

## Secondary Education: Challenges and Options

### Part 3: Efficient use of resources to expand secondary provision

Universal access to secondary education in India can only be achieved if resources are used effectively. This policy brief summarises elements of a study that projects future expansion of secondary education. It is the third of three briefings that use this study to identify how the goals of RMSA can be achieved, and is an interim document based on modelling and not on substantial secondary analysis, empirical work and household surveys.

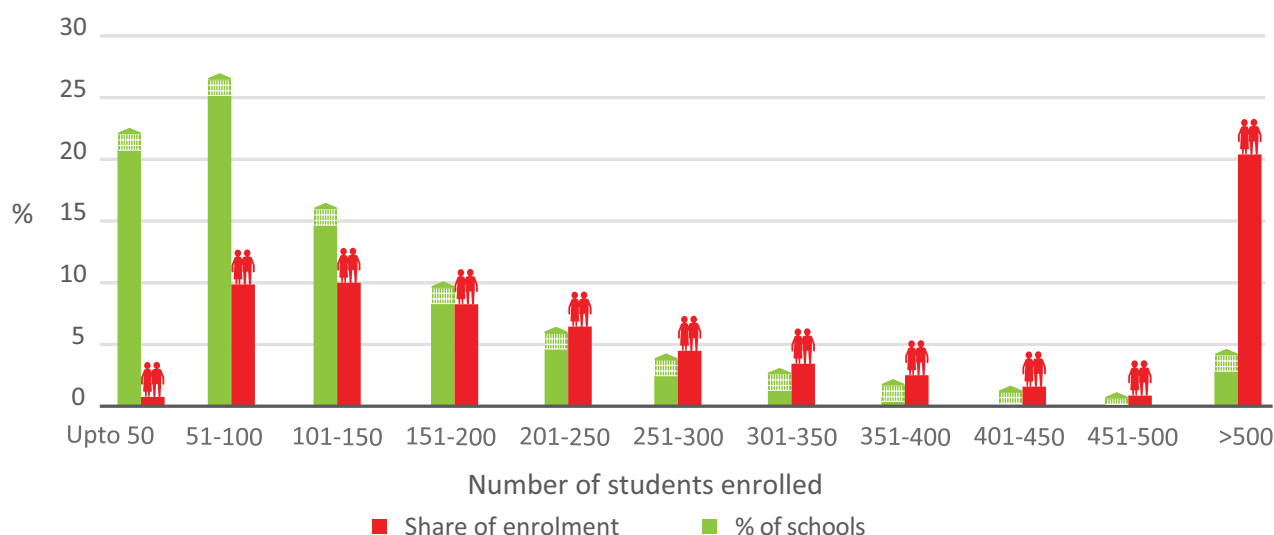
The growth in secondary provision is leading to increasing numbers of small schools, which are more expensive per pupil and often limited in their resources. Teacher distributions are also uneven across India, and there is a lack of suitably qualified teachers. Measures needed to address school size and teacher distribution include new guidelines and incentives to increase efficiency and the merging of small schools. State education budgets should also be addressed with the target of spending 0.75-1% of state GDP on secondary education.

Growth in participation in secondary education has implications for resource requirements. Achieving the fastest sustainable rates of growth, discussed in Part 1 of this series, will require efficient use of teachers and classrooms. In states with surplus teachers, a large number of teachers will have to be redeployed and in states with fewer teachers, large number of teachers will have to be employed. The principal issues that need to be addressed are:

#### RMSA norms are leading to inefficient small schools

The current norms for school establishment and location are resulting in growing numbers of expensive small schools. Across India about two in three secondary schools have fewer than 150 children and nearly one in four has fewer than 50 children, yet these account for less than 4% of students (see Figure 1). The cost per student in these schools may be four times greater than for schools with more than 300 students. These schools are often limited in the extent to which they can provide adequate facilities and trained teachers in all subjects. In states with many small schools, RMSA provisioning norms relating to teachers, classrooms and laboratories etc will result in large under-used capacities; the resources could generate more capacity elsewhere.

Figure 1: Distribution of secondary schools by enrolment size and enrolment share



## Teacher distribution is uneven and there is a lack of qualified teachers

The distribution of teachers between schools is uneven. Some districts have schools with pupil-teacher ratios (PTRs) below 10:1 and other schools with PTRs above 100:1. 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-class ratios. Expanded secondary provision requires additional teachers covering all major subjects and electives and more efficient deployment of existing teachers, particularly where current PTRs are well over the RMSA norm of 30.

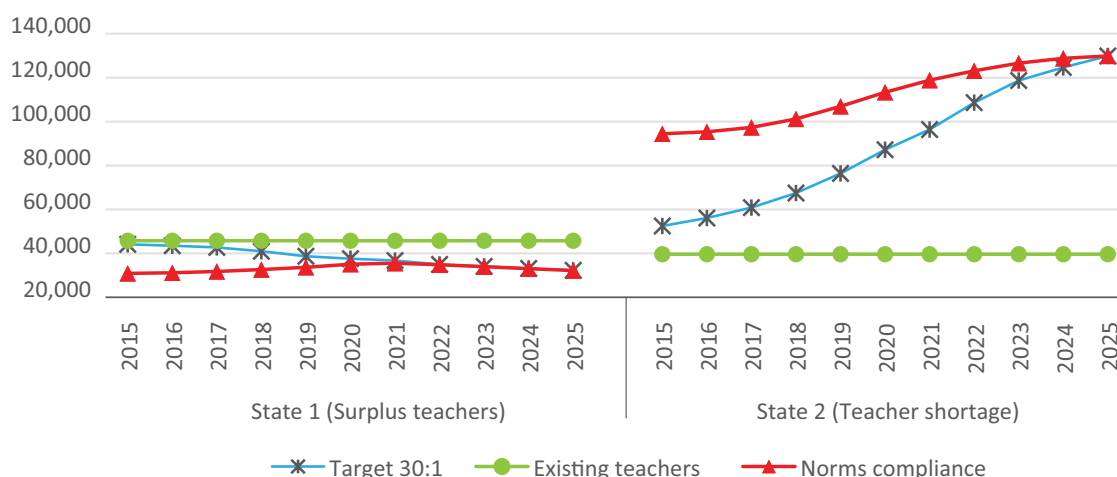
## State education budgets need to be addressed

Financing universal secondary education with current costs per student could require more than 2% of State GDP (SGDP) in areas where costs per student are high. This represents a disproportionate and unsustainable allocation of state budgets to education. In contrast, some states spend less than 0.75% on secondary schools, which suggests they are under-investing.

Several measures are needed to ensure resources are used appropriately to support expansion of secondary provision:

- It is unlikely that a single set of norms on school size and staffing can address the many different contexts within and between states, so new guidelines are needed to encourage increases in average school size, better distribution of size, and the locating of schools where needs are greatest. Upgrading of schools should be favoured over new schools, unless new schools are needed to reach unserved communities. Trade-offs should be reached between size, travel distances and time, costs and security. Incentives are needed to increase efficiency in locating schools to maximise access.
- Each state will need a different approach to make its use of teachers more efficient. In some states, new teachers are needed to meet growing demand and reduce the backlog to achieve PTRs of 30:1. Where PTRs are low it may be possible to increase them by merging small schools and by making use of multi-subject and multi-grade teachers within reforms to improve the effectiveness and reduce the costs of small schools. This employment or redeployment of teachers to meet RMSA norms will need to be done gradually, as shown in Figure 2. An efficient strategy is needed to train, appoint and deploy new teachers to ensure all schools have trained teachers in major subjects. It is important to project teacher demand in different states and match this to needs to increase enrolment rates in the short term, while anticipating medium term demographic changes (see Part 1), with plans to reduce contract teachers as demand falls.

**Figure 2: Teacher requirement in two states: surplus teachers vs teacher shortage**



- Planning should profile investment to lead to education systems that can be financed at sustainable levels; this is likely to require not more than 0.75-1% of SGDP. Where much more than this is allocated it may be that costs are too high and universal access will prove unaffordable. Conversely much less than 0.75% of SGDP suggests there may be under-investment and quality may be compromised. Financial analysis can diagnose need and track expenditure by state and at lower levels.