# Accelerating RMSA: Future Challenges and an Agenda for Policy Options<sup>1</sup>

## ZERO DRAFT

## **Status**

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is an initiative of the Government of India in partnership with State governments which seeks to universalise enrolment in grades 9 and 10. It supports the upgradation of existing schools, the building of new schools to reach under-served areas, investments in quality improvement, and contributions to recurrent costs. The goal is to universalise entry into secondary school by the end of 2017 and achieve universal completion by 2020<sup>2</sup>. Achievement of this goal would and lessen the gap between India and other BRIC countries where universal access to secondary school has been a reality for two decades. It should increase international competitiveness as a result of investment in human capital. It should also contribute to social justice and the extension of the Right to Education to the age of 16 in line with almost all middle-income countries. The challenge for RMSA is to identify ways to accelerate progress that are financially sustainable, demographically realistic, democratically accessible, and which lead to expanded capabilities indicated by higher educational attainment.

India's progress in improving access to secondary education has fallen behind the expectations of the 11<sup>th</sup> Five Year Plan, which launched RMSA in 2007. Gross enrolment rates at secondary have only reached 71%. Currently no more than 60% of all Indian children complete secondary school successfully and net enrolment rates are little more than 40%, and can be much lower. Many of those completing secondary school fail to acquire Board qualifications at a level that indicates mastery of the national curriculum. Those from scheduled tribes and castes and from other educationally marginalised groups are especially disadvantaged. Girls' enrolments lag behind those of boys in low enrolment states, but are often higher than boys where enrolment rates are high.

These levels of participation are substantially lower than in East Asia (90%) and Latin America (103%), and in the BRIC countries with which India is sometimes compared (Global Monitoring Report 2012)<sup>3</sup>. China in particular has had near universal levels of enrolment in lower secondary schools since 2000 and a majority completing upper secondary in all but the least developed parts of the country<sup>4</sup>. Most OECD countries have had universal access to secondary schooling for over 50 years.

<sup>&</sup>lt;sup>1</sup> This is a draft of a policy brief prepared by Keith M Lewin, Guarav Siddhu and Shashi Jha for the RMSA TCA programme.

<sup>&</sup>lt;sup>2</sup> http://mhrd.gov.in/rmsa

<sup>&</sup>lt;sup>3</sup> Some increase will have taken place since 2012 but further growth is increasingly constrained by drop out before grade 8. The secondary completion rate cannot be higher thena the grade 8 completion rate.

<sup>&</sup>lt;sup>4</sup> Lewin 2011

# **Status**

About 31.5 million children are enrolled in grade 1 across India as shown by Figure 1. This total includes many over-aged and some under-aged children. By grade 5 the total number enrolled is similar to the number of 10 years olds in the population (indicated by the dotted line). From grade 6 upwards, there are fewer children enrolled than there are in the relevant age group, and by grade 9, after the transition to secondary school, enrolments have fallen to about 19.7 million. Over the last ten years enrolments have grown at every grade level. However, drop out has not fallen rapidly and the numbers surviving to grade 8 are becoming a constraint on growth.



Figure 1. Enrolment by grade 2004-2013- All India

Figure 1 is highly aggregated and patterns differ greatly between States, districts and blocks and social groups (i.e. Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Castes (OBC), those with disability, etc.). Participation in secondary school is highly unequal. Only 11% of children in the lowest quintile of household expenditure are likely to reach secondary school whilst almost all of those in the richest quintile complete grade 10. The average number of years of schooling received by all children varies by more than 2:1 between states. Children who are two or more years over-age make up more than 30% of children enrolled in grade 5, and only 30% of 14 year old children are in the correct grade for their age. Boys entering school at age of 10 have one eighth of the chance of attending secondary schools of those entering at the age of 6, and over age girls only one sixteenth the chance.

# **Key Issues**

The first issues for RMSA that limits achievement of its targets is that the number of children reaching and successfully graduating from grade 8 may remain insufficient to provide universal access to grade 9 in States with low secondary enrolments. Secondary schools can only expand as fast as the supply of qualified and capable grade 8 students who are willing and able to remain in school and complete grade 10. Though survival rates to grade 8 are about 75% on average, in low enrolment States far from RMSA targets, survival rates to grade 8 are still not much more than 60%. High rates of growth in secondary school places (above say 10% per annum) will, sooner or later, result in a shortage of qualified applicants. Low rates of

expansion will mean that the targets for GER=100% for secondary will not be met in the existing time scale and will need to be adjusted.

The second set of issues concerns demographic transition and migration. India's fertility rates is declining. The population of six year olds is already in decline in most States foreshadowing shrinkage in the numbers of secondary age children. Figure 2 shows the long-term projections for school age children. Alongside demographic transition urban migration is progressing rapidly and is changing where secondary age children live. Where rates of migration are 7% a year then numbers of children seeking school places will double every ten years. There are risks that school location decisions based on current population distributions will be rapidly out dated and result in over capacity in some places and shortages of places in others.

The general implications are clear that overall demand for secondary school places is set to grow in the short term, to provide opportunities for those currently denied a place in grade 9. After a period of growth up to about 2020, which will vary greatly between low and high enrolment States, demand will fall. It will therefore be important to anticipate demographic transition and patterns of migration and not over-build capacity based on peak demand that will last for a limited period of time.



The third issue is that additional demand for secondary education will come from marginalised groups not previously able to enrol. These groups disproportionately include children from low income households, those from rural areas and from urban slums, those from scheduled tribes and castes and other backward castes, and, in some states, girls. These different groups have systematically different characteristics to those children who currently attend secondary school and will be from poorer households with much lower cultural capital and levels of capability. Costs will also be a constraint on attendance for these new entrants. Secondary school costs to households may be more than four times those for enrolment at local primary schools depending on location and school type. One source of increased costs may result from increases in average distances to travel to secondary school. Safety and security issues are also associated with distance and are problematic in some states, especially for adolescent girls and will affect new entrants.

The fourth issue is that the current norms and standards for school establishment and location are resulting in larger numbers of small and very small schools. It is already the case that 50% of all secondary schools in some states have fewer than 100 students in grades 9 and 10. As shown in figure 3, across India about 66% of secondary schools had fewer than 150 children and 23% less than 50 children in 2012-13. In terms of enrolment share, only 3.6% students attended the smallest schools with less than 50 enrolled. The cost per student in these schools may be as much as four times greater than for schools with more than 300 students. It may also be the case that academic performance in small schools is less as a result of the difficulties of providing qualified staff for all subjects and adequate facilities.



Figure 3. Distribution of secondary schools by enrolment size categories and enrolment share

The fifth issue is that the distribution of teachers between schools is very uneven. Pupil Teacher Ratios (PTRs) within the same district can vary from below 10 to above 100. In some states less than 14% of schools have teachers qualified in all four of the main subject areas despite very low PTRs and high teacher per class ratios. Expanded secondary schooling requires additional teachers covering all major subjects and electives, and much more efficient deployment of existing teachers, especially where current PTRs are well over the RMSA norm of 30.

The sixth issue is that financing universal secondary education with current costs per student could require more than 2% of State GDP (SDGP) where costs per student are high. This level is financially unsustainable without a disproportionate allocation of the State budget to the education sector. In contrast some States spend less than 0.75% on secondary schools which suggests they are underinvesting. Planning should profile investment to lead to systems that can be financed at levels that are sustainable and which are not likely to be more than about 1% of SGDP.

The last issue is that growth in participation in secondary school enrolments is likely to be inequitable. Children from richer SC and ST and OBC households may increase their chances of completing secondary school at the expense of those in the same groups from lower income levels. If academic achievement alone is used to filter and select children into different secondary schools this may replicate and reproduce inequality in ways that are not transparent.

## **Key recommendations**

Analysis of national and state level data and preliminary fieldwork leads to the provisional identification of policy options. These need refinement, a more comprehensive evidence base, and road testing and adaptation in the context of low enrolment districts and States. These policy options relate to each set of issues identified in the main text.

#### Flows

RMSA should only support the expansion of secondary school places at rates that do not result in providing more places than the number of grade 8 students willing and able to transition to grade 9. Expansion should also be managed at rates which allow adequate numbers of teachers to be employed and class sizes to be limited to 40 students to maintain quality. Enrolment projection modelling can identify the ceilings to growth that arise from the flow of grade 8 students. These should be applied at State and district level. The results should be reflected in targets for progress towards GER 100% at secondary level that recognise starting points and challenging, but not impossible, rates of growth.

Efforts must be sustained to reduce drop out and increase the flow of students through elementary school to grade 8 and enhance levels of achievement and readiness for secondary school. The success of RMSA depends on not losing momentum to complete the tasks of SSA in ensuring all children graduate successfully from grade 8.

#### Demography

Policy and decisions on resource allocations for RMSA should recognise and plan for the consequences of demographic transition and likely patterns of migration that will change the number and location of secondary age children over the next two decades. A period of expansion will be followed by a period of falling rolls in many areas. As India urbanises policy on school location will have to make provision for rapid growth in enrolments in receiving areas and shrinkage in enrolments in sending areas.

#### **New Entrants**

New entrants to secondary schooling will have different qualities to those currently enrolled. Curriculum reform and pedagogic innovation will be needed to meet new needs and capabilities of those enrolled. Without this failure rates and drop out may increase.

New entrants will be mostly from poorer households. Because of this attendance must be fee-free and direct costs must be minimised for households with the lowest range of income. Those at or below the poverty line are likely to need cash transfers to support the direct and opportunity costs of secondary school attendance, and necessary travel costs, and should not contract debt to pay school costs.

Costs to households will place constraints on the extent to which private for profit providers can contribute to expanded access to secondary schooling since most households below the second quintile will find private schools unaffordable.

#### School Size

Small secondary schools are likely to be very expensive to operate and limited in the extent to which they can provide fully trained teachers in all subjects and adequate facilities. It is unlikely that a single set of norms on school size and staffing can address the specificities of many different contexts within and between States. New guidelines are needed that encourage increases in average school size, better distribution of size around the average, and location of schools where needs are greatest. School upgradation should be favoured over new school building unless new schools are needed to un-served communities. Trade-offs are needed

between size, travel distances, time of travel, costs, and security. Incentives are needed to increase efficiency in locating schools to maximise the additional access provided by RMSA investments.

#### Teachers

The number of new teachers needed to staff all schools at agreed norms has to reflect the realities within States. New teachers are needed to meet new demand and reduce the backlog needed to achieve PTR 30:1 in some high PTR States. Where PTRs are low it may be possible to increase them through strategies to merge small schools, and by making use of multisubject and multi-grade teachers within a planned system of reforms to improve the effectiveness and reduce the costs of small schools. Policy is needed on an efficient strategy to train, appoint and deploy new teachers in efficient ways which ensure all schools have trained teachers in major subjects. It is important to project teacher demand in different States and match it to needs to increase enrolment rates in the short term and anticipate medium term demographic changes.

#### Finance

States allocate different proportions of their budgets to secondary education. Where much more than 1% of State GDP is allocated it may be that costs are too high. Conversely much less than 1% of SDGP suggests there may be under investment. If costs per student are relatively high universal access will prove unaffordable. If costs per student are too low quality may be compromised. Financial analysis is needed to diagnose need and track expenditure by State and at lower levels.

RMSA will not achieve its goals by 2017. Continuity and sustainable financing for expanded access to secondary schools is needed through to 2022 and beyond otherwise to gains made under the 12<sup>th</sup> Plan may be put at risk.

### Equity

RMSA should monitor who benefits from expanded access and develop strategies to ensure that the most marginalised are reached. Pro-poor policy is needed to encourage sustained improvements in access to secondary schools within the most excluded groups. Local solutions are needed to ensure equality of opportunity in secondary education is a reality and that changing patterns of provision and access are publicly monitored to provide progressive public financing which supports participation of those with least resources. States must remain guarantors of a right to access to secondary school and determine how this translates into programmes of investment in buildings and staff, and subsidies and support to poorer households.

In summary it is essential that planning of RMSA for education infrastructure, staffing and financing should pay full attention to the issues that link access, equity, efficiency and effectiveness to the flow of children through the school system. Planning must reconcile high aspirations with realistic goals and allocate resources in ways which reflect demography, constraints on growth arising from the flow of children through to grade 8, efficient teacher deployment, curricula and pedagogies relevant to new learners, and needs to tailor expansion of opportunity under RMSA to promote propoor and more equitable access to quality secondary schooling. National policy should facilitate State policy and investment within a framework that allows common goals to be translated into more local objectives, targets, and indicators that reflect specificities of context.