



**Consortium for Research on
Educational Access,
Transitions and Equity**

**Secondary Education in India:
Development Policies, Programmes and Challenges**

K. Biswal

**CREATE PATHWAYS TO ACCESS
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**National University of Educational
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Educational Access, Transitions & Equity

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Contents

Preface.....	vii
Summary.....	viii
1. The Context – A Manifesto for Secondary Education.....	1
2. Growth Trends and Current Status	5
3. Development Policy.....	16
4. Current Reform Agenda and Development Interventions	19
5. Development Challenges and the Way Forward	22
References.....	29
Appendix 1.....	34

List of Tables

Table 1: Key Demographic and Economic Development Indicators in Select Countries.....	36
Table 2: Key School Education Development Indicators in Select Countries	37
Table 3: Key School Education Development Indicators in Select Countries	38
Table 4: Physical Access to Secondary and Higher Secondary Schooling Provisions, 2002 (NCERT, 2008).....	39
Table 5: Grouping of States/Union Territories According to the Level of Physical Access to Secondary and Higher Secondary Schooling Provisions, 2002 (NCERT, 2008).....	40
Table 6: Relevant Secondary School Age Projected Child Population and Availability of Schooling Provisions in States and Union Territories, 2007	41
Table 7: GER Trends at Secondary and Higher Secondary Levels, 2004/05 to 2007/08.....	42
Table 8: Linear Growth Trends of GER at Secondary Level in the Coming Years if the Present Trend (from 2004/05 to 2007/08) Continues	43
Table 9: Linear Growth Trends of GER at Higher Secondary Level in the Coming Years if the Present Trend (from 2004/05 to 2007/08) Continues	44
Table 10: Categorisation of States and UTs according to Growth Trends in Grade VIII Enrolment, 2001-2004	45

List of Figures

Figure 1: Growth of Primary, Middle and Secondary Level Institutions in India since 1950/51 (in '000)	7
Figure 2: Physical Access to Secondary and Higher Secondary Schooling Provisions in Selected States, 2002	9
Figure 3: Gross Attendance Ratios (GAR) at Various Stages of School Education in 1995/96 (NSS 52 nd Round) and 2007/08 (NSS 64 th Round).....	13
Figure 4: Percentage Distribution by Level of Last Enrolment of Persons aged 5-29 Enrolled in the Past but Currently not Attending (rural+ urban), India (NSS 64 th Round).....	13
Figure 5: Trends in Public Expenditure on Education in India, 1950/51 to 2008/09	14
Figure 6: Growth of Enrolment in Grades VIII, IX and X in India (in millions)	24
Figure 7: Ratio of Grade IX Enrolment to VIII and Grade X to IX in India.....	25
Figure 8: Education System in India.....	34
Figure 9: Educational pattern in states and UTs	35

Acronyms

CABE	Central Advisory Board of Education
CREATE	Consortium for Research on Educational Access, Transitions and Equity
EDUSAT	Education Satellite
EFA	Education for All
EFADI	Education for All Development Index
GAR	Gross Attendance Rate
GER	Gross Enrolment Rate
GoI	Government of India
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICT	Information and Communications Technology
IFE	International Forum for Education 2020 Institute
MDG	Millennium Development Goal
MHRD	Ministry of Human Resource Development
MPCE	Monthly Per Capita Expenditure
NAR	Net Attendance Rate
NCERT	National Council of Educational Research and Training
NER	Net Enrolment Ratio
NFHS	National Family Health Survey
NIEPA	National Institute of Educational Planning and Administration
NPE	National Policy on Education
NSS	National Sample Survey
NSSO	National Sample Survey Organisation
NUEPA	National University of Educational Planning and Administration
POA	Programme of Action
PPP	Public-Private Partnership
PRI	Panchayati Raj Institutions (Local Government Institutions)
PTA	Parent-Teacher Association
RMSA	Rashtriya Madhyamik Shiksha Abhiyan (Programme for Universalisation of Secondary Education)
SC	Scheduled Caste
SEDI	Secondary Education Development Index
SEMIS	Secondary Education Management Information System
SMDC	School Management and Development Committee
SSA	Sarva Shiksha Abhiyan (Education for All Programme)

SSE	Statistics on School Education
SES	Selected Educational Statistics
ST	Scheduled Tribe
TLM	Teaching-Learning Material
TPR	Teacher-Pupil Ratio
UEE	Universal Elementary Education
ULB	Urban Local Body
UN	United Nations
UNDP HDR	United Nations Development Programme Human Development Report
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UPS	Upper Primary School
USE	Universalisation of Secondary Education
UT	Union Territory
VEC	Village Education Committee

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Preface

This paper makes a perceptive contribution to work within CREATE on changing patterns of access to education and to its concerns for transition to secondary schooling. It complements other research monographs, and work for the World Bank (Lewin, 2008a) that relates to the development of secondary schooling. This work grows from a collaboration to support the development of Rashtriya Madhyamik Shiksha Abhiyan, the national programme to promote the universalisation of access to secondary education. India lags far behind the other BRICs (Brazil, Russia, and China) in providing access to secondary schooling to its population. Fewer than half of all children succeed in reaching Grade IX especially in the northern BIMARU states. This represents a challenge under the recent Right to Education Act which provides for universal access to age 14 years – nominally Grade VIII and the threshold of secondary schooling. As the numbers graduating from elementary schools rise to more than twice their present volume, access to secondary school will have to expand substantially. If transition to secondary is not a realistic prospect, then many will fail to complete the elementary school cycle, especially if they are poor and over age.

Greater access is critical to improved equity – most secondary schooling in most states is fee paying, public subsidies disproportionately favour higher rather than lower income households, and much secondary schooling is private and exclusionary. If social mobility out of poverty is to occur such that greater proportions of scheduled tribes and castes, OBCs and the ultra poor acquire knowledge and skill that is valued in the labour market then more of them will need to experience effective secondary schooling that encourages abstract reasoning and high level cognitive development. And without much doubt if India does not provide more educational opportunity at secondary level, frustration amongst youth may ferment unrest, and the gap between India and China in human resource investment will widen rather than diminish.

For all these reasons this paper provides necessary reading for those interested in RMSA and the next phase in India's energetic efforts to make sure that all its children progress beyond basic literacy and numeracy and acquire the competencies needed to play a full role in India's rapid development. There are no good reasons why so many children fail to have access to the opportunities their peers in the other BRICs take for granted. Nor are there good reasons why some large states in India manage to provide near universal access at affordable costs, and others do not. This paper is a step on a pathway towards more equitable transition to secondary school across India.

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Summary

This paper provides an overview of secondary education in India with focus on the development trajectory currently pursued in the sub-sector reviewing the current status, development policies, approaches and reform programmes. While discussing the tremendous progress made in enhancing secondary schooling opportunities in India during the past six decades, the paper highlights the increasing regional, gender and social disparities in secondary education. It is argued that there is a large deficit in policy planning for secondary education development, which not only goes against the principle of inclusive development and the service-led growth strategy but also affects India's capacity to connect effectively to globalisation. The broad development approach pursued by the country needs a clearer framework for change with more focus on decentralisation and governance issues and quality improvement. The paper identifies key challenges relating to implementation of major reform programmes including Rashtriya Madhyamik Shiksha Abhiyan (RMSA). It concludes that India needs to step up investment in pre-reform activities for creating a sustainable environment for initiating change; improving political will; introducing strategic management models ensuring continuity in change at the school level; and increasing budgetary allocation to make more inclusive quality secondary education a reality.

Secondary Education in India: Development Policies, Programmes and Challenges¹

“... (.) It is obvious that there can be no intelligent decision without acquaintance with facts. With the growing condensation of space and time, relations between countries and peoples are becoming continually closer. Modern democracy therefore demands that the people at large must have knowledge not only about their own country but also of the world in general. It is largely the function of secondary education to meet this demand of democracy. ...”

Humayun Kabir (1955:194)

1. The Context – A Manifesto for Secondary Education

Education, the fulcrum of sustainable development, holds the key to ‘social inclusion’. It is one of the necessary conditions for advancing quality of life and freedom. In other words, universal access to quality knowledge and skills ensures that everybody has an equal opportunity to play a full part in work and society. It is thus essential for integrating the marginalised and vulnerable in society into the development process. Promoting equity and active citizenship through a well-developed education and training system, therefore, needs to occupy the centre-stage of the development agenda in every society.

However, even when the benefits of education are obvious, it has yet to acquire the required urgency in the development agenda of several nations, including India. In the 1960s, while education was recognised as a strong explanatory variable for the differential levels of socio-economic development of nations, the low income countries, however, realised this much later, in the 1980s, when there was some visible policy shifts towards increasing investment in education. International commitments -- in the early 1990s, particularly for EFA, and at the dawn of the 21st century, for MDGs -- rather than domestic development policy concerns, made education, mainly primary education, figure prominently in the priority list of reform programmes of these countries. Since then, many developing nations, including India, have been following a sort of truncated education development agenda leaving relatively little space for policy-planning and resources for expansion of the post-compulsory levels of education, the middle segment of the education chain – secondary and higher secondary levels of education². What it means is that one hardly comes across a development approach in most developing countries that covers the entire school education sector. Instead, these countries including India have gone for positioning relatively more in their policy planning the primary and tertiary education; and thus, their planned development efforts suddenly get trimmed at the beginning of the upper secondary schooling cycle.

1 An earlier version of this paper was presented at the “International Seminar on Indian Education: The Positive Turmoil” organised in New Delhi from February 7-9, 2011. The usual disclaimer applies.

2 In India, the secondary stage consists of Grades IX and X (relevant ages 14-15) and higher secondary stage consists of Grades XI and XII (relevant ages 16-17) (see Figure 1, Annex I). In this paper, both stages have been referred to as secondary education (Grades IX to XII, relevant ages 14-17).

In recent years, however, while stakeholders continue to debate the nature and functions of secondary education,³ the need for its development has become apparent with the changing context of schooling. Besides its contributions to the formation of active citizens (Government of India, Secondary Education Commission, 1953; Kabir, 1955; Alvarez, 2000; Lewin and Caillods, 2001; Briseid and Caillods, 2004; World Bank, 2003, 2009), secondary education plays a critical role in addressing the emerging human development concerns in countries engaged in building knowledge societies for staying connected to the globalisation process. The 'globalisation' phenomenon has compressed time and space and resulted in 'new circuits of exchange' of capital, people, goods and knowledge (Harvey, 1990). There is global shift in manufacturing, division of labour, and integration of labour markets creating novel global institutions that increasingly influence the development policies of nations. Pressures resulting from globalisation also affect cultural and social values. New forms of inequalities have emerged. Economic issues have dominated the de-bordering process; there is conflict between economic primacy and social values. 'Staying connected' to the globalisation process has become a major challenge for many developing nations. In the globalisation context, one of the major challenges for education is to discover new ways of 'knowing' so as to make nations effectively participate in the globalisation process, while ensuring equitable economic and socio-cultural diversity. There is, indeed, the need for changing the role of the school from an institution of knowledge generation and transmission to an institution, which can respond effectively to the skill requirements of the future world, i.e. making pupils communicate effectively in terms of culture, technology and language (Stromquist, 2002; Biswal, 2006).

For several decades, it has been argued in the literature that secondary education needs to be expanded both as a response to increased social demand and as a feeder cadre for higher education, giving little emphasis to its other important functions. It is also argued that investment in secondary education yields considerable social and economic returns, making it crucial for national development (World Bank, 1993, 2005, 2009; Tilak, 2001; Mukhopadhyay, 2007; Alain and Tan, 1996; Lewin and Caillods, 2001; Duraisamy, 2002; Lewin, 2006, 2008a). Despite this, secondary education continues to be the most neglected segment of school education in many developing countries, including India.

India is following a service-led growth model and striving hard to survive the global competition, in these conditions it is being increasingly recognised that secondary education, is the most critical segment of the education chain. Apart from the bottom-up pressure (i.e. arising from the growth of primary schooling) and the top-down pressure (as the source of potential intakes for higher education) for its expansion, there is a need to pay greater attention to secondary education as it caters to the needs of the most important segment of the population – adolescents and youth, the source of the future human and social capital of a nation. While examining trends in secondary education across industrialised nations, Briseid and Caillods (2004:17) rightly argue that:

3 In India, the same debate has been on since the early 1950s as is clear from the writings of the then Secretary to the Ministry of Education, GOI, Dr. Humayun Kabir that, "Qualitatively, secondary education has suffered from the lack of a clear definition of objectives and scope. Treated either as mere continuation of primary education or only a preparation for higher education, it cannot at present be regarded as a definite stage making the end of formal education of a specified standard (.) ... Planned to cater only for those who have an intellectual bent of mind, even its emphasis on intellect is one-sided: it tends to test memory at the cost of reasoning and judgment. ... it is modelled primarily to serve the needs of urban life" (Kabir, 1955:195).

Dealing with adolescents at a very critical moment of their lives, education has an important mission: to provide youths with the necessary knowledge and skills to live in an advanced technological society; to prepare them for the world of work but also for further learning; and to foster social cohesion and transmit the cultural and ethical values necessary for active participation in a democratic society.

Preparing young people for life, advancing science education and learning to learn and communicate effectively in the global village are considered additional forces affecting secondary education across the globe. In fact, at this level, two main functions of education (i.e. individual and social) converge (Alvarez, 2000). At the individual level, secondary education empowers and prepares youth for life in respects such as, personal development, preparation for the labour market, training for higher cognitive functioning; and as part of its social function, advances 'human and social capital' for nation building, redistributes income and wealth and alleviates income poverty. Its development, therefore, can greatly contribute towards acquiring global competitiveness and achieving the MDGs.⁴ In fact, it is argued that:

... investing in youth will provide the longest and most effective dividend towards meeting the MDGs by building the social capital needed to foster pragmatic development (Farmanesh, et al., 2005:v).

In the context of emerging challenges of human development worldwide, such as the HIV/AIDS pandemic; conflicts; environment degradation and climate change; increasing inequality within and between nations; pressure to acquire and maintain a competitive edge through innovation/advancing science education and/or capacity to adopt new technology and learning to learn through global communication networks, it is, indeed, crucial to invest in secondary education.

In the Indian context, balanced development of education is critical for nation building. Education is one of the most important components of the inclusive development model of the emerging Indian democracy, which was well articulated even in the 1960s in the report of the Education Commission (1963-64). However, the current Indian setting no doubt reflects the socio-economic consequences of the distortions in the development model envisaged in the early years of freedom. India has grown visibly, yet remains far away from being a developed society and economy. Some of the following facts and figures describe the Indian setting and illustrate the need for renewed attention to development of education.

There are around 125.4 million young people between the ages of 15-24 who are illiterate in the world (UNESCO, 2010), and 99.5% of them (124.8 million) live in the developing world. More than half of them (51.8%) are found in South Asia, and India's share of these is around 62%. In fact, India alone is home to a little less than one-thirds (40.4 million; 32.2%) of all the young illiterate people in the world (UNESCO, 2010, also see Table 1, Annex I).

4 While all the Millennium Development Goals (MDGs) are related to youth, Goals 1, 3, 5, 6 and 8 directly affect the development of youth. In fact, development of youth can increase their engagement in poverty reduction (MDG 1); enable them to act as peer educators and teachers for achieving UPE (MDG 2); support them, particularly young women, to help themselves (MDG 3); enable them to participate in health care programmes to reduce child mortality (MDG 4); make them aware of the reproductive and sexual health for improving maternal health (MDG 5); engage them in combating HIV/AIDS (MDG 6) and ensuring environmental sustainability (MDG 7); and promote their employability, entrepreneurship and capacity to use ICT for promoting global partnership for development (MDG 8).

There is wide spread income poverty and socio-economic inequality in India.⁵ More than one-thirds of the country's population (34%) is living on less than US\$1 per day. In other BRIC and Asia-Pacific countries and South Asian neighbours the proportions living under this poverty line are lower, nations like Brazil (8%), China (10%), Indonesia (8%), the Philippines (15%), Sri Lanka (6%) and Pakistan (17%) (UNESCO, 2010). The inequalities in the distribution of income and wealth are evident from the fact that the share of the top population quintile (richest 20%) in the total income/expenditure is around 45%. In fact, 28% of the rural population⁶ in the country is in the lowest wealth quintile⁷ (NFHS, 2007). It may be noted that household wealth heavily influences school attendance in India (Lewin, 2008b). This is partly reflected in the key education development indicators. For example, in the family of 128 nations, India ranks 105th in terms of EFA Development Index (EFADI); relatively low compared to that of several other developing countries – viz., Indonesia (65th), the Philippines (85th) and Brazil (88th) (see Table 2, Annex I).

In India, one in every 10 children ages 6-10 is out of school. Approximately two-thirds only of the Grade I cohort survive to the last grade of the primary cycle. Around 84% of primary graduates progress to upper primary level, but the participation rate in upper primary level is much lower (GER 71%), and the public current expenditure per pupil at primary and secondary levels (as % of GNP per capita) is 9.0 and 16.7 respectively (UNESCO, 2010). It would be interesting to examine growth trends and development approaches in the secondary education sub-sector. As greater economic growth and social equity are associated with balanced public educational investment (World Bank, 1993, 2005; Wood and Mayer, 1999), the study of secondary education reform policies, approaches and programmes in India would not only help identify the development direction but also provide clues for future policy planning.

It is in this context, the paper makes an attempt to assess the current status of secondary education; briefly review the related policies, approaches and reform programmes; and reflect on development concerns, with focus on challenges of implementing reforms in the sub-sector. The paper has five parts. The first provides the context and rationale for expansion of secondary education. The second attempts to identify growth trends and assess the current status of secondary education in India. The third briefly reviews the related development policies since the colonial period. The fourth looks into the current reform agenda, approach and programmes, mostly focusing on the interventions of the central government. The final concluding section highlights major development challenges and directions.

5 If we consider the composite measure of poverty (as measured by the new international Multi-dimensional Poverty Index developed by the Oxford Poverty and Human Development Initiative for the UNDP's HDR 2010), about 645 million people or 55% of India's population is poor. The MPI is made up of ten indicators of education, health and standard of living achievement levels. The ten indicators relate to: years of schooling and child enrolment (education); child mortality and nutrition (health); and electricity, flooring, drinking water, sanitation, cooking fuel and assets (standard of living). Each education and health indicator has a 1/6 weight, each standard of living indicator a 1/18 weight (Shrinivasan, 2010).

6 The share of rural households and population in India is around 72% and 74% respectively (NSS 64th Round, 2007/08). According to the 64th Round of the NSS (2007/08), the literacy rate in India (population aged 7 years and above) is 71.7% (67% in rural areas and 84.3% in urban areas. The literacy rate ranges from 58% in Bihar to 94% in Kerala.

7 In the NFHS III, the wealth index has been constructed by combining information on 33 household assets and housing characteristics such as ownership of consumer items, type of dwelling, source of water, and availability of electricity into a single wealth index. The household population is divided into five equal groups of 20% each (quintiles) at the national level from 1 (lowest, poorest) to 5 (highest, wealthiest) (NFHS, 2007).

2. Growth Trends and Current Status

Historical forces have largely influenced the policy-planning processes and growth trends in education, both in developed and low-income countries. These include colonial policies related to institutional structures, choice of providers, curriculum decisions, teacher recruitment, evaluation systems, certification and financing.⁸ Initially, secondary education was considered a subsidiary to tertiary education as its primary function was to prepare pupils for higher studies. As such, by and large, it evolved as an elite system facilitating local processes for 'elite formation' and catering to the needs of the socially and the economically privileged. Towards the end of the 16th century, secondary schools in Europe and the USA were promoting mental discipline of their pupils, giving little attention to the practical application of knowledge in vocational settings aimed at preparing an elite group of persons trained and educated in liberal arts and prepared to assume leadership roles in any sphere. The curriculum at the secondary stage was dominated by the needs of the socially and economically privileged rather than by the needs of the masses (Briseid and Caillods, 2004). In British India, the East India Company and the subsequent colonial policies in the 19th century promoted new public schools of western learning to serve the higher classes of society with the hope that the educated elites would promote schooling among the rural masses, which later on came to be known as the 'downward filtration theory' (Chaudhary, 2007). In fact, it is argued that, as a by-product of colonisation, the European model of education was exported to a large portion of the less developed world. The colonial educational policies are believed to have affected human capital formation in these countries even after independence (Foster, 1966; Clignet, 1968). In fact, the present system of secondary education in India can still be called Macaulayan given the selection process and the curricular emphasis for preparing pupils for white-collar urban jobs. The mid-twentieth century, however, marked the beginning of a new era in secondary education. By the 1960s and 1970s, secondary education was more linked to primary education than to tertiary education. Around this time, secondary education also underwent structural changes in several countries and by the late 1980s and 1990s, the lower secondary stage became part of compulsory basic education in many OECD countries. Such developments changed the basic approach towards public provisioning of secondary education in these countries, calling for a significant role of the government in its expansion (Briseid and Caillods, 2004).

Secondary education began to expand in developed societies only after World War II. In fact, barring a few nations,⁹ the expansion of general secondary education is yet to happen at the desired pace, in many developing societies, including India. The growth of secondary education in India, however, shows unique trends. During the period starting from 1850 to 1919 when the colonial government completely transferred the education authority to elected Indian Ministers at the provincial level, there was an undue emphasis (compared to primary education) on expansion of secondary schools and colleges (Ghosh, 2000; Chaudhary, 2007). Indian social structures and local factors (in terms of ethnic fragmentation/caste structure) played a pivotal role in the provisioning of both primary and secondary schooling during this

⁸ Further, it is often argued that, in the developed world and in some of its colonies, public education systems were established from 'top to bottom', meaning that the foundation of universities came first in the beginning of the 12th century followed by the secondary schools in 15th and 16th centuries, and finally, the public primary schools in the 19th century.

⁹ For example, in East Asian countries, secondary education received greater attention from 1945 on, with significant increase in public investments for its quantitative and qualitative expansion. Countries like Japan, Korea, Singapore, the Philippines, Malaysia and Thailand, which invested more on secondary education, has now been reaping high dividends because of the resultant broadening of the human capital base.

period. It is argued that the number of public primary schools was lower in districts with higher levels of caste and religion diversity. In such districts, traditional elites preferred to develop secondary schools (Chaudhary, 2007).

After the Wood's Despatch (1854)¹⁰ and with the introduction of the new system of education in India by the British Crown that largely replaced the indigenous network of schools¹¹ and the implementation of the 'grant-in-aid' policy, the secondary schooling provisions expanded relatively faster as many indigenous schools acquired the status of 'aided schools'. The indigenous schools which did not receive grant-in-aid from the colonial government came to be known as 'private un-aided schools'. Provinces of British India responded differently to the colonial government's grant-in-aid policy – viz., aided schools became more common in Bengal province. Some argue that, during the early 1860s, a new system of schooling emerged in India with government universities, a network of affiliated colleges and a number of primary and secondary schools, both aided and un-aided. It was during Lord Curzon's tenure (1899-1905) emphasis was laid on qualitative improvements in schooling and greater state control. The former policies of promoting aided secondary schools and colleges were abandoned in favour of instituting government schools as role models for aided schools (Chaudhary, 2007).

After 1919, policies of the provincial governments largely influenced the pattern of growth of secondary schooling provisions. In fact, in 1948, India had around 12,500 secondary schools of all grades in its major states (which included lower secondary stage/UPS) and enrolled in them a little less than 3 million children. However, even after favourable expansion policies of the colonial government, the number of high and higher secondary schools in India was around 4,000 in 1948 with an enrolment of about 1.8 million (Kabir, 1955).

In independent India, the network of educational institutions has expanded remarkably during the past six decades. The growth rate of secondary level institutions during this period has remained much lower compared to that of the middle level (Figure 1). Between 1950/51 and 2007/08, while the number of primary level institutions increased by almost four fold from 209.7 thousand to 787.8 thousand, the number of the middle level institutions went up by twenty-four fold from 13.6 thousand to 325.2 thousand, and the secondary level institutions by more than twenty-three fold, from 7416 to 173.0 thousand.¹² It may, however, be noted that the growth rates of middle and secondary level institutions seem to be relatively very high during the period primarily because of their small base (Figure 1). The number of teachers at the secondary level (Grades IX-XII) also increased from 127 thousand in 1950/51 to 2,126.9 thousand in 2007/08. The Pupil-Teacher Ratio (PTR) at the secondary and higher secondary stages taken together (Grades IX-XII), however, increased from 21 in 1950/51 to

10 In 1953, the British Parliament instituted an enquiry into the state of Indian education. On the basis of the findings of the enquiry, Sir Charles Wood, the then Secretary of state, sent a despatch popularly known as Wood's Despatch to the Court of the Directors of the East India Company in 1854. The despatch enunciated the aim of education as the diffusion of the Arts, Science, Philosophy and Literature of Europe. It laid down that the study of Indian languages was to be encouraged and that the English language should be taught wherever there was a demand for it, and that, both English and the Indian Languages were to be regarded the media for the diffusion of European knowledge. The despatch also recommended that a number of high schools should be set up, at least one in every district. This eventually led to setting up of first three universities in the country (in Calcutta, Bombay and Madras) in 1857. The despatch is considered the first official education policy of the colonial government.

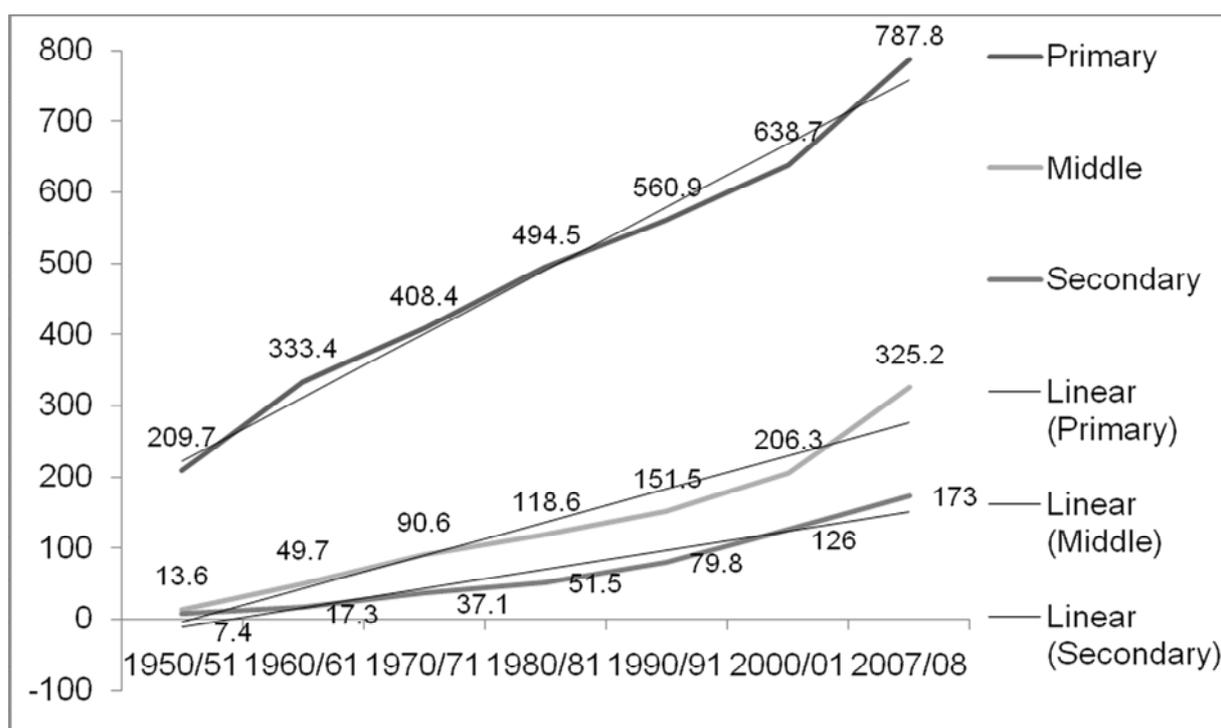
11 The 'indigenous system of schools' in British India consisted of mainly two types of institutions – i.e. elite religious schools and local elementary schools.

12 According to SEMIS 2009/10, the total of secondary and higher secondary schools in the country is around 189 thousand (NUEPA, April, 2011).

33 in 2005/06. In 2007/08, PTR was 33 at the secondary stage (Grades IX-X) and 37 at the higher secondary level (XI-XII) (Government of India (SES), various years).

Expansion has not only been in terms of the number of institutions, but also in terms of the spatial distribution of the schooling provisions at secondary and higher secondary levels. Some eight years ago, more than 73% of habitations in the country had access to a secondary school at a maximum walking distance of 5 kilometres; and more than 62% had access to a higher secondary school at a maximum walking distance of 8 kilometres (NCERT, 2008, see Table 4, Annex I). More than four-fifths of the population in the country had physical access to a secondary school at a maximum distance of 5 kilometres from their habitations in 2002; and around 69% of them had physical access to higher secondary schooling provisions at a maximum distance of 8 kilometres. According to the NSS 64th Round (2007/08), 82.9% of rural households and 99% of urban households have access to a secondary school within 5 kilometres. In terms of primary schools, the picture is similar: 92% of both rural and urban households have access to a primary school within at a kilometre; and 91.1% of rural households and 99.1% of urban households have access to middle level schooling within 3 kilometres (NSSO 64th Round).

Figure 1: Growth of Primary, Middle and Secondary Level Institutions in India since 1950/51 (in '000)



Source: Government of India (SES), various years.

Note: Includes high/higher secondary/intermediate/pre-university/junior college/pre-degree level institutions.

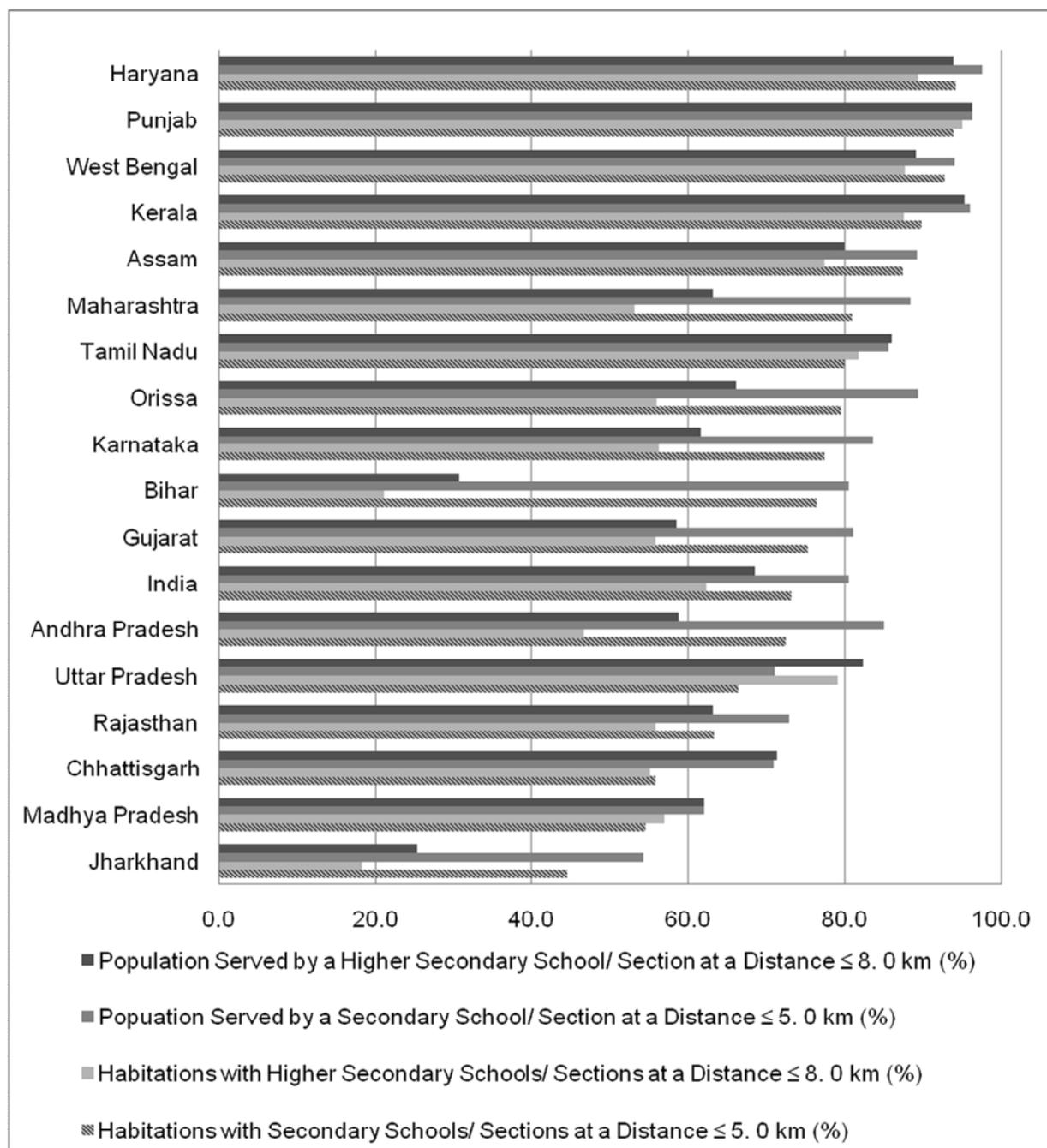
What is more interesting to note is that compared to the poor households, the rich have access to all types of schooling provisions much closer to their homes, particularly in rural areas. The availability of middle and secondary level schooling provisions in close proximity of

households is relatively less for lower decile classes of the monthly per capita expenditure¹³ (MPCE). For example, in rural India, while 38.8% of poor households (belonging to the lowest MPCE decile class) have access to a secondary school at a distance of less than 2 kilometres, 58.8% of the rich households (belonging to the highest MPCE decile class) have access to secondary schools within the same distance (NSSO, 2010). In other words, even in terms of physical distance, the poor have relatively low access to secondary schooling facilities in rural India. Moreover, with 34.6% of secondary institutions and 34.4% of higher secondary institutions being private un-aided institutions¹⁴ (Government of India (SES), 2007/08), the poor may be economically as well as geographically excluded from secondary schooling facilities in the country.

13 MPCE is the sum total of monetary values of all the items (i.e. goods and services) consumed by the household on domestic account during the reference period. Monthly per capita expenditure (MPCE) is the household consumer expenditure over a period of 30 days divided by household size (NSSO, 2010).

14 At the primary and middle levels, the share of the private un-aided institutions is 17.1% and 7.5% respectively (Government of India (SES), 2007/08). In 1973/74, the share of the private unaided institutions in the total institutions at the secondary and higher secondary stage was just 5.59%. Over the years since 1973/74, the relative share of private unaided institutions at the secondary and higher secondary stage declined steadily to 28.87% in 2005/06. In 2007/08, the share of aided institutions in the total institutions at the secondary stage was 26.11%; and it was 30.27% at the higher secondary stage. According to the NSS 64th Round (2007/08), nearly 18% of secondary and higher secondary level enrolment was in private un-aided institutions.

Figure 2: Physical Access to Secondary and Higher Secondary Schooling Provisions in Selected States¹⁵, 2002



Source: Table 4, Annex I.

The issue of differential access to secondary schooling provisions becomes further compounded as the private un-aided sector plays a significant role in providing access, particularly in some of the economically backward states. It is evident from the fact that, at the sub-national level, the proportion of private un-aided institutions in the total institutions at the secondary stage widely varies between 88.4% in Uttar Pradesh and none in West Bengal. Among the major states, the proportion of private un-aided institutions in the total number of

¹⁵ These 17 states and union territories share more than 94% of the country's population (Census of India, 2001).

institutions at the higher secondary stage varies between around 70% in Andhra Pradesh and 4.5% in Bihar (Government of India (SES), 2007/08).¹⁶

At the macro level, thus, physical access to schooling¹⁷ (as per the distance norm) at the secondary and higher secondary levels seems to be very encouraging, which, in fact, hides the story of large variations across states in India, and within states, across districts and sub-district level units. Large regional variations in physical access to secondary and higher secondary schooling provisions are clear from the fact that, still in some nine states and UTs (A&N Islands, Manipur, Meghalaya, Chhattisgarh, Madhya Pradesh, Jharkhand, Mizoram, Nagaland, Arunachal Pradesh)¹⁸, more than 40% of habitations have physical access to secondary schooling provisions at a distance of less than 5 kilometres; and in 20 states and UTs, nearly the same proportion of habitations have access to higher secondary schooling provisions beyond 8 kilometres (NCERT, 2008, also see Figure 2, Tables 4 & 5, Annex I).

Analysis of data on institutions at the secondary level (Government of India (SES), 2007/08) and projected population for the year 2007 (Census of India, 2001), it is found that, at the all-India level, on average, 10 secondary schools/sections and 5 higher secondary schools/sections were available per 100,000 people in 2007/08 (see Table 6, Annex I). At the sub-national level, the size of this indicator varied between 3 secondary schools/sections per 100,000 people in Bihar and Delhi to 53 in Mizoram. However, major states like Uttar Pradesh (4), West Bengal (5), Tamil Nadu (5) and Madhya Pradesh (7) had less than 10 secondary schools/sections per 100,000 people in 2007/08. Although a crude indicator of access, availability of secondary and higher secondary schooling provisions per 100,000 people provides important clues about the potential size (in terms of enrolment) of secondary and higher secondary level institutions, particularly in rural areas. Given the fact that the share of the relevant secondary school age child population (14-15 years) in the total population is around 4% in most states, a secondary school/section per 10,000 persons at the macro level limits its potential size to less than 450 particularly in rural areas, which can be called a small school. Similarly, the potential size of a higher secondary school/section would be less than 1000, assuming full participation of the relevant age group at this level of education.

An encouraging macro level scenario of physical access to secondary and higher secondary schooling provisions coupled with large variations at the sub-national levels directs our attention to the distortions in the policy planning with regard to expansion of school networks, often due to political and local factors. Such a pattern of growth of schooling provisions has serious policy implications in terms of ensuring minimum standards in schools and the capacity of the country to finance them. Development policies and programmes that promote a secondary school network dominated by small schools/sections and largely influenced by political and local factors would over a period become unsustainable in terms of maintaining standards and equity in provisions, processes and outcomes. Eventually, this model of providing secondary education becomes very costly (both in terms of private costs and public subsidy) making it unaffordable.

16 It seems that states like West Bengal and Bihar have not furnished complete data on private un-aided institutions at the secondary and higher secondary levels as one would expect their presence, at least, in urban areas.

17 It may be noted that, in this paper, the analysis of the physical access to secondary and higher secondary schools does not take into account varying infrastructure, teaching-learning and related facilities (i.e. deviations from the laid down standards) existing across individual institutions, which are essential elements of access to schooling in any society.

18 Partly, this may be because of the geophysical features of some of these states and UTs.

Participation in secondary education also shows encouraging trends in India, at least in absolute terms. From 1.5 million in 1950/51, the total enrolment in secondary and higher secondary stage has gone up almost thirty times to 44.48 million in 2007/08 (see Figure 1). It can be seen in Figure 1 that the trend line showing growth trends in the enrolment at primary level is much steeper compared to that of the middle and secondary levels, thereby implying relatively slow growth of enrolment at the secondary and higher secondary levels. It may be underlined that, at the all India level, during the period 2000/01 to 2007/08, the average annual growth rate of enrolment at secondary and higher secondary stage was highest (7.06%) compared to that of the middle (4.23%) and primary stages (2.52%) (Government of India (SES), various years). Prior to 2000/01, the growth rate of enrolment in secondary education was lower than that of the primary and middle level enrolment (Government of India (SES), various years). Such a trend in the growth of enrolment at the national level, indeed, hides large variations across regions, gender and social categories in participation in secondary and higher secondary education.

At the all India level, the Gross Enrolment Ratio (GER), which shows total enrolment in secondary stage (Grades IX-XII) as a percentage of the total population in the relevant age-group also increased steadily from 19.3 in 1990/91 to 44.81% in 2007/08. It may be noted that the GER figures for secondary stage (Grades IX-X) and higher secondary (Grades XI-XII) stages were not available separately until 2004/05 making it difficult to study their growth trends. In 2004/04, the GER at secondary stage (Grades IX-X) was 51.65% in 2004/05 in India, which increased to 58.15% (50.87% in rural areas) in 2007/08; only around a 7% improvement during this period. Similarly, the GER at the higher secondary stage (Grades XI-XII) was 27.82% in 2004/05 India, which increased to 33.48% (19.22% in rural areas) in 2007/08, only around a 6% improvement in its size (see Table 7, Annex I). At the secondary level (Grades IX-X), the GER was 52.47% for Scheduled Castes and 43.27% for Scheduled Tribes in 2007/08. At the higher secondary level (Grades XI-XII), the GER was 27.91% for SCs and 20.33% for STs (Government of India (SES), 2007/08).

Apart from variations by gender and social categories, the size of the GER varies greatly across states and union territories. In 2007/08, the GER at secondary stage (Grades IX-X) was less than the national average in 15 states and union territories including several north-eastern states, Bihar, Jharkhand, J&K, Chhattisgarh, Punjab, West Bengal, Orissa, Rajasthan and Gujarat. Except Rajasthan, West Bengal, Meghalaya, and to some extent, Bihar, none of the states in this group had not made any significant progress in participation in secondary education. States in the 'Hindi-belt' like Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh, which are home to around 38% of the country's population, have been performing poorly in terms of both development and performance indices¹⁹ at the secondary level (Rani, 2007). Among the major states, only Tamil Nadu and Kerala had relatively higher level of participation in secondary education with a GER of more than 75% in 2007/08.

Similarly, at the higher secondary stage (Grades XI-XII), the GER in 17 states and UTs was lower than that of the country average, which included some the major states – Bihar, Orissa, West Bengal, Jharkhand, Chhattisgarh, Rajasthan, Gujarat and Punjab. Among the major

19 Following the methodology of the UNDP, Rani has constructed the 'secondary education development index' using three indicators – i.e. institutions, teachers and enrolment; and the 'educational performance index' has been constructed using four indicators – i.e. (i) transition rate from upper primary to secondary, (ii) cumulative dropout rate from Grades I-X, (iii) % age of students appeared in the secondary board examination to the enrolment, and (iv) % age of passouts (in the appeared students). Rani (2007) found wide variations in the development of secondary education across states in India; the value of the Secondary Education Development Index (SEDI) varied between 0.09 in Bihar and 1.0 in Kerala in 2003/04.

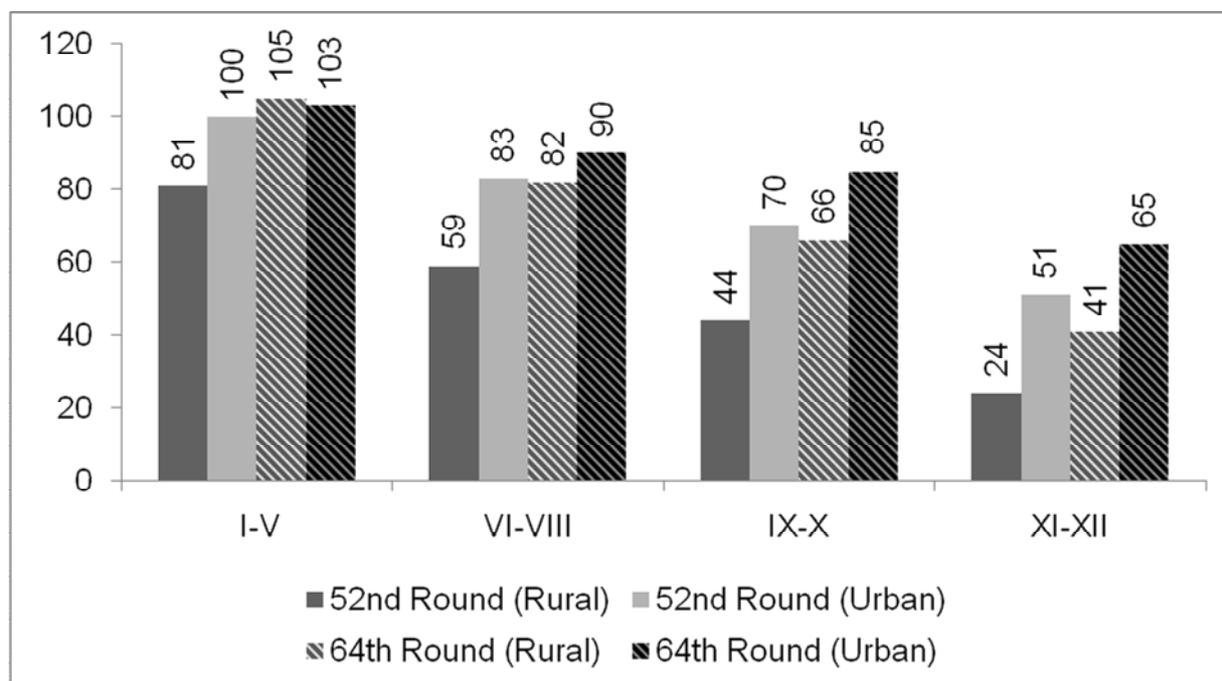
states, only Kerala and Tamil Nadu had GER more than 45% at the higher secondary stage in 2007-08. During 2004/05 and 2007/08, only a few major states – Kerala, Uttar Pradesh, Madhya Pradesh, Tamil Nadu, West Bengal and Haryana –improved their GER at this level by on an average more than 2 percentage points per annum (Government of India (SES), various years, also see Table 7, Annex I).

According to NSS 52nd Round (NSSO, 1998), the Gross Attendance Ratio (GAR) at the secondary stage (Grades IX-X) and higher secondary stage (Grades XI-XII) was 51% and 32% respectively. Further, the Net Attendance Rate (NAR) was 26% and 15% respectively in Grades IX-X and XI-XII. Between the NSS 52nd Round (1995/96) and the 64th Round (2007/08), participation in secondary and higher secondary education has improved significantly. The GAR at the secondary stage (Grades IX-X) has improved to 70% (66% in rural areas and 85% in urban areas), and at the higher secondary stage (Grades XI-XII), it has increased to 48% (41% in rural areas and 65% in urban areas) in 2007/08 (NSS 64th Round). The net attendance Ratio (NER) at the secondary and higher secondary stages has gone up to 41% (38% in rural areas and 51% in urban areas) and 27% (23% in rural areas and 40% in urban areas) respectively in 2007/08 (see Figure 4). However, the level of participation at various stages of school education varies significantly across socio-economic groups. At the secondary level, while only 34 per 1,000 people (aged 5-29) in the lowest MPCE decile class participate in secondary education, it increases to 89 for the highest MPCE decile class (NSS, 2010). Similarly, only 12 people per 1,000 (aged 5-29) in the lowest MPCE decile class attend higher secondary institutions, and the number goes up significantly to 80 for the highest MPCE decile class. In other words, poverty is strongly associated with a lack of participation in post-compulsory levels of school education, particularly at the higher secondary stage.

Even after visible progress in secondary education, regional, gender and social disparities in access and participation continue to be a major concern. Although the share of girls in the total enrolment at the secondary and higher secondary (Grades IX-XII) stages has increased substantially from 13.3% in 1950/51 to 42% in 2005/06, there still exists wide gap in the participation of boys and girls. In fact in 1950/51, only 16 girls per 100 boys were enrolled in Grades IX-X, which increased to 73 in 2005/06 and 77 in 2007/08. Interestingly, more or less the same level of gender disparity in participation in secondary education (Grades IX-X) is seen among other social categories. In 2007/08, 76 SC girls/100 boys and 70 ST girls/100 boys were participation in secondary Grades IX-X. Over the years, the gender parity indices, both at the secondary and higher secondary stages have also improved significantly. In 2007/08, the Gender Parity Index (GPI) in participation was 0.84 and 0.85 respectively at the secondary (Grades IX-X) and higher secondary (Grades XI-XII) stages (Government of India (SES), 2007/08).

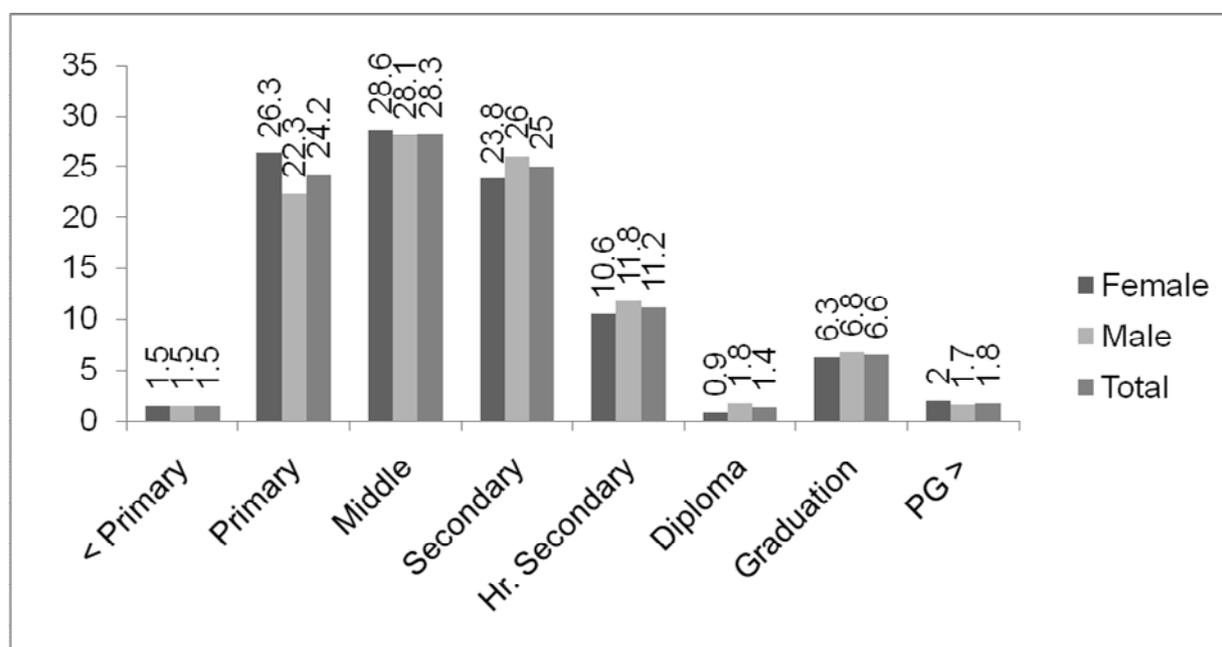
Relative to other social categories, the participation rate of SCs and STs in secondary and higher secondary education continues to be low. In 2007/08 at the secondary stage, the GER for SCs and STs was 52.64% and 43.27% respectively. It was 27.91% for SCs and 20.33% for STs at the higher secondary stage (Government of India (SES), 2007/08). According to the NSS 64th Round, among the SCs, 55 per 1,000 persons in the age group 5-29 were attending secondary Grades IX-X, while only 27 persons were attending higher secondary grades. This figure was as high as 73 and 48 respectively at secondary and higher secondary stages for general category of the population. Similarly, in 2007/08 among the STs, only 46 per 1000 persons in the same age group were attending secondary classes and 22 were attending higher secondary grades (NSSO, 2010).

Figure 3: Gross Attendance Ratios (GAR) at Various Stages of School Education in 1995/96 (NSS 52nd Round) and 2007/08 (NSS 64th Round)



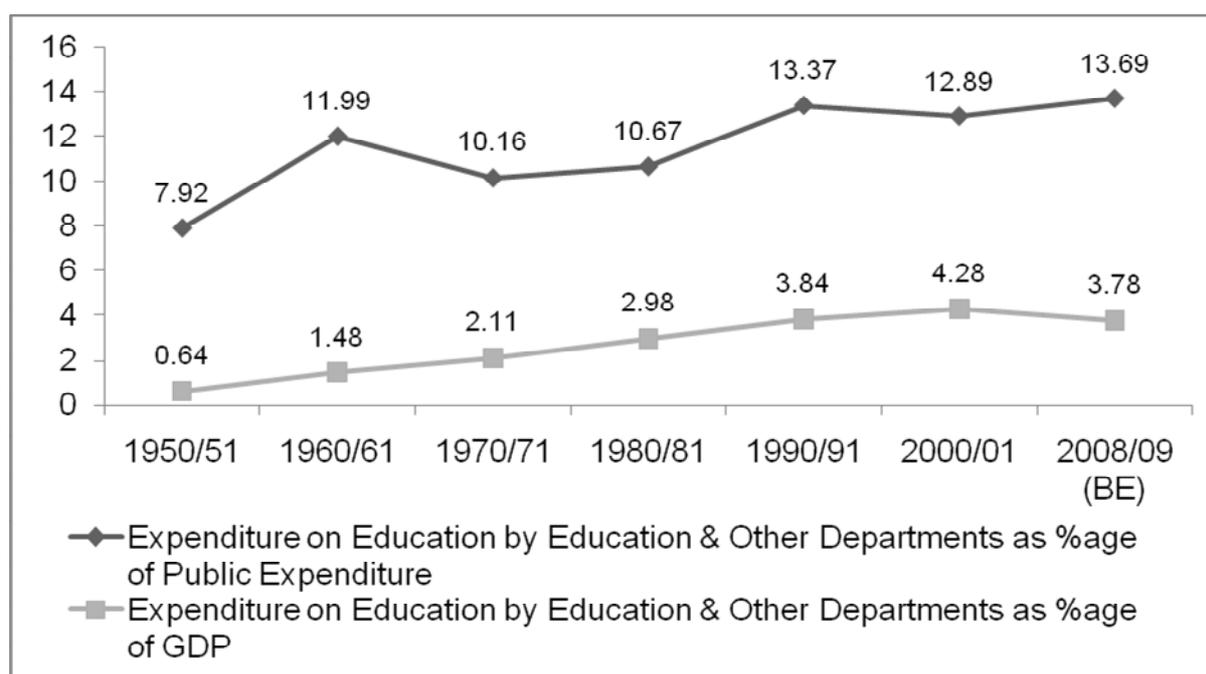
Source: NSSO, 2010.

Figure 4: Percentage Distribution by Level of Last Enrolment of Persons aged 5-29 Enrolled in the Past but Currently not Attending (rural+ urban), India (NSS 64th Round)



Source: NSSO, 2010.

Figure 5: Trends in Public Expenditure on Education in India, 1950/51 to 2008/09



Source: Analysis of Budgeted Expenditure on Education, various years.

During the last six decades, development of school education has happened mostly in terms of country-wide expansion of school networks and participation rates at all levels. High wastage (low internal efficiency) and low levels of learning achievement still plague the school system. The dropout rate²⁰ in Grades I-X continues to as high as 56.7% (56.6% for boys and 57.3% for girls). In other words, only around 43 out of every 100 Grade I cohort survive up to Grade X (Government of India (SES), 2007/08). Moreover, the dropout rates of 68.4% for SCs and 76.9% for STs in Grades I-X indicate huge wastage in school education in India.

If we consider the findings of the NSS 64th Round (2007/08), household level data still reveals high dropouts from secondary and higher secondary stages. Out of all education discontinued persons in the age group 5-29, around 25% were found to have once been enrolled in Grades IX-X but not attending in 2007/08. In other words, these persons dropped out when they were enrolled in Grades IX-X. Similarly, 11.2% of all education-discontinued persons in the age group 5-29 were once enrolled but were not attending higher secondary grades in 2007/08 (see Chart 5). This is an important proxy indicator of low efficiency of the school system in the country. The repetition rates at the secondary and higher secondary stages are found to be somewhat lower at 5.5% and 3.5% respectively (NSSO, 2010).

The education sector has always received a low priority in comparison to other sectors in the economy in terms of its share in the total public expenditure. In absolute terms, the public expenditure on education has increased from 644.6 million Rupees in 1950/51, to 1,864,985.85 million Rupees (BE) in 2008/09. In relative terms, public expenditure on education has never crossed 15% of the total public expenditure during the last six decades (Figure 6). As a percentage of GDP, public expenditure on education has never crossed 4%, except for in 1999/00 and 2000/01. In 2008/9, the budgeted public expenditure on education

²⁰ The Apparent Cohort Method has been used to estimate the dropout rate in Government of India (SES), 2007/08, which is relatively crude.

was as low as 3.78% of GDP. Further, while elementary education takes away more than half of the education budget (i.e. 52.13% in 2008/09, BE), the share of public expenditure on secondary education in the total public expenditure on education continues to be as low as 29.34% (2008/09, BE); almost no increase since 2005/06 (BE), when its share was 28.79%.

The imbalance in the pattern of public expenditure within the school education sector in India is clearly visible. While India spends around 62% of its planned education budget on elementary education, secondary education receives only about 16% of this budget (2008/09, BE). In fact, the share of secondary education in the total planned expenditure on education was around 11% (in 2005/06) prior to the launch of several centrally sponsored development programmes like the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) in April 2009. However, the matter of concern is that, over the years, there is an increase in the private costs of post-compulsory levels of education while the public subsidy at this level school education has remained more or less stagnant. For example, the average annual per capita expenditure on secondary/higher secondary education was Rs. 1,577 in 1995/96 (NSS 52nd Round), which increased to Rs. 4,351 in 2007/08 (NSS 64th Round). In rural India in 2007/08, the poorest households (in the bottom MPCE decile) were spending on an average Rs. 1,623 per pupil per annum at the secondary/higher secondary stage compared to the average annual per capita private expenditure of Rs. 5,517 by the richest households (in the top MPCE decile).

3. Development Policy

In the Indian setting, capturing comprehensively the education development policy shifts at the macro level since independence is a difficult task. There is an absence of relevant information, particularly at the state level, as many states do not have even the sector specific policy documents. Further, quite a number of development policy shifts do not sit in the policy documents as these are primarily associated with implementation of state and/or centrally sponsored development programmes/schemes. Currently, documentation and policy analysis in education by sub-sector, in fact, themselves are development concerns in India. This section, therefore, attempts to provide an overview of the changing secondary education development policies as found in the reports of various commissions and national education policy documents.

In British India, the Wood's Education Despatch (1854) was the first official policy document of the colonial government for public provisioning of education that promoted growth of secondary education.²¹ Subsequently, in the second half of the 19th century, the network of English-medium secondary schools and colleges, mostly private aided, expanded relatively fast compared to that of primary education. Towards the late 19th century the policy focus, however, shifted to include issues relating to expansion of primary education. With the recognition of primary education as a subject of critical importance by the Indian Education Commission Report (1883) and intense political unrest and uprising for nationalism among educated Indians (in the early 20th century), the colonial government was compelled to review its policy of quantitative expansion and private support for schooling in favour of greater state involvement. In other words, during this period, the policy focus shifted from quantitative expansion to quality improvement of secondary education with greater state control. The policies of promoting aided secondary schools and colleges were abandoned in favour of expansion of the network of government schools (Chaudhary, 2007).

After independence, the first step towards improving policy planning for development of secondary education was the setting up of the Secondary Education Commission in 1952 (also known as the Mudaliar Commission). The primary objective of the Commission was to diagnose the growth pattern and suggest measures for reorganisation and improvement of secondary education. The commission's major recommendation was to develop a 3-year national system of secondary education after 8-years of elementary education (8 + 3 system of school education) to make it a complete stage. The commission also recommended the reconstruction of the syllabus to provide a wider and more balanced course and adopt mother tongue as the medium of instruction (Kabir, 1955). Some of the other important recommendations of the commission included the introduction of craft work in the school curriculum, making provisions for increased co-curricular activities, greater emphasis on activity-based teaching-learning, improving school libraries & laboratories and examination reforms, and establishment of multi-purpose schools with diversified courses as model schools (*Ibid*).

Nearly one-and-a-half decades after the Mudaliar Commission, the Kothari Commission (1964-66), while articulating goals and objectives at all stages of education in the context of national development priorities, recommended for a 4-year secondary education system and discontinuing the practice of 'streaming' up to Grade X. It may be noted that, ten years after the commission submitted its report; education was placed in the Concurrent List making

21 For example, in 1916/17, India had a larger share of population enrolled in secondary schools as compared to France and Japan (Chaudhary, 2007).

states and the centre responsible for its development. This changed the policy context for development of secondary education.²² The National Policy on Education (NPE), of 1986 subsequently reiterated the views of the Education Commission to implement a 4-year secondary education system across the states and UTs.²³ The NPE emphasised improving equitable access to secondary education and the enrolment of girls, SCs and STs, particularly in science, commerce and vocational streams (Para 5.13 of the NPE, 1986). The NPE and the Programme of Action (POA), 1992 while recognising secondary education as a critical instrument for social change, called for its planned expansion. The NPE, (as modified in 1992) specifically laid emphasis again on increasing access to secondary education with particular focus on participation of girls, SCs and STs; increased autonomy of Boards of Secondary Education to enhance their ability to improve quality; introduction of ICT in school curriculum for coping with globalisation; renewed emphasis on work ethos and values of a humane and composite culture in the curricula; and vocationalisation through specialised institutions or through the refashioning of secondary education to meet the manpower requirements of the growing Indian economy (Para 5.13 to 5.15).

Even with explicit policy emphasis on central support for expansion and quality improvement of secondary education, the central government, has played a minimal role in the expansion of the secondary education during the last six decades. As education was a state responsibility prior to 1976, the relative economic status of states shaped the pattern of growth of secondary education resulting in wide regional variations reflected in the structure of school education, management, infrastructure facilities, teacher deployment, quality of learning achievements, etc. The central government's support for development of this segment of school education has been indirect and limited to technical support through apex level bodies and the implementation of a few centrally sponsored schemes. One way in which the central government does directly support secondary education is by running some 1,500 *Kendriya Vidyalayas*²⁴ (KVs) and *Navodaya Vidyalays*²⁵ (NVs) that contribute to around 2% of the total enrolment.²⁶

Keeping in view the changing development context and as a logical extension of the policy of Universal Elementary Education (UEE), the central government shifted its policy emphasis, to some extent, towards development of secondary education during the Tenth Five-Year Plan. The Working Group on Secondary Education for the Tenth Five-Year Plan (2002-07) suggested the Central Government providing support to states in areas of access, equity, quality improvement, ICT, inclusive education, and vocational education. Further, in 2005,

22 It is, however, interesting to note that, unlike elementary and higher education, the respective responsibilities of the Centre and States are not clearly defined for secondary education. This has seriously constrained the development of secondary education in the country.

23 The first official policy document, the National Policy on Education (1986), emphasised increasing access to secondary education, including increasing facilities for technical and vocational education at this stage. Moreover, even after a little over two decades of policy emphasis for a uniform system of 12 years of schooling (8+2+2), 7 + 3 + 2 system of school education continues in several states (see Figure 1B, Annex I).

24 Secondary Schools (generally with Grades I-XII) run by the Central Government mainly to cater to the educational needs of the children of transferable Central Government employees including Defence and Para-Military personnel by providing a common programme of education.

25 Secondary Schools (generally with Grades VI-XII) run by the Central Government to provide good quality modern education to the talented children predominantly from the rural areas, without regard to their family's socio-economic condition.

26 The Central Government has committed to set up 6,000 model secondary schools during the eleventh five year plan (2007-12). It proposes to set up another 500 NVs, 500 more KVs, 2500 schools in KV template in educationally backward areas and another 2,500 schools in Public-Private Partnership (PPP) mode.

the Central Advisory Board of Education (CABE)²⁷ accordingly emphasised the provision of high quality secondary education to all Indian adolescents, girls and boys, up to the age of 16 by 2015 and up to 18 by 2020 (i.e. universalisation of secondary and higher secondary education). The CABE Committee on Universalisation of Secondary Education²⁸ (USE) recommended that each state should develop norms for USE keeping in view the common national parameters as well as the state specific parameters. States should also develop their medium-term perspective plans for USE; go for decentralisation as the main approach to planning and implementation of USE; and invest in the public school system with the specified norms and standards similar to those of the *KVs* for enhancing its effectiveness. The committee also emphasised that vocational education and training should become a major national programme and be structurally and administratively placed outside the school system. Accordingly, the targets for USE as spelled out by the CABE Committee included: (i) universal participation by 2015; (ii) universal retention by 2020; (iii) mastery learning by more than 60% learners by 2020; and (iv) universal higher secondary education (Grades XI-XII) by 2020.

27 The CABE constituted two committees on secondary education: (i) CABE Committee on Universalisation of Secondary Education; and (ii) CABE Committee on Girls' Education and Common School System in 2004, which submitted their reports in June 2005.

28 It is pertinent to mention here that, for the first time, 'universal secondary education' (USE) as an emerging development agenda was articulated and debated at NIEPA in a national conference organised by Professor Marmar Mukhopadhyay in 2001. The conference not only provided alternative secondary education development paths (in terms of development scenarios) but also provided important inputs to the Tenth Plan formulation process and the CABE Committee on Secondary Education (2005). In a way, historically, the USE movement in the country began at NIEPA in 2001.

4. Current Reform Agenda and Development Interventions

The recommendations of the CUBE Committee (2005) largely shaped the development priorities in secondary education during the Eleventh Plan period (2007-2012). The 11th Plan, therefore, targeted to: (i) achieve universal access (to secondary schooling provision within 5 kilometres, and higher secondary schooling provisions within a distance of 5-8 kilometres of every habitation); (ii) raise GER at secondary stage to 75% by 2011/12; (iii) reduce substantially gender, social and regional disparities in enrolment, dropout and retention rates; (iv) improve Teacher-Pupil Ratio (TPR) at the secondary stage to about 25, & ensure availability of trained subject and other teachers by 2011/12; and (vi) introduce ICT in secondary and higher secondary schools.

The broad secondary education development strategies envisaged (at the macro level) during the 11th Plan included: (i) restructuring of the school system (to a 5+3+2+2 system) and expansion of the secondary school network/physical access by upgrading the existing schooling provisions and establishing new institutions/sections including high quality model schools at the Community Development Block level to serve as benchmark for excellence in secondary schooling; (ii) promoting Public-Private Partnership (PPP) to leverage private investment in the expansion of secondary schooling provisions; (iii) ensuring quality secondary education with focus on science, mathematics and English; (iv) promoting inclusiveness in secondary education through demand-side financing strategies; (v) introducing ICT in government and aided schools; (vi) adopting the National Curriculum Framework, 2005; and (vii) undertaking institutional reforms in school management. Implicitly, the development policy during the 11th Plan emphasised the supply of schooling provisions and ensuing equity in participation rather than the quality improvement and governance components. Moreover, the plan gave little emphasis to expansion and quality improvement of higher secondary education (Planning Commission of India, 2008).

Currently, several secondary education development schemes and programmes, including the recently launched Rashtriya Madhyamik Shiksha Abhiyan (RMSA), are being implemented in the country to achieve the 11th Plan targets. The RMSA was launched in April 2009 with the basic developmental objectives of universalising access to and improving quality of secondary education (Grades IX-X) in the country. In other words, the RMSA aims at making secondary education of good quality accessible and affordable to all young people. Specifically, the RMSA aims at: (i) maintaining standards in secondary education by making schools conform to the prescribed norms related to physical facilities, staff and academic matters (rationalising facilities, staff and TLM across secondary schools as per norms); (ii) universalising physical access to all young people (taking a distance norm of 5 kilometres at secondary and 7 kilometres at higher secondary stages); (iii) improving participation and retention in secondary education (75% GER at secondary stage by 2013/14, 100% GER by 2016/17, and universal retention by 2020); (iv) overcoming barriers to secondary schooling due to gender, socio-economic status, disability and other disadvantaged circumstances (improving equity and delivery of secondary education); and (v) enhancing intellectual, social and cultural learning in secondary schooling --i.e. improving quality of learning outcomes (a very ambiguous objective in the absence of benchmarks in the quality of secondary schooling, often measured in terms of pass percentage in board examination).

Unlike the centrally-sponsored schemes, the RMSA has been designed as a country-wide reform programme (more or less in line with the reform programme in elementary education sub-sector, the *Sarva Shiksha Abhiyan* (SSA) to be implemented in partnership with states

(primarily in terms of resource sharing; whereas strategic management responsibilities of secondary education continues to stay with states). As such, it adopts a 'sector-wide approach' rather than a 'functional approach' (generally followed in implementing the centrally sponsored schemes) to development of secondary education, calling for 'convergence of all on-going interventions' in the sub-sector. However, it may be underlined that, although in principle the RMSA envisages to cover all government and aided institutions at secondary and higher secondary stages, its coverage is limited to only government managed secondary schools/sections during the 11th Plan period. Similarly, the on-going centrally sponsored schemes in secondary education have not been subsumed in the RMSA during this period. It is expected that, during the 12th Plan period, convergence will happen in the RMSA, and its coverage would increase to include the aided secondary level institutions and institutions at the higher secondary stage. Like the SSA, the RMSA is also envisaged to adopt a decentralised institutional framework for its implementation. Evidence based participatory planning and management at the district and institutional levels, therefore, are considered critical for its success. The unique feature of the RMSA relates to its focus on mainstreaming (in terms of institutional arrangements for its implementation) from day one to ensure greater level of sustainability (MHRD, 2009).

The broad development strategies of the RMSA primarily focus on improving access, quality, equity, school effectiveness and governance, including support services (MHRD, 2009). However, in practice, the development path followed during the 11th Plan puts too much emphasis on improving physical access to and facilities in secondary schools/sections, filling in gaps in the infrastructure and staff in the existing secondary schools/sections (only government managed) so as to make them conform to norms and standards. There is, in fact, little emphasis on quality improvement and school effectiveness interventions. So much so that, innovations in secondary schooling are envisaged to be promoted beyond the RMSA framework, primarily through the involvement of NGOs and private sector research and resource institutions. In a way, in the initial years, the effort is to ensure standards in government managed secondary schooling provision.

However, the important quality improvement interventions envisaged in the programme, among others, include curriculum revision and examination reforms; teacher training and rationalisation of subject teacher deployment; capacity building of the School Management and Development Committee (SMDC), including the leadership development programme for school heads; strengthening classroom-based support and supervision; promotion of life skills and adolescent education; strengthening guidance and counselling at the school level; and establishing Learning Resource Centres, with libraries, ICT support and links with Education Satellite (EDUSAT). The RMSA offers a strategic opportunity in secondary education to improve access, equity, quality, accountability and ability to measure learning outcomes through standardisation of curriculum and examinations across states. As it is into just the second year of its implementation, the RMSA is yet to be concretised as a reform programme in secondary education.

Apart from the RMSA, the prominent on-going centrally sponsored schemes in secondary education relate to the establishment of model schools and strengthening of boarding and hostel facilities for girl students, ICT in schools, inclusive education, incentives to girls and national merit-cum-means scholarship to improve participation and retention, vocationalisation of secondary education, improving deployment of language teachers and

adolescence education (MHRD, 2010).²⁹ It is important to note here that, in the absence of any holistic approach to the development of secondary education, the centrally sponsored schemes are hardly integrated into the state plans and these schemes operate as stand alones with little indication of state ownership.

²⁹ It may be noted that not much information is currently available about the development interventions being pursued by states in secondary education.

5. Development Challenges and the Way Forward

A run through the above discussions makes it very clear by now that secondary education as a critical segment of the school education sub-sector has never been properly positioned³⁰ in the policy-planning process in India since independence. While in British India, secondary education was promoted through favourable colonial development policies and community initiatives, it was neglected in free India because of relatively high political commitment for compulsory level of education and higher & professional education. Moreover, even though there has been visible quantitative expansion of secondary education (mainly as a response to increased voluntary social demand), the sub-sector is yet to align itself to the changing context of schooling. In fact, little thinking has gone into developing secondary education to discharge effectively its social and individual functions. Rather, for all these years, the focus has been on its growth as an extension of elementary education. As such, like in several other developing economies, secondary education in India faces a number of development challenges.

The development challenges facing secondary education can be broadly grouped into two categories – (i) those that sit at the systems level; and (ii) the rest that are related either to individual functions of secondary education or to strategic management of the sub-sector specific reform programmes (i.e. challenges relating to implementation of development initiatives), excluding those that are exogenous. In this section, while highlighting some of the systems level challenges in secondary education, the attempt is to identify key challenges relating to implementation of major reform programmes like the RMSA, which are of immediate concern for improving strategic management of the sub-sector. The systems level challenges are generally more dynamic in nature that try to deal with development issues related to aligning secondary education to larger socio-economic needs of society, which, among others, include issues such as:

- (i) What is the appropriate secondary schooling model (in terms of its objectives and functions), particularly in ever changing national and global settings? How to diversify secondary education to accommodate the growing social demand for quality schooling?
- (ii) How to have expanded access while maintaining quality and equity? In other words, what are the limits of trade-off between quality, quantity and equity in developing secondary education?
- (iii) What are the implications of uniform provisioning and mixed market providers (private participation) in terms of coverage and equity?
- (iv) What should be the appropriate curriculum and evaluation system to prepare pupils simultaneously for workplace, pursuing higher education, and preparing for life? What kind of secondary curriculum would lead to high level of relevance and external efficiency?
- (v) What should be the mode of financing secondary education that is sustainable and affordable? Given the investment priorities in other development sectors in a developing country like India, where to get funds to finance secondary education development initiatives?

³⁰ Positioning secondary and higher secondary education in a country simply means assigning priority to these sub-sectors in the policy planning process and determining the optimum size of these sub-sectors through strategic planning for increasing access and relevance.

These issues continue to be debated in national and international development forums, which generally result mostly in development rhetoric (i.e. statements dense with ‘should’, ‘need to be’, etc.). Such systems level secondary education development dialogue, in fact, started much earlier in India immediately after independence, when the Secondary Education Commission (1952-53) had foreseen patterns of growing interdependence among nations, which became subsequently a reality in the late 20th century. While the quest for effective schooling models is on, developing countries like India have remained quite inefficient both in terms of articulating ‘appropriate sustainable change’ in secondary education (i.e. designing reform programmes) and in generating the right kind of political and key stakeholder support for its translation into actions.

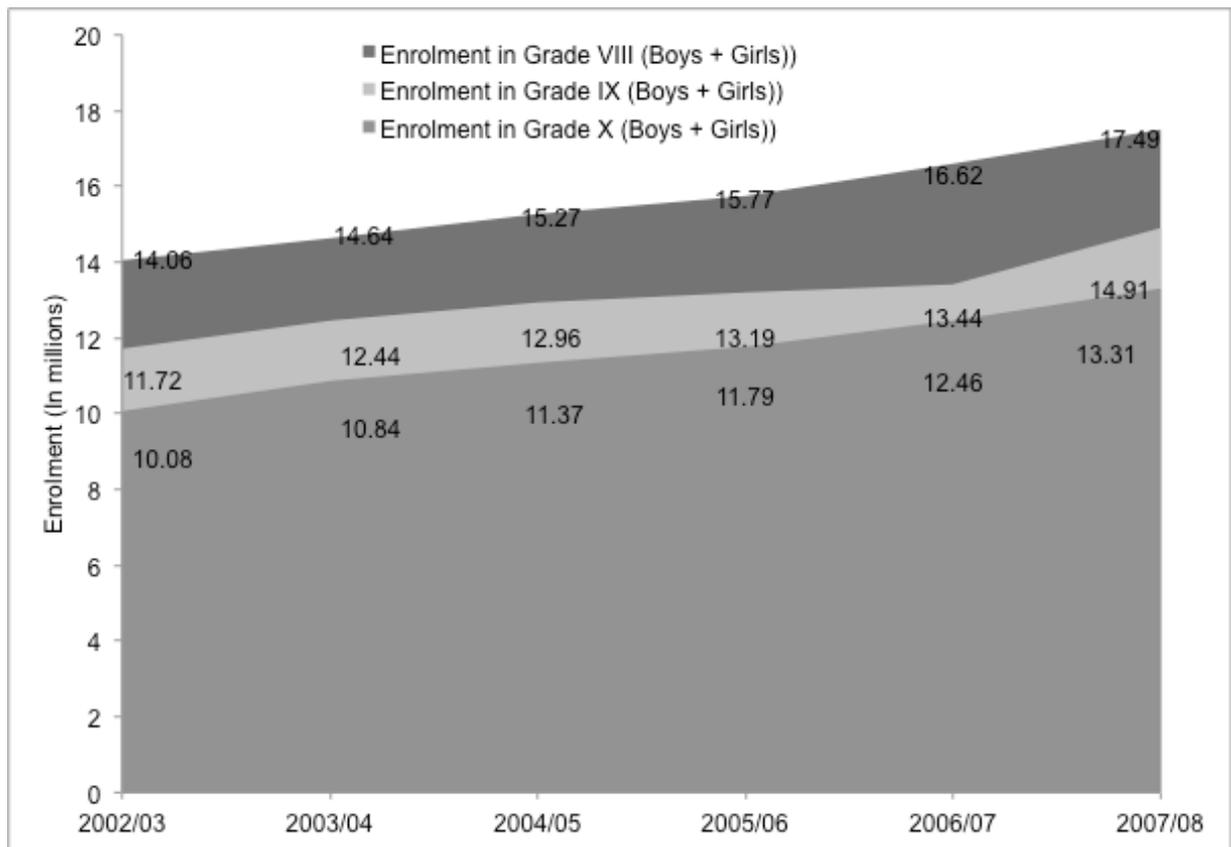
Several factors have contributed to the inappropriate design and ineffective implementation of education reform programmes in India. First, besides political factors (i.e. how secondary education figures in the political agenda), ‘comprehensive profiling of the secondary education sub-sector’ is, perhaps, the starting point for articulating change. How much do we know our secondary schools? Surprisingly, one comes across very little evidence-based information about what affects secondary schooling in terms of inputs, processes, outputs and outcomes. Lack of data and information is the critical development constraint in secondary education in India. Although, in recent years, efforts have been made (as part of RMSA and NUEPA initiatives) to institutionalise the Secondary Education Management Information System (SEMIS) at the sub-national levels, it is yet to feed effectively into the planning and management processes of secondary education. Absence of proper monitoring and feedback mechanisms coupled with thin research in the sub-sector limits the knowledge of secondary education in the country.

Second, lack of related data and information has resulted in designing ‘over ambitious reform programmes’ such as the RMSA, and very often, fragmented centrally sponsored schemes in secondary education. How a reform programme is designed has important bearing for its success and sustainability. Although, the RMSA has been designed taking into account the recommendations of the CABE, which itself, in the absence of appropriate data, emphasised accommodating increased demand for secondary school places³¹ due to the success of the SSA and maintaining the minimum standards in schooling provisions. It may also be underlined that to the success or failure of efforts to achieve a higher level of expansion of secondary education (higher access rate) is largely conditioned by the growth pattern of elementary education. Projecting the success of the SSA is, therefore, critical in estimating demand for secondary schooling. Even with increased participation in secondary education in recent years, there still exists a large gap between Grade VIII and Grade IX enrolment³² (Figure 7). At the all India level, while the promotion rate from Grade IX to X seems to be very high (more than 95%), there has always been substantial transition loss (around 10-15% without adjusting for repeaters in Grades VIII and IX) between elementary and secondary stages (Figure 8). It, of course, varies greatly across regions and social categories. Besides, the poor internal efficiency of the elementary education sets the limits of expansion of secondary education.

31 Assuming 75% success in the SSA, the CABE Committee had projected that the total enrolment in Grades IX-X would increase to 28 million in 2007/08 and 34.20 million at the end of the 11th plan period (2011/12). In 2007/08, the actual enrolment in Grades IX-X (including the repeaters) in India was 28.2 million (Government of India (SES), 2007-08).

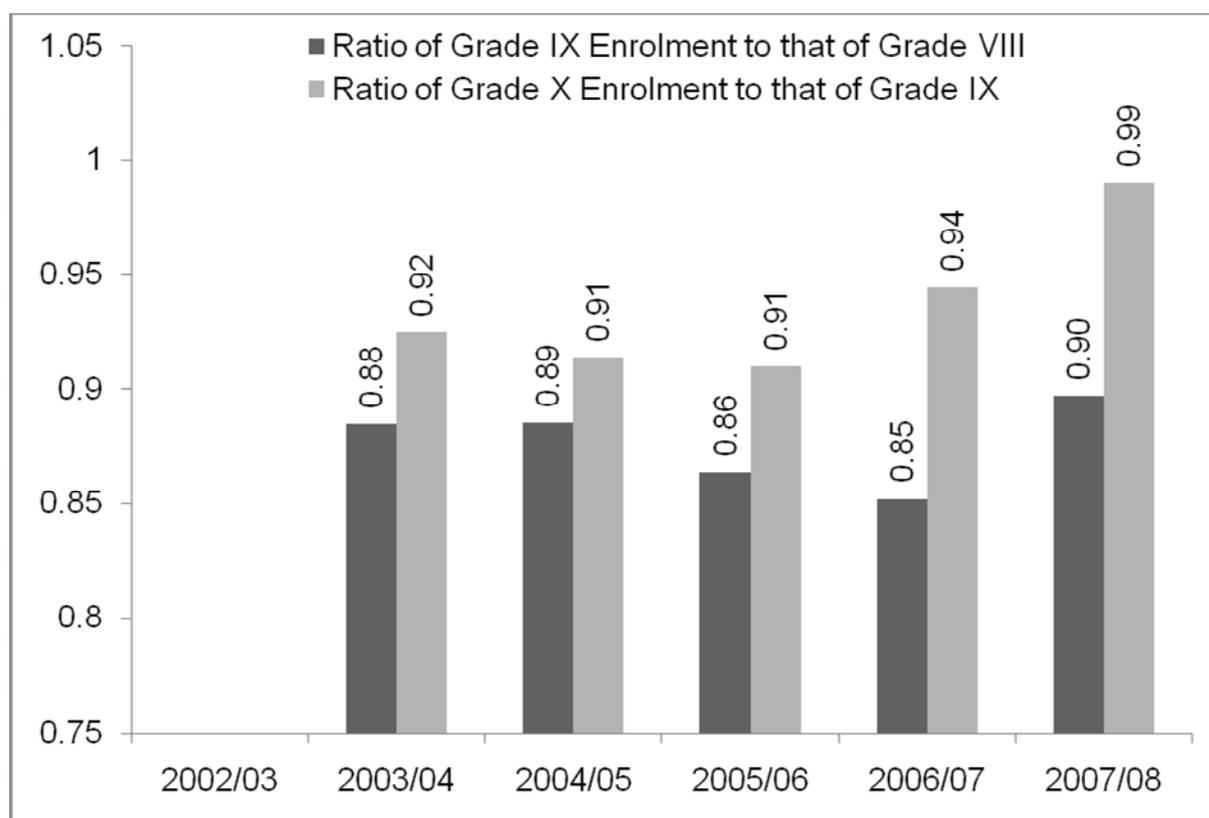
32 Several major states like Kerala, Maharashtra, Tamil Nadu, Punjab, Haryana and West Bengal have registered either negative or low growth of Grade VIII enrolment during 2005/6 and 2007/08 (see Table 5, Annex I).

Figure 6: Growth of Enrolment in Grades VIII, IX and X in India (in millions)



Source: Government of India (SES), various years.

Figure 7: Ratio of Grade IX Enrolment to VIII and Grade X to IX in India



Source: Estimated on the basis of the Government of India (SES) data, various years.

During the tenth plan period (2002-2007), increases in the relevant secondary school age population pulled down the GER, the indicator mainly used to set targets and assess progress in participation in RMSA. High ambitions in reform programmes are evident, for example, from the fact that, at the all India level, it will not be possible to achieve the participation targets at the secondary stage (i.e. 75% GER by 2013/14 and 100% GER by 2016/17) as envisaged under the RMSA. Assuming some success of the SSA in raising participation (which would have already impacted participation at the secondary stage (Grades IX-X) by 2002/05), and considering that the growth trends in enrolment at secondary stage since 2004/05 continues into the future, India may achieve a GER of around 69% by 2013/14 and 76% by 2016/17 (see Table 8, Annex I). It is also interesting to note that several major states like Assam, Jharkhand, Punjab and Bihar may achieve GER of less than 50% at the secondary stage by 2016/17. Only Karnataka, Tamil Nadu, Kerala, Madhya Pradesh and Uttar Pradesh may achieve a GER of over 90% at the secondary stage by 2016/17 (see Table 8, Annex I).³³

Third, low level of ‘readiness to take off’ in terms of pre-reform/project activities has invariably affected planning and implementation of education reform programmes in general and secondary education development programmes in particular. For whatever reasons, India has always invested little time and resources for creating an enabling environment – particularly, in terms of awareness building, information generation through research and consultation, stakeholder participation, capacity building and institutional & management

³³ The large size of the projected GER at the secondary stage in Madhya Pradesh and Uttar Pradesh is because of low base and large change during the first four years starting from 2004/05.

reforms³⁴ for adopting and managing education reform programmes such as the RMSA. In the absence of a threshold level of related capacity, stakeholder participation in education reform programmes generally remain limited, and the 'proximate forums' such as Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs), School Management and Development Committees (SMDCs), Village Education Committees (VEC), Parent-Teacher Associations (PTAs), etc. engaged in educational development are captured by local elites. Even after two years of implementation of the RMSA, states are not ready with the required capacity to plan and manage the programme, particularly at the district and the sub-district levels. Many states have not put together the norms, standards and procedures that will guide them in planning and monitoring the RMSA interventions. They have also not made any substantial investment in awareness and capacity building of personnel, institutions and local governments and making related institutional arrangements for strategic management. As information enhances the power and professional authority of policy-makers, planners and administrators; capacity building becomes a precedence requirement for development. If there is no capacity, especially at the sub-national and institutional levels, there is no development. As long as this dimension of education reform programmes is neglected, programmes like RMSA can hardly make any difference in improving secondary education in the country.

Fourth, 'decentralisation' as a policy strategy has been considered a panacea for decades in designing and implementing education development programmes. In other words, almost all education reform programmes, including the RMSA, view the 'bottom-up' approach to planning and management as key to their success. In such a decentralised development model, the unit at the bottom of the educational hierarchy (in most cases, the school) is envisaged to play a critical role in designing and implementing reforms (like the RMSA) in terms of administrative, fiscal and curricular decisions. In other words, the bottom-up approach creates space for schools to act as key decision-makers rather than mainly agents of others decisions. In practice, however, the implementation of the bottom-up approach in education reform programmes has faltered in India. This has happened primarily because too much emphasis has been placed by policy-makers and administrators at the top of the educational hierarchy on demonstrating 'efficiency' rather than 'effectiveness' of reform interventions. Simply put, the secondary education reform programmes, including the RMSA, have not made enough provisions in their programme designs (in terms of policy and institutional arrangements) to facilitate school-wide reform.

What changes need to be brought about at the central level to enable school decision-making? Policy-makers and development planners have hardly designed education reform programmes taking into account this concern. It is, in fact, difficult to find the kind of 'up' in the 'bottom-up approach' that promote school improvement.³⁵ In major reform programmes such as the RMSA, issues of quality and equity are generally addressed through macro level interventions such as the rationalisation of schooling inputs, improvements in teacher quality,

34 The general understanding of the scope of 'capacity development' and the strategies to scale up the related interventions have been narrowly conceived in various reform programmes in India. Broadly, capacity development is seen as a process by which individuals, groups, organisations and societies create, enhance and maintain their capacities over time (Caillods and Grauwe, 2006). It refers to organisational and technical abilities, relationships and values that enable countries, organisations, groups and individuals at all levels of society to carry out functions effectively and achieve their development objectives. It has human resource, organisational and institutional dimensions.

35 School improvement, school wide or whole school or comprehensive school reform calls for to develop and implement their own improvement plans mainly focusing on identifying learning potentials and barriers to learning and creating enabling environment for effective pedagogy as well as staying connected to its external environment.

curriculum and examination reforms, improved support services, and demand-side financing strategies such as scholarship schemes, incentives to socio-economically disadvantaged groups like free uniforms, textbooks and transport allowances, which often do not have the desired results. School effectiveness interventions (based on whole school reform experiences) may certainly prove critical in supplementing macro strategies and interventions in dealing with issues of equity and quality.

It is a fact that socio-economically disadvantaged groups receive relatively less pedagogical support at home, which needs to be compensated at the school level. Moreover, improving school-wide leadership through school improvement planning is essential for addressing quality related issues including pedagogical practices and school-based support and evaluation systems. In short, the school is the most appropriate unit for identifying what works and what does not in terms of promoting governance, pedagogy, support services, evaluation of learning achievements, professional commitment and authority, leadership to manage and sustain change and communication with key stakeholders. The school, however, needs support in terms of the enabling institutional environment, capacity and funds to undertake school improving activities. Creating space for school improvement in policy planning and programme design (such as the RMSA) and making adequate budgetary provisions for this intervention are considered important development challenges in secondary education.

Fifth, the education reform programmes in the country assign too much importance to resource allocation (mostly within their rigid frameworks) as compared to the resource utilisation aspects. This is evident from the huge spillovers in annual budgets of states under the RMSA. Resources allocated under the education reform programmes like the RMSA are tied funds giving little scope for reallocation at the sub-national and institutional levels thereby limiting innovations and best practices. The District Secondary Education Plan is viewed as an instrument for resource allocation rather than a strategic development document. The criteria for resource allocation often do not take into account the priority areas of development and the capacity of individual states to absorb the allocated resources. Such a strategy has affected both efficiency and effectiveness of investments in secondary education. Moreover, education reform programmes have generally gone for creating monitoring and reporting systems that focus on 'compliance' rather than identification of achievements and failures. In other words, designing appropriate monitoring and feedback systems that celebrate failures along with successes of the reform interventions is a development challenge in secondary education sub-sector in India.

At the functional level, critical areas of reform in secondary education relate to teacher management (i.e. deployment and management, professional development and support services, working conditions, and incentive structures); better school infrastructure; textbooks and teaching materials; progressive technology and examination reforms; and school based management and leadership development (IADB, 2000; World Bank, 2009; Lewin, 2008c; Briseid and Caillods, 2004). In addition, developed country strategies to improve secondary education such as: emphasis on continuity from Grade I to XII rather than maintaining distinctly separate cycles of school education; retaining as many children as possible in the school system for as long as possible; combination of school and enterprise based training at the upper secondary level; emphasis on transversal competencies or general skills in curricula – i.e. communication, problem solving, reasoning, ability to learn and motivation; emphasis on new subject areas such as ICT, citizenship, health, sustainable development and human rights; emphasis on differentiation to meet the learning needs of individual students;

developing team teaching; stronger emphasis on project work; giving schools more autonomy and space for pedagogical innovations and good practices; giving high priority to teacher development; emphasis on school-based support system to provide pedagogical help to teachers; emphasis on delegation and wider accountability of schools on outcomes; and allocating relatively large resources for secondary education provide important clues for designing reform programmes in India.

To conclude, reforming secondary education in India from an elite system to an inclusive one is a huge challenge. Needless to mention, the context of schooling is changing; so does the framework for bringing about sustainable educational change. While dealing with educational change, the emphasis need to shift from strategic planning to strategic thinking; from the management model of 'control and command' to networking and invite and participate; from planned strategy to preparing people for change (i.e. building sustainable capacity); and from transforming people to transferring opportunity. Making secondary schools and their teaching settings effective in India, therefore, would require creating the momentum for change through analyses of school culture -- whether teaching-learning is taking place as part of a reaction and/or compliance, and whether the school is operating in isolation. There is then a need for shifting the school culture from reaction to defining clear purpose and focus; compliance to engagement of students, teachers and other immediate stakeholders; and from an environment of isolation to collaboration. This would require a new framework for articulating change in the secondary education sub-sector; a framework that connects the culture (of classrooms and schools) to conditions (of learning and teaching), and to 21st century competencies. Increased investment in pre-reform activities (for creating sustainable environment for articulating and initiating change); improved political will; strategic thinking and management ensuring continuity in change at the school level; and an increased budgetary allocation seem to be the necessary conditions for making inclusive quality secondary education happen in the country.

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Appendix 1

Figure 8: Education System in India

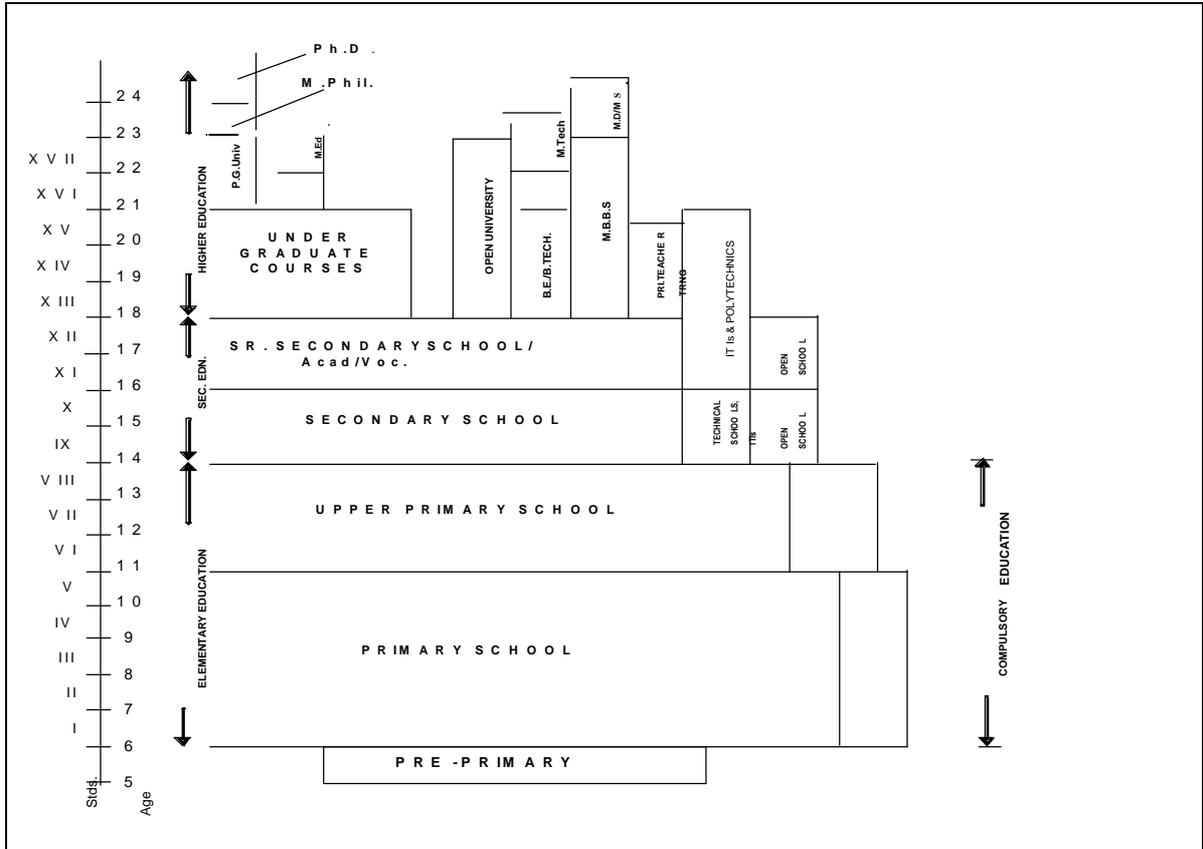


Figure 9: Educational pattern in states and UTs

Level/ Stage of Education	Grades	State/UT
Primary	1-5	Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Jharkhand, Madhya Pradesh, Manipur, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, A & N Islands, Chandigarh, Delhi, and Pondicherry
	1-4	Assam Goa, Gujarat, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, West Bengal, D&N Haveli, Daman & Diu and Lakshadweep,
Upper Primary	6-8	Arunachal Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Manipur, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, A & N Islands, Chandigarh, Delhi and Pondicherry
	5-8	Nagaland, West Bengal
	5-7	Assam, Goa, Gujarat, Kerala, Maharashtra, Meghalaya, Mizoram, D&N Haveli, Daman & Diu and Lakshadweep
	6-7	Andhra Pradesh, Karnataka, Orissa
Secondary/ High School	9-10	Arunachal Pradesh, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Manipur, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, West Bengal, A & N Islands, Chandigarh, Delhi and Pondicherry
	8-10	Andhra Pradesh, Assam, Goa, Gujarat Karnataka, Kerala, Maharashtra, Meghalaya, Mizoram, Orissa, D&N Haveli, Daman & Diu, Lakshadweep
Higher Secondary/ Junior Colleges	11-12	Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Jharkhand, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, West Bengal, A & N Islands, Chandigarh, D&N Haveli, Daman & Diu, Delhi, Lakshadweep and Pondicherry
Higher Secondary grades attached to Degree Colleges	11-12	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Karnataka, Jharkhand, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, West Bengal, Chandigarh

Table 1: Key Demographic and Economic Development Indicators in Select Countries

Country	Average annual growth rate (%), age 0-4 population ¹	GNP per capita (PPP) ² (US\$)	Population living on less than US\$1 per day ³ (%)	Share of income or expenditure (%), the richest 20%	Youth literacy rate (15-24), total (%)	Number of youth illiterates (000)
	2005-2010	2007	1990-2005	1992-2005	2000-2007	2000-2007
Brazil	0.0	9270	8.0	61	98.0	766
Bangladesh	-0.3	1330	41.0	43.0	72	8965
China	-1.0	5420	10.0	52.0	99.0	1639
Columbia	1.3	8260	7.0	63.0	98.0	176
Eritrea	-0.1	780	...	39.0	86.0	138
France	-0.3	33850	...	40.0	...	...
India	-0.1	2740	34.0	45.0	82.0	40412
Indonesia	-0.6	3570	8.0	43.0	97.0	1431
Iran	3.0	10840	...	50.0	97.0	589
Italy	-0.1	30190	...	42.0	100.0	7
Japan	-1.4	34750	...	36.0	...	...
Korea	-1.8	24840	...	38.0	...	...
Pakistan	1.9	2540	17.0	40.0	69.0	11151
Philippines	0.4	3710	15.0	51.0	94.0	975
Russia	1.1	14330	...	47.0	100.0	71
Sri Lanka	-1.1	4200	6.0	48.0	97.0	90
Thailand	0.0	7880	...	49.0	98.0	181
United Kingdom	1.0	...	...	44.0	...	...
United States	0.8	45840	...	46.0	...	...
Vietnam	0.0	2530	...	44.0	94.0	1105
World	0.5	9947	...	...	89.0	125401
Developed Countries	0.2	...	...	...	100.0	451
Developing countries	0.5	...	...	...	87.0	124807
South and West Asia	0.3	...	...	...	80.0	65013

Source: UNESCO, 2010.

Notes: 1. Demographic indicators are from the UN Population Division estimates, revision 2006 (UNDP, 2007).

2. World Bank, 2009.

3. UNDP, 2007 Data are for the most recent year available during the period specified.

... Data not available.

Table 2: Key School Education Development Indicators in Select Countries

Country	Compulsory education (Age group)	Duration of primary education	EFA Development Index (EFADI) rank (according to	NER in primary education, total (%)	Survival rate to last grade in primary education, total	Transition from primary to secondary general	GER in secondary education, total, 2007 (%)		NER in secondary education (lower + upper
	2009	2009	2007	2007	2006	2006	Lower secondary	Upper secondary	2007
Brazil	7-14	4	88	93	76	82	108	90	77
Bangladesh	6-10	5	112	87	84y	97y	60	30	41
China	6-14	5	...	...	...	...	96	60	70
Columbia	5-15	5	...	87	88	99	94	68	67
Eritrea	7-14	5	124	41	60	77	43	18	25
France	6-16	5	7	99	...	100	111	117	98
India	6-14	5	105	89*	66y	84y	71	42	...
Indonesia	7-15	6	65	95	95	99	90	57	68
Iran	6-10	5	...	94	...	83	86y	77y	77y
Italy	6-18	5	5	99	100	100	108	88	85
Japan	6-15	6	2	100	...	...	101	101	98
Korea	6-15	6	21	98	97	99	101	95	97
Pakistan	5-9	5	117	80	70	76	68	32	42
Philippines	6-12	6	85	91	73	98	87	73	61
Russia	6-15	4	...	...	95	...	82	88	...
Sri Lanka	5-14	5	...	66*	93y	97y	45	23	32
Thailand	6-16	6	...	95	...	87	101	67	81
United Kingdom	5-16	6	9	97	...	...	98	97	91
United States	6-17	6	...	92	95	...	100	89	88
Vietnam	6-14	5	...	...	92	93y	...	...	...
World	...	...	...	87	...	93	78	54	59
Developed Countries	...	...	...	96	...	99	102	99	90
Developing countries	...	...	...	86	...	88	75	48	54
South and West Asia	...	...	...	86	...	84	67	39	46

Source: UNESCO, 2010

Note: (y) Data are for the school year ending in 2005.

Table 3: Key School Education Development Indicators in Select Countries

Country	Pupil/Teacher Ratio (PTR) in secondary education, 2007		Total public expenditure on education, 2007		Public current expenditure on primary education, 2007		Public current expenditure on secondary education, 2007	
	Lower secondary	Upper secondary	As % of GNP	As % of total govt. expenditure	As % of GNP	Per pupil as % of GNP per capita	As % of GNP	Per pupil as % of GNP per capita
Brazil	20	17	5.2z	16.2z	1.6z	1.6z 15.0y	2.2z	13.0y
Bangladesh	29	21	2.4	15.8	0.9	8.5	0.9	13.6
China (in 1999 1.9/13.0)	16	16	...	..	...	...	...	...
Columbia	...	...	5.1	12.6	1.9	16.1	1.3	12.9
Eritrea	57	40	2.4z	...	0.8z	9.7z	0.2z	5.1z
France	13	11	5.6z	10.6z	1.0z	16.0z	2.4z	24.1z
India	...	...	3.2y	...	1.2y	9.0y	1.4y	16.7y
Indonesia	14	12	3.6	17.5	...	...	...	...
Iran	19	19	5.6	19.5	1.4	14.1	2.3	10.7y
Italy	9	11	4.8	9.7z	1.1z	24.1z	2.1z	26.7z
Japan	14	11	3.4z	9.5z	...	...	...	...
Korea	20	16	4.4y	15.3y	1.4y	16.2y	1.6y	20.2y
Pakistan	...	...	2.8	11.2	...	...	...	...
Philippines	39	25	2.3y	15.2y	1.2y	7.6y	0.6y	7.9y
Russia	...	4	...	12.9	...	...	...	...
Sri Lanka	19	...	...	...	...	...	...	...
Thailand	20	23	4	20.9	...	...	...	...
United Kingdom	16	14	5.4y	12.5y	1.3y	16.8y	1.8y	18.3y
United States	14	15	5.7z	14.8z	...	...	...	...
Vietnam	20	26	...	...	...	...	...	...
World	...	...	4.9	15	1.4	13.7	1.6	19.5
Developed Countries	...	...	5.3	12.4	1.1	17.8	2.1	22.3
Developing countries	...	...	4.5	...	1.6	12.5	1.3	17.3
South and West Asia	...	...	3.8	15.8	1.3	11.4	1.4	13.6

Source: UNESCO, 2010

Notes: (z) Data are for 2006; (y) data are for 2005.

Table 4: Physical Access to Secondary and Higher Secondary Schooling Provisions, 2002 (NCERT, 2008)

Sl. No.	State/UT	Total Habitations	Number of Habitations		Percentage of Habitations		Percentage of Population Served	
			With Secondary Schools/ Sections at a Distance \leq 5.0 km	With Higher Secondary Schools/ Sections at a Distance \leq 8.0 km	With Secondary Schools/ Sections at a Distance \leq 5.0 km	With Higher Secondary Schools/ Sections at a Distance \leq 8.0 km	By a Secondary School/ Section at a Distance \leq 5.0 km	By a Higher Secondary School/ Section at a Distance \leq 8.0 km
1	Andhra Pradesh	66431	48162	30997	72.5	46.7	85.03	58.78
2	Arunachal Pradesh	4204	1048	819	24.9	19.5	46.28	36.72
3	Assam	65818	57582	50899	87.5	77.3	89.23	79.93
4	Bihar	72668	55580	15327	76.5	21.1	80.52	30.67
5	Chhattisgarh	37491	20914	20650	55.8	55.1	70.91	71.26
6	Goa	706	630	437	89.2	61.9	95.91	80.8
7	Gujarat	31281	23566	17451	75.3	55.8	80.98	58.52
8	Haryana	8583	8088	7671	94.2	89.4	97.53	93.85
9	Himachal Pradesh	35718	27788	23410	77.8	65.5	87.17	78.96
10	Jammu and Kashmir	20792	15573	12052	74.9	58.0	83.68	69.01
11	Jharkhand	50007	22282	9164	44.6	18.3	54.25	25.31
12	Karnataka	51533	39924	28974	77.5	56.2	83.63	61.61
13	Kerala	6592	5923	5769	89.9	87.5	96	95.27
14	Madhya Pradesh	83949	45850	47778	54.6	56.9	62.03	62.05
15	Maharashtra	77298	62523	41113	80.9	53.2	88.43	63.17
16	Manipur	3858	2263	1903	58.7	49.3	75.99	63.14
17	Meghalaya	7245	4157	1920	57.4	26.5	65.61	33.16
18	Mizoram	744	301	47	40.5	6.3	65.74	9.74
19	Nagaland	1224	445	147	36.4	12.0	45.48	14.92
20	Orissa	83427	66370	46633	79.6	55.9	89.3	66.15
21	Punjab	14623	13736	13895	93.9	95.0	96.27	96.25
22	Rajasthan	80461	50909	44843	63.3	55.7	72.86	63.07
23	Sikkim	1383	1022	840	73.9	60.7	80.45	66.95
24	Tamil Nadu	53577	42873	43818	80.0	81.8	85.57	86.03
25	Tripura	7538	6432	6251	85.3	82.9	90.65	88.31
26	Uttar Pradesh	201606	133915	159396	66.4	79.1	71.07	82.33
27	Uttaranchal	25495	20616	21125	80.9	82.9	83.78	86.66
28	West Bengal	113635	105473	99572	92.8	87.6	93.98	89.07
29	A and N Islands	673	398	387	59.1	57.5	83.19	79.47
30	Chandigarh	39	39	39	100.0	100.0	100	100
31	D and N Haveli	460	308	261	67.0	56.7	75.49	67.48
32	Daman and Diu	82	82	82	100.0	100.0	100	100
33	Delhi	187	187	187	100.0	100.0	100	100
34	Lakshadweep	7	6	2	85.7	28.6	99.25	47.83
35	Puducherry	186	183	182	98.4	97.8	98.64	98.44
36	India	1209521	885148	754041	73.2	62.3	80.43	68.51

Table 5: Grouping of States/Union Territories According to the Level of Physical Access to Secondary and Higher Secondary Schooling Provisions, 2002 (NCERT, 2008)

	Percentage of Habitations having Physical Access to Secondary/Hr. Secondary Schooling Provisions, 2002				Percentage of Population Served by Secondary/Hr. Secondary Schooling Provisions, 2002			
	≥ 80	70-80	60-70	< 60	≥ 90	80-90	70-80	< 70
Access to Secondary Schooling Provisions (Distance ≤5.0 km)	Chandigarh, Daman and Diu, Delhi, Puducherry, Haryana, Punjab, West Bengal, Kerala, Goa, Assam, Lakshadweep, Tripura, Maharashtra, Uttaranchal, Tamil Nadu	Orissa, Himachal Pradesh, Karnataka, Bihar, Gujarat, J&K, Sikkim, Andhra Pradesh	D & N Haveli, Uttar Pradesh, Rajasthan	A&N Islands, Manipur, Meghalaya, Chhattisgarh, MP, Jharkhand, Mizoram, Nagaland, Arunachal Pradesh	Chandigarh, Daman & Diu, Delhi, Lakshadweep, Puducherry, Haryana, Punjab, Kerala, Goa, West Bengal, Tripura	Orissa, Assam, Maharashtra, Tamil Nadu, Andhra Pradesh, Uttaranchal, J&K, Karnataka, A&N Islands, Gujarat, Bihar, Sikkim	Manipur, D&N Haveli, Rajasthan, Uttar Pradesh, Chhattisgarh	Mizoram, Meghalaya, MP, Jharkhand, Arunachal Pradesh, Nagaland
Access to Higher Secondary Schooling Provisions (Distance <8.0 km)	Chandigarh, Daman and Diu, Delhi, Puducherry, Haryana, Punjab, West Bengal, Kerala, Tripura, Uttaranchal, Tamil Nadu	Uttar Pradesh, Assam	Himachal Pradesh, Goa, Sikkim	J&K, A&N Islands, MP, D&N Haveli, Karnataka, Orissa, Gujarat, Rajasthan, Chhattisgarh, Maharashtra, Manipur, Andhra Pradesh, Lakshadweep, Meghalaya, Bihar, Arunachal Pradesh, Jharkhand, Nagaland, Mizoram	Chandigarh, Daman and Diu, Delhi, Puducherry, Haryana, Punjab, Kerala,	West Bengal, Tripura, Uttaranchal, Tamil Nadu, Uttar Pradesh, Goa	Assam, A&N Islands, Himachal Pradesh, Chhattisgarh	J&K, D&N Haveli, Sikkim, Orissa, Maharashtra, Manipur, Rajasthan, MP, Karnataka, Andhra Pradesh, Gujarat, Lakshadweep, Arunachal Pradesh, Meghalaya, Bihar, Jharkhand, Nagaland, Mizoram

Source: Author, based on the analysis of the NCERT, 2008.

Table 6: Relevant Secondary School Age Projected Child Population and Availability of Schooling Provisions in States and Union Territories, 2007

State/UT	Total Population, 2001	Share in the Total Population of India, 2001	Share of SC Population, 2001	Share of ST Population, 2001	Projected Total Population, 2007 ('000)	Projected Child Population (Boys + Girls) by Age Group, 2007 (in '000)		Share of Projected Total Child Population (14-15 age group) to Projected Total Child Population (14-15 age group) of India	Number of Secondary Schools/Sections, 2007-08	Number of Hr. Secondary Schools/Sections, 2007-08	Availability of Secondary Schools/Sections per Lakh Population, 2007	Availability of Hr. Secondary Schools/Sections per Lakh Population, 2007
						14-15	16-17					
Andhra Pradesh	76210007	7.4	16.9	6.6	81554	3330	3403	6.9	16937	4032	21	5
Assam	26655528	2.6	6.9	12.4	29053	1315	1304	2.7	5072	748	17	3
Bihar	82998509	8.1	15.7	0.9	92208	4503	4333	9.3	2951	795	3	1
Chhattisgarh	20833803	2.0	11.6	31.8	22933	1004	992	2.1	2042	2148	9	9
Gujarat	50671017	4.9	7.1	14.8	55809	2239	2256	4.6	5523	2805	10	5
Haryana	21144564	2.1	19.4	0.0	23743	1042	1061	2.1	3420	2675	14	11
Jharkhand	26945829	2.6	11.8	26.3	29745	1409	1384	2.9	1429	225	5	1
Karnataka	52850562	5.1	16.2	6.6	56909	2280	2343	4.7	11835	3426	21	6
Kerala	31841374	3.1	9.8	1.1	33535	1100	1122	2.3	3145	2380	9	7
Madhya Pradesh	60348023	5.9	15.2	20.3	67569	3050	3004	6.3	4997	4675	7	7
Maharashtra	96878627	9.4	10.2	8.9	106386	4236	4330	8.7	15762	4575	15	4
Orissa	36804660	3.6	16.5	22.1	39276	1632	1645	3.4	7434	1088	19	3
Punjab	24358999	2.4	28.9	0.0	26391	1056	1072	2.2	2330	1780	9	7
Rajasthan	56507188	5.5	17.2	12.6	63407	2967	2897	6.1	8309	5358	13	8
Tamil Nadu	62405679	6.1	19.0	1.0	65629	2272	2336	4.7	2990	4582	5	7
Uttar Pradesh	166197921	16.2	21.2	0.1	186755	8912	8750	18.4	7518	8000	4	4
West Bengal	80176197	7.8	23.0	5.5	86125	3597	3644	7.4	4686	3954	5	5
INDIA	1028610328	100.0	16.2	8.2	1128520	48529	48559	100.0	113824	59166	10	5

Source: Government of India (SES), various years.

Table 7: GER Trends at Secondary and Higher Secondary Levels, 2004/05 to 2007/08

State/UT	GER at Secondary Level, Grades IX-X (Age Group 14-16)				Average Percentage Point Change in GER at Secondary Level, 2004/05 - 2007/08	GER at Hr. Secondary Level, Grades XI-XII (Age Group 16-18)				Average Percentage Point Change in GER at Hr. Secondary Level, 2004/05 -2007/08
	2004/05	2005/06	2006/07	2007/08		2004/05	2005/06	2006/07	2007/08	
Andhra Pradesh	53.09	56.72	58.70	61.21	2.7	42.17	41.17	40.80	42.04	-0.04
Assam	49.41	49.36	48.61	44.14	-1.8	14.38	14.30	14.38	10.67	-1.24
Bihar	22.47	22.67	24.42	28.08	1.9	9.82	8.92	11.19	11.40	0.53
Chhattisgarh	43.93	38.94	44.29	45.71	0.6	30.38	23.78	23.04	23.31	-2.36
Gujarat	55.30	53.49	54.69	57.64	0.8	21.78	25.51	27.75	27.71	1.98
Haryana	52.94	52.43	56.35	60.02	2.4	34.16	32.04	35.62	42.11	2.65
Jharkhand	26.49	27.39	26.07	29.75	1.1	2.45	3.20	3.48	6.86	1.47
Karnataka	59.03	57.11	65.73	68.09	3.0	33.85	33.45	38.10	41.32	2.49
Kerala	93.19	93.30	92.93	92.54	-0.2	27.85	36.67	51.80	47.99	6.71
Madhya Pradesh	45.66	48.01	52.95	59.61	4.7	25.33	26.91	31.02	35.41	3.36
Maharashtra	68.91	70.49	69.56	69.41	0.2	42.32	43.25	41.75	43.82	0.50
Orissa	53.73	53.37	52.74	53.77	0.0	32.92	32.19	30.56	22.77	-3.38
Punjab	51.47	49.77	48.95	46.95	-1.5	27.87	29.95	31.06	32.04	1.39
Rajasthan	43.91	45.89	48.61	54.04	3.4	21.59	22.25	22.26	24.49	0.97
Tamil Nadu	80.66	82.62	86.72	90.79	3.4	43.87	45.40	48.59	53.74	3.29
Uttar Pradesh	48.92	48.77	48.60	64.27	5.1	22.93	22.45	22.00	41.23	6.10
West Bengal	41.46	44.66	44.55	47.91	2.2	21.07	26.23	24.25	27.21	2.05
India	51.65	52.19	53.27	58.15	2.2	27.82	28.47	28.96	33.48	1.89

Source: Selected Educational Statistics (various years) and Statistics of School Education, 2007/08.

Table 8: Linear Growth Trends of GER at Secondary Level in the Coming Years if the Present Trend (from 2004/05 to 2007/08) Continues

State/UT	GER at Secondary Level, Grades IX-X (Age Group 14-16)				Projected Size of the GER at the Secondary Level, Grades IX-X, if the Growth Trends of the Past Four Years Continues												
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Andhra Pradesh	53.09	56.72	58.70	61.21	64.02	66.65	69.28	71.92	74.55	77.19	79.82	82.45	85.09	87.72	90.36	92.99	95.62
Assam	49.41	49.36	48.61	44.14	43.74	42.08	40.43	38.77	37.12	35.46	33.80	32.15	30.49	28.84	27.18	25.52	23.87
Bihar	22.47	22.67	24.42	28.08	29.06	30.91	32.77	34.63	36.49	38.35	40.20	42.06	43.92	45.78	47.64	49.49	51.35
Chhattisgarh	43.93	38.94	44.29	45.71	45.89	46.96	48.03	49.10	50.17	51.24	52.30	53.37	54.44	55.51	56.58	57.65	58.72
Gujarat	55.30	53.49	54.69	57.64	57.34	58.16	58.98	59.80	60.62	61.45	62.27	63.09	63.91	64.73	65.56	66.38	67.20
Haryana	52.94	52.43	56.35	60.02	61.73	64.24	66.76	69.27	71.79	74.31	76.82	79.34	81.85	84.37	86.89	89.40	91.92
Jharkhand	26.49	27.39	26.07	29.75	29.54	30.39	31.23	32.08	32.92	33.77	34.62	35.46	36.31	37.15	38.00	38.85	39.69
Karnataka	59.03	57.11	65.73	68.09	71.44	75.02	78.60	82.18	85.76	89.34	92.92	96.50	100.08	103.66	107.24	110.82	114.40
Kerala	93.19	93.30	92.93	92.54	92.41	92.18	91.95	91.71	91.48	91.25	91.02	90.79	90.55	90.32	90.09	89.86	89.63
Madhya Pradesh	45.66	48.01	52.95	59.61	63.26	67.93	72.61	77.29	81.97	86.65	91.33	96.01	100.69	105.37	110.05	114.72	119.40
Maharashtra	68.91	70.49	69.56	69.41	69.74	69.79	69.85	69.91	69.96	70.02	70.08	70.13	70.19	70.25	70.31	70.36	70.42
Orissa	53.73	53.37	52.74	53.77	53.28	53.22	53.17	53.12	53.07	53.02	52.97	52.92	52.87	52.82	52.77	52.71	52.66
Punjab	51.47	49.77	48.95	46.95	45.69	44.25	42.81	41.38	39.94	38.50	37.06	35.62	34.19	32.75	31.31	29.87	28.43
Rajasthan	43.91	45.89	48.61	54.04	56.39	59.70	63.01	66.32	69.63	72.95	76.26	79.57	82.88	86.19	89.50	92.81	96.12
Tamil Nadu	80.66	82.62	86.72	90.79	93.82	97.27	100.72	104.17	107.62	111.07	114.51	117.96	121.41	124.86	128.31	131.76	135.21
Uttar Pradesh	48.92	48.77	48.60	64.27	64.11	68.70	73.29	77.87	82.46	87.05	91.64	96.23	100.81	105.40	109.99	114.58	119.17
West Bengal	41.46	44.66	44.55	47.91	49.46	51.38	53.30	55.23	57.15	59.08	61.00	62.92	64.85	66.77	68.70	70.62	72.54
India	51.65	52.19	53.27	58.15	58.96	61.02	63.08	65.13	67.19	69.25	71.31	73.37	75.42	77.48	79.54	81.60	83.66

Source: Based on Government of India (SES), various years.

Table 9: Linear Growth Trends of GER at Higher Secondary Level in the Coming Years if the Present Trend (from 2004/05 to 2007/08) Continues

State/UT	GER at Hr. Secondary Level, Grades XI-XII (Age Group 16-18)				Projected Size of the GER at the Higher Secondary Level, Grades XI-XII, if the Growth Trends of the Past Four Years Continues													
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
Andhra Pradesh	42.17	41.17	40.80	42.04	41.36	41.28	41.20	41.13	41.05	40.98	40.90	40.82	40.75	40.67	40.60	40.52	40.44	
Assam	14.38	14.30	14.38	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	10.67	
Bihar	9.82	8.92	11.19	11.40	12.09	12.79	13.49	14.19	14.89	15.59	16.29	16.99	17.69	18.39	19.10	19.80	20.50	
Chhattisgarh	30.38	23.78	23.04	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	23.31	
Goa	41.79	40.23	40.10	44.12	43.28	43.96	44.65	45.33	46.02	46.71	47.39	48.08	48.76	49.45	50.14	50.82	51.51	
Gujarat	21.78	25.51	27.75	27.71	30.70	32.70	34.70	36.70	38.71	40.71	42.71	44.72	46.72	48.72	50.73	52.73	54.73	
Haryana	34.16	32.04	35.62	42.11	42.84	45.58	48.33	51.07	53.81	56.56	59.30	62.04	64.78	67.53	70.27	73.01	75.76	
Jharkhand	2.45	3.20	3.48	6.86	7.38	8.73	10.08	11.43	12.78	14.13	15.48	16.83	18.18	19.53	20.89	22.24	23.59	
Karnataka	33.85	33.45	38.10	41.32	43.45	46.15	48.86	51.56	54.27	56.98	59.68	62.39	65.09	67.80	70.51	73.21	75.92	
Kerala	27.85	36.67	51.80	47.99	59.97	67.52	75.08	82.63	90.19	97.74	105.30	112.85	112.85	112.85	112.85	112.85	112.85	
Madhya Pradesh	25.33	26.91	31.02	35.41	38.26	41.69	45.13	48.56	52.00	55.43	58.87	62.30	65.74	69.17	72.61	76.04	79.48	
Maharashtra	42.32	43.25	41.75	43.82	43.54	43.84	44.14	44.44	44.74	45.04	45.34	45.64	45.94	46.24	46.54	46.84	47.14	
Orissa	32.92	32.19	30.56	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	22.77	
Punjab	27.87	29.95	31.06	32.04	33.64	35.00	36.36	37.72	39.08	40.45	41.81	43.17	44.53	45.89	47.26	48.62	49.98	
Rajasthan	21.59	22.25	22.26	24.49	24.83	25.70	26.57	27.44	28.31	29.18	30.05	30.92	31.79	32.66	33.54	34.41	35.28	
Tamil Nadu	43.87	45.40	48.59	53.74	56.10	59.38	62.66	65.94	69.22	72.50	75.78	79.06	82.34	85.62	88.90	92.18	95.46	
Uttar Pradesh	22.93	22.45	22.00	41.23	40.77	46.21	51.66	57.10	62.55	67.99	73.44	78.88	84.33	89.77	95.22	100.66	106.11	
West Bengal	21.07	26.23	24.25	27.21	28.80	30.44	32.09	33.73	35.38	37.02	38.66	40.31	41.95	43.60	45.24	46.88	48.53	
India	27.82	28.47	28.96	33.48	34.05	35.80	37.54	39.29	41.04	42.79	44.53	46.28	48.03	49.77	51.52	53.27	55.01	

Source: *Ibid.*

Table 10: Categorisation of States and UTs according to Growth Trends in Grade VIII Enrolment, 2001-2004

State/UT	Total Enrolment in Grade VIII							Linear Growth Trends: Average Annual Growth Rate (%)		
	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2001/02-2005/06	2005/06-2007/08	2001/02-2007/08
Group I: Negative Growth Rate (2001-2007)										
Kerala	605813	586041	573682	554921	543831	534802	533926	-2.7	-0.9	-2.1
Mizoram	15868	16024	15719	16366	16544	16434	15519	1.0	-3.1	-0.4
A & N Islands	6867	6961	6816	7050	7384	7606	6813	1.8	-3.9	-0.1
Goa	25097	25834	25442	25714	25363	25092	24968	0.3	-0.8	-0.1
Group II: Growth Rate < 2%										
Maharashtra	1662922	1815110	1815409	1844510	1928972	1885411	1687215	3.8	-6.5	0.2
J & K	154397	165259	136350	150856	162028	162028	162028	1.2	0.0	0.8
Tamil Nadu	1138596	1056333	1111760	1169045	1143584	1166641	1196248	0.1	2.3	0.8
Puducherry	20331	21145	21679	21707	21743	21735	21875	1.7	0.3	1.2
Punjab	302129	324740	314196	315329	321858	325269	330688	1.6	1.4	1.5
Orissa	450000	444635	450744	461345	479071	495957	502144	1.6	2.4	1.8
Assam	357520	326126	374471	376523	383872	384020	400312	1.8	2.1	1.9
Group III: Growth Rate between 2-4%										
Haryana	333203	374466	367950	407298	408276	440751	379846	5.2	-3.5	2.2
Delhi	234957	252282	248676	212449	251345	242028	269408	1.7	3.5	2.3
Chandigarh	12398	13754	12494	12089	11491	12978	14291	-1.9	11.5	2.4
Manipur	40651	40651	42580	43984	45391	47041	47084	2.8	1.8	2.5
Rajasthan	962990	730408	832939	918062	965658	1104038	1133317	0.1	8.3	2.8
Himachal Pradesh	130025	146157	143165	144197	146683	142156	153228	3.1	2.2	2.8
Daman & Diu	2413	2826	2804	2612	2889	2930	2940	4.6	0.9	3.3
Uttaranchal	146039	157634	167333	171084	173321	174094	178983	4.4	1.6	3.4
West Bengal	890731	952149	1063759	1034824	1051671	1092435	1102356	4.2	2.4	3.6
Gujarat	689304	756445	739896	760165	777225	817206	856043	3.0	4.9	3.7
Karnataka	745283	798440	777092	810096	841061	895204	926178	3.1	4.9	3.7
Group IV: Growth Rate between 4-6%										
Lakshadweep	1298	1741	1631	1426	1440	1661	1661	2.6	7.4	4.2
Tripura	42546	46394	50050	50319	54442	56212	55865	6.4	1.3	4.6
Sikkim	7217	8512	7585	8621	9806	9031	9488	8.0	-1.6	4.7
India	13170216	14059195	14641856	15266907	15766769	16622436	17495128	4.6	5.3	4.8
Andhra Pradesh	829056	901755	1000339	1066846	1087713	1122443	1173320	7.0	3.9	6.0
Arunachal Pradesh	16060	18093	16023	16784	18854	19532	22733	4.1	9.8	6.0
Group V: Growth Rate > 6%										
Chhattisgarh	294515	326550	348404	367988	325791	410610	422069	2.6	13.8	6.2
Nagaland	18451	18960	24864	27448	30191	30191	29323	13.1	-1.4	8.0
Jharkhand	227379	200004	251313	268223	284641	318621	378482	5.8	15.3	8.9
D & N Haveli	2800	3366	3661	3530	4003	4093	4686	9.3	8.2	9.0
Madhya Pradesh	809009	953253	994887	1154025	1293693	1464833	1422932	12.5	4.9	9.9
Bihar	568195	554046	564511	651050	702319	885527	1002562	5.4	19.5	9.9
Meghalaya	23547	29150	30074	37626	39034	43429	43598	13.5	5.7	10.8
Uttar Pradesh	1402609	1983951	2103558	2152795	2205581	2260397	2982999	12.0	16.3	13.4

Source: Selected Educational Statistics, various years



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Report summary:

The paper aims to provide an overview of secondary education in India with focus on the development trajectory currently pursued in the sub-sector. The paper reviews current status, development policies, approaches and reform programmes. While discussing the tremendous progress made in enhancing secondary schooling opportunities in India during the past six decades, the paper highlights the increasing regional, gender and social disparities in secondary education. It is argued that there is a large deficit in policy planning for secondary education development which not only goes against the principle of inclusive development and the service-led growth strategy but also affects India's capacity to connect effectively to globalisation. The broad development approach pursued by the country needs a clearer framework for change with more focus on decentralisation and governance issues and quality improvement. The paper identifies key challenges relating to implementation of major reform programmes including Rashtriya Madhyamik Shiksha Abhiyan (RMSA). It concludes that India needs to step up investment in pre-reform activities for creating a sustainable environment for initiating change; improving political will; introducing strategic management models ensuring continuity in change at the school level; and increasing budgetary allocation for making more inclusive quality secondary education a reality

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