



INDIA
RASHTRIYA MADHYAMIK SHIKSHA
ABHIYAN (RMSA)

Second Joint Review Mission
29 July – 6 August, 2013

Aide Memoire

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Annexes

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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
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
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
UC	Utilization Certificate
UEE	Universal Elementary Education
UPS	Upper Primary School
UT	Union Territory
VEC	Village Education Committee
VER	Village Education Register
WSDP	Whole School Development Plan

Introduction and Recommendations

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 a 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 universal access to secondary level education by 2017, i.e., by the end of the 12th Five Year Plan. The Programme was launched in 2009.
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.
3. This is the Second JRM of RMSA and was held from 29 July – 6 August, 2013. The Terms of Reference (ToR) for the Mission and details of the Mission composition are attached at Annex 1. This JRM is a desk review.
4. The Mission would like to acknowledge the work done by the teams in MHRD, TSG, NCERT, NUEPA and States for their valuable contribution. The Mission has greatly benefited from the various thematic discussions. The Mission would like to put on record the Mission’s gratitude to all the above mentioned.

Mission Objectives

5. The Mission was asked to focus and provide guidance on the following issues:
 - **Learning outcomes** – State level initiatives to include student learning outcomes and leveraging RMSA provisions for this.
 - **Teacher Management and Deployment** – how States are planning for teachers?
 - **Teacher Training** – how much are States spending on teacher training, priorities for and content of teacher training?
 - **UDISE data**

Key Recommendations

Overview

- The Ministry of HRD may like to consider an evaluation of the RMSA, as in the five years of operation there has been time enough for it to be fully and firmly installed on the ground, but, the operational experience of these five years has thrown up various issues.
- MHRD may initiate necessary preparatory work in advance of the JRM on the agreed thematic topics for the next or future JRMs. Work may be begun on: effective coordination (and possible collaboration) between SSA and RMSA implementation structures; and formulation of perspective plans for teacher management and training, including networking of relevant training institutions.

Review of progress

- MHRD could commission a study which looks at the broader question of the relationship between school size in relation to population density, teacher utilization and resourcing
- MHRD may review with the states the low completion rate of school strengthening activities to identify if there are any systemic issues.

UDISE

- MHRD to support NUEPA in addressing its concern about the role of states in UDISE and to provide stronger guidance to states about the UDISE collection process for the 2013-14 cycle
- NUEPA may carry out a review of the year-on-year comparability of the data, including both use of data from DISE and SEMIS and future data collection cycles, and publish its findings. This should be completed before the publication of the 2013-14 data.
- Enhance the capacity of MIS staff to promote the increase in the use of UDISE data at school, block and district levels to enhance the quality of data.
- MHRD may review of options for establishing a national education statistical agency.

Learning outcomes

- A detailed analysis of the grade VIII NAS at both national and state level may be conducted and used to inform the development of 'junior secondary readiness to learn programmes'
- MHRD may facilitate greater engagement of state exam boards within the RMSA programme.
- The technical cooperation agency may be deployed to support NAS implementation at all levels to ensure validity, comparability and standardisation.

Teacher recruitment, management and deployment

- States could prepare five year plans for teacher recruitment to better plan for financial requirements and inform Teacher Education institutions on training requirement.
- An analysis of the teacher eligibility/recruitment tests across states could be undertaken to gain better insights into the quality of the recruitment process.
- Retirement of teachers from service could be done at the end of the academic session to prevent disruption of teaching-learning while the academic session is on.
- An analysis of the scale of contract teachers recruited and paid under RMSA may be carried out.
- A study could be done of the impact of allowances, in order to develop a more effective incentive system to attract teachers to rural schools.

Teacher training

- A National Resource Group on RMSA may be constituted and as an urgent task the NRG could review the NCERT ITPDP.
- A national workshop may be organized by MHRD to discuss coordination on teacher training between the centrally sponsored schemes of RMSA, SSA and Teacher Education.
- MHRD and states to develop rigorous evaluations of the impact of teacher training programmes on teachers knowledge, skills and dispositions and classroom processes

List of Recommendations

Overview

- The Ministry of HRD may like to consider an evaluation of the RMSA, as in the five years of operation there has been time enough for it to be fully and firmly installed on the ground, but, the operational experience of these five years has thrown up various issues.
- MHRD may initiate necessary preparatory work in advance of the JRM on the agreed thematic topics for the next or future JRMs. Work may be begun on: effective coordination (and possible collaboration) between SSA and RMSA implementation structures; and formulation of perspective plans for teacher management and training, including networking of relevant training institutions.

Review of progress

- MHRD and the States may like to develop guidelines on a reasonable size for new schools to be sanctioned.
- MHRD may wish to commission a study which looks at the broader question of the relationship between school size in relation to population density, teacher utilization and resourcing; and which would include examining the norm of a school within 5km to a habitation and the alternative of using residential schools
- MHRD might review with the states the low completion rate of school strengthening activities to identify if there are any systemic issues. An action plan may be drawn up. In addition, the MHRD could consider only approving new activities where there is sufficient progress in completing existing sanctions.

UDISE

- In the short term, MHRD to convene a national workshop with UDISE administrators, data users and experts to map out the key outstanding issues of the existing system and to identify ways to take these issues forward
- MHRD to support NUEPA in addressing its concern about the role of states in UDISE and to provide stronger guidance to states about the UDISE collection process for the 2013-14 cycle. In particular:
 - The record keeping system at the school level should be strengthened and standardized
 - Greater standardization is needed in the conduct of the 5% verifying of school data. The mission suggests that the verification should include visits to schools and be in unannounced manner and that the teachers' attendance, regularity, the provision of substitute teachers and student attendance (headcount) should be verified and reported accordingly to the state and RMSA and SSA.
 - Helping states use UDISE data in a dynamic fashion, to keep track of rapid changes in school level data during the course of the year, while keeping the rigour of the 30 September cut off for national level statistical purposes.
- NUEPA may carry out a review of the year-on-year comparability of the data, including both use of data from DISE and SEMIS and future data collection cycles, and publish its findings. This should be completed before the publication of the 2013-14 data.
- On an urgent basis, promote the increase in the use of UDISE data at school, block and district levels to enhance the quality of data which is helpful for targeted interventions.
- In order to take forward the recommendations of the Committee appointed by MHRD to review education statistics, MHRD could review of options for establishing a national education statistical agency, within the next five years. Such a plan could include:
 - Plans for covering all institutions offering secondary education, including the remaining unaided sector, vocational schools and open schooling.

- How to develop a sustainable funding stream. MHRD might consider approving in principle a five year budget, subject to the availability of annual allocations.
- The staffing necessary to put the UDISE on a secure footing and how these staff could be attracted to the UDISE unit.

Learning outcomes

- MHRD may facilitate greater engagement of state exam boards within the RMSA programme. Amongst other things, this would help develop comparative measures of inter-state progress given that state board examinations are not comparable between states.
- The technical cooperation agency that assisted NCERT with the introduction of IRT should continue to support NAS implementation at all levels (most pressingly grades VIII & X) to ensure validity, comparability and standardisation in reporting (specifically reporting the range of performance in scores corresponding to the 10th, 25th, 50th, 75th, and 90th percentiles).
- A practicable model of CCE for secondary level may be developed in RMSA, keeping in mind the context of students, the need to address the child's all-round development, as well as the degree of resourcing likely to be available in government and aided schools.
- The MHRD may support the development and implementation of a Secondary School Readiness Programme, at least on a pilot basis in willing states.
- There could be a detailed analysis of the grade VIII NAS at both national and for every state is conducted. Dissemination of the state reports should be released in advance of the consolidated national report. These can then be used to inform the development of 'junior secondary readiness to learn programmes'
- NCERT could further work on making NAS findings more user friendly and implements a more rigorous dissemination and systematic communication strategy, including release of results and background data into the public domain
- The JRM endorses the recommendations of the Panchapakesan committee for establishing a dedicated National Assessment and Evaluation Centre to commission, quality assure, analyses, disseminate and archive NAS data over the long term.
- MHRD may consider facilitating the development of a holistic perspective Plan for learning improvement by the states.

Teacher recruitment, management and deployment

- It is recommended that the NCTE should notify the pre-requisite teacher qualifications for secondary school level.
- It is suggested that the states could prepare a five year plan for teacher recruitment to better plan for financial requirements and inform Teacher Education institutions on training requirement.
- It is suggested that MHRD could commission a research study in states to find out the status of subject teachers and how states prioritize subject teachers to be recruited in the context of making requests for new and additional teachers in their AWP&Bs.
- It is recommended that an analysis of the teacher eligibility/recruitment tests across states could be undertaken to gain better insights into the quality of recruitment process. There is a need to understand the content of these tests; and whether tests include soft-skills, motivational aspects, as well as literacy. The selection procedure should be made more scientific and valid through technical support to the agencies engaged in these state level tests.
- A study may be conducted of the impact of allowances for teachers, in order to develop a more effective incentive system to attract teachers to rural schools, given the perennial and large scale nature of the challenge of posting teachers in rural and remote regions in the country.
- An analysis may be done to understand the scale of contract teachers recruited and paid under RMSA, their qualifications, recruitment process, salary structure, tenure and career paths, across states

- Considering the long process followed in appointment and deployment of teachers, it is suggested that the states may consider creating a reserve number of teachers over and above the number required as per PTR guidelines. The reserve teachers are also needed at the district level for the purpose of teacher training and they may be located in the DIETs. So far, Kerala is the only state known to be having teacher reserve. States may also be encouraged to think of a mechanism of linking post-retirement retention of well-performing teachers for 1-2 years whose experience and expertise may be utilized by the system both in teaching, supporting other teachers in the classroom, and teacher education programmes. Some states (for example, Haryana) have a practice of engaging retired teachers against long leave - CCL/maternity/medical etc. as per workload at school level. This may be encouraged in case of states having deficient number of teachers of a given subject or for small schools.
- Retirement of teachers from service should be done at the end of the academic session to prevent disruption of teaching-learning while the academic session is on. Vacancies created due to retirement should be reported well in advance (disaggregated by subject, gender, social category), preferably through a computerized system, to enable systematic planning by states to fill the posts in a timely manner. It is observed that some states such as Haryana have already been following this in policy. Steps need to be taken to ensure that other states also follow the same.

Teacher training

- The MHRD may advise each state to prepare a five year perspective plan based on micro planning exercises to arrive at a realistic training plan along with cost implications that have annual and five year projections. This will help the MHRD as well as the states to prepare a financing plan for the same.
- A National Resource Group on RMSA may be constituted, with an appropriate profile of its members and the mandate. The NCERT ITPDP and potentially all states' training design, content and dissemination strategy may be reviewed by the NRG along with an expert group drawn from different areas and disciplines to help enrich it and cross reference it with experience other training providers.
- A national workshop may be organized by MHRD in the current financial year where states may be invited along with the Council of Boards of Secondary Education (COBSE) and the National Council of Teacher Education (NCTE) to discuss more effective and functional coordination between the centrally sponsored schemes of RMSA, SSA and Teacher Education.
- MHRD and states to develop rigorous evaluations of the impact of teacher training programmes on teachers knowledge, skills and dispositions and classroom processes

Section 1: Overview and Key Issues

1. 1. The Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is developing well as an effective sequel to the Sarva Shiksha Abhiyan at the elementary stage. What is noteworthy is its emergence as a national mandate even in the absence of a constitutional or statutory prescription. But, it will be more meaningful for the Govt. to look ahead and have a clearer perspective about what should be the developments beyond the secondary stage and, what should be the specific purpose assigned to secondary education in the educational spectrum.
1. 2. Such a long-term visioning will be relevant both for detailing the arrangements at the secondary level as well as for addressing emerging and futuristic concerns of products of the educational system. The Mission realises, it does not lie fully within its remit to raise this issue. Nevertheless, because of its conviction that education at all levels and through different programmes, with all their attendant attributes, should be seen as a smooth continuum, it would still like to refer to it as an emerging concern for the system as a whole. Our understanding of these issues would be enhanced by a study tracking the transitions made by students between and within stages of schooling.
1. 3. The Mission has been encouraged to adopt this approach also by the open-mindedness and the receptivity to new ideas displayed by the Ministry of HRD. Without meaning to be presumptuous, the Mission acknowledges with appreciation the positivism and progressiveness projected by the Ministry; and, hopes this attitude and approach will continue to pervade all aspects of the Abhiyan, particularly review of its content and improvement of its implementation.
1. 4. The stated position of the Abhiyan has been to adopt a qualitative approach to quantitative expansion. It was to reiterate this emphasis the First JRM observed that although comprehensive Manuals and Guidelines to govern operationalisation of the programme have all been duly conceived and fully documented, for the programme to succeed these initiatives must be pursued to promote practice of the prescriptions. The Mission is heartened to see this happening. The forthright and forthcoming responses in the action taken on earlier Mission-recommendations and identification of appropriate themes for focussed attention in this Mission clearly indicate earnestness of the Govt's endeavour to make this a meaningful exercise.
1. 5. The deliberate strategy of the programme has been to emphasise, in the initial phase, focussed attention to installation of infrastructural and institutional arrangements. Even as it endorsed this strategy, the first JRM urged early attention to quality considerations. This Mission voices the same opinion. Consequently, even as we cite incidence of significant slippages in installation of infrastructure, we recommend commencement of accelerated attention to quality issues. There will be a lead-time in this to iron-out action points. In the meanwhile, the realistic decisions relating to continuance of the funding pattern and changes in the normative costing will surely help to hasten completion of the infrastructural arrangements.
1. 6. The TORs for this Mission are indeed reflective of the Govt's acceptance of this approach. Before getting into the implications of the given TORs, the Mission notes with appreciation the shift in the methodology.
1. 7. Themes have been identified for in-depth consideration of quality aspects. In this connection, we wish to make two observations:
 - Identified theme or themes may not fully cover the relevant quality aspects. For example, 'Learning Outcomes' may have to be viewed in a wider perspective of 'quality' and this Mission focused on a few aspects, viz., assessment of learning outcomes, teacher recruitment and management, and teachers in-service training. If it is not possible to so organise its holistic consideration during one Mission, then, it must be continued as a 'carried forward' item in the next Mission.

- Even if a theme can be fully covered during one Mission, it should not be lost sight of thereafter. There should be a cumulative recording of themes, a kind of an agglutinative approach in each Mission. The Action Taken Report is a good tool to ensure continuity of attention.
1. 8. In this context, we are happy to recognise the Ministry's acceptance of our role in suggesting the agenda for the next Mission. In view of the Ministry's receptivity to this proposition and, in the light of our observations, in the preceding paragraph, about a continuum of thematic-attention to relevant subjects, *we wish to propose an enlargement of the span from one succeeding Mission to a series of Missions so that medium and long-term perspectives, with due prioritisation, can be built-in.*
 1. 9. Purely for maximising output from JRM deliberations, and without meaning to be didactic, we wish further to suggest that, on some of the themes so proposed, there may have to be preliminary ground-work, which could be done ahead of the deliberations of a JRM. This Mission recommends that the following topics are selected for investigation: effective coordination (and possible collaboration) between SSA and RMSA implementation structures; and formulation of perspective plans for teacher management and training, including networking of relevant training institutions.
 1. 10. Looking forward to the next JRM, which is field-based, this Mission recommends the following issues: how the RMSA Programme might promote the effective use of ICT in improving teaching and learning; how the Programme might address remaining issues for CWSN with the integration of IEDSS in RMSA; and, the implications of including aided schools in RMSA.
 1. 11. RMSA was launched in March 2009. It has been operating for five years now. There has been time enough for the national RMSA model to be fully and firmly installed on the ground. But, the operational experience of these five years has thrown up various issues of friction and concern. It is accepted practice that major programmes are subjected to evaluation in such a time frame. The Ministry of HRD may like to consider such an evaluation.
 1. 12. It may be contended that the JRM is meant to serve that purpose. In our opinion, a mid-term evaluation will go far beyond a biennial review Norms and Standards, Guidelines for implementation, operational efficiencies, and the very objectives of the programme may come to be evaluated. As stated earlier, for instance, we may need to have a clearer perspective about what should be the developments beyond the secondary stage and, what should be the specific purpose assigned to secondary education in the educational spectrum. Also, for example, opening of small unviable schools because of the 5 k.m. access-norm has created problems relating to PTR and availability of teachers. Strict enforcement of the distance-norm has tended to ignore the 'economics of access'. It was on this reckoning, the Last Mission had observed as follows: "Without meaning to detract from the merit (and, indispensability) of the equity factor, it may be stated that, rather than opening too many new schools with inadequate enrolment, it will be less expensive (and, possibly, more equitable) to open larger schools; and, in order to ensure access, there could be attached hostel facilities or transportation provided to students and teachers. Such schools (and, hostels) can be better equipped and better staffed." Understandably, it has not been possible for the Ministry to consider this suggestion because of the fundamental prescription of the norm. Hence the relevance of an evaluation.
 1. 13. The Mission has carefully considered the given themes in the backdrop of the information/data circulated and the institutional and (State) governmental presentations made. These have been discussed separately seriatim in the succeeding sections. Some of the more important issues emerging have been culled out for special mention here.
 1. 14. *The administrative arrangements pertaining to the RMSA may require some reconsideration.*
 - In line with our conviction about education at all levels being seen as a smooth continuum, we recommend unified administrative structures and systems.
 - One can visualise a subsequent statutory prescription for secondary education in appreciation of its position as the first terminal point in formal schooling.

- While each programme can be given special attention separately, there can be a unified control and command structure for promoting coordination and synergies. On overall reckoning, such an arrangement will also provide scope for shared facilities leading to cost-cutting.
 - Such an approach in the initial phase itself will pave the way for subsequent sustenance of quality and smooth and well organised extrapolation (if and when necessary) to the senior secondary stage.
 - If this approach is accepted, logically it must descend to the State level also. In other words, there may be one PROGRAMME DIRECTOR with separate Project Directors.
1. 15. The importance of an efficient and reliable data-base is widely recognised and well served by UDISE. Here, again, there is scope for rearrangements:
- Consistently with the recommendation made above for ‘administrative’ unification, there may be unification of the data base also. The Data Units of the SSA and RMSA may merge to commonly serve the unified Programme.
 - Adoption of the UDISE has been advocated and accepted; but, it does not appear to have been fully actualised. Even at the risk of some project-interruption, it may have to be enforced with greater strictness through financial controls.
 - As was observed by the last Mission, all stakeholders will need to be made aware of UDISE and equipped to fully avail of the facility.
 - An issue allied to this will be about educating State Govts. on the built-in scope for 20 percent addition of supplementary parameters at their discretion. This provision took a very long time to be known and understood in the SSA. Learning from their experience, special attention may be given under RMSA to propagate it. If this happens, State Govts.’ readiness to accept UDISE will materialise willingly.
 - Although it is not within our mandate to talk about issues far beyond RMSA, in line with our overall perspective of viewing ‘education’ at all levels as a smooth continuum, we take the liberty to suggest establishment of an independent National Educational Statistics Agency under the Ministry of HRD as has been recommended earlier by others. UDISE can be a part of such an Agency.
 - One complaint against UDISE under RMSA is about absence of staff-support below the State-level. The unification proposed can incidentally remedy this deficiency by making the SSA data-personnel available for RMSA also.
1. 16. On ‘Learning Outcomes’, as stated earlier, the position will need to be addressed on a wider quality framework. Even on the basis of the segmented scrutiny made, it can be said that the subject requires a multi-factor analysis.
1. 17. The practice of making end-of-stage assessment with reference to Board examinations may not be fully reflective of the achievements at the secondary stage, in the post RTE scenario, in the absence of entry-level competencies at Class-9. It is not appropriate to make an assessment of progress across states and time with reference to Board examination results.
1. 18. Establishment of the threshold levels of learning by students will also be relevant for purposes of training of teachers. Training programmes must address the immediate challenges faced by teachers in teaching secondary grade students. Interventions to provide remedial support to students will not be easily possible without the necessary grade-level competencies.
1. 19. Exit level assessments, at the Upper Primary Stage, of competencies/Learning Outcomes cannot serve as a wholly valid benchmark for planning teaching at the secondary stage. Additional entry level assessments, covering broader factors, will result in greater reliability.
1. 20. This will be particularly so in the context of the no-detention/no-examination policy governing the elementary stage. It is not our mandate, and it is certainly not our intention to question the approach statutorily prescribed. If at all it is possible to look at the problem in an upstream perspective, well and good. Otherwise, the best option will be to go for entry-level assessments for determining down-stream achievements.

1. 21. Norms, standards and recognition conditions for secondary schools are statutorily prescribed by Boards of Secondary Education. It may be open to question, therefore, if the Boards are not involved in the RMSA-fold in some formal or structured way. Their involvement will also facilitate considerations relating to Board examinations and assessment practice at the secondary stage. This may help to get over the problem of not being able to use secondary Board examination as uniform markers of RMSA progress across the states.
1. 22. There can be an opinion that this view of the situation is too idealistic. But, three disturbing facts have compelled us to take up this fundamental issue:
 - No State Board of Secondary Education has accepted the no-examination policy.
 - The C.B.S.E. itself has found it necessary to reintroduce annual examinations albeit still under a no-detention system.
 - The system of CCE does not appear to have been clearly understood or well implemented.
1. 23. With reference to information circulated and based on the presentations made, the subject of 'Learning Outcomes' has been analysed in detail later in this report. Without detracting from the merit of that analysis, this Mission strongly makes two recommendations:
 - The theme on 'Learning Outcomes' may be carried forward to the next JRM also, for a holistic analysis, along with all other related factors.
 - As an exercise by the Ministry to prepare the ground for a fuller analysis, before commencement of a JRM, the themes identified for consideration therein may to the extent possible be subjected to some preparatory examination by an expert group.
1. 24. Inclusion of private 'aided' schools in the Abhiyan has provided it with more structural stability, though the implications need to be studied with respect to: teacher qualifications, teacher recruitment, training needs, and the resulting overall resource envelope. There is also the broader question of whether these schools should be included on a comparable basis as government schools, given their significant presence in some states. And, integration of four centrally sponsored schemes with the RMSA has clothed its dry bones with more flesh. This has been a welcome expansion.
1. 25. While all the four additions are important, we wish to make some comments on two of them - ICT and IEDSS. In the context of integration of ICT:
 - The distinction between technology *of* education and technology *in* education must be clearly recognised. ICT must lead not only to development of knowledge of and capabilities in computer-applications; it must also lead to use of such computer applications for enhancing the teaching-learning process.
 - Implementation of ICT was earlier seen to have been outsourced. The vendor/lender of computers was given a contract to install the equipment and impart instruction through ad hoc functionaries in an arbitrary manner. The progress of teaching-learning was known only to the ad hoc functionary and the vendor/lender. This wasteful arrangement can stop only if the school-system owns the scheme and closely monitors/supervises its implementation.
1. 26. Integration of IEDSS is a significant step in realising the objective relating to 'equity'. We wish to flag three issues for special attention in this connection.
 - Factors for identification of Children With Special Needs (CWSN) must be commonly set out and clearly understood. Congruence with the provisions of the relevant Statute – The Persons with Disabilities Act – shall be ensured.
 - Teachers must be trained to identify children having physical disabilities.
 - Teachers must equally be trained to assess the 'special needs' of such children; and, they must alongside be given special training to provide services to meet their special needs.
1. 27. Teacher training, development and, deployment have to be seen as essential components of the 'quality package'. The training needs must be clearly identified and a training package must

be carefully assembled. The bulk of information provided and presentations made only revealed a fragile system providing fragmented attention.

1. 28. This subject has been examined at length and discussed in detail later in this report. The Mission will make the following main observations in this context:

- For the colossal requirements involved, the infrastructural facilities available are woefully inadequate.
- Only two National Institutions – NCERT and NUEPA – have been entrusted with almost the entire load of work. The coordination and communication between the two and between them and the States/beneficiaries does not appear to be adequate. Some parallel, additional structures and systems may have to be developed in order to respond to the needs of those responsible for implementation at the state level.
- States should formulate an overall Training Policy for school teachers with a 5-year perspective.
- MHRD, NCERT, NUEPA, NCTE and CBSE must jointly develop a coordinated Action Plan to implement the Training Programme.
- A network of Organisations/Institutions like Universities, Prominent Colleges, IASEs, CTEs, SCERTs, DIETs, reputed academic bodies in the field must be formed to partner in this programme.
- Available training facilities/programmes do not realise full utilisation because of schools' inability to relieve them from schools for training. One way of getting over this problem is to provide a 'training reserve' in teacher-cadres. To minimise the cost implications, retiring teachers can be re-employed on a contract basis and based in DIETs/SCERTs so that when not required to deputise for teachers on training, they can be part of a Reserve Resource Group to serve as a Teacher Support Mechanism.
- Another way of minimising disruptions to class-room teaching can be to prescribe that academic staff will retire only at the end of the academic year (as is happening in some states reporting to this JRM).

1. 29. NCERT is admittedly the apex academic body on school education. But, NCERT's advocacies and initiatives will be meaningful only if they are transmitted to the ground level. Their involvement in the RMSA-fold must, therefore, address this requirement. Rejuvenation of SCERTs has become a clichéd expression. But, it has only grown in its relevance and significance. The minimal role assigned to SCERTs in SSA has happily been (somewhat) reversed. RMSA must recognise this reality and taken care to associate them as important counter-part organisations of NCERT at the State level. Equally important it will be to build-up the DIETs and build-in their role as valuable links in the network of institutions to provide academic support to RMSA especially in training of teachers.

Section 2: Review of progress under the RMSA Programme

Progress against outputs

2. 1. The Mission would have liked to report against some of the expected outputs of the Programme, such as enrollment, gross enrollment ratio (GER), gender parity index, etc. However, the Mission has some serious concerns with the data provided in the Results Framework Document and the provisional 2012-13 UDISE data report shared with the Mission. The specific difficulties with the data are recorded elsewhere in this Aide Memoire (such as inconsistency in reporting on 2010-11 data, calculation of GER, etc). In addition, the JRM does not regard that State Board Examination results are a legitimate way to measure the progress, since, given the methodology used to prepare the examination papers board, results are neither statistically comparable in a given state from one year to the next, nor comparable across states. The rest of this section, therefore, reports briefly on some of the Programme inputs (other inputs such as teacher training are discussed in other sections of this Aide Memoire).

New schools

2. 2. As of 31 March 2013, a total of 9,636 new schools have been sanctioned since the RMSA Programme started in 2009-10; 7,707 of these schools are functional (Table 1). This represents a creditable completion rate of 80 percent for the country as a whole; and most states were able to achieve high rates of completion both over the period as a whole and for each year during the period. There were no sanctions in 2012-13, and the tentative total for 2013-14, reported to the JRM, is 222 new schools.
2. 3. Overall, the low income states of Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Orissa and Uttar Pradesh were sanctioned 61.0 percent of the new schools, and all states but Jharkhand (73 percent) and Bihar (34 percent) were able to complete all their sanctioned schools over the period since 2009-10.
2. 4. The new schools which have become operational have a total enrollment of about 569,000 students (as at 31 March 2013). This means that the average school size is 68 students. However, there are significant variations across states, with school sizes as low as 13 students per school in Manipur, and more than 100 students in Madhya Pradesh, Podicherry and Dadra & Nagar Haveli. It is not clear whether these new schools of this size were built by states because they are expected to expand in the near future (which would of course necessitate additional classrooms). The size of a school is important to consider because not only are small schools much more expensive per pupil, there are harder to staff with adequate teachers and, even more importantly, they tend to offer poorer quality education (since there are insufficient teachers to develop a strong professional community and the total budget does not permit high quality instructional inputs). Of course, small schools are necessary in some locations, but priority for RMSA funding for the next few years should be on larger schools.

Table 1: New Schools under RMSA, as at 31 March 2013

		Totals since 2009-10				
		Approved	Functional	Enrollment	% achieved	Avg. school size
1	Andaman & Nicobar Islands	0	0	0		
2	Andhra Pradesh	102	95	5445	93%	57
3	Arunachal Pradesh	33	21	500	64%	24
4	Assam	0	0	0		
5	Bihar	966	325	9592	34%	30
6	Chandigarh	4	0	0	0%	
7	Chattisgarh	1341	1338	120692	100%	90
8	Dadra & Nagar Haveli	0	0	0		
9	Daman & Diu	3	3	344	100%	115
10	Delhi	0		0		
11	Goa	0		0		
12	Gujarat	328	326	20423	99%	63
13	Haryana	37	37	2289	100%	62
14	Himachal Pradesh	136	102	4830	75%	47
15	Jammu and Kashmir	530	526	21738	99%	41
16	Jharkhand	894	657	57491	73%	88
17	Karnataka	305	305	23509	100%	77
18	Kerala	112	95	4150	85%	44
19	Lakshadweep	4		0	0%	
20	Madhya Pradesh	944	944	144732	100%	153
21	Maharashtra	0		0		
22	Manipur	116	67	853	58%	13
23	Meghalaya	25	13	0	52%	0
24	Mizoram	81	81	3469	100%	43
25	Nagaland	147	147	3288	100%	22
26	Orissa	709	709	21537	100%	30
27	Puducherry	11	11	1143	100%	104
28	Punjab	222	222	14768	100%	67
29	Rajasthan	0		0		
30	Sikkim	0		0		
31	Tamil Nadu	1254	1055	40794	84%	39
32	Tripura	83	81	4320	98%	53
33	UttraPradesh	1021	1021	51750	100%	51
34	Uttarakhand	228	228	11016	100%	48
35	West Bengal	0		0		
Grand Total		9636	8409	568673	87%	68

Source: Mission calculations based on data from MHRD provided to the 2nd JRM

2. 5. The Mission is encouraged that sanctioning of new schools has been given sufficient weight to Special Focus Districts (Table 2). Information was not available as to whether these schools were also completed at the same rates as schools in other districts.

Table 2: Approved schools in Special Focus Districts

Particulars	SC	ST	Minority	LWE	Total
No. of Districts	61	109	90	33	653
New school approved	895	2258	890	1284	9636
Proportion of SFD to total Districts	9%	17%	14%	5%	
Proportion of schools approved in SFD to total schools approved	9%	23%	9%	13%	

Source: MHRD presentation to the 2nd JRM

Recommendations

- *MHRD and the States may like to develop guidelines on a reasonable size for new schools to be sanctioned.*
- *MHRD may wish to commission a study which looks at the broader question of the relationship between school size in relation to population density, teacher utilization and resourcing; and which would include examining the norm of a school within 5km to a habitation and the alternative of using residential schools*

School strengthening

2. 6. School strengthening consists of additional classrooms, science laboratories, computer rooms, libraries, art/craft/culture rooms, toilet blocks, and drinking water. A total of 1,79,013 such facilities were sanctioned (
2. 7. Table 3). However, the completion rate of these facilities has been poor over the period, with 25 percent or less in each category having been completed, and only a further 20 percent or so in progress. This pattern is more or less repeated across years. Some states, such as Assam, have not been able to complete a single activity under RMSA while in Chhattisgarh, Manipur, Mizoram, Nagaland, Odisha, Punjab, UP and Tripura almost all activities have either been completed or under progress in 2010-11. However, in Chhattisgarh nothing significant sanctioned in 2011-12 has been started. Overall, it is unexpected that these relatively small and simple works should be completed at such a lower rate than whole new schools. It is somewhat encouraging that there has been an uptick in activity since the last JRM, but overall completion rates are still very low. Since the last Mission, the MHRD has announced that the State Schedule of Rates (SoR) can be used, where this is lower than the GOI rates; though it appears that in some states the problem is that the State SoR has not been updated sufficiently recently to reflect local conditions.

Table 3: School strengthening under RMSA

	2009-10				2010-11				2011-12				Total				
	Sanctioned	Completed	% Completed	In progress	Sanctioned	Completed	% Completed	In progress	Sanctioned	Completed	% Completed	In progress	Sanctioned	Completed	% Completed	In progress	% in progress
ACR	8475	5529	65%	625	21947	3886	18%	6369	18934	101	1%	1226	49356	9516	19%	8220	17%
Science lab	3984	2621	66%	311	8755	1906	22%	2941	10668	105	1%	1026	23407	4632	20%	4278	18%
Computer Room	3508	2048	58%	156	7101	1593	22%	2033	9032	109	1%	539	19641	3750	19%	2728	14%
Library	3674	2343	64%	267	10255	2277	22%	3154	11940	101	1%	1874	25869	4721	18%	5295	20%
Art/craft /culture room	3655	2424	66%	241	10367	2046	20%	3701	14947	120	1%	605	28969	4590	16%	4547	16%
Toilet Block	5111	1704	33%	154	7369	1794	24%	2799	6921	365	5%	31	19401	3863	20%	2984	15%
Drinking water	5111	1404	27%	441	5269	1681	32%	2096	1990	13	1%	15	12370	3098	25%	2552	21%
Totals	33518	18073	54%	2195	71063	15183	21%	23093	74432	914	1%	5316	179013	34170	19%	30604	17%

Note: no new sanctions in 2012-13. Source: Mission calculations based on data from MHRD provided to the 2nd JRM

Recommendation

- *MHRD might review with the states the low completion rate of school strengthening activities to identify if there are any systemic issues. An action plan may be drawn up. In addition, the MHRD could consider only approving new activities where there is sufficient progress in completing existing sanctions.*

Project staffing

2. 8. The Mission notes that there are still large vacancies at the state and local levels. The increase in MMER is welcome and the Mission expects that this will result in increased staffing levels. However, this must be monitored closely since the Mission is concerned given the experience of SSA in this area, especially with respect to staff in financial management and accounting positions, is not encouraging. It is very likely that specific focus will be needed in this area.

Table 4: Project staffing, vacancies

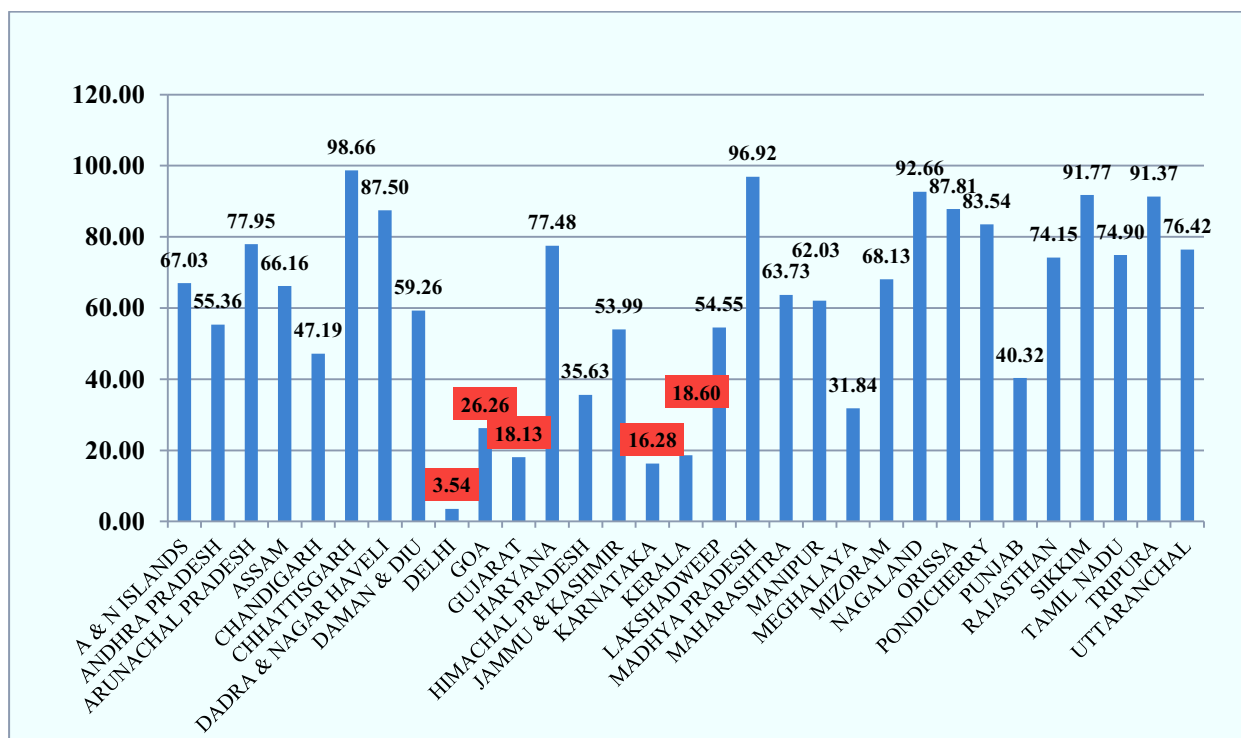
Level	Percentage in position	No. of State / UT	percentage Vacancy	No. of State / UT
State	100	2	100	0
	>75 & < 100	4	>75 & < 100	1
	>50 & < 75	7	>50 & < 75	11
	<50	18	<50	19
District	100	3	100	0
	>75 & < 100	3	>75 & < 100	6
	>50 & < 75	5	>50 & < 75	4
	<50	20	<50	21

Source: MHRD presentation to 2nd JRM

School Management and Development Committees

2. 9. The Mission notes the wide variation in the portion of schools which have constituted SMDCs (Figure 1), even allowing for the fact that in some states new boards have not been appointed pending local elections. Given the importance of the SMDCs in the accountability scheme under RMSA and the resources devote to training members of the SMDCs, the Mission recommends that this issue is examined in detail though studies and discussed in a future JRM.

Figure 1: State Wise percentage of Constituted SMDCs

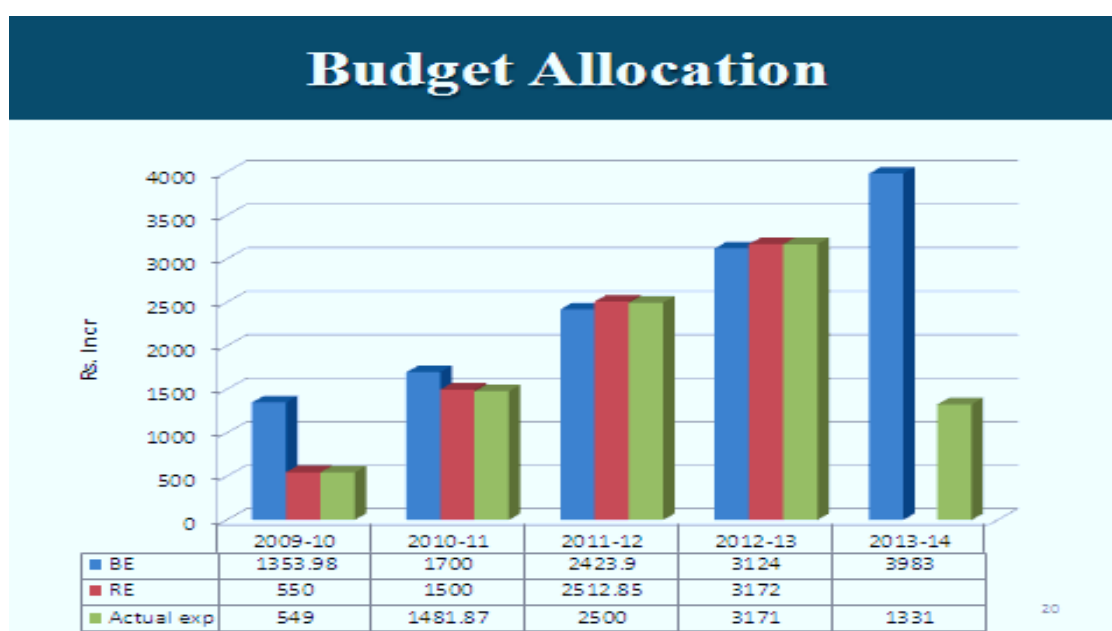


Source: SES 2010-11, quoted in MHRD presentation to 2nd JRM

Financial Progress

2. 10. This section presents the overall financial progress of the RMSA programme on certain parameters on the basis of presentation by MHRD and the available annual Interim unaudited financial report (IUFRR) of 2012-13. As in SSA, financial management and fiduciary issues should be a standing agenda item to be discussed at each JRM.
2. 11. **Budget:** The RMSA budget since year one of the programme (i.e., 2009-10) is increasing year-on-year. With expansion of the programme, the early years are marked with an exponential increase in the year-on-year budget and currently the budget increase is around 25 percent over the previous year. The graph (Figure 2) below presents the budget estimates (BE), revised estimates (RE) and the actual expenditure (AE) of the Central share of funds over the years of programme implementation until now.

Figure 2: Budget Allocations under RMSA, 2009-10 to 2013-14



Source: MHRD presentation to 2nd JRM

2. 12. **Expenditure:** The annual interim unaudited financial report (IUFRR) from MHRD reports an expenditure of Rs 3255.89 crores for the financial year 2012-13 incurred by the States/UTs in implementing the programme. This is a cumulative amount which includes expenditure of both the state and central funds. The IUFRR table indicates that 73percent of the total release by MHRD has gone to nine states - Andhra Pradesh, Bihar, Chattisgarh, Jammu & Kashmir, Madhya Pradesh Orissa, Punjab, Tamil Nadu and Uttar Pradesh.
2. 13. **State Share release:** While significant state share release is noted from some states, an equal number of states are not contributing enough funds. There are five states – Andaman & Nicobar, Bihar, Dadar & Nagar Haveli, Haryana, Jharkand and West Bengal which did not contribute their full state share to the programme in the last year (Table 5). As of now, since the start of the Programme, an overall shortfall of state share Rs 256.46 crores has been reported.

Table 5: Annual Interim Unaudited Financial Report 2012-13

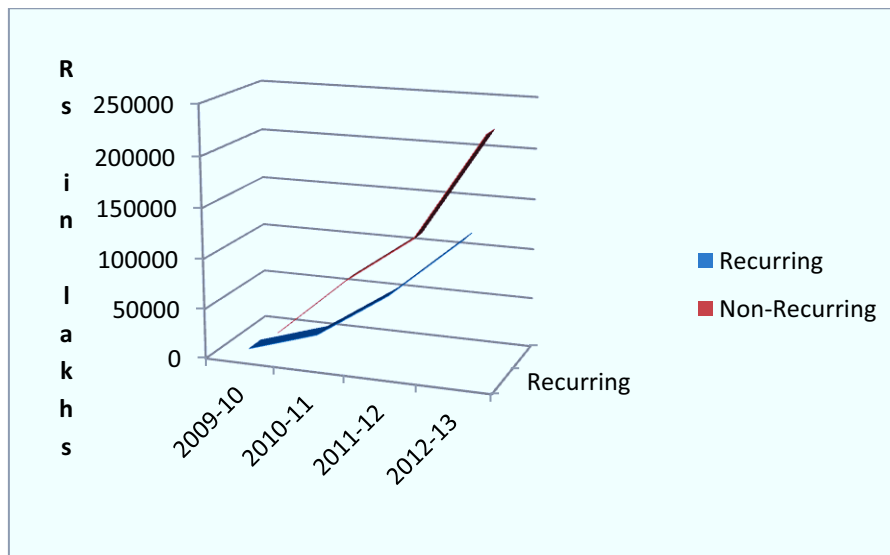
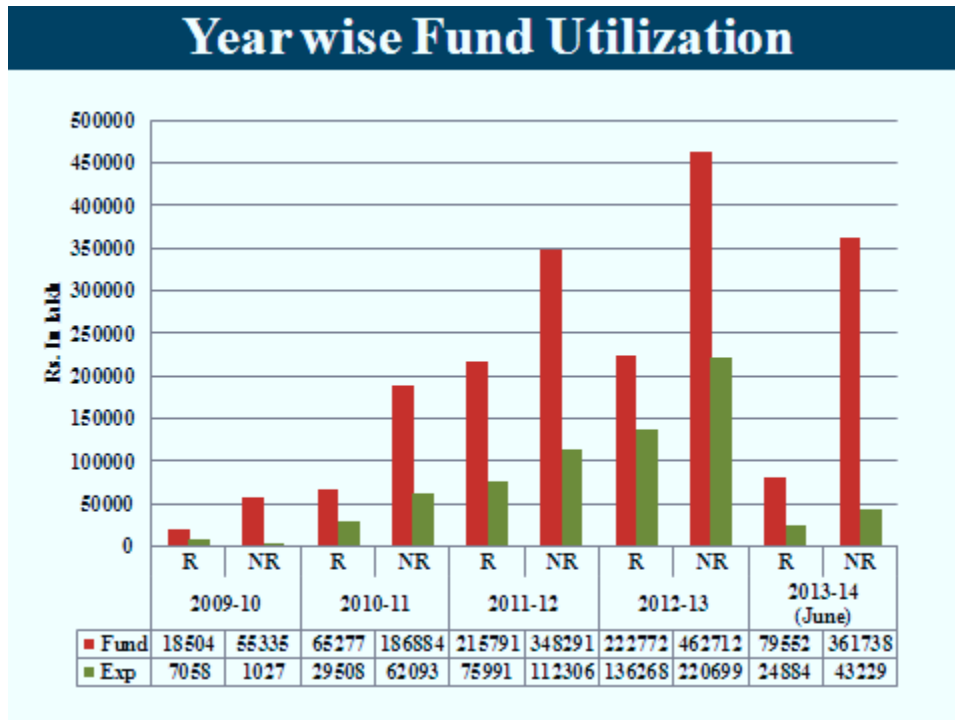
(Rs in lakhs)

Sl. No.	Name of State	Opening Balance	Releases by GOI	Releases by State	Others	Reported Expenditure	Closing balance
1	2	3	4	5	6	7	8
1	Andaman & Nicobar	73.07	67.13	0.00	0.00	75.69	64.51
2	Andhra Pradesh	19434.04	43294.84	11598.63	0.00	23144.39	51183.12
3	Arunachal Pradesh	121.00	2437.16	50.00	0.00	187.00	2421.16
4	Assam	600.20	12832.16	944.44	0.00	4800.72	9576.08
5	Bihar	39668.42	13765.60	0.00	0.00	2419.10	51014.92
6	Chandigarh	242.21	70.18	23.50	0.00	105.91	229.98
7	Chattisgarh	51395.11	30897.19	8033.65	0.00	1967.37	70410.39
8	Dadar & Nagar Haveli	283.29	45.32	0.00	0.00	104.79	223.82
9	Daman & Diu	440.72	55.00	511.99	0.00	74.43	933.28
10	Delhi	584.24	0.00	32.48	11.46	478.61	149.57
11	Goa	Not received					
12	Gujarat	1788.34	8205.96	2735.42	0.00	2015.45	10714.27
13	Haryana	3850.28	9408.00	0.00	58.62	2216.35	11100.55
14	Himachal Pradesh	4123.00	5700.67	1900.22	0.00	7897.39	3826.50
15	J & K	11428.37	10935.54	7939.17	0.00	15267.32	15035.76
16	Jharkhand	12596.44	0.00	0.00	160.75	5343.74	7413.45
17	Karnataka	8526.69	7986.05	5116.67	602.21	8952.66	13278.96
18	Kerala	3310.22	1527.00	3000.00	0.00	16679.00	-8841.78
19	Lakshadweep	Not received					
20	Madhya Pradesh	6109.95	46122.50	15374.00	0.00	57734.57	9871.88
21	Maharashtra	7295.43	1967.24	701.32	0.00	8899.30	1064.69
22	Manipur	1546.61	4301.14	138.33	0.00	4804.31	1181.77
23	Meghalaya	1072.00	159.70	125.93	0.00	379.14	978.49
24	Mizoram	1970.16	6391.89	572.17	86.71	6408.47	2612.46
25	Nagaland	Not received					
26	Orissa	7656.64	18510.61	6170.20	0.00	34622.12	-2284.67
27	Puducherry	334.61	72.07	49.00	5.80	123.88	337.60
28	Punjab	2832.78	30844.39	4697.00		35369.43	2278.94
29	Rajasthan	18.64	8703.95	2901.32	0.00	5317.86	6306.05
30	Sikkim	Not received					
31	Tamil Nadu	16909.79	27613.87	10001.65	0	40568.33	13956.98
32	Tripura	149.92	7017.66	460.68	5.38	4848.87	2784.77
33	Uttar Pradesh	19358.98	22086.62	13804.32	0.00	35709.54	19540.38
34	Uttarakhand	10032.12	9663.79	6017.48	0.00	10523.46	15189.93
35	West Bengal	461.52	0.00	0.00	0.00	64.18	397.34
36	National Components						0.00
	TOTAL	234214.79	330683.23	102899.57	930.93	337103.38	312951.15

2. 14. Fund Utilisation: The overall fund utilisation is around 50 percent. Kerala and Orissa are the top performers in this category followed by Punjab with 92 percent fund utilisation, Maharashtra with 89 percent and Madhya Pradesh with 85 percent respectively. The other

States/UTs that have utilised funds upto 50 percent against the outlay are Andaman & Nicobar, Delhi, Himachal Pradesh, Jammu & Kashmir, Manipur, Mizoram, Tripura, Tamil Nadu and Uttar Pradesh. This is an area of challenge for a large portion of participating States/UTs. Expenditure reports from four states (Goa, Lakshadweep, Nagaland, Sikkim) are not included in the IUFIR either on account of non-submission or errors in the report.

Figure 3: Yearwise Fund Utilization under RMSA, 2009-10 to 2013-14 (June)



2. 15. Audit Reports: It is reported that all audit reports have been received by MHRD for years 2009-10, 2010-11 and 2012-12. For the year 2012-13, reports from most of the States/UTs are expected by due date, which is 31 August 2013, however auditors in 3 States – Bihar, Meghalaya and Tamil Nadu – are yet to be appointed.

2. 16. Internal audit: There has been no progress on Internal Audit since the last JRM and requires urgent attention. In addition, the mission would like to emphasise the significance of monitoring of compliance of audit observations by States/UTs. Other than this serving as a financial safeguard for MHRD for RMSA funds, this process will help in rectifying issues of budgeting, accounting and expenditure. The MHRD may wish to consider constituting an audit committee with responsibility of monitoring of settlement of audit objections/observations.
2. 17. Status of States using E-procurement platforms: As of now, 22 States have an NIC platform, out of which 11 States are using an NIC/validated platform for RMSA. There are five States – Bihar, Gujarat, Daman & Diu, Dadar Nagar Haveli and Punjab – which are using a non-NIC platform for e-procurement.

Current Financial Year 2013-14

2. 18. Union Cabinet Approval: The JRM team was informed that the Union Cabinet has approved various long pending demands of States with respect to adoption of State Schedule of Rates (SoR), enhancement of MMER to 4 percent, continuance of 75:25 sharing pattern between Centre and States and extension of quality related interventions of the scheme to Government aided schools. The norm of revision relating to applicability of SoR and enhanced MMER provisions will be applicable prospectively.
2. 19. PAB Approval: Immediately upon the Cabinet approval, PABs were held and until now, almost all States/UTs AWPB have been approved with releases made to eight States and the others currently under process. Bihar, Jharkhand and Uttar Pradesh have been asked to resubmit their AWPBs. In advance of this round of PAB, States were given indicative budgets and pre-requisites for AWPB preparation, which included an integrated plan for secondary education including RMSA, ICT@School, Girls Hostel, IEDSS and Vocational Education schemes and use of U-DISE data as a basis for preparing their AWPBs. The table of indicative budget includes State share and un-utilised amounts with the States.
2. 20. The challenge ahead is the availability of funds as Union Cabinet approval this year is for a lesser amount compared to MHRD's own projected requirement on two counts; the first being expansion of the programme to Government aided schools and second, MHRD's endeavour to clear up committed liabilities of Rs. 6500 crore carried over from previous years. While MHRD at PAB approval has suggested to States to prioritise the activities on providing access to the children and within access, the major components to include committed liabilities for schools and teacher's salary and then to go in for quality/equity interventions, this certainly will impact implementation of other important elements of the programme.
2. 21. The JRM mission is very pleased to see that, in line with a recommendation of the First JRM, MHRD has provided states with indicative budget allocations to states from this year, which include states' share. MHRD has also made efforts to conclude PAB approvals in a timely manner such that timely releases can be made to the States. MRHD is also considering a mechanism to allow States to conduct teachers training activities which are normally scheduled during May-July period, but cannot be carried out for want of PAB approval. The Mission recommends in the coming years that the indicative budget allocations could be further calibrated in line with states' sizes, needs, utilization capacity and resources available.
2. 22. The other area which is laudable is increase of MMER from 2 percent to 4 percent as this will help States to appoint required number of finance staff which would help strengthen financial management capability of States and improve quality of rigour. This will improve fund utilisation and use of financial best practices including audit compliance for the programme. However, the experience of SSA in the appointment of sufficient staff for financial management is salutary, with many posts remaining unfilled for many years despite the higher percent of MMER than under RMSA. This will therefore need to be monitored closely and regularly. The mission also noted that MHRD has planned five regional workshops on financial management for capacity development.

Section 3: UDISE

Findings

Multiple data gathering systems

3. 1. The government of India has been publishing educational statistics couple of decades. Over this period, remarkable improvements in coverage, timeliness and use of statistics have been achieved. At present three parallel education management information systems (EMIS) are running for the elementary and secondary level of education: (1) the Unified District Information System for Education (UDISE, which is a merger of DISE and the Secondary EMIS/SEMIS) managed by the National University of Education Planning and Administration (NUEPA); (2) the Ministry of Human Resource Development (MHRD), Bureau of Planning, Monitoring and Statistics, publishes Selected Education Statistics (SES) every year; and (3) the National Council of Education Research and Training (NCERT) regularly conducts the All India Educational Survey with an interval of 3-4 years. The 8th edition of the Survey conducted in 2009 covering all types of school, recognized and unrecognized and recently published preliminary statistics gives 5.4 million less enrolment than DISE and at the same time, SES enrolment is 2.3 million higher than SES in 2009/10 at primary level.
3. 2. The UDISE covers 1.4 million Indian elementary and secondary schools. According to the UDISE management team it collects data from each recognized elementary and secondary school every year on the basis of fixed reference date, i.e. 30th September, and publishes educational statistics within the same year. The Mission wishes to acknowledge that this is a notable achievement considering its size, coverage and time with minimal staff. It needs further improvement with latest hardware, software and greater dedicated staff to fulfil the huge demand of data analysis and effective use of data for planning and monitoring including integrating UDISE with Geographical Information System (GIS) for the rationalization of school and targeted interventions.
3. 3. The Statistics Division of MHRD collects data from both aided and unaided schools from all over India every year and publishes the Statistics of School Education (SSE). The SSE report is an annual publication, but the data is consistently one year behind. At present, GOI has specified that SSE (formally known as SES) is the official source of data.
3. 4. It has become evident that the use of different data sources for elementary and secondary education statistics is creating confusion and preventing effective planning and monitoring at national level. In addition, the methodologies of calculating education indicators are different from each other and many indicators do not match with the international practices of calculating indicators e. g. retention rate, dropout rate etc. Moreover, the number of schools covered by UDISE has been increasing each year but it is not clear whether schools covered a few years back are also covered in the subsequent years.
3. 5. The Review Committee on Educational Statistics, 2008 analyzed various aspects of educational statistics and suggested a range of measures to address them. One of them is to have a single data source for school education and it is recommended to establish an apex body for educational statistics of India. The Government of India had formed a committee under the chairmanship of Prof. R. Govinda, Vice Chancellor of the NUEPA, to streamline the DISE and SES data collection system. These are both welcome and timely action towards a rationalised education statistics system is urgently required.
3. 6. NUEPA, with the assistance of an external party, should carry out a review of the year-on-year comparability of the data, before the publication of the 2013-14 data. This review should:
 - Review areas of uncertainty in the current database:
 - Analyze the status of teachers and pupils based on the common schools by using latest data of UDISE 2012-13 and baseline (perhaps 2009)

- Identify where district /state boundaries have changed over time and the consequent effect these have on the dataset
- Then, publish revised figures for the relevant tables and indicators where the review finds this to be necessary, especially for the core indicators.
- Develop a definitive list of secondary schools, against which future changes can be checked and on which the 2013-14 data collection can be conducted. Prepare a list of private and public secondary and higher secondary schools including name, address and course offering and update every year with the collaboration of Education Department. Based on the list prepared send UDISE questionnaire and response rate
- In consultation with states, revise DCF to take care of number of teachers sectioned and problem of counting teacher in composite schools. This should happen from the 2013-14 collection cycle.
- Adding / revising and using indicators and methodologies which are internationally comparable (such as the definition of sex-ratio versus Gender Parity Index) and calculated in consistent manner over time (such as the treatment of data from Class VIII in those states where this was or is considered part of secondary education), and published in the UDISE publications.

Composite schools under UDISE

3. 7. UDISE started from the 2012-13 data collection. The UDISE Data Capture Form (DCF) includes secondary education components. The questionnaire is comprehensive and gives most of the information required for effective planning and management of the project. The structure of education is different from one to another state – different states club together the secondary grades in different combinations with elementary and with higher secondary grades – and teachers are sanctioned according to running grade at school rather than the level of education. It was not possible to reconcile this situation with the separate DISE and SEMIS systems, and the UDISE system is the opportunity to do so; however, the DCF of UDISE needs to be amended to bring clarity to data collection in this area. This is essential to help states and the centre plan effectively, especially with respect to teacher numbers. The DCF should be suitably amended for the 2013-14 data collection cycle.

Administration of UDISE at the state level

3. 8. The State Project Director (SPD) of RMSA with the coordination of SSA SPD is responsible for overall coordination of the project at state level where there is a provision of two separate SPDs for RMSA and SSA. If there is only one SPD for both SSA and RMSA, the UDISE process is coordinated by the SSA SPD.
3. 9. The State level SSA MIS coordinator is coordinating the task including secondary component of UDISE. The RMSA MIS Coordinator at State level is also involved in finalization of DCF. At the district and block level the SSA MIS coordinators are providing support and collecting data from secondary schools. There is no separate MIS coordinator from RMSA below than state level. Most of the MIS coordinators have computer background, but limited knowledge of calculation methodologies and of the interpretation of education indicators.
3. 10. Once schools have filled up the questionnaire in paper format, they send it to the block, cluster and then district level, where the data is entered electronically. District level data is then collated at the State level. States met with during the Mission revealed a variety of practices in data verification, though the extent of physical verification at the school level varied. Punjab was the most extensive, with a large proportion of schools being checked at each level of aggregation; though all states carried out the mandatory 5 percent independent review. When the verification process found errors, states varied in the extent to which these changes were made or confirmed by the school. After finishing the data verification and cleaning work, the data is shared with the RMSA and SSA management and send to NUEPA for national compilation.

Use of UDISE data

3. 11. One of the objectives of RMSA is to increase GER at secondary level and there are three streams of education running in the country– general, technical vocational and education provided through distance mode (open school). The UDISE collects data from all types of general schools but in secondary education does not collect data from Technical and Vocational centers and distance mode institutions (open school) through NIOS. (In addition, the Mission noted the continuing challenge of including private unaided schools in UDISE.) Due to partial coverage of UDISE it is not possible to accurately calculate national GER of secondary education of the country.
3. 12. The MHRD has mandated the use of UDISE data for preparation of Annual Work Plan and Budget (AWP&B), and rejected some states’ proposal which used direct data. This is highly commendable. Moreover, some of the states met with during the Mission said that they were using the UDISE data to carry out teacher deployment and management exercises. Beyond this, however, it is not clear the uses of DISE at the sub national level.
3. 13. The Mission found that the UDISE has the potential to be a powerful tool for sub-national planning and programming. First, states have the capability to gather additional information about schools through the DCF format and UDISE collection process; and though NUEPA reported that this discretionary element is being used, there was no clear evidence from the States about how this additional data is being used. Second, states have their UDISE dataset available to them, but the Mission found little evidence of states using this in the day-to-day work. States were not updating UDISE during the course of the year in order that they have the latest information readily available. This may stem from the way that this data is stored and managed at the state level, or from the capacity of staff. On the other hand, several states which met with the Mission were collecting additional data about their schools (such as Punjab on teacher and student attendance and Himachal Pradesh has a teacher record system online), though these systems were not connected to UDISE.
3. 14. States reported that one challenge is a lack of ownership of the data at the sub-state level, either because secondary schools do not like the fact that SSA is leading the UDISE process, because of lack of cooperation between SSA and RMSA teams, or because schools do not use the data and so feel no obligation to ensure its accuracy.
3. 15. The Mission recommends that there is an urgent need to promote the increase in the use of UDISE data at school, block and district levels to enhance the quality of data which is helpful for targeted interventions. This could be promoted by, over the course of the next year:
 - NUEPA working with states to prepare their own annual reports. This would have the added advantage of NUEPA and states identifying issues of mutual interest which could be explored on a cross-state basis.
 - States commissioning studies, using RMSA funds as needed, to explore key policy issues for which UDISE can provide possible answers
 - Helping states use UDISE data in a dynamic fashion, to keep track of rapid changes in school level data during the course of the year (while keeping the rigour of the 30 September cut off for national level statistical purposes).
 - NUEPA should make raw data of UDISE available to the interested persons online, in readily usable formats and with guidance on the structure of and definitions used in the database. Previous years’ DISE and SEMIS data should similarly be made available. However, personal identity e. g. name of the teacher/phone number should not be disclosed.
 - Identifying examples of good practice in the use of UDISE data
 - The capacity enhancement of MIS coordinators and other staff including block level and those we are filling UDISE form staff/teachers should be trained not only on UDISE questionnaire but also calculating indicators, interpreting and presenting indicators on regular manner.

- States to develop a mechanism and capacity to calculate regularly the future requirement of the teachers by subject and school at district/state level by using simulation module considering attrition rate and other variables required. States may need technical assistance to do this from national bodies and/or Development Partners.
- MHRD to commission from NUEPA or some other institution or team an annual State of Indian School Education, which would provide trend data on key indicators as well as picking up different, focused themes from year to year.

Ensuring the sustainability and quality of the UDISE system

3. 16. The Mission noted that the significant successes of the system to date has been achieved with only a small number of people in NUEPA and with funding received from programme budgets (i.e., those of SSA and RMSA). A national education MIS must be seen as a long term investment by the country. One option, therefore, is to follow the recommendation of the Sathyam Committee report that an Education Statistical Agency be established at the national level, in order to promote continued improvement in the quality and reliability of the statistical system and to provide for a more reliable financial framework.
3. 17. At the same time, the mission is concerned that UDISE should continue to provide readily available data for the programmatic needs of SSA and RMSA, so that effective planning, financial allocations and programme evaluation can take place. Moreover, there is considerable scope for increasing the use that implementing agencies make of the UDISE data which would further strength the demand for, and therefore ensure the supply of, high quality data. Before making fully functional the apex body under MHRD mentioned above, the Mission is in favor of suggesting the management of UDISE should be as it is.
3. 18. The UDISE includes both types of information – Statistical and project related information, i.e., it is both an Education MIS (EMIS) and a Project MIS (PMIS). Sometime, the combined information gives good idea of project ‘inputs’ as well as “outputs”. However, at the same time, there is a tendency to show high “output” especially on enrolment as most of the inputs are directly related to output – enrolment. After EMIS comes under the apex body of MHRD, the PMIS should come under program implementation body of MHRD with strong functional coordination.

Recommendations:

- *In the short term, MHRD to convene a national workshop with UDISE administrators, data users and experts to map out the key outstanding issues of the existing system and to identify ways to take these issues forward*
- *MHRD to support NUEPA in addressing its concern about the role of states in UDISE and to provide stronger guidance to states about the UDISE collection process for the 2013-14 cycle. In particular:*
 - *The record keeping system at the school level should be strengthened and standardized*
 - *Greater standardization is needed in the conduct of the 5% verifying of school data. The mission suggests that the verification should include visits to schools and be in unannounced manner and that the teachers’ attendance, regularity, the provision of substitute teachers and student attendance (headcount) should be verified and reported accordingly to the state and RMSA and SSA.*
 - *Helping states use UDISE data in a dynamic fashion, to keep track of rapid changes in school level data during the course of the year, while keeping the rigour of the 30 September cut off for national level statistical purposes.*

- *NUEPA may carry out a review of the year-on-year comparability of the data, including both use of data from DISE and SEMIS and future data collection cycles, and publish its findings. This should be completed before the publication of the 2013-14 data.*
- *On an urgent basis, promote the increase in the use of UDISE data at school, block and district levels to enhance the quality of data which is helpful for targeted interventions.*
- *In order to take forward the recommendations of the Committee appointed by MHRD to review education statistics, MHRD could review of options for establishing a national education statistical agency, within the next five years. Such a plan could include:*
 - *Plans for covering all institutions offering secondary education, including the remaining unaided sector, vocational schools and open schooling.*
 - *How to develop a sustainable funding stream. MHRD might consider approving in principle a five year budget, subject to the availability of annual allocations.*
 - *The staffing necessary to put the UDISE on a secure footing and how these staff could be attracted to the UDISE unit.*

Section 4: Learning Outcomes

Findings:

Understanding and Definition of Learning Outcomes and Learning Assessment

4. 1. Sound assessment of learning provides the information that underpins robust monitoring and evaluation of the performance of the education system. Reliable, objective data is critical for effective diagnosis, the identification of appropriate remedial action, and the effective targeting of resources.
4. 2. India's 12th Five-Year Plan notes: *“The four main priorities for education policy have been access, equity, quality and governance. The Twelfth Plan will continue to prioritise these four areas, but will place the greatest emphasis on improving learning outcomes at all levels.”* [GoI, 2013: p49]. The 12th plan commits to *“... learning outcomes that are measured, monitored and reported independently at all levels of school education with a special focus on ensuring that all children master basic reading and numeracy skills by Class 2 and skills of critical thinking, expression and problem solving by Class 5. [GoI, 2013: Box 21.1 – emphasis added].*
4. 3. It is generally accepted that a learning outcome has to be measurable in order that a conclusion can be drawn as to whether it has or has not been achieved. This requires measurable indicators, i.e., achieving ‘basic reading and numeracy by class two’ (as cited in the 12th plan) will require establishing measurable indicators which enable progress against this objective to be assessed.
4. 4. In discussion, NCERT indicated existing NCF curriculum and syllabi do not contain explicit descriptors of expected learning levels by grade. While inclusion of learning level descriptors may be something to consider in future curriculum reform the RMSA programme may wish to consider developing with states a minimal set of basic learning outcome indicators that could be monitored across all states receiving RMSA support.

Assessment of Learning Outcomes

4. 5. Within any education system, multiple forms of learning assessment varying by purpose, approach and level / scale of assessment will be found. Commonly, however there are two basic types of assessment. These are categorized according to their underlying purpose – simply put ‘assessment of learning’ (summative assessment) and assessment for learning (diagnostic or formative assessment).
4. 6. High stakes examinations (such as the grade 10 state board examinations) are a form of summative assessment. They are used to measure the mastery of individual students against set syllabi often through formal tests. The function of high stakes examinations and certification is to provide evidence to employers and for college entrance – providing an important screening function.
4. 7. The purpose of the various forms of diagnostic assessment is to identify what has or has not been learnt. This can be done at various levels from individual, to class, to school to nation. Good diagnostic assessment can give helpful insights into the effectiveness of pedagogy, the appropriateness of the pace of learning as well as informing the need for any remediation.
4. 8. Continuous comprehensive evaluation is a form of diagnostic assessment and was introduced by MHRD to promote the cycle of feedback integral to student learning and teacher performance. The NCF-05, clearly mentions that CCE is a ‘pedagogical tool’, thus emphasizing its value as a means to keep teachers and children informed of what they are attaining in the classroom processes. This serves as a means to assess students’ all-round

(comprehensive) development on an ongoing (continuous) basis and take pedagogical decisions as well report progress to parents.

4. 9. *The Mission recommends that a practicable model of CCE for secondary level be developed in RMSA, keeping in mind the context of students as well as the degree of resourcing likely to be available in government and aided schools.*
4. 10. National, regional, or international surveys of learner achievement are large scale forms of diagnostic assessment. Unlike examinations and classroom assessment, these do not focus on individual learners but are sample based and are designed to gather information at the system level. They provide insight into the characteristics and achievement levels of a student cohort by extrapolating findings drawn from a relatively small, but representative sample. This provides a way of measuring as well as comparing learner achievement in areas of special interest e.g., between sub-groups, subjects and geographies.
4. 11. Unlike formal examinations, sample-based achievement surveys gather information on relevant background factors through questionnaires administered to students, teachers, school leaders, parents. This enables investigation of factors such as parental background on learner achievement. Overall, it is better to think of a sample-based survey of educational outcomes not as a form of ‘testing’, but as a review of the health of the education system.
4. 12. National Assessment Survey (NAS) information is essential in devising needs based learning strategies and resource allocations. Furthermore, when disseminated through effective communication strategies – national achievement survey data can be a powerful tool to engage communities, parents, and learners in the quest to drive up learning levels.
4. 13. It is important to stress national achievement surveys focus on quantifying the ‘how much’ and how things have changed over time. However, additional evaluation is needed to uncover the ‘why’ and what can be done any particular issue. This is particularly pertinent to co-scholastic areas which are difficult to address adequately in a quantitative based survey. Given the importance of going beyond the numerical measurement, it is recommended that when studies of this kind are commissioned, attention is needed to the capacity for analyzing and disseminating scientific classroom studies and impact evaluations.

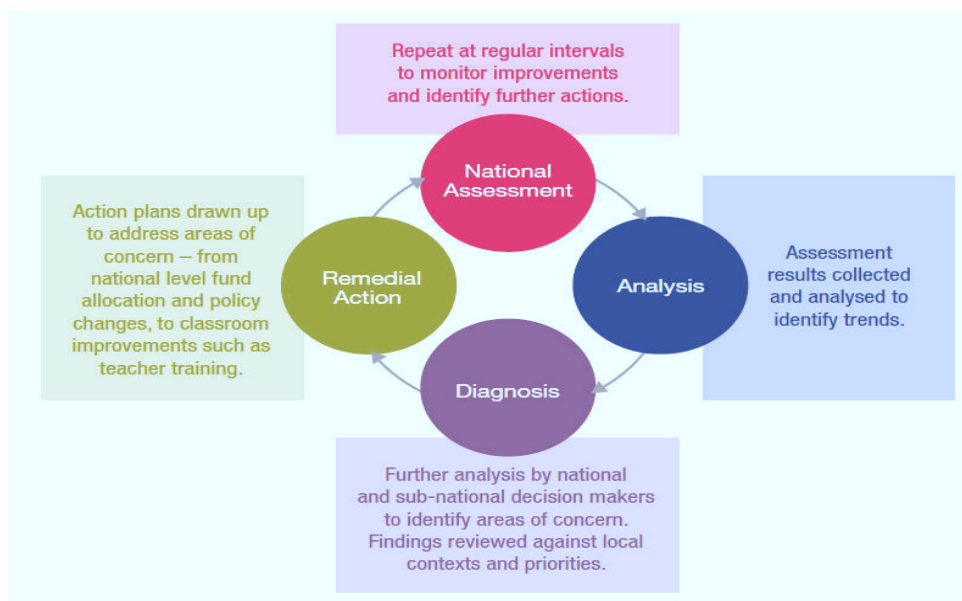
Table 6; Differences between National Assessment Surveys and Public Examinations

	National Assessments	Public Examinations
Frequency	Conducted on a regular cycle (e.g. every three or four years).	Annually and more often where the system allows for repeats.
Who is tested?	Usually a sample of students at a particular grade or age level.	All students who wish to take this examination at the examination grade level.
Stakes: importance for students, teachers, parents	Low importance to students and parents	Great importance – certificate grading determines access to jobs / HE.
Is additional background information collected from students?	Frequently, student, parent, teacher questionnaires	information about candidates’ schools and home contexts are not collected - making analysis of underlying factors impossible
Scoring	Usually involves statistically sophisticated techniques e.g. IRT	Usually a simple process that is based on a predetermined marking scheme.
Usefulness for monitoring trends in achievement levels over time	Appropriate if tests are designed with monitoring in mind – IRT techniques applied	Not appropriate because examination questions and candidate populations change from year to year - new test papers are set for each exam session, making it impossible to compare scores over time.

The Use of Learning Outcome Assessments

4. 14. The sentiment behind the old adage – ‘*weighing a cow does not make it heavier*’ applies to learning outcome assessments – conducting an assessment does not automatically lead to

improved learning. The diagram below describes the virtuous cycle evident where learning outcomes are used effectively.



4. 15. Making survey findings user friendly and implementing an effective dissemination and communications strategy is an important determinant of whether research is converted to practical action. While commending the efforts made by NCERT to make NAS V more accessible in the graphic document “What do they know?”¹ State representatives at the JRM present had little knowledge of NAS work. Given the potential value of the NAS (and other reports) the mission recommends that NCERT redoubles its efforts on graphic presentation of findings and implements a more systematic and comprehensive dissemination and communication strategy. It is recognised that this has significant funding implications which both SSA and RMSA leadership should consider.

Equity in Learning Outcomes

4. 16. Equity issues should not be considered only in terms of access and inputs but also in learning outcomes. Competent learning outcomes assessment using robust sampling, estimation of errors of measurement (‘standard errors’) and the application of appropriate tests of significance enable learning performance between sub groups to be investigated. None of the main surveys (NAS V, ASER) conducted in Indian elementary schools reports any significant differences between results for boys and girls. However, this may change at secondary level. The PISA 2009+ results for Himachal Pradesh and Tamil Nadu for students aged 15 do reveal significant differences between girls and boys (see below).

Differences in PISA test scores by gender

Assessment Domain	State	Outcome	Points difference (G-B)	Statistically significant?
Reading	Himachal Pradesh	Girls outperform boys	+10	✓
	Tamil Nadu	Girls outperform boys	+36	✓
Mathematics	Himachal Pradesh	Boys outperform girls	-30	✓
	Tamil Nadu	Girls outperform boys	+7	✗
Science	Himachal Pradesh	Boys outperform girls	-20	✓
	Tamil Nadu	Girls outperform boys	+10	✓

Source: ACER 2012.

¹ www.ncert.nic.in/new_ncert/ncert/rightside/.../educational_technology.pdf

- 4.17. While not focused on secondary school students, NCERT's Class V NAS did reveal that average performance of disadvantaged students (ST, SC, OBC, CWSN) in Reading, Mathematics, and EVS was significantly lower than the general category and able-bodied students.

India's National Achievement Survey

- 4.18. Learning outcomes are the *raison d'être* of any education programme. Within India there has been increasing recognition of the challenges presented by poor learning outcomes. As part of its response GoI has instituted a programme of National Achievement Surveys (NAS) at grades III, V, VIII (underway) and X (planned). The Mission appreciates the considerable progress made towards understanding and assessing them with a view to informing practice.
- 4.19. The NAS is being undertaken using Item Response Theory (IRT) which, when applied correctly, enables comparison across time and locations. NCERT, the body currently commissioned to conduct NAS are the first to use IRT for grades III and V, these form important baselines of national learning levels in India.
- 4.20. NCERT's Class V survey follows international best practice in reporting the range of scores achieved by students. In simpler approaches to assessment emphasis is typically placed on *average scores* and the *average* number of students who can correctly answer a particular test item. Understanding the range of performance is particularly important for those concerned with equity in learning. It enables policy makers to look at how well the system serves the many rather than the few.
- 4.21. The IRT-based NAS could be incredibly useful for the RMSA programme; Firstly in diagnosing and helping respond to learning issues of students entering grade VIII; secondly, in monitoring the learning progress made by junior secondary students from grade VIII entry to grade X exit (the learning gradient). The latter is important as state board results are not comparable between states.
- 4.22. In order to maximise the potential of IRT-based learning assessment it is recommended (i) The technical support group that have assisted the introduction of IRT are mandated to continue to support NAS implementation at all levels (most pressingly grades VIII & X) to ensure validity, comparability and standardisation in reporting (specifically reporting the range of performance in scores corresponding to the 10th, 25th, 50th, 75th, and 90th percentiles) are maintained; and, (ii) That detailed analysis of the grade VIII NAS at both nation and state levels is conducted and this is used to inform 'junior secondary readiness to learn programmes'.
- 4.23. The value of NAS findings will be of great value as a baseline for RMSA as well as a diagnostic tool informing implementation. This however depends on the following:
- Continued use of IRT with particular attention being paid to the sample frame and comparability
 - Timely analysis, processing and release
 - Appropriate disaggregation
 - Improved presentation and dissemination of data and greater efforts to assist states in interpreting and utilizing learning data for learning improvement
 - Documentation of trends
 - Long term data management – to ensure data bases of the series of NAS are carefully maintained.
- 4.24. Given the comparability of NAS conducted using IRT survey findings grow over time as more learning progress can be monitored. MHRD have given unequivocal support to the implementation of a continuous, rolling programme of national achievement surveys. In common with the SSA JRMs, the RMSA JRM endorses the findings of the Panchapakesan committee that recommended a dedicated National Assessment and Evaluation Centre be established to take the lead in the management, commissioning, analysis, dissemination and

long term data management of NAS. This centre should have a recurrent funds flow and full complement of permanent expertise – to ensure continuity, institutional memory and staff succession planning. It is important to note that this body does not necessarily have to be the implementer of all studies but must have the expertise to draft ToR, commission, quality assure and disseminate NAS and impact evaluation activities. Given the size of India and the broader expertise resource available within higher education, philanthropic bodies and the private sector, an authoritative body that is able to ‘steer but not necessarily row’ would seem a logical operational model.

4. 25. The Mission welcomes and supports MHRD’s emphasis on enhanced learning outcomes from the initial phase of RMSA implementation. A well-executed assessment of learning outcomes, at the national as well as state levels, has implications across the programme, These range from teacher training, identification of appropriate classroom practices to assessing impact of inputs such as materials, to determining priorities and allocation of funds. It is therefore of particular value to planners, and RMSA would profit from building a culture of using the resultant outcomes focus. (As a sidelight, one debate that would greatly benefit from the use of learning outcomes data is that of the use of CAL, a high cost input whose value and contribution to school effectiveness needs greater exploration and understanding.)

On the states’ assessment programmes

4. 26. Presentations were made by Uttarakhand, Andhra Pradesh, Gujarat and Kerala. These demonstrated both census based and sample based approaches at various grades. The Mission appreciates the enthusiastic effort of all states which indicates their commitment to learning improvement. In particular the focus of the Uttarakhand study on identifying levels of learning at grade 9 to help inform programmes to establish a foundation level of knowledge, the close linkage between learning assessment and school performance and staffing evident in the work of AP and the extensive use of DIETs and SCERTs evident in the work of Kerala.
4. 27. While these are encouraging signs, states might consider taking a more strategic view of quality improvement in general and the use of assessment in particular. It would help to consider the following:
- Reasons behind poor performance. E.g. low achievement in mathematics may be due to poor textbooks, lack of examples that connect with students’ lives, or low time on task, language and literacy related difficulties and other factors, other than just the usual classroom performance of the teacher. Strategies used post-assessment have to factor in likely reasons.
 - Ensuring diagnostic surveys are designed so as to lead to better understanding of what to do.
 - Avoiding assessment findings that equate teacher performance directly to student performance because teachers working with disadvantaged students may get unfairly penalized. The performance of a teacher must be gauged by their ‘value add’, i.e., where were students on entering a class and what level were they at exit.
 - One of the dangers in remedial teaching is that it tends to repeat the same method (that did not work earlier). Teachers need access to a wider range of strategies and methods for students who did not succeed with the earlier ones.
 - Assessment data needs analysis and conversion into training and other inputs for teachers, which may include Secondary Readiness Package development, curriculum and textbook renewal, pedagogical guidelines, the development of an ICT-based teacher support system, teacher training, and school transition programmes built around SDPs.
4. 28. Such surveys, where conducted, should be used as an input into the development of five-year perspective quality improvement plan of the state as well as for AWPB development, incorporating both long-term strategies as well as activities specifically designed to bring about issues emerging from the survey and bring about quality improvement.

Using Learning Outcomes to Develop a Holistic Perspective Plan for Quality Improvement

4. 29. A significant fillip to quality improvement efforts would result from a holistic five-year perspective plan for quality (and learning outcome) improvement in the states. Such a plan would:
- Incorporate a ‘vision’ (of the kind of student who should emerge from secondary education, as well as the kind of classroom, pedagogy, materials and school that would develop such students).
 - Target a limited number of higher order learning outcomes (from within the subjects and the overall development of students) for every year of the five year period, in increasing order of complexity.
 - Use the targeted outcomes to agree on the specific teacher behaviors, pedagogical practices or teacher performance standards and indicators desired – based on which in-service teacher training and other inputs (such as the use of ICT and School Leadership training for HTs) would be designed to bring about improvement in the targeting learning outcomes.
 - Include the development of enabling and supportive relationships and practices among the key stakeholders – students, teachers, parents, community, head teachers and sub-district officials – would be seen as part of the endeavor.
4. 30. Such an incremental, targeted approach that focuses on improving both the nature of processes and relationships required is likely to enhance quality over the years.
4. 31. *The Mission, therefore, recommends that the MHRD may facilitate the development of such a Holistic Perspective Plan for Quality Improvement by the states.*

Using Assessment to Enhance ‘Secondary Readiness’ at entry level

4. 32. A widely-acknowledged issue across the country is that of learning gaps perceived among students entering secondary classes, in particular those who suffer from cumulative disadvantage. This implies that the expected ‘readiness’ to participate in age- and grade-appropriate learning at secondary level is missing. Not being able to cover this gap results in large proportions of children never being able to ‘catch up’.
4. 33. Given the wide-spread nature of this issue, a ‘Secondary School Readiness Programme’ may be considered in the early months of the academic year. This would differ from the usual ‘remedial’ teaching in that it would not only revise a few preliminaries but would be a structured approach offering accelerated learning tailored to students’ entry level learning. This envisages the implementation of a ‘differential classroom’ with children working at different levels and paces. It would take into account issues of literacy, language and other exposure needed, and would combine learning across the various elementary grades in order to get students ‘ready’ for secondary as rapidly as possible.
4. 34. Assessment of learning outcomes, implemented in a diagnostic manner in the classroom at entry level when combined with findings of the forthcoming NAS VIII would provide a rich understanding of the starting point for learners entering secondary.
4. 35. Bridging this learning gap or covering the ‘cognitive distance’ required could be undertaken through a range of options such as:
- A summer camp in the weeks before secondary classes commence or the use of extra classes for the purpose
 - Development of ‘Readiness Material’ that provides the pre-requisites of various materials.
 - Incorporation of foundation aspects in the initial part of the teaching of each unit in the class

- Use of CCE on an ongoing basis to assess students' entry level for different units about to be taught.
4. 36. Given that there are many composite schools, teachers of classes 7-8 could initiate the process of secondary readiness so that they are not required to do it again when they themselves are teaching classes 9 and 10.
4. 37. *The Mission recommends the development and implementation of a Secondary School Readiness Programme, at least on a pilot basis in willing states.*

Institutional linkages and capacity building

4. 38. Greater involvement is needed on part of state level institutions such as SCERTs, RIEs, IASEs, CTEs, universities and district level institutions such as DIETs. Apart from linkages, institutional capacities also remain an issue. The joint development of a common vision and division of labour would enable the various institutions to work in coordination. This would include rejuvenating these institutions, e.g., ensuring that all are connected to the internet to ensure that they are able to use the distance education as well as Skype-based video conferencing.
4. 39. Given wide ranging evidence of a strong 'backwash' effect on classroom teaching – i.e., that 'what is taught is what is tested, and what is tested is what is valued' it is particularly important that state boards are encouraged to engage with the RMSA Programme. The nature of State board exams has a strong impact on classroom practice. The State boards should be encouraged to review the balance between factual recall and higher order thinking, assessment of practical skills, language competence, and the assessment of co-scholastic competence. The state boards could also be incredibly useful in assisting with the logistical management in administering the NAS and should be encouraged to participate.
4. 40. The Mission is concerned at the limited national level and state level human and institutional resource available towards focused improvement of quality and learning outcomes. The efforts of the NCERT need to be embedded in a larger National Resource Group drawn from professionals and academics, institutions and NGOs across the country. This would need to be a group that is active around the year, addressing state as well as national requirements, and coordinated by the MHRD.
4. 41. *Towards this the MHRD may consider before the next JRM:*
- A Capacity Building Needs Assessment
 - The development of a national capacity building programme with a five-year perspective
 - The constitution of a National Resource Group

Recommendations:

- *MHRD may facilitate greater engagement of state exam boards within the RMSA programme. Amongst other things, this would help develop comparative measures of inter-state progress given that state board examinations are not comparable between states.*
- *The technical cooperation agency that assisted NCERT with the introduction of IRT should continue to support NAS implementation at all levels (most pressingly grades VIII & X) to ensure validity, comparability and standardisation in reporting (specifically reporting the range of performance in scores corresponding to the 10th, 25th, 50th, 75th, and 90th percentiles).*
- *A practicable model of CCE for secondary level may be developed in RMSA, keeping in mind the context of students, the need to address the child's all-round development, as well as the degree of resourcing likely to be available in government and aided schools.*
- *The MHRD may support the development and implementation of a Secondary School Readiness Programme, at least on a pilot basis in willing states.*

- *There could be a detailed analysis of the grade VIII NAS at both national and for every state is conducted. Dissemination of the state reports should be released in advance of the consolidated national report. These can then be used to inform the development of 'junior secondary readiness to learn programmes'*
- *NCERT could further work on making NAS findings more user friendly and implements a more rigorous dissemination and systematic communication strategy, including release of results and background data into the public domain*
- *The JRM endorses the recommendations of the Panchapakesan committee for establishing a dedicated National Assessment and Evaluation Centre to commission, quality assure, analyses, disseminate and archive NAS data over the long term.*
- *MHRD may consider facilitating the development of a holistic perspective Plan for learning improvement by the states.*

Considerations

- Learning level performance descriptors could be developed in the next phase of secondary curriculum reform. In the interim RMSA may wish to consider establishing one or two basic learning performance indicators by for grades 9 & 10 in numeracy and literacy to assist with performance monitoring.
- MHRD may consider before the next JRM:
 - A Capacity Building Needs Assessment
 - The development of a national capacity building programme with a five-year perspective
 - The constitution of a National Resource Group.

Section 5: Teacher Recruitment, Management and Deployment

Findings

5. 1. The section is arranged under five broad themes: teacher recruitment policy and procedures; teacher qualification; teacher deployment; teacher transfer; and teacher performance, incentives and promotion.

Teacher Recruitment Policy and Procedures

5. 2. At secondary education level, teacher demand is influenced by overall student population growth, student teacher ratio trends across the different subjects, the organization of schools (student classroom ratio, composite schools that are either primary, upper primary, secondary or higher secondary, or some combination of these levels) and projected growth areas (new sanctioned posts due to new schools, and vacancies due to retirement, promotions, transfers, attrition).
5. 3. Availability of qualified teachers and their proper deployment has been viewed as an important influencing factor in ensuring quality education. While there is no national guideline with regard to secondary school teachers at the national level, quality interventions under RMSA include reducing the Pupil Teacher Ratio to 30:1 and the programme has provisions for appointment of additional teachers to achieve this target.
5. 4. The implementation status report in RMSA of the MHRD provided to the Mission shows that, as of 31 March 2013, achievement of targets of recruitment of new teachers is 45 percent and that of additional teachers is 36 percent. 29 percent of the additional teachers sanctioned have yet to be recruited. Further, it is noticed that the status of recruitment of teachers presents a mixed scenario. States such as Karnataka, Mizoram, Tripura, J&K and Andhra Pradesh have achieved almost hundred percent but some other states such as Gujarat, Bihar, Jharkhand, Lakshadweep, Maharashtra, Meghalaya, Pondicherry, Rajasthan have reported nil progress. Based on the UDISE 2012-13 data, the all India teacher vacancy status is at 33 percent but 13 states have 50 percent or more vacant positions. The vacancy status in the new schools is significantly high at 58 percent against sanctioned posts, with 9 states that have not recruited a single teacher against the sanctioned posts and another 6 states with higher than 50 percent vacant positions..
5. 5. The mission finds that the states have evolved their own mechanisms of teacher recruitment and the nature and content differ from state to state. The selection of teachers happens through a state level teacher eligibility test in many states. The content of these tests across states differs from one to another. The written examination is supported in some states through a procedure of counseling for the purpose of posting. There are instances such as in Andhra Pradesh of having more than one test for selection of teachers, viz., APTET (with 20 percent weightage) and Teacher Recruitment Test (with 80 percent weightage). On the other hand, Madhya Pradesh conducts tests but not every year, and Odisha does not conduct teacher eligibility tests to recruit teachers.
5. 6. Teachers appointed to teach classes 6 to 10 are trained graduate teachers (TGTs) who are recruited either directly or through promotion and in most states through the state level TET. In many states, in case of subject teacher requirement at secondary level, PGTs teaching senior secondary classes in the same school are allotted subject periods at the secondary level. There is no uniformity across states in the ratio of direct selection and promotion from the feeder cadre. Andhra Pradesh follows a ratio of 1: 2 for direct selection as against promotion. In Himachal Pradesh it is 50:50 for PGTs, and 75:25 for TGTs. In the case of Physical Education (DPE) it is just the reverse i.e. 25:75. For other teachers it is 50:50 just as in the case of PGTs. Tamil Nadu has a 50:50 policy for both graduate and post graduate teachers and 100 per cent by promotion for HMs. The RMSA norm for composite schools (covering classes 6 to 10)

prescribe that the shared teachers for upper primary and secondary classes be split in the 3:2 ratio.

5. 7. There is a need to understand teacher rationalization processes across school levels to improve planning for deployment. From the information shared during the JRM, the Mission found that the annual request of the number of teachers from states does not provide an accurate picture of the overall needs of states vis-a vis their full requirement of teachers. *It is suggested that the states could prepare a five year plan for teacher recruitment to better plan for financial requirements and inform Teacher Education institutions on training requirement.*
5. 8. Contract Teachers at Secondary level: If on the one hand, some states have a stated policy of not appointing contract teachers, there are states such as Himachal Pradesh having contract teachers whose service is regularized on completion of six years. Similarly, Madhya Pradesh offers an initial contract for 3 years and Orissa for 6 years before regularizing the posts. Such a practice may be an incentive for contract teachers. It may also be a corridor for improperly qualified teachers to get in to the system. *It is suggested that an analysis be done to understand the scale of contract teachers recruited under RMSA, their qualifications, recruitment process, salary structure, tenure and career paths, across states.*

Teacher Qualifications

5. 9. The National Teacher Policies do not mention teacher qualifications for secondary level school education at the national level. The provisional UDISE 2012-13 data reveals that 75 percent of the teachers are suitably qualified to teach at secondary level with B. Ed (69 percent) and M.Ed. degrees (6 percent). 11 percent of the teachers have no professional qualification. There is a huge dearth of subject teachers: math (only 12 percent of total teacher strength), science (12 percent), Languages including English (19 percent) and Social Studies (8 percent). These teachers are also not just dedicated to secondary, but maybe shared with upper primary and senior secondary levels in composite schools. The UDISE data reflects that the total percentage of all subject teachers stands at 30 percent. It is difficult to draw a meaningful conclusion from this data. For e.g. which subject/areas does the other larger percentage (70 percent) of teachers represent? What is the universe that constitutes 100 percent? There is a need to delve deeper into the composition of teachers by their subject qualification and teaching.
5. 10. Headmasters are largely appointed on promotion. However, there are states also making direct recruitment of headmasters and the qualification of head master is not yet rationalized in some states. Himachal Pradesh, for example, requires a post-graduation with B. Ed to be a headmaster. This would mean that teachers with only graduation and B. Ed. will not be promoted as PGTs however high performing they may be as teachers.
5. 11. There seems to be a serious difference between the government and private institutions in the recruitment of qualified teachers. *With respect to teacher qualifications of secondary school teachers, there should be congruence between what is prescribed by RMSA/NCTE/Board of Secondary Education. The qualifications of teachers should be one of the conditions of recognition/affiliation by the Boards.*

Teacher Deployment

5. 12. Ensuring that the right type and number of teachers are available in the schools where they are needed is a challenge faced by many states due to several factors such as leave, transfer, superannuation, etc. Unfortunately, there are cases of the least qualified teachers being posted in the rural and remote schools. *There is a need to develop transparent criteria for teacher deployment for both state and district cadres.*
5. 13. Improving pupil-teacher ratio is a strategy adopted under the RMSA for improving learning achievement in particular and through it the overall quality of secondary education.

5. 14. There is a mechanism of rationalization of teachers in every district regularly so that provision is made to ensure that the new teachers are positioned in those very schools where they are needed.
5. 15. The RMSA norms provide for 5 subject teachers and 1 headmaster for student strength up to 160. For every additional number of 30 students there will be an additional teacher. This formula, even though is logical in terms of the PTR, would pose problems such as which subject teacher would be this additional teacher? What happens to the requirement of teachers of other subjects? States like Andhra Pradesh have developed their own policy based on the perceived importance the subjects in the curriculum such as the first additional teacher would be of mathematics, then of English and then of Physical Science, Biological Science, Social Studies and so on. But this is a challenge especially in the context of teacher work load implications in general and deployment of teachers in very small size schools in states such as Mizoram which has reported student strength as small as 6 students in some schools. Will the PTR be the same for such schools? Also there isn't a close relation between the PTR (norm-30:1) and SCR (norm-40:1) that can help to determine teacher requirements.
5. 16. The planning for teacher workforce at secondary involves a different methodology from elementary because of the requirement of subject teachers. Therefore, using just the PTR and SCR to calculate teacher requirement is misleading and does not present the complete scenario. Planning for teachers has to take into account the number of sections per class,, which determines the workload of each subject teacher (i.e number of periods allocated for each subject per week), subject requirement for new and additional positions, and the vacant posts in different subjects due to retirement/attrition, In composite schools, it also has to address the issue of teacher workload distribution across upper primary and secondary (in case of classes 6 to 10), and across secondary and higher secondary (in case of classes 9 to 12). Therefore, teacher workforce planning has to be based on a combination of all these factors. States maybe provided guidance.

Teacher Transfer

5. 17. States do have a transfer policy in place.
5. 18. In some cases the transfer policy has been worked out systematically providing a formula for considering seniority for transfer, in others it is more general in nature. There are provisions made for recommendation by the Chief Minister for out of turn transfer and inter district transfer.
5. 19. Some states (e.g. Andhra Pradesh) follow the norm of transfer allowed after a minimum of 2 years posting and compulsory posting after 8 years. A common challenge in most states is the unwillingness of teachers to move to rural and remote schools resulting in a disproportionate dearth of teachers in rural schools compared to urban and peri-urban schools. Many states have hardship allowances of one kind or another.

Teacher Performance, Incentives and Promotion

5. 20. The success of RMSA depends upon the availability of dedicated and effective teachers in the secondary schools.
5. 21. None of the states have established performance standards for teachers of different subjects. Hence, as of now, there is no stated practice of linking teacher performance with promotion. Currently, promotion is time bound and not merit based, which must be a disincentive and demotivation for hard working and high performing teachers. Some states are found following a policy of withholding the increment of teachers with cumulative effect based on the poor performance of students in the Board Examination. Even though one would be keen to link student performance with that of the teacher effectiveness, it is difficult to deny that there are

other uncontrolled/ uncontrollable factors influencing student achievement at the secondary level.

Salary Structure

5. 22. RMSA does not have a national or state level norm for teacher salaries. While this is an area under state jurisdiction, the Mission noted that as there are different pay scales being applied in states. This affects the RMSA fund distribution to the states; and states which are paying in accordance with the Sixth Pay Commission receive more funds per teachers than states with lower salary scales. As salaries form a major share of the RMSA budget, an analysis of state salary structures paid from RMSA funds could provide an insight for more equitable distribution of RMSA funds across states, with the prescribed limits.

Teacher accountability as a part of system accountability

5. 23. The Mission did not have the opportunity to discuss the issue of system and teacher accountability in great detail. However, accountability to deliver outcomes is a critical focus area for all levels within the system. A robust monitoring and reporting mechanism that is done frequently with rigour and integrity will ensure greater accountability to outcomes from state down to school level. The potential of the CRCs and BRCs at the local level to support and monitor teachers should be strengthened. In this regard, the School Management and Development Committees also have a significant role to play in monitoring school functioning and teacher performance (attendance and to some extent classroom activities)

Good Practices

5. 24. The following good practices are listed with a view to encourage other states to follow.
- Himachal Pradesh has instituted the practice of on-line maintenance of the service book of all its teachers. Such a practice has several advantages for the teachers as well as the administrators. Since specific and credible details regarding the usefulness of the system are not available, a study needs to be undertaken with a view to replicate this progressive practice in other states, particularly the large states.
 - Andhra Pradesh follows a transfer process by preparing a seniority list which is based on stated criteria, applications for which are made online. The list is made available online and provided to the District Selection Committee for implementation at the district level. Teachers within the same management are transferred within the district. There is a minimum eligibility period of two years for transfer and compulsory transfer made once in eight years.
 - Teacher management is closely linked to teacher educator availability and involvement including inter linkages between organizations. The mission could not get proper data on the availability of teacher educators and their involvement. Some of the State missions have been using resources available outside the school education system such as the university departments, management institutions, and other colleges of teacher education. It was also found by the mission that there were differential levels of involvement of DIET and CTE faculty to the neglect of CTE faculty in teacher development activities. Considering that the CTE as an agency is meant primarily for the secondary level of schooling, there needs to be a greater involvement of the staff of CTE in the teacher development activities of RMSA. Further, where ever the States have visualized the DIETs as the agency for teacher development, there is a need for re visioning and expansion of capacities of the DIETs.

Recommendations

- *It is recommended that the NCTE should notify the pre-requisite teacher qualifications for secondary school level.*
- *It is suggested that the states could prepare a five year plan for teacher recruitment to better plan for financial requirements and inform Teacher Education institutions on training requirement.*
- *It is suggested that MHRD could commission a research study in states to find out the status of subject teachers and how states prioritize subject teachers to be recruited in the context of making requests for new and additional teachers in their AWP&Bs.*
- *It is recommended that an analysis of the teacher eligibility/recruitment tests across states could be undertaken to gain better insights into the quality of recruitment process. There is a need to understand the content of these tests; and whether tests include soft-skills, motivational aspects, as well as literacy. The selection procedure should be made more scientific and valid through technical support to the agencies engaged in these state level tests.*
- *A study may be conducted of the impact of allowances for teachers, in order to develop a more effective incentive system to attract teachers to rural schools, given the perennial and large scale nature of the challenge of posting teachers in rural and remote regions in the country.*
- *An analysis may be done to understand the scale of contract teachers recruited and paid under RMSA, their qualifications, recruitment process, salary structure, tenure and career paths, across states*
- *Considering the long process followed in appointment and deployment of teachers, it is suggested that the states may consider creating a reserve number of teachers over and above the number required as per PTR guidelines. The reserve teachers are also needed at the district level for the purpose of teacher training and they may be located in the DIETs. So far, Kerala is the only state known to be having teacher reserve. States may also be encouraged to think of a mechanism of linking post-retirement retention of well-performing teachers for 1-2 years whose experience and expertise may be utilized by the system both in teaching, supporting other teachers in the classroom, and teacher education programmes. Some states (for example, Haryana) have a practice of engaging retired teachers against long leave - CCL/maternity/medical etc. as per workload at school level. This may be encouraged in case of states having deficient number of teachers of a given subject or for small schools.*
- *Retirement of teachers from service should be done at the end of the academic session to prevent disruption of teaching-learning while the academic session is on. Vacancies created due to retirement should be reported well in advance (disaggregated by subject, gender, social category), preferably through a computerized system, to enable systematic planning by states to fill the posts in a timely manner. It is observed that some states such as Haryana have already been following this in policy. Steps need to be taken to ensure that other states also follow the same.*

Considerations:

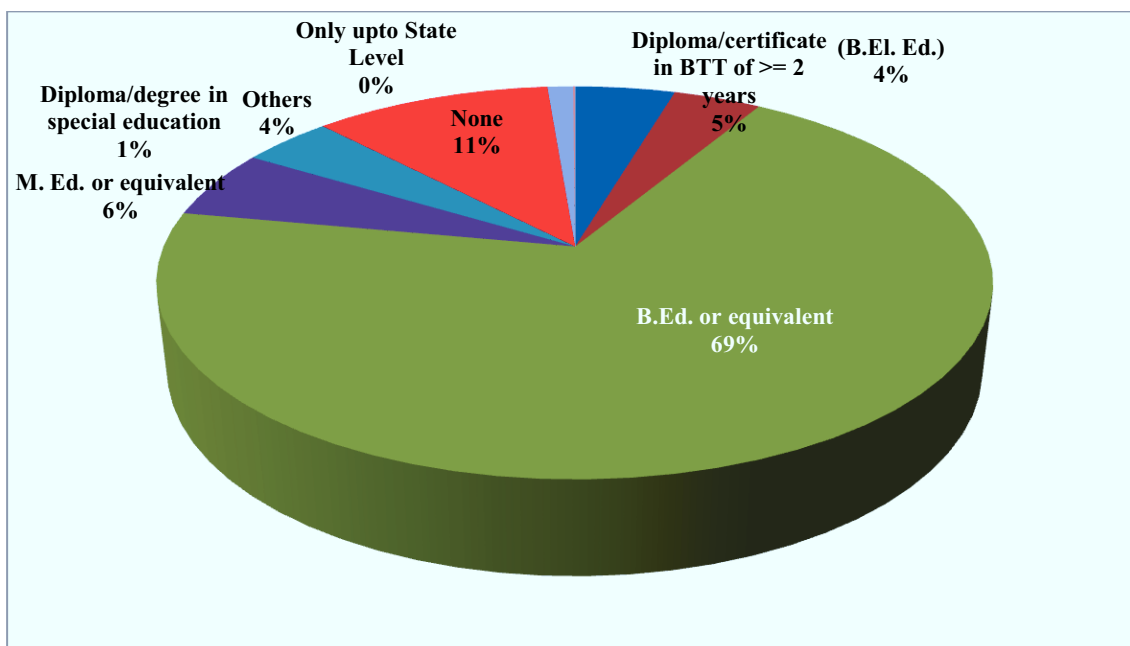
- *With respect to teacher qualifications of secondary school teachers, there should be congruence between what is prescribed by RMSA/NCTE/Board of Secondary Education. The qualifications of teachers should be one of the conditions of recognition/affiliation by the Boards.*
- *Mechanisms for basing teacher salary rises and career promotions on classroom performance could be considered with exemplars of national and international good practices.*
- *A few states have developed MIS systems and e-service books of teachers (Punjab and Himachal presented during the JRM) with key information of all the teachers. The use of the teacher MIS could be expanded as a programme management tool to plan new recruitment and filling positions against retirement, transfer, promotion, and to track areas of teacher performance like attendance*

Section 6: Teacher Training and Spending on Teacher Training

Planning for teacher training: Targets and Achievement

6. 1. A total number of 26,298 teachers were recruited from 2009-10 till July 2013 (excluding Bihar, Jharkhand and Uttar Pradesh). Overall, only about 68.8 percent of secondary school teachers across all types of secondary schools have the mandatory a B.Ed. degree and there is inter-state variation.

Figure 4: Teachers with mandatory academic qualifications (all schools), 2012-13

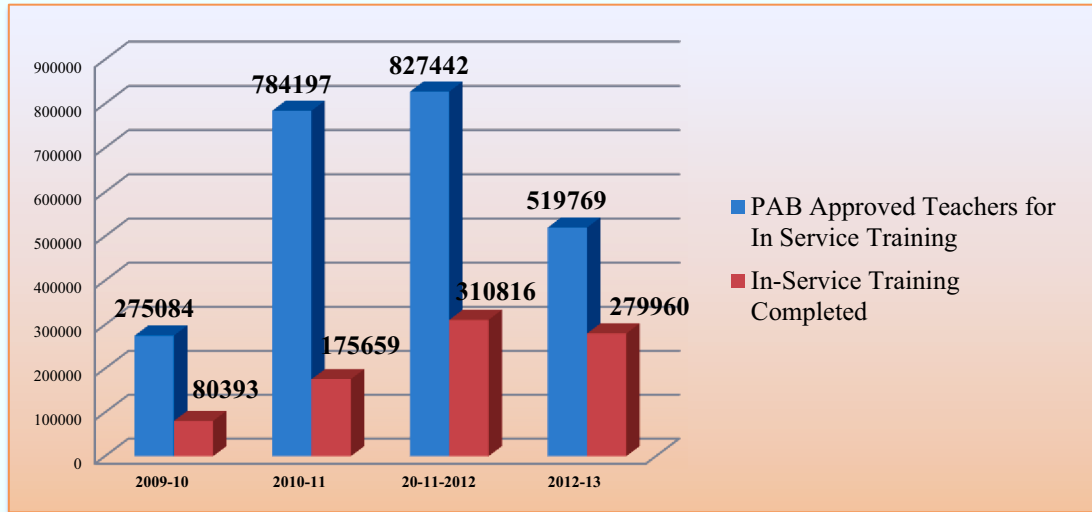


Source: UDISE 2012-13. Note: Jharkhand and West Bengal excluded due to non-availability of data

6. 2. Trends in in-service teacher training from 2009-13 show an overall lower than expected progress of 52 percent physical and 36 percent financial achievement. The mission was pleased to note high progress rates in some states. Mizoram met 100 percent of its target, Arunachal Pradesh has achieved 99 percent of its target, Chattisgarh stood at 83 percent and Maharashtra had achieved 84 percent of its physical targets. However, Chhattisgarh shows an overall physical achievement of 83 percent, but only 29 percent financial achievement in the training of teachers. Several states show discrepancy in physical and financial achievements, Andaman & Nicobar Islands (27 percent Physical, 24 percent Financial), Bihar (4 percent Physical, 3 percent Financial), Haryana (18 percent Physical, 10 percent Financial), Jharkhand (2 percent Physical, 0 percent Financial), Uttar Pradesh (17 percent Physical, 31 percent Financial).
6. 3. This discrepancy between physical and financial achievement should be eliminated through better plan preparation with disaggregated allocations for different segments of trainees each year. It will be useful to understand why different amounts have been sanctioned to states and whether some states are supplementing RMSA funds with additional funds from state governments. As the data on training covers teachers, head teachers, yoga teachers, induction and key resource persons as a combined group, it is not possible to make an inference on the physical and financial achievement on training only for teachers. Physical and financial achievement data may be synchronized to ensure that fund releases match training program scheduling. This needs two fold correction (i) timeliness of fund releases both from the central

and the state governments based on better analysis of training needs of each category of teachers (ii) ensuring that training schedules are not piled up at the end of the year but are planned in such a way as to ensure completion of targeted numbers with financial coverage ensured eliminating discrepancy in physical and financial achievements. The MHRD may advise each state to prepare a five year perspective plan based on micro planning exercises to arrive at a realistic training plan along with cost implications that have annual and five year projections. This will help the MHRD as well as the states to prepare a financing plan for the same.

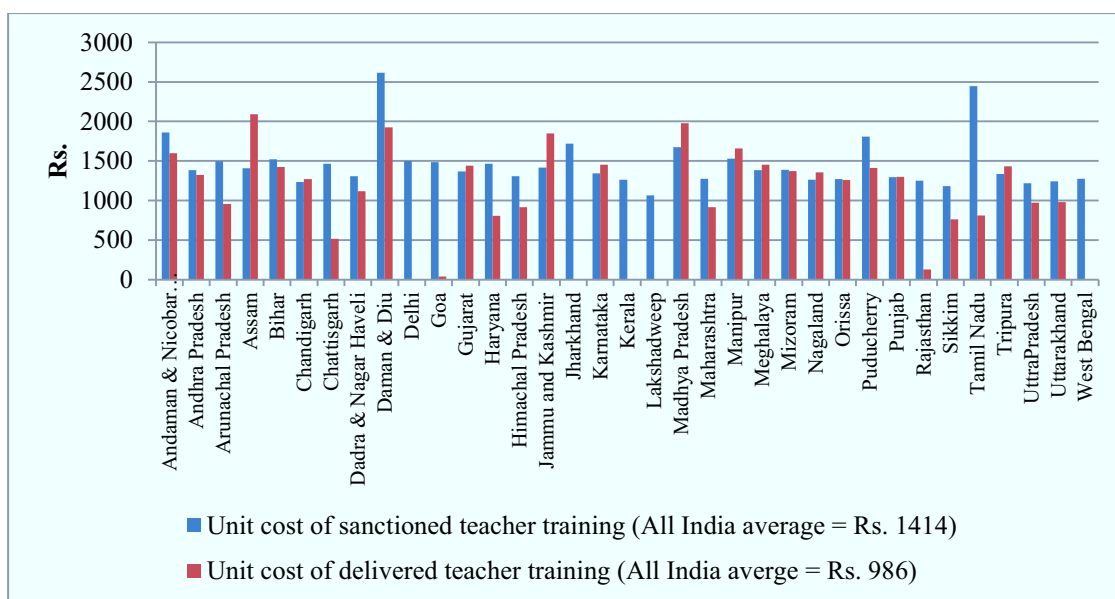
Figure 5: Training: Approved vs Achieved



Source: MHRD presentation to 2nd JRM

6. 4. RMSA has different categories of training: induction training, pre-service training, head masters’ training, training of key resource persons etc. There is a need for greater analysis at the national level of the induction and in-service training needs of different states for nuanced and realistic PAB approvals. The mission was pleased to note that there seemed to an improvement in the rationalization of teacher training needs for funds requisitioning since 2009 to 2013, which shows better planning over the years. The targets appear more realistic. In the year 2010-11, approvals were for 784197 teachers for in-service training; training was imparted to only 175659 teachers, less than 25 percent of the approved numbers (Fig 2). Induction training was implemented in only 11 states with 19.30 percent progress. Training of master trainers was undertaken in 7 states till 2013 and out of 10,871, only 4042 have been completed. Jharkhand continues to grapple with a variety of problems of lack of capacities, institutions and appropriate validity of data, reflecting extremely poor performance. The gap between the target and the achievement reduced in 2012-13, but the mission would like to emphasize the need for states to undertake decentralized micro planning exercises starting at the school level so that teacher training numbers are arrived at realistically, linked with state quality improvement plan and institutional capacities that can effectively address training requirements uniformly over the years.

Figure 6: Unit costs of training provided under RMSA, planned and actual, all years 2009-10 to 2012-13



Source: World Bank calculations based on MHRD data provided to 2nd JRM. Note: Data includes costs for induction and in-service training of headmasters, Yoga teachers, key resource persons and teachers

6. 5. States are spending much lesser money on training per teacher (2009-10 to 2012-13) than what they propose (Figure 6). As the table below indicates, the all India average of the sanctioned unit cost under teacher training is Rs. 1414, while the all India average of the delivered unit cost under teacher training is only Rs. 986. This means that on an average, the states are spending only 70 percent of the money per teacher than what they are proposing. For example, in the case of Maharashtra, a sanctioned amount of Rs. 128 per teacher has been made, while the expenditure per teacher is noted as Rs. 91. Similarly, in case of Tamil Nadu, an amount of Rs. 245 per teacher has been sanctioned, while the expenditure is noted at Rs. 81 per teacher. It will be useful to understand why different amounts have been sanctioned to states and whether some states are supplementing RMSA funds with additional funds from state governments, so that both states and MHRD can anticipate better future needs and expenditures.

School Leadership: Training of Head Teachers

6. 6. Between the years 2009-10 and 31 March 2013, an overall achievement of 55 percent in the training of head masters is seen. While it is clear that the bulk of this training happened in the recent years and states are making an improvement than previous years, the overall achievement is still very low. NUEPA through its collaboration with the National School for School Leadership in the United Kingdom is preparing a school leadership strategy aimed at building capacities of school heads and educational functionaries through support from UKREL. Initially they would start with A.P., Gujarat, H.P, Mizoram, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, Chhattisgarh and Kerala. While this is a very commendable initiative, the mission felt that there was a need for more focus and capacity building of states on training delivery mechanics like annual planning of the teacher training plans, scheduling of batches and delivery models that may include use of blended and online systems to avoid extended face time required from teachers with trainers. School leaders may be provided opportunities to organize professional learning communities of teachers in schools.
6. 7. The mission after discussion with the states recommends that association of elite management institutions may not be very relevant to the needs of secondary teacher training. The unit costs were also found to be unsustainable. It may be necessary to undertake multi sectoral collaborations, not only with institutions at the regional and state levels but also through

collaboration with non-governmental organizations, private service providers and philanthropic organizations.

Training content

6. 8. The mission notes that various states as well as national institutions have developed training content and modules on training of teachers, head masters, master trainers, key resource persons. The NCERT has developed an In-service Teacher Professional Development Programme (ITPDP) of 5 days for master trainers on Science and Mathematics. While the training is cascade model based, NCERT plans to use ICT and Edusat along with interactive radio to directly address the teachers/master trainers. The mission feels that it would be useful for NCERT to start with assessing its own NAS results at Class VIII level that should be a good base for needs assessment of training needs at the secondary level. This also applies to states that should assess NAS data for their own states and identify training needs. The mission strongly feels that there is a need to have the NCERT ITPDP training design, content and dissemination strategy reviewed by an expert group drawn from different areas and disciplines to help enrich it and cross reference it with experience other training providers. MHRD may also facilitate review of all packages prepared by the states so that the content is relevant and useful for secondary teachers, with less overburdening with irrelevant topics as was noted in training content shared by some of the states. Training needs assessment approaches need more professionalization so that the training packages are oriented towards application based teaching methodologies with special reference to content areas rather than over emphasis on theoretical knowledge and pedagogy. Training content needs to focus more substantively on content knowledge, assessment strategies and classroom management catering to the specific requirements of the adolescent student, covering the newly integrated activities especially ICT@Schools and IEDSS. A pre-test and post-test design built into training packages will help identify the impact of large scale trainings planned for different target groups.
6. 9. Three tier cascade model of training delivery is primarily being followed by most states, which is often top down. States should proactively consider a hybrid model of school based training supplemented by ICT and on-line support. Online resources such as interactive instruction materials with inbuilt monitoring mechanisms should be utilized and online MIS on teachers' management and training may be developed for continuous monitoring and tracking of status.

Teacher educators and continuous professional development of teachers

6. 10. States are struggling to meet the needs of professionally trained teacher educators to cater to the specific needs of large numbers of secondary teachers. While states have been identifying master trainers for teacher training with different parameters (Maharashtra requires 5 years in teaching in secondary schools, computer literacy, proficiency in the subject area, good communication skills etc.), different states follow their own parameters for identifying and preparing master trainers. It is important for national and state level exercises to be undertaken on identifying performance standards of two kinds: (i) competencies for teacher educators; and, (ii) standards and indicators of teacher performance. This will ensure better consonance between teacher educators and teacher performance outcomes expected. States need to designate accreditation agencies/institutions for certifying teacher educators for teacher training under RMSA. Collaborations and utilization of services of the SCERTs, NGOs, and private sector may be explored.

Institutional Support

6. 11. There is inter-state variation in access to teacher education institutions. Under the centrally sponsored scheme of Teacher Education, Colleges of Teacher Education (CTEs) and Institutes for Advanced Studies in Education (IASEs) are mandated with the responsibility of secondary

teacher education. However the potential of these institutions and spare capacity in the same have not been fully explored and utilized by RMSA. Rajasthan, AP, Karnataka, Kerala, Orissa, Tamil Nadu have all CTEs and IASEs in place- these need to be effectively involved in the in-service training programs as they already have professionals and subject experts in secondary education. States should proactively make these institutions functional with filling up of staff vacancies and other support from the program. The potential of the Regional Institutes of Education (RIEs) under the NCERT should be fully utilized as they offer immense potential as regional hubs that could provide umbrella support not only to the SCERTs but also to the institutions that may be identified (private sector and NGOs) for support on teacher education and professional development. IASEs and CTEs could link up with the RIEs for creating a large network of teacher training institutions to support RMSA. As RIEs are integrally linked to national curriculum initiatives, they form important link between the states under their jurisdiction and the NCERT.

6. 12. While Karnataka and Maharashtra have a good network of professional institutions, states with fewer number of training institutes like Assam, Madhya Pradesh, Jharkhand and Bihar face problems in professional and academic support for teacher training. Large states like Assam, Chhattisgarh, Jharkhand, MP etc. do not have fully functional DIETs in all the districts. States must explore the potential of DIETs (that are presently involved only in elementary teacher training) to provide support for teacher training under RMSA. There is a need for states to revitalize and galvanize the SCERTs and DIETs to support RMSA. There is a need for better convergence with BRCs and CRC at sub-district level so that they can provide better academic support to the teachers at the school level.
6. 13. An overarching National Resource Group to discuss issues around RMSA and its quality improvement and training needs may be established with a mandate to meet periodically and review all interventions/training design, materials and dissemination strategies for better implementation. It may also review project proposals to support RMSA implementation that will be funded out of a national component under RMSA. It may also apprise RMSA of project achievements and shortcomings. The NRG should comprise of academics, teacher education and management experts, assessment bodies, private sector representatives, NGOs etc.

Convergence at different levels for optimal utilization of resources

6. 14. The existing structure of the RMSA program needs more effective and functional coordination with the centrally sponsored schemes of teacher education program and SSA. The newly designated role of SCERT and DIETs (besides CTEs and IASEs) under the TE program includes supporting secondary teacher education. While some SCERTs (Karnataka, Andhra Pradesh and Kerala) do perform secondary level functions, in reality, these institutions are yet to become an effective and responsive support system for RMSA. There appears to be a disconnect between the three programs (TE, SSA and RMSA) that need better convergence both in functional and administrative structures for teacher training. There is also need for more information sharing at national and state levels about the opportunities for the programs to support each other effectively.

Recommendations

- *The MHRD may advise each state to prepare a five year perspective plan based on micro planning exercises to arrive at a realistic training plan along with cost implications that have annual and five year projections. This will help the MHRD as well as the states to prepare a financing plan for the same.*
- *A National Resource Group on RMSA may be constituted, with an appropriate profile of its members and the mandate. The NCERT ITPDP and potentially all states' training design, content and dissemination strategy may be reviewed by the NRG along with an expert group*

drawn from different areas and disciplines to help enrich it and cross reference it with experience other training providers.

- *A national workshop may be organized by MHRD in the current financial year where states may be invited along with the Council of Boards of Secondary Education (COBSE) and the National Council of Teacher Education (NCTE) to discuss more effective and functional coordination between the centrally sponsored schemes of RMSA, SSA and Teacher Education.*
- *MHRD and states may develop rigorous evaluations of the impact of teacher training programmes on teachers knowledge, skills and dispositions and classroom processes*

Consideration:

- *RMSA may wish to indicate to the Bureau of Teacher Education of MHRD that the Mission noted that the norms for sanctioning of teacher education institutions under the Centrally Sponsored Scheme of Teacher Education may be reviewed, given the rapid expansion of secondary education since the norms were formulated.*

Section 7: Developing a stronger evidence base for improving the RMSA Programme

7.1. There are a considerable number of studies of elementary education in India, as the SSA Programme has gained a high profile and demonstrated concrete outcomes. These studies have informed and influenced policy and programme decision-making. The situation with respect is quite different, with relatively few detailed studies of this sector. This JRM benefited from the background studies and analyses that were conducted by various agencies, including MHRD and the Development Partners. The discussions during the Mission also identified a number of issues on which deeper analysis is needed, to inform policy makers and programme administrators at national and state levels. Some of this analysis is needed for the next JRM, while other reviews need a longer gestation period. More broadly the Mission would like to see a stronger culture of evaluation for new interventions as they are introduced at the national and state level. This section describes some of the studies which the JRM has identified (further details are included in the Annexes). The Development Partners stand ready to offer technical and financial assistance in order to carry out these studies.

- Role of School Management Development Committees.
- Functioning of composite schools.
- Time on task/opportunities to learn.
- Pilot qualitative work on assessment of co-scholastic skills.
- Transitions between elementary and secondary, and between secondary and higher secondary, and transitions within the secondary cycle of education.
- Impact of in-service teacher training.
- Integration of Aided schools in RMSA.
- Planning for additional teachers to be recruited under RMSA.
- Review of civil works planning.
- Teacher recruitment policies and practices.

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INDIA
RASHTRIYA MADHYAMIK SHIKSHA
ABHIYAN (RMSA)

Second Joint Review Mission
29 July – 6 August, 2013

Aide Memoire

Annexes

List of Members
Action Taken Report (ATR)
Developing a stronger evidence base
Terms of Reference
Check List
Agenda

Mission Members:

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Shri. Subir Shukla, GOI Nominee (Core Group)
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Colin Bangay, DFID India (Core Group)
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Toby Linden, World Bank (Core Group)
Sandeepa Sahay, DFID India (Core Group)
Shabnam Sinha, World Bank (Core Group)

Action Taken Report on 1st JRM Recommendations

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
1	<p><i>Planning and Appraisal</i></p> <p>The possibility of providing an indicative planning allocation to each state at the start of the planning process should be explored by MHRD with the Ministry of Finance and the Planning Commission. In such an approach, these indicative amounts would be based on the expected budget resources that will be available. The state notional allocations should be based on objective needs. States could then plan their PAB proposals within this overall envelope.</p>	<p>This has been started from the year 2013-14 and States have been informed.</p>	<p>The Mission is very pleased to see this development – this is a significant step towards better planning – and the Mission welcomes the Ministry’s recognition that this will need to evolve over time in the light of experience.</p>
2	<p>Within each state’s approved amounts by the PAB, a minimum percentage should be determined at the national level for investment in areas other than civil works and teacher salaries.</p>	<p>A percentage of funds under recurring head is kept aside for teacher training, training of heads of schools, school grant, guidance and counseling and other quality interventions.</p>	<p>This should be tracked, as states seem to have considerable difficulty in adequately planning for and implementing training programmes.</p>
3	<p>The timetable for RMSA PABs should be brought forward, so that the first releases take place in April.</p>	<p>Time table drawn up for 2013-14 and intimated to States/UTs</p>	<p>The Mission welcomes this. MHRD noted that Cabinet approval for the revisions to the Scheme was not forthcoming until early May; delaying the PAB process. Additional delays were experienced in states’ documentation. The Mission recommends that this is monitored in further JRMs to ensure the process is starting earlier and becoming quicker.</p>
4	<p>PAB minutes more elaborately drawn up to indicate the reasons for rejection of proposal items.</p>	<p>The recommendations of the JRM are being kept in mind while drafted up the minutes.</p>	<p>The Mission was extremely pleased to see the improvements to the PAB and commends the Ministry for the same. This will provide significant future guidance for states.</p>
5	<p>There is need to clarify the remit of RMSA in</p>	<p>IEDSS has been integrated with RMSA from 2013-</p>	<p>This is a welcome development.</p>

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	<p>relation to special needs children. In a number of states visited the impression given was that catering for special needs was not part of RMSA – rather this work was undertaken by a separate centrally sponsored scheme, Integrated Education for the Disabled at Secondary School (IEDSS). One approach would be to amalgamate IEDSS within the RMSA framework. There is indeed a broader need to examine which other secondary education initiatives could profitably be brought within the RMSA Framework to promote operational synergies and effectiveness.</p> <p>Civil Works</p>	<p>14</p>	
6	<p>MHRD should commission a review of current civil works practices, including siting, design, sanitation and environmental issues, which would focus on effective utilization of spaces to improve functionality and cost effectiveness; the review should identify examples of good practice and practical solutions for the wide range of situations found in Indian states. The review should also identify a strategy to support states in making changes to their current practices.</p>	<p>➤ Till now, the MHRD has been undertaking review of civil works during the finance / procurement review meeting as well as while conducting the appraisal of States/ UTs Annual Plan. In the current year, the plan is to undertake separate dedicated review of civil works through Quarterly Review Meetings/Regional Workshops.</p> <p>➤ As far as Environmental, Sanitation, Siting etc. issues are concerned, an environmental assessment of schools (sample of 15 schools) in five states has been carried out and the Report is being finalized .Accordingly further steps will be taken up.</p>	<p>The Mission was informed further that joint workshops are planned with the SSA teams, in order to develop shared learning.</p> <p>Additional TSG staff is being recruited.</p> <p>The environmental assessment report in draft has been received and the Ministry has provided comments to the consultant. The Ministry is keen for this task to be finished soonest.</p> <p>The Mission noted that all this work should inform the Environmental Management Framework developed for the Programme.</p>
7	<p>MHRD should review several of the norms</p>	<p>RMSA, until now, was following normative unit</p>	<p>The Mission welcomed this development but urged</p>

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	related to civil works, to increase norms related to unit costs to bring them in line with current state schedules of rates and introduce flexibility with respect to the norms on room sizes.	cost based on the normative size of the rooms / components based on the Kendriya Vidyalaya Scheme of the Govt. of India. In the last financial year 2012-'13, no new approvals for civil works were given in the whole country. As far as current financial year is concerned, Cabinet Committee on Economic Affairs (CCEA) has permitted States / UTs to apply States Schedule of Rates (SSOR) or Central Public Works Department (CPWD) rates whichever is lower for civil work interventions. In the current year, proposals for civil works from the States and UTs have been received, considered and approved by the PAB on the basis of the State Schedule of rates.	the Ministry to consider applying this new policy retroactively so that the back log of civil works can be addressed more effectively.
8	RMSA norms should be revised to provide flexibility on room sizes and covered areas.	In the current year, as the States / UTs has been allowed to follow state SOR, the States / UTs have been given the flexibility to go by their State Specific Sizes based on the Bureau of Indian Standard Norms / Specifications.	The Mission believes that in some areas, such as computer labs, some standardization is needed. Moreover, the norms should be driven by pedagogical needs (computer rooms need sufficient electrical plugs; square rooms more amendable to flexible groups, etc)
9	TSG and TCF to support development of design guidelines at the National level and support states in design renewal, building from the innovative work done in SSA and DPEP.	The MHRD has planned to develop the design guidelines at National Level in consultation with National Level Institutions having expertise in the subject and States/UTs which are the main implementing agencies. While doing so it is proposed to leverage the learning's and experience of SSA and attempt to factor in the regional variations	

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
10	A review of use of maintenance and repair grants at secondary level should be an element on a broader study.	This will be done in the Quarterly Review Meeting/Workshops proposed for civil works at regional and National level.	The Mission recommends that this review feed into a larger study of the way that SMDCs operate, as discussed during the Mission.
11	Strengthen guidance on electrical, plumbing and other finishing works and enhance monitoring procedures.	<ul style="list-style-type: none"> ➤ The States/UTs have already been advised to follow the Part-8, 'Building Services', section-2, 'Electrical & Allied Installation' and Part-9, 'Plumbing Services' of National Building Code (NBC). ➤ As far as strengthening monitoring procedures are concerned, Third party monitoring of implementation of interventions sanctioned under RMSA including civil works is already under process. This will be supplemented by field visits. Further the States / UTs have also been granted higher percentage of MMER in the current financial year for putting in better implementation and monitoring mechanism. The states are being encouraged to take up concurrent monitoring of Civil works 	
12	Need to focus on the functional aspects of civil works and encourage innovations. TSG capacity needs augmentation to perform these additional functions	As far as augmentation of TSG capacity is concerned, the MHRD has already decided as well as approved more number of posts in the TSG. The Posts sanctioned for the Civil Unit of the TSG are one for Chief Consultant, one for Senior Consultant & two for Consultant. The process for filling in the vacant posts is under way.	There was some good work done under SSA which needs to be captured (and in some cases, re-discovered).
13	The TSG/ TCF should work on developing a design guideline that lists out the broad space	➤ As stated in 9 above	

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	requirements, functional requirements, design considerations, environmental considerations and cost considerations for the various civil works facilities.	<p>➤ As far as cost is concerned, the States / UTs have been given the flexibility to go by their SSOR / CPWD rates, whichever is lower.</p>	
14	A more diverse 'menu' of civil works packages could be developed and from this menu states should be encouraged to develop their own designs.	After development of Design Guidelines, menu of civil works packages will be developed.	The Mission was informed that these Guidelines will be finalized this year.
15	A more comprehensive sample monitoring framework could be developed. This could include periodic independent audits of civil work.	Will be undertaken through the Third Party Evaluation / MIs.	
16(a)	Civil works planning should be based upon a school wise verification and identification of the immediate needs in a school.	This principle is being strictly followed. Appraisals are conducted and approvals accorded strictly on the basis of infrastructural gap analysis in accordance with the UDISE.	
16(b)	The provisioning of urinals and water closets should be based on the number of children using the toilets and not on the civil works package blueprints. Bureau of Indian Standards or the National Building Code recommendations should be followed in this respect.	The principle is being already broadly followed in the current financial year & the same will be firm-ed-up in this year.	The Mission was informed that the file has been moved on this issue, with a link to the norms under National RWSS Mission.
16(c)	Toilet designs should also ensure availability of water and proper flushing arrangements. In girl's toilets, provision for disposing of sanitary napkins is necessary.	The States / UTs are being sensitized on the issue at the time of appraisal and review.	The Mission recommended that the MHRD works with the Rural Mission over a common understanding of what a functioning toilet and drinking water facility means. This will ensure UDISE is accurate.

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
16(d)	<p>Ensure that repair grants are effectively used for maintenance of schools. A school maintenance manual should be developed and distributed. This grant would need to acknowledge that large schools need a larger grant.</p>	<p>It has been decided by the MHRD to undertake review of utilization of Repair Grant in the Quarterly Review Meeting / Workshop of the Civil Works. Thereafter a Formulation of the School Maintenance Manual will be commissioned. The issue has also been discussed with the States during the National Workshop of working of SMDCs.</p>	<p>The Mission was informed that MHRD is making a study of the extent to which these funds are actually used or merely being parked at the school level.</p>
17	<p><i>Education of Satisfactory Quality</i> Engage a wide range of stakeholders in a structured dialogue about how to identify the main constraints to learning outcomes and effective strategies to overcome them. The objective of that conversation should be on how to help teachers respond to the multiple learning needs of their students, and develop state strategies which are then reflected in their RMSA proposals. Of particular importance will be to bring together the various relevant implementing agencies of the Centrally Sponsored Schemes, such as RMSA, SSA and Teacher Education, to develop a mechanism which would create inter-Mission linkages around substantive and institutional issues.</p>	<p>A workshop has been held by the TCA on “Learning Outcomes” with a number of State Representatives. More steps will be taken on this recommendation. In addition to this, the Ministry is funding the National School leadership programme, in which activities for leadership development and professional development for Schools leaders are being undertaken through NUEPA with the States.</p>	<p>The Mission has made some recommendations in the main report o learning outcomes. The Mission recommends that MHRD provides some guidance for states in time for the preparation of next year’s AWPB process begins.</p>
18	<p>The Planning and Appraisal process allow states to take future projections of student enrolment into account when planning infrastructure investment.</p>	<p>Potential enrolment is worked out for upgradation of elementary school into secondary school.</p>	
19	<p>States should be able to use funds from the RMSA Programme to pay for translation of the</p>	<p>States can utilize the funds under MMER to meet translation of documents</p>	

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	documents.		
20	2 % MMER needs to increase to allow sufficient resources for states to provide for the prescribed implementation structures and to remove perverse incentives to pursue high-cost items simply to increase MMER resources. The formula on which MMER is calculated could be finessed to incorporate a predictable recurrent cost component and smaller percentage element.	The norm for MMER has been revised such that for the country MMER can be approved upto 4% of total allocation. To ensure that smaller States/UTs get a minimum fund for setting up management structure, MMER are being approved upto 5%. The approval upto 5% was accorded to the State/ UT if the proposal of the State/UT found merit. With the indicative budget which was worked in advance and shared with the States, the criteria for MMER was distributed were worked out.	
21	The states need more clarity on the utilization of the recurrent fund releases to them, in accordance with the state's priorities.	In the review meetings with Finance Controllers of States / UTs, it has been clarified that within the approved budget, the States have the flexibility to utilise the funds available under each head according to their priorities, (recurring and non-recurring) while ensuring that funds from recurring head are not diverted to non-recurring and vice versa.	
22	The school grant need not be uniform across all schools. While states should set a minimum amount that each school would receive, states should have the flexibility to allocate the remaining resources according to enrolment in secondary education. States could, if they choose, continue to allocate the same amount to each school.	No demand from States has been received by the MHRD, This may be considered if States send a demand.	The Mission is concerned that States are not aware of this flexibility; guidance should be provided to states in this area. The Mission recommends that states should set a minimum amount for each school, but the remaining funds allocated in line with student numbers. This would be a simple way of ensuring the grant more closely matches the needs of schools.
23	Efforts are needed to make Government of India releases to states both more predictable and timely.	Fund release to States depends mainly on availability of funds with Centre. Also on the timely submission of Utilization Certificate and	The Mission recommends that a clear set of steps is established, with expectations of the length of time each step should take. This would enable delays to

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
		other documents relevant from States.	be identified more clearly and remedies addressed.
24	Consider whether committed recurrent grants could be released prior to the PABs.	It is being explored.	The Mission notes that this is currently the practice in SSA.
25	MHRD should support state-level initiatives to improve student learning outcomes.	At present, RMSA supports Remedial Teaching to 20% of the students of Class IX. States have been encouraged to come forward with initiatives in quality interventions and especially to improve student learning outcomes.	
26	MHRD to focus on learning outcomes and introduce a section on learning outcomes while providing overview and background for the next RMSA JRM.	The theme is a focus area in the 2 nd Joint Review Mission..	
27	The school annual grant should be allowed to be used for regular cleaning of toilets.	It is upto the States how they use School grant. It is flexible fund with the schools.	
	Access and Retention		
28	Report aided and unaided school data separately in UDISE	UDISE captures the aided and unaided school data separately	
29	Clarify how 'upgraded schools' consisting elementary and secondary sections are recorded – either as two schools or as one school.	All schools have a unique 11 digit school ID. Secondary and Higher Secondary Schools having Classes 1 to 8 and covered under DISE earlier, carry the same code even in UDISE. The rest of the schools are given fresh codes.	
30	All states should conduct geographical positioning system (GPS) school censuses (covering all schools, government, government aided, private recognised and private	States are being advised to go for GIS-mapping , using GPS and distance matrix for mapping access.	The Mission notes that states need support in understanding how to use the GIS data; moving beyond a simple distance measure from a habitation.

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	unrecognised) and input data on one digital school map.		
31	Support should be provided by the TSG / TSF to assist states in digitalising school mapping and integrating UDISE and GIS data.	Workshops have been conducted with States/UTs in which this have been raised and discussed. Steps will be taken on this.	
32	A state that has made strong progress in GIS present to all states at the next JRM.	This may perhaps be taken up in the next JRM.	This recommendation is carried forward.
33	Teacher education support (including student centred and content based teacher training modules) needs a larger involvement of teacher education institutions with roles and responsibilities clearly fleshed out.	<p>The NCERT has brought out teacher training modules in science and mathematics as well as in generic concerns (understanding adolescent learner, gender issues, inclusive education, etc.) for secondary stage teachers under RMSA. State Key Resource Persons in science and mathematics are being trained by the Council (NIE, RIEs, PSSCIVE and CIET) in collaboration with SCERTs and state RMSA functionaries.</p> <p>Further, in other subject areas the Council is in the process of preparing teacher training modules.</p> <p>Larger involvement of existing teacher education institution in the state for secondary stage teacher training is need of the hour.</p>	The Mission's main report addresses these issues.
34	MIS to be put in place to track and ensure that all teachers are trained and avoid any duplication	States have been requested to identify all their teachers on their roll for tracking, including for training purposes.	The Mission recommends that states are encouraged to provide teachers with a single identification number for teachers; the Adhaar scheme is one option.
35	A strategic plan with timelines for the integration and consolidation of separate schemes could be developed for the	The Schemes - ICT@ School, Inclusive Education of the Disabled at Secondary Stage (IEDSS), Construction and running of Girl's Hostel (GH)	The Mission is very pleased to see this development, and to learn from MHRD that there is an integrated budget and one implementation

Sl. No.	Key Recommendations	Present status/Action taken	Observations of 2nd JRM
	rationalization process. There is a need to examine which other secondary education initiatives could profitably be brought within the RMSA Framework to promote operational synergies and effectiveness.	and Vocationalization of Higher Secondary Education (VE) have been converged with RMSA from this year.	society which is being replicated at the state level. The Mission also notes that civil works is only being approved under RMSA.
36	2 % MMER needs to increase, to allow sufficient resources for states to provide for the prescribed implementation structures and to remove perverse incentives to pursue high-cost items simply to increase MMER resources	MMER has been approved upto 4% of total allocation for FY 2013-14	
37	States are given a firm deadline for completion of the 2011-12 audit reports. MHRD should consider not releasing further funds to those states which are not in compliance.	Audit Reports of 2011-12 have been received from all States/UTs	The Mission notes the importance of states following up the findings of the audit reports and making necessary changes. The MHRD should prepare a short report highlighting (a) any common issues across states; and (b) any states where the same findings occur in several years.
38	MHRD to develop and circulate a standard TORs for conduct of audit by the e statutory auditor	Sample TOR is given in FMP Manual. Elaborate TORs are being developed by TSG.	The Mission was informed that these TOR should be ready before the end of August.
39	Encourage use of computerized accounting software package to begin within the top ten spending RMSA states.	The States were being encouraged to take this up. In addition, the possibility of such a package is being explored.	The Mission was informed that the software being used under other Centrally Sponsored Schemes is planned for RMSA; the technical issues are being worked out.

ANNEX: Developing a stronger evidence base for improving the RMSA Programme

There are a considerable number of studies of elementary education in India, as the SSA Programme has gained a high profile and demonstrated concrete outcomes. These studies have informed and influenced policy and programme decision-making. The situation with respect is quite different, with relatively few detailed studies of this sector. This JRM benefited from the background studies and analyses that were conducted by various agencies, including MHRD and the Development Partners. The discussions during the Mission also identified a number of issues on which deeper analysis is needed, to inform policy makers and programme administrators at national and state levels. Some of this analysis is needed for the next JRM, while other reviews need a longer gestation period. More broadly the Mission would like to see a stronger culture of evaluation for new interventions as they are introduced at the national and state level. This section describes some of the studies which the JRM has identified (further details are included in the Annexes). The Development Partners stand ready to offer technical and financial assistance in order to carry out these studies.

- A. 1. Role of School Management Development Committees. SMCs play a key role in elementary education in engaging the community in schools, as well as providing a core element of the accountability framework. There is a provision for similar committees in secondary education, but relatively little is known about how they currently function. There is reason to believe they will function differently than in elementary education, given the different types of schools and the fact that, for example, children in a secondary school may come from different communities and many, many parents will not themselves have been to secondary education. It is important to understand, therefore, how SMDCs are operating currently, not least to inform the training programmes being supported through RMSA.
- A. 2. Functioning of composite schools. The Mission was struck by the prevalence of composite schools, i.e., those schools which offer both elementary (usually upper primary) and secondary education (often including higher secondary too). While elsewhere in this Aide Memoire, we note that this arrangement creates some difficulties for the collection of UDISE data, there are larger issues about how these schools operate. Do they smooth the transition for students from upper primary to secondary, resulting in higher transition rates? Are there greater curriculum and pedagogical linkages, so that students are better prepared for secondary education? How does the administration of the school function?
- A. 3. Time on task/opportunities to learn. Given RMSA's strong commitment to improved learning outcomes the mission recommends a detailed study on the 'opportunity to learn'. Opportunity to Learn is a function of: (i) available time to learn and effective school management and (ii) instructional approaches that make use of available time. An opportunity to learn study would involve school and classroom observation covering the following broad parameters: The percent of days schools is actually open (as against the officially sanctioned days); Teacher attendance rate; Student attendance rate; The percent of time during the day available for instruction; The percent of time in class students are on task; Percent of students with prescribed textbooks; Observed use of reading textbooks in the classroom; Basic numeracy and literacy ability; Class size; Teacher ratios against subject needs; School support visits. Such a study would produce useful practical information that can inform the development of improved strategies for teacher support and improved learning.
- A. 4. Pilot qualitative work on assessment of co-scholastic skills. The Mission recognises the importance of current work NCERT is doing to develop a robust Grade VIII assessment. At present the plans do not include assessment of co-scholastic skills or spoken/aural comprehension of language. The Mission agrees that for the first running of the NAS this is appropriate. However, in the longer run, adding robust measures of a broader conception of student performance is important. The Mission therefore recommends that NCERT commission a small-scale, pilot study on these other forms of assessment to provide some initial findings to feed into future assessment cycles.
- A. 5. Transitions between and within the secondary cycle of education. The institutional structure of secondary education is much more complicated than elementary education, both with respect to the management of schools (there are many more aided and unaided secondary

schools) and with respect to the secondary classes covered clubbed with other phases of education. The transition of children between and within the secondary cycle is not well-understood, so effective and well-targeted measures to improve these transitions are hard to develop. A tracer study should be commissioned which would follow a random sample from the cohort of those in Class VIII until they exit secondary education. Both qualitative and quantitative methodologies should be used in order to generate a complete picture of the student experience (and the perspective of their parents about these transitions).

- A. 6. Impact of in-service teacher training. States should be encouraged to commission rigorous evaluations of the in-service teacher training they provided; evaluations which go beyond entry-exit tests but look at whether the behaviour and practice of the teachers in the classroom has changed as a result of the training (and in line with the intended outcomes of the training). Some work has been done by NCERT in elementary education, which can serve as models as how to approach this evaluation work.
- A. 7. Aided schools. Now that aided schools are included in the RMSA Programme, it is important to understand in more detail about these schools and in particular the extent to which they differ in their needs from government schools in order that they may provide secondary education of good quality to all their students. This would also enable MHRD and the states to better-estimate future financial demand from the RMSA Programme.
- A. 8. Planning for additional teachers to be recruited under RMSA. The Mission found that states have taken different approaches to deciding how many teachers they need to recruit under RMSA; and the fact that the physical and financial achievements are poor suggests that further support is needed to help states do this better. Calculating the number of teachers and the pace at which they need to and can be recruited, however, is not a simple task. The overall number of needed teachers is driven by the number of students and their locations, the need for subject teachers, the size of schools, the number of teachers retiring, etc. The ability of states to actually recruit the teachers they need is driven by: the quantitative output of teacher training institutions (many of which are in the private sector) by subject, the quality of that output (and so the number of teachers that pass the eligibility tests states use), the salary and conditions of service paid to teachers, the length of the recruitment process, and the availability of funding. Helping states work through these issues would help the implementation of the Programme considerably.
- A. 9. Review of civil works planning. The first JRM recommended that a study of civil works planning be conducted, given the significant resources that are being invested. The way in which decisions are made about where to locate schools, the expected size, as well as the contracting and verification processes.
- A. 10. Teacher recruitment policies and practices. Building on the initial analysis done for the 2nd JRM, further study is needed of practice at the state level.

TERMS OF REFERENCES

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 a 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 universal access to secondary level education by 2017, i.e. by the end of the 12th Five Year Plan.

1.2. RMSA was launched in 2009, funded through national resources (central government + state government) and now has tied up for external funding by Development Partners (DP) – World Bank's International Development Association (IDA), United Kingdom's – Department of International Development (DFID) and European Union (EU). As part of the agreement for external aid from the DPs which came into effect in November, 2012, a monitoring mechanism by way of a Joint Review Mission (JRM) to be conducted every six months in the months of January and July each year has been set up. The January Mission undertakes States visits, while the July mission is a desk review. The field visits to the selected States/UTs implementing RMSA will be by a Joint team of nominees of both the GoI and the DPs, after which there will be discussions on the findings of the State visits followed by report writing and wrap up in which the Education Secretaries/SPDs of the States will also be participating.

1.3 The Second Joint Review Mission (JRM) of Rashtriya Madhyamik Shiksha Abhiyan, is scheduled from July 29 to August 05, 2013. This will be a desk review, to be held in Delhi and will cover some aspects of programme implementation and progress and all States will be participating in the desk review. The Mission will be led by Government of India (GoI).

2. Mission Objectives and Guiding Principles

2.1. RMSA has been under implementation since 2009-10 and is still evolving its processes and systems. In the first Joint Review Mission (JRM) held in January, 2013, the mission undertook field visits to five States to examine issues related to programme implementation, capacity at the state, district and sub-district levels. The Mission also investigated the following aspects of implementation in the States visited:

- (i) *Planning and budgeting processes/allocations (at district, state, national levels)* - Budget allocations through the AWPB process, Planning at the district and state levels, Using the Planning and Appraisal Manual, Setting priorities for funding at district, state and Centre, Using monitoring tools and the results framework

- (ii) *Civil Works* - Identification of need for a new/upgraded school, Selection of sites for upgrading/new schools, Procurement and e-procurement of civil works, Quality and supervision of works, Green' schools, environmental issues, Role of SMDCs, etc.

2.2 The guiding principle will be one of learning and sharing from the experiences so far; identify gaps and to collaboratively explore and work out options for bridging those gaps.

3. Mission Plan

3.1 The Mission would comprise of 10 members – five members nominated by Government of India and five by the Development Partners.

3.2 Four thematic discussions would be organized as part of the Mission, in which Government of India (GOI), Development Partners (DPs), State RMSA State Project Director (SPDs), National Resource Institutions and Monitoring Institutes will participate.

3.3 GoI will provide the leadership and coordination of the JRM. The organization of meetings and deliberations in Delhi for this JRM will be the responsibility of The World Bank.

4. Terms of Reference (ToR)

- **Learning outcomes** – State level initiatives to include student learning outcomes and leveraging RMSA provisions for this.
- **Teacher Management and Deployment** – how States are planning for teachers?
- **Teacher Training** – how much are States spending on teacher training, priorities for and content of teacher training?
- **UDISE data**

5. Time Frame

The JRM will take place from July 29th to August 5th, 2013.

6. Documents and Information required

Information to be provided by GoI:

- State and district wise PAB approved budget allocations, 2012-13
- Overall Programme Implementation Report of States
- FMRs pertaining to the half yearly period ending 31/3/2013
- Annual progress on agreed indicators included in the Results Framework (tentative)
- Action Taken Report on recommendation of 15th JRM.

The documents will be given to Mission members one week prior to the Mission.

CHECK LIST

The check list is a reference list of items - the progress/ status of which needs to be reported in the State report/ National aide memoire. This information will be based on the States' Reports and documents from the MHRD/TSG, NUEPA, NCERT. The State RMSA office will provide back ground information including information/ points pertaining to the check- list to the Ministry / TSG by 30th June .Some of the items may be observed by the JRM members during their interaction / discussion with the MHRD,TSG, State RMSA Functionaries, etc during the duration of the JRM.

These are not organized in any sequence of order of occurrence, but in the order the report is generally presented.

Access:

- 1) Any current assessment of un served habitations/ areas as per RMSA norms.
- 2) State 'process' for projecting enrolment while identifying school for up gradation.
- 3) Whether habitation mapping as well as school mapping exercise has been done. If yes, when and what is the outcome? Is this basis for projection empirical? Issues of technology based and /or manual mapping.
- 4) What is the status of provisions/ availability of secondary schools in the States?
- 5) Whether secondary schools have proper infrastructure – physical facilities including classrooms, toilets and drinking water facilities, computer labs, Headmaster's room, office, staff, supplies according to prescribed standards through financial support in the case of Government and Local Body (Municipal schools, Panchayat schools etc.)?
- 6) Whether there is appropriate regulatory mechanism in the case of other category schools?
- 7) Are there State infrastructural norms prescribed for (pvt. incl.) secondary schools, if so, how does it compare with RMSA?
- 8) Whether schools approved and reported as functional are functioning, quality of transaction and infrastructure provided?
- 9) Issues related to availability of electricity, connectivity, residences for staff etc.
- 10) Convergence of assets under other schemes- girls hostel, ICT,IEDSS,

Quality:

- 1) Availability of teachers according to prescribed Pupil Teacher Ratio (PTR), including subject teachers
- 2) Appointment of approved teachers
- 3) Training of teachers (whether institutionalized or not)? How are the training needs identified? Who conducts the training? Role of institutions in teacher training?
- 4) Availability and quality of teaching learning material?
- 5) Use of ICT in teaching and learning. Please comment if there is any views of teaching aids.
- 6) Availability of teachers support programme and capacity building programme (whether institutionalized or not)?
- 7) Comment on classroom practices. How is CCE being carried out in classrooms? Awareness of the teachers?

- 8) Reviewing/ revising curriculum to meet National Curriculum Framework (NCF), 2005 norms. What is the status? Which are the organizations involved? How are the text-books revised in the State?
- 9) Whether the State has any learning assessment programme?
- 10) Comment on availability of library and library hour in the time table.
- 11) Comment on availability on science and math lab and space in the time table
- 12) Has the State initiated any learning enhancement programme? How is it designed? Who is involved? Any help from NGO? Has any evaluation at the State level been done?
- 13) Other quality interventions by the State.

Equity:

- 1) Comment on the admission/ enrolment procedures for children of the weaker section of the society, the economically backward section, girls, SCs, STs, OBC, disabled children etc
- 2) Comment on the special policies and programmes, plans and initiatives for children from the weaker sections of society, the economically backward section, girls, SCs, STs, OBC, disabled children etc. Mention if there are any incentive like free text books, free uniforms and other facilities.
- 3) Special problems, if any, of all or any of the above mentioned categories and efforts to reduce them.
- 4) Comment on any initiative/ effort to provide special training to teachers, head teachers, administrator's staff, to ensure gender and social sensitivity.
- 5) Any steps to ensure gender sensitive approach in the class?
- 6) Comment if there is any monitoring mechanism in place on gender issue, social discrimination issue.

UDISE data:

- 1) Details on the State UDISE management system
- 2) Describe the staff assigned this responsibility and the procedures used to distribute DCF, filling of DCF, compilation, validation and finally sending of UDISE data to NUEPA
- 3) Describe the responsibilities and duties of officials at various levels with regard to UDISE
- 4) Whether there are dedicated officials/staff for UDISE for SSA and RMSA and mention the level (school/ district/ Block/ Division/ State)
- 5) Whether the officials/ staff have been oriented / trained?
- 6) Whether the officials/ Staff have been oriented to the changes in the DCF every year?
- 7) Whether a calendar for these activities have been made and ensured that all concerned are aware of this Calendar along with their responsibilities?
- 8) Whether stationery/computers/equipments are made available for this work?
- 9) Please state the number and level of review / monitoring meetings held for this in a year and describe the format for these meetings
- 10) Please mention the number and level of capacity building workshops and trainings for these activities and describe the format for these trainings
- 11) What are the problems faced in terms of
 - a. Staff
 - b. Stationery
 - c. Computers / Software
 - d. Time
 - e. Funds
 - f. Lack of understanding of the DCF or other similar issues
 - g. Correctness of the data
 - h. What were the data discrepancies found? How were the data discrepancies addressed?
 - i. Others—Please describe in detail

- 12) Whether officials/staff/ functionaries responsible for Planning and Monitoring are competent to use the data for planning?
- 13) Whether Planning and Monitoring officials have been trained / oriented to use this data for their activities in Planning and Monitoring
- 14) How was the data utilized for preparation of AWP&B.?
- 15) Whether officials of other wings of the Education Department are aware and oriented with regard to UDISE?
- 16) Any other information state thinks relevant to inform.

Teacher Management and Deployment-how States are planning for teachers?

- 1) Describe the teacher management system in the State at
 - (a) State level
 - (b) District level
 - (c) School level
 - (d) If there is any other level, please elaborate.
- 2) How many types of teacher cadres are there in the State? Elaborate.
- 3) How is the posting of teachers done – at school level, at district level, at state level?
- 4) Can the teacher be transferred from school to school, district to district?
- 5) How is a teacher recruited? Elaborate.
- 6) What is the necessary teacher qualification? Elaborate
- 7) How is a teacher deployed in schools? From which class to which class does a teacher teach?
- 8) How many hours of teaching does a teacher do in a week/ month?
- 9) What is the pay scale of teachers?
- 10) Headmasters/ Principals
- 11) Vice-Principals
- 12) Lecturers
- 13) Assistant Teachers
- 14) Any other category – Elaborate
- 15) Does the State have contract teachers? Please describe in detail the various categories of contract teachers or para-teachers and what is the payment/ remuneration paid to them? What subjects/ classes do they teach?
- 16) Are contract teachers appointed/ posted in place of regular teachers or in addition to regular teachers? Elaborate
- 17) Are teachers sanctioned under RMSA regular teachers or contract teachers? Please elaborate.
- 18) Any other information State thinks relevant to inform

Teacher Training – (how much are States spending on teacher training, priorities for and content of teacher training)

- 1) What is the percentage of trained teachers in the secondary sector in the State? (B.Ed along with subject qualification. If any other qualification like D.Ed, Certificate, etc is also taken into consideration then please elaborate)
- 2) What is the number and capacity of teacher training institutions in the State? How are they funded?
- 3) Is there a system of induction training for teachers in secondary schools in the State? Please elaborate
- 4) What is the regularity of in-service training of secondary school teachers in the State? Please elaborate
- 5) Is in-service training compulsory for all teachers? What is the frequency – annual, once in two years, once in three years, need-based? Elaborate
- 6) If the State is pursuing in-service teachers training through Institutes/ other agencies, is the training package designed after a need based assessment in consultation with Department/ schools/ Principals/ teachers themselves? Elaborate

- 7) How have the training packages under RMSA teacher training programmes been designed? Please elaborate
- 8) What is the duration of training – days/ hours?
- 9) How is the State/ Institutions/ agency sourcing resource persons/ master trainers?
- 10) Does the State have a pool of resource persons/ master trainers in all subject areas?
- 11) How is the pool of resource persons/ master trainers selected?
- 12) Are the objectives/ outcomes of the particular in-service training programme defined and what is the achievement?
- 13) Has there been an assessment of the impact of in-service teacher training in improvement in classroom practices, learning outcomes, etc?
- 14) Does the State use ICT technology in teacher training? Please elaborate.
- 15) Any other information State thinks relevant to inform

Learning outcomes:

- 1) Please describe and elaborate any state level initiatives to improve student learning outcomes and leveraging RMSA provisions for this
- 2) Any baseline conducted by the States/ any other agency in Secondary Schools? Please elaborate.
- 3) Any other relevant information.

Programme Schedule

Date	Day No.	Venue	Time	Activity	Participants	Responsibility	
29 th July (Mon)	Day 1	Amaltas, India Habitat Centre, Lodi Road	10.00-11.30 am	a. Overview of RMSA Activities: Key developments and initiatives.	MHRD	MHRD	
			11.30-12.30 pm	b. Overview of quality initiatives: by NCERT and discussion	TSG		
			12.30-1.30 pm	c. Overview on UDISE: by NUEPA and discussion	JRM members NCERT NUEPA NIOS		
			1.30-2.30 pm	Lunch			
			2.30-5.30 pm	d. Review of the ATR on the 1 st JRM	MHRD, JRM Members, NUEPA and NCERT	Mission Leader	
				e. Mission work including analysis of documents by Mission team	Mission members		
30 th July (Tue)	Day 2	Magnolia, India Habitat Centre, Lodi Road	10.00 am-5.30 pm	Thematic Discussion on UDISE a. Presentation by NUEPA b. Presentation by 4 States on use of UDISE for plan preparation and analysis c. Use of UDISE for during appraisal – MHRD/ TSG Interaction of mission members	JRM members MHRD States representatives from 4 States NUEPA TSG	MHRD	
31 st July (Wed)	Day 3	Magnolia, India Habitat Centre, Lodi Road	10.00 am-5.30 pm	Thematic Discussion on Learning Outcomes a. Presentation by NCERT b. Presentation by TCA(DFID-TCA) c. Presentation by 6 States Interaction of mission members	JRM members MHRD States representatives from 6 States NCERT TSG	MHRD	
1 st August (Thurs)	Day 4	Magnolia, India Habitat Centre, Lodi Road	9:30 am-5.30 pm	Thematic Discussion on Teacher Management and Deployment a. Presentation by TSG/NUEPA b. Presentation by TSG c. Presentation by 4 States	JRM members MHRD States representatives from 4 States NCERT	MHRD/ WB	

Date	Day No.	Venue	Time	Activity	Participants	Responsibility
2 nd August (Fri)	Day 5	Magnolia, India Habitat Centre, Lodi Road	9:30 am–5.30 pm	Interaction of mission members Teacher Management and use of RMSA resources for teachers and teacher training: Presentation by World Bank	NUEPA TSG	
				Thematic Discussion on Teacher Training and Spending on Teacher Training d. Presentation by NCERT on the Training package developed by NCERT and its dissemination to States e. Presentation by 4 States f. Presentation by NUEPA on School Leadership Programme Interaction of mission members	JRM members MHRD States representatives from 4 States NCERT TSG NUEPA	MHRD
3 rd August – 5 th August (Sat – Mon)	Day 6-8	Willow, India Habitat Centre, Lodi Road		Writing of Report/Aide-Memoire	JRM members MHRD	Mission Leader
5 th August (Mon)	Day 8		5:00 PM	Pre Wrap-up Meeting	JRM members MHRD	Mission Leader
6 th August, (Tues)	Day 9	The Lalit Hotel Barakhamba Avenue, Connaught Place, New Delhi New Delhi	1:00 –2:00 pm Lunch 2:00 pm onwards	Wrap-up Meeting / Report Presentation followed by Lunch	JRM members MHRD States representatives from 35 States NCERT NUEPA NIOS TSG	MHRD