51% in 2012-13). There is a lot of variation between sanctioned and actual unit costs across years, states and for a state over time. Sanctioned unit costs in 2012-13 varied from below Rs.1500 (the RMSA norm) to Rs.2650 for Madhya Pradesh (among the large states). The actual unit costs varied from Rs.394 for Goa to Rs.2400 for Punjab in 2012-13. The actual unit cost for Andhra Pradesh was Rs.21 in 2009-10, Rs. 3000 in 2011-12 and Rs.1350 in 2012-13. This analysis should be updated based on more recent figures and discussed with states, as these variations are huge. Given the large increase in the number of teachers in the system, and expected continued expansion, it is important for MHRD and states to keep track of financial and physical achievement in respect of teacher training, and to monitor whether coverage is increasing to meet the expanding needs.

5.17. **Teacher recruitment policies**: Teacher recruitment at secondary level is done mostly by the state governments (other than the central government schools for which teacher recruitment which is done at the national level), hence an enquiry of the state level policies, processes and practices will help to understand the full picture.

5.18. While there is a national regulation for secondary school teacher eligibility criteria for educational and professional qualifications, there are differences across states in their recruitment policies. There isn't uniformity across the country in the professional training (content and duration), recruitment process and deployment of teachers.

5.19. Countries with good education systems follow a stringent recruitment process and some filter the applicants after the professional training to short list the most competent and motivated teachers for teaching in schools. Some of these countries also have in place a licensure system that is required to be updated periodically for teachers through appraisal mechanisms.

5.20. Teacher appraisal based on performance forms part of the regulatory process in many countries. This area needs further exploration and understanding to consider for implementation in the states.

5.21. Continuous professional development also forms an important part of the career progression – an enquiry into the existing in-service training system, and its linkages to career progression for teachers, in the states and other countries can help inform and improve practice

5.22. Most countries with good systems provide for attractive starting salaries to teachers to retain them. The situation in India is complex with a mix of regular and contract teachers at differentiated salaries. An enquiry into how teachers' salaries compare with earnings from other professionals in India who have similar levels of human capital can help better understand the role salaries (and benefits) play in attracting good quality candidates into the teaching profession.

*Recommendations:*

**For States:**

- It is recommended that for the AWP&Bs the states provide their strategy for teacher recruitment based on subject wise shortages of teachers (with gaps identified and aggregated from schools), and availability of qualified applicants from the successful candidates of the state eligibility tests for secondary level. In this regard, if states have an MIS for all the teachers (regular and contract) with their personal and professional history information, it will be a helpful database for planning.
- As there is a huge shortage of math, science and English teachers, the states may consider some form of incentive system to attract more such subject teachers to secondary schools. In addition to subject specific attention should be paid to enable teachers to address identified learning gaps.
- States should be encouraged to analyse the findings from their teacher eligibility tests to identify areas of weakness in graduate performance as well as which teacher training institutions which are consistently producing very low performing graduates. In both instances appropriate remedial action could then be taken.
- States could strengthen their teacher management system and introduce a career growth linked with professional development path for teachers in order to promote professionalism, commitment and accountability
- In-service teacher training may be designed and conducted with the combined expertise of SCERT, DIETS, Boards of Examination, CTEs and IASEs for delivery of both subject knowledge and effective pedagogical strategies.

**For GoI**

- GoI could commission work with States and draw from international experience to develop guidance on more efficient teacher management systems – capable of predicting need, monitoring teacher education college output, monitoring the quality of teacher entrants, motivating those in the profession (through a clear career path and professional development approach) and ensuring optimum deployment of teachers.
- GoI could consider review of teacher training norms – the more flexible approach which enables length of training to be adjusted to needs as a good model to follow (in particular with reference to the specific neds of ST and SC teachers and of women teachers) and is responsive to the requirements of on sight support needs of teachers.

## 6. Unified District Information System for Education (UDISE)

6.1. To avoid duplication of efforts with regard to school data collection, the Ministry of Human Resource Development has decided to merge DISE and SEMIS in 2012-13 which was successfully implemented across the country with the States' support. This ensured that school fills up only one Data Capture Format (DCF) and data is entered into single software for elementary and secondary / higher secondary school statistics. The mechanism for implementation of UDISE in the States/UTs is summarized below:

6.2. Beginning 2013-14, it was decided that all the districts will ensure printing and distribution of DCF using UDISE software separately for Elementary, Secondary, Higher Secondary and Composite Schools (though some delays were reported in Nagaland of the states visited). School Heads were made responsible to submit filled-in form to the Cluster Resource Centre (CRC) or Block Education Officer (BEO) concerned, as determined by the State/UT. The CRCs and BEOs as laid down by the State/UT shall verify coverage and filling up of all the data fields in DCFs before sending them to Block Resource Centres (BRCs). Further, the CRC-Coordinators have been assigned the responsibility specifically to check all the filled in DCFs.

6.3. As regards the data entry of DCFs at Block level, the filled-in-formats are required to be kept at Block level and exported computer file be forwarded to District level for compilation. In case, the data entry is to be carried out at District level, the BRC Coordinator should submit the formats at District level for data entry. To ensure quality of the data, at least 20 percent of the filled-in formats are to be checked thoroughly at the Block level. After completion of the data entry, MIS units of SSA and RMSA at District level jointly ensure compilation, consistency checking by using U-DISE software and merging of entire database. (This cooperation was especially seen in Bihar.) After merging the compilation, State Project Directors certify the database before being sent to NUEPA for compiling the national database. In addition, the SSA societies conduct post enumeration survey on 5% random sample basis, through third party which include all categories of schools.

6.4. Proper maintenance of records by schools goes a long way in improving the reliability and quality of data on school education. Proper maintenance of school records also facilitates quick and proper filling of DCFs canvassed by various data collection agencies. In addition, properly maintained school records are useful in day-to-day management of schools. In this regard, an Expert Group was constituted by the Ministry of Human Resource Development which submitted its report in August, 2013 on the 'Unified System of School Education Statistics'. The Expert Group, inter alia, recommended the adoption of a set of core records to be maintained by all schools.

6.5. Iit is reiterated that core school records in the prescribed formats as contained in the report may be adopted and maintained by all the schools. School records could be maintained in printed formats of records / registers or in digitized form wherever necessary infrastructure in terms of functional computer and required professional is available.

*Achievements and Good Practices*

6.6. Mission members visiting Chhattisgarh were able to witness good usage of UDISE data in the process of preparation of AWP&B as the state was amidst of finalisation of its plan soon to be submitted to the PAB.

6.7. Bihar should be commended in the increased rigour it applies to management information systems. A good example is the increased accuracy around enrolment reporting and the

commissioning of a 100% student census in 16 Gram Panchayats and four urban wards to ascertain migration of students in and out of the government and private schooling sectors.

*Concerns*

6.8. On UDISE data problems have been experienced because of non-alignment of DCF format and UDISE software. Mission members visiting also couldn't notice any relationship of school report cards generated under U-DISE with the school improvement plan at the village levels and upwards. No visible connection could be deciphered of plans made at school and district level with the state level plans. What happens with the schools level plans was also not clear which raises concern over the process of SIP itself. SMDC did not know about any such process- it is primarily principal and teachers' job. However, in rural areas exception was seen where SMDC members were more involved than in urban areas.

6.9. The coding of upgraded schools presents an important conundrum. Bihar has taken the position that upgraded schools are identified by a single code. Other states however are issuing an additional number for upgraded elementary schools (thus the same school has two unique identification numbers – and elementary and a junior secondary number). If the latter approach is followed schools which are further upgraded to high schools (a sensible policy followed by Bihar which delivers economies of scale and higher quality provision through sharing of staff and resources) will have three separate numbers for the 'same' school.

6.10. UDISE performs a vital function as census of the state of education delivery in India. Continually striving to improve its accuracy by ensuring that all schools and students (including unaided privates, vocational schools and those studying through NIOS until recently not captured) are included is a major but important task. Not least because it will ensure increasing accuracy important planning data such as GER, NER and transition rates.

*Recommendations*

**For States:**

- There should be careful validation of the data collected from the schools at all levels before it reaches to the state level for insertion in state plans and DISE national portal.
- The State Government should ensure proper orientation of teachers and headmaster in order to ensure error free data in UDISE.
- The state / district level officials need to be sensitized about the basic educational indicators such as GER, Gender Parity Index (GPI), drop-out rates and transition rate along with analysis of data for the purposes of state/ district level planning.

**For GOI:**

- Clear guidance (and compliance monitoring) is needed to ensure a consistent approach in the coding of upgraded schools i.e. does each school a separate code for its elementary, junior secondary and higher sections within the same school, or as in Bihar, have one code per physical school.
- Clear guidelines on the apportioning common resources – e.g. teachers and classrooms which are utilized across elementary, junior and high school level in the same school are required.
- NUEPA should consider thorough training of state officials on DCF and UDISE software to enhance capacities for proper compilation, analysis and timely usage of data in the process of planning.
- Given the growing significance of UDISE, MHRD consider making it official data and providing funding in a recurrent rather than on a project basis.

## 7. Aided Schools

7.1. The subsumed scheme of RMSA now includes the components of ICT@ Schools, IEDSS, Girls' Hostel Scheme and Vocationalization of Higher Secondary Education. The criterion for determining eligibility for RMSA support to aided schools does not appear clear or are not well understood. Given that including aided schools represents an expansion of coverage but does not appear to come with additional financial provision – it is particularly important that greater clarity is achieved to ensure RMSA money is targeted to deliver the greatest impact for all. The equity considerations of payments by results for fee charging private but government aided schools needs to be carefully considered.

7.2. It is important to understand the number and enrolment in aided schools as their share of participation in secondary school education level is significant. The states/UTs with secondary government aided schools domination are Goa, Gujarat, West Bengal, Uttar Pradesh, Maharashtra and Meghalaya. The 2012-13 UDISE (SEMIS) data shows that the secondary government aided schools (40,094) are almost half the number of government schools (81,063) and the rate of their growth has been higher in the last three years. There has been an increase of 8.7% in the number of secondary government schools from 2010-11 to 2012-13 and 14.8% in the number of secondary government aided schools in the corresponding period. Similarly, the enrolment increase in government schools from 2010-11 to 2012-13 has been 9.5%, whereas the government aided schools have increased enrollment by 23.4% over the same time period. Even so, it may also be noted that the coverage of the secondary government aided and private schools in UDISE is not complete and therefore their exact share is not known. It is also important to note that as the data shows aided schools are *not* significantly worse off across the board compared to government schools (see appendix table at end of this section).

7.3. Among the states visited during the 3rd JRM, Karnataka has a total of 14,194 government secondary schools and 3,557 government aided secondary schools. While the number of aided schools has gone up from 3,275 in 2009-10 to 3,547 in 2012-13, its share in the total number of secondary schools has gone down from 28% to 25%. They still form a significant portion of the secondary school participation. Chhattisgarh on the other hand has only 99 secondary government aided schools out of the total of 5940 secondary schools and 8 out of the 27 districts do not have any government aided secondary schools. Nagaland does not have any government aided schools, though the state government provides some grants to private schools based on their annual performance from the state education budget but not covered under RMSA.

7.4. Bihar has two types of government aided schools - schools established by the community to which government provides recurrent support and private schools affiliated to Bihar state examination board to which the State government provides incentive payments on the basis of strong examination performance. The second type of schools is not entitled to RMSA support. Private aided schools account for only 4% of Bihar's' secondary enrolment compared with 86% for department of education schools and 7% for private unaided schools. In addition to guidance on RMSA allocations to aided schools within states – thought is also required on allocations for aided schools between states. States with a small percentage of aided schools such as Bihar should not lose out.

*Recommendations*

**For States**:

- States could consider formulating guidelines which help district offices prioritize spending across different school types.

**For GOI**:

- MHRD may consider commissioning an in depth study to understand the different types of government aided schools- their management and funding provisions, infrastructure facilities, teacher management, day to day operations and linkages with RMSA. This would provide an estimate of the additional resources required to meet these needs.
- In light of the significant differences of government aided school enrolments between states GoI may wish to consider the usefulness of further guidance on the criterion for eligibility for RMSA support, and apportioning of funds to aided schools in advance of the next AWPB round.

## Aided Schools

Appeared/Enrolled- Percentage of students enrolled in class 10 that appeared for the class 10 examination.
Percentage Usable Toilets-All schools are required to have at least one usable toilet. Co-educational schools are required to have at least one usable girls toilet.
SC 8-10- The secondary school cycle includes classes 8,9 and 10.
SC 9-10- The secondary school cycle includes classes 9 and 10.

Source: SEMIS 2010-11
Additional Subject Teachers Required- Percentage of Schools with a Student to Subject Teacher Ratio >120 for Science, Social Science or Mathematics.

| State | Student-Teacher Ratio | | Additional Subject Teachers Required % | | Appeared/Enrolled % | | Percentage Usable Toilets | | Average Secondary School Enrollment (School Size) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Govt | Aided | Govt | Aided | Govt | Aided | Govt | Aided | Govt SC 8-10 | Aided SC 8-10 | Govt SC 9-10 | Aided SC 9-10 |
| Mean Across States Included | 25.94 | 31.3 | 88.60 | 92 | 89.00 | 94.80 | 19.20 | 35.40 | 236.16 | 278.84 | 185.83 | 244.38 |
| ASSAM | 24.03 | 20.72 | 78.88 | 75.33 | 87.95 | 76.85 | 7.28 | 2.35 | 249.34 | 199.78 | | |
| GOA | 9.67 | 11.48 | 37.80 | 49.13 | 118.6 | 111.33 | 39.02 | 64.46 | 102.41 | 166.00 | | |
| GUJARAT | 29.85 | 32.14 | 92.82 | 95.14 | 112.4 | 101.6 | 49.22 | 60.17 | 222.52 | 320.01 | | |
| KARNATAKA | 25.93 | 28.03 | 86.76 | 88.54 | 103.66 | 109.56 | 25.41 | 52.78 | 223.81 | 251.12 | | |
| KERALA | 21.53 | 25.45 | 98.61 | 99.20 | 103.64 | 98.49 | 27.19 | 44.17 | 438.69 | 580.39 | | |
| MAHARASHTRA | 32.62 | 41.69 | 92.66 | 94.56 | 93.00 | 89.37 | 35.68 | 44.21 | 232.01 | 281.78 | | |
| MEGHALAYA | 11.79 | 14.41 | 51.52 | 64.40 | 77.35 | 71.75 | 21.21 | 12.44 | 196.21 | 138.18 | | |
| MIZORAM | 6.56 | 6.25 | 29.70 | 10.71 | 86.87 | 73.58 | 0.99 | 0.00 | 97.92 | 91.71 | | |
| ORISSA | 23.21 | 16.60 | 95.30 | 82.23 | 67.36 | 75.16 | 7.52 | 6.62 | 204.50 | 185.91 | | |
| WEST BENGAL | 16.31 | 24.19 | 91.16 | 97.51 | 87.28 | 104.77 | 36.73 | 16.07 | | | 185.84 | 244.38 |

## 8. Programme Management

### Staffing and allocation towards MMER

| | Percentage in position | No. of States / UTs | Percentage Vacancy | No. of States / UTs |
|---|---|---|---|---|
| **State Level** | 100 | 2 | 100 | 0 |
| | >75 & < 100 | 4 | >75 & < 100 | 1 |
| | >50 & < 75 | 7 | >50 & < 75 | 11 |
| | <50 | 18 | <50 | 19 |
| **District Level** | 100 | 3 | 100 | 0 |
| | >75 & < 100 | 3 | >75 & < 100 | 6 |
| | >50 & < 75 | 5 | >50 & < 75 | 4 |
| | <50 | 20 | <50 | 21 |

8.1. As is evident from the table above, staffing is a matter of concern across the States. With the RMSA expenditure showing an upward trend, this is a serious cause for concern. Almost all the States visited have expressed concern that funds allocated towards MMER are insufficient to meet the operational, supervision and training costs of the Program. Many of the States attributed shortage of staff to allocation of inadequate funds towards MMER. The Mission is pleased to note the recently-approved increase in the percentage of funds for MMER, as this is an area where States have been concerned for some time. However, the Mission notes that overall allocations to the Programme are not expanding as fast as expected, and even with an increased percentage, the actual amounts states receive for MMER is small. There are fixed costs in any state for running a large programme like RMSA.

*Recommendations*

**For GOI:**

The MHRD may wish to discuss with the states what these fixed staffing and operational costs might be and to ensure that there are sufficient funds available to meet these costs in every state.

**Procurement**

*Achievements and Good Practices*

8.2. All States are required to follow the Manual on Financial Management and Procurement for RMSA issued by MHRD on 24th January 2012 for their procurement of works, goods and

consultancy activities. In most of the states visited, the officials are aware of the existence of FM &P Manual.

8.3. It is noted that civil works constitute the major procurement activity in states (approximately 60 percent) with goods like school furniture as a distant second so far as volume of procurement is concerned. JRM noted that there is a need for closer monitoring and supervision of civil works by the District offices as well as SMDCs. This assumes greater significance in absence of effective internal controls observed in some states.

8.4. In the five states JRM visited, mission noted that civil works are entrusted to either PWD or CPWD or state corporations for execution of the same. For example, in the state of Chhattisgarh, the state Government has entrusted new school construction to the State PWD and strengthening of existing schools to District Collectors, who in turn has selected BSNL for strengthening of schools. In MP, while state agencies are involved, these have been decentralized to the district level.

8.5. Out of five states mission visited, in four states except Nagaland e-tendering is adopted for procurement of civil works for better transparency and fairness. All states are following their respective state government rules for procurement activities.

8.6. All states have procurement work done at both state and district level with Nagaland at district level only.

8.7. Mission noticed that civil works progress is slow in many states. However in some states like Chhattisgarh, it is seen that 95% of civil works relating to new school building for the period 2009-10 and 2010-11 are at various stages of completion with around 60% schools fully completed and the remaining 5% contracts yet to be awarded for local issues like LWE activities.

*Concerns*

8.8. As envisaged in the FM&P Manual, the first step in the procurement activity is preparation of a realistic procurement plan based on AWP & B. However some states like Chhattisgarh has not prepared any procurement plan at state level, though the State PWD has its own procurement plan for civil works.

8.9. All the states visited have a concern that the lump sum unit cost fixed by the MHRD for all the works was based on the 2008-09 CPWD Schedule of Rates to be used for the 2009-10, 2010-11 & 2011-12 sanctioned civil works is low and at present context unworkable. In the last field mission in the month of Jan 2013, mission brought this to the attention of MHRD, who agreed to use the current state SOR for sanction of new civil works.

8.10. For example in Chhattisgarh, in 2011-12, not even one of the 623 sanctioned buildings has been completed. It was reported that the sanctioned amount for these was arrived at on normative costs instead of the Schedule of Rates of the State Government. Besides, the funds for these were released in March and May 2013, i.e., after almost two years of sanction. Rise in prices in the meantime led to the existing sanctioned costs not being workable. The State PWD is unable to take these up and will be able to do so only after the due upward revision of sanctioned costs.

*Recommendations*

**For States:**

- Greater coordination between the MHRD and the State government may be undertaken to ensure that funds are released on time so that the State is able to use the releases in the same financial year.
- Adherence to Manual on FM&P, especially in respect of procurement activities, must be ensured.
- States to ensure monitoring mechanism at all levels

**For GOI:**

- MHRD and individual states may wish to explore the possibility of canceling the original approvals for civil works which are still not started, and then issue fresh approvals for these schools (which would automatically make available the State SOR).

**Financial Management**

**Financial Progress**

| | | | | | In INR Crores |
|---|---|---|---|---|---|
| Year | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| BE | 1353.98 | 1700 | 2423.9 | 3124 | 3983 |
| RE | 550 | 1500 | 2512.85 | 3172 | |

8.11. As per the cumulative fund utilisation, 8 States/ UTs have been able to utilize more than 40% of the fund available during these 5 years till 30th September 2013. These are Madhya Pradesh, Odisha, Arunachal Pradesh, Tamil Nadu, Andaman & Nicobar, Mizoram, Uttar Pradesh and Andhra Pradesh.

8.12. States/UTs of concern are Dadra & Nagar Havelli, Meghalaya, Daman & Diu, Bihar, West Bengal, Rajasthan, Lakshadweep and Delhi.

8.13. The State performing well under recurring components are Andhra Pradesh, Chandigarh, Dadra and Nagar Havelli, Himachal Pradesh, Madhya Pradesh, Mizoram, Tamil Nadu and Tripura. Expenditure under salary for teachers, school staff, school grant and teacher training for these States/UTs is at least 50% of the approved budget.

**Good Practice:**

8.14. **Fund Flow arrangements**: The Mission observed that in some of the States like Chhattisgarh and Bihar transfer of funds from State to District offices and further to Schools take place electronically. In Chhattisgarh, with the help of a Nationalized Bank the State RMSA office has introduced a fund disbursement and monitoring system. This enables real time tracking of every transaction at the school and district level. This enables data collection, data analysis and on-line report generation for every user.

**Concerns:**

8.15. **Delay in release of Funds to States**: It was observed that PAB meetings for AWP&B approval for FY 2009-10 were delayed as it was the initial year. Delays were also observed during 2010-11. The position improved since 2011-12. In a few cases the mission noted late submission of AWP&B by a few States. Consequently funds have also been released late, between January and March. The mission observed that this negatively impacts on the quality of expenditure causing a rush to spend money before the end of the financial year.

8.16. **Releases reported as expenditures**: The mission noted that releases to schools are being reported by the Districts as expenditure. The mission observed substantial delays in the submission of UCs by the schools. The FM&P Manual states that expenditures should be reported based on UCs and not releases and only expenditures actually incurred. It also lays down that funds for recurring grants should be released to schools only after UCs of previous grants have been furnished to the Districts. The mission did find examples of schools having overdue UCs and yet are receiving the following year's grant.

8.17. **Statutory and Internal Audits**: As on date Audit Reports for FY 2012-13 has been received for 26 States/UTs. The audit reports are overdue for Andhra Pradesh, Arunachal Pradesh, Jammu & Kashmir, Nagaland, Odisha, and Uttar Pradesh.

8.18. The Mission was informed in some of the States like Bihar that the statutory audit is conducted sitting in the office of the State Society. District and schools bring their books of account to the State Society for audit. Review of audit reports submitted by the States suggests that the overall audit regime would benefit from further strengthening. The Mission noted that Internal Auditors have not been appointed in any of the States. States expressed concern that funds received under MMER is not adequate to fund a more rigorous audit regime.

*Recommendations:*

**For States:**

- Districts need to play a more proactive role in collection of UCs and ensure that expenditure is reported based on actual utilization and not releases.
- Training on Financial Management and Procurement: There is a need for periodic training of staff at the level of State, District and Schools.
- As part of the training on financial management States need to be trained about the requirements of the audit Terms of Reference provided in the FM&P Manual. This will help States in getting the required assurance from the audit exercise.

**For GOI:**

- A Fund Disbursing and Monitoring system similar to that of Chhattisgarh can facilitate online tracking of utilization by schools. Rolling out of the Central Plan Monitoring System (CPSMS) could be another option. MHRD needs to study these options, identify the most viable option and chalk out a strategy to facilitate roll out
- Considering the geographical spread and size of the Program, MHRD needs to support NUEPA and other appropriate agencies to develop and deliver targeted training focused at the practical 'day to day' transactions of different personnel at State, District and School levels. Training needs to be provided on a regular basis to allow for new staff joining and staff movement within the system.

- MHRD may consider issuing instructions to States to appoint auditors empanelled with C&AG for major audits for improving the quality of audits
- MHRD may wish to increase the attention paid to internal audit and a key component of effective financial and programme management.

**Annexes:**

Terms of Reference (ToRs) & Agenda
Check List
Action Taken Report (ATR)
List of Members
State Reports

- Nagaland
- Madhya Pradesh
- Bihar
- Chhattisgarh
- Karnataka

SSA 18th JRM – ATR