



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

**Access to Elementary Education in India
Country Analytical Review**

**R. Govinda
Madhumita Bandyopadhyay**

July 2008



**National University of Educational
Planning and Administration
NUEPA**



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Educational Access, Transitions & Equity
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The Consortium for Educational Access, Transitions and Equity (CREATE) is a Research Programme Consortium supported by the UK Department for International Development (DFID). Its purpose is to undertake research designed to improve access to basic education in developing countries. It seeks to achieve this through generating new knowledge and encouraging its application through effective communication and dissemination to national and international development agencies, national governments, education and development professionals, non-government organisations and other interested stakeholders.

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Access to Elementary Education in India: Country Analytical Review

**R. Govinda
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List of Acronyms

AIE	Alternative and Innovative Education
AIES	All India Educational Survey
ASER	Annual Status of Education Report
DISE	District Information System for Education
DPEP	District Primary Education Programme
ECCE	Early Childhood Care and Education
EFA	Education for All
EGS	Education Guarantee Scheme
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GNP	Gross National Product
HDI	Human Development Index
ICDS	Integrated Child Development Scheme
KGBV	Kasturba Gandhi Balika Vidyalaya
MDG	Millennium Development Goals
MHRD	Ministry of Human Resource Development
MICS	Multiple Indicator Cluster Surveys
MPCE	Monthly Per Capita Consumption Expenditure
NCERT	National Council of Educational Research and Training
NER	Net Enrolment Ratio
NGO	Non Governmental Organisation
NFHS	National Family Health Survey
NPE	National Policy on Education
NPEGEL	National Programme of Education for Girls at Elementary Level
NPNSPE	National Programme of Nutritional Support to Primary Education
NSS	National Sample Survey
OBC	Other Backward Classes
PTR	Pupil-Teacher Ratio
SC	Scheduled Castes
SSA	Sarva Shiksha Abhiyan
ST	Scheduled Tribes
UEE	Universal Elementary Education
UT	Union Territory

Acknowledgements

This CREATE Country Analytical Review (CAR) in India consisted of a fairly large exercise involving several scholars working intensively on the various sub-themes related to elementary education India. Each has resulted in independent papers. The present Review Paper is an attempt to synthesize the observations emerging from all these papers. We are grateful to the authors for allowing us to use the papers for developing this synthesis.

Other related papers which are completed or being prepared for publication with CREATE include: *Education and Social Equity: With a Special Focus on Scheduled Castes and Scheduled Tribes in Elementary Education* (Sedwal and Kamat, 2008), *Gender Equity in Education: A Review of Trends and Factors* (Bandyopadhyay and Subrahmanian, 2008), *Access to What? Impact of Diversification of Supply on Access and Participation* (Juneja, forthcoming), *School Dropouts or 'Pushouts'? Overcoming Barriers for the Right to Education* (Sinha and Reddy, forthcoming), *Pedagogy and Pedagogue: Factors Impacting Access, Equity and Transition of Elementary School Children* (Nawani, forthcoming), *Distress Seasonal Migration And its Impact on Children's Education* (Smita, 2008), *Impact of Malnutrition on Cognition and Education of Children. A Review of Research Evidence* (Sood, forthcoming), and *Access to Elementary Education and Changing Framework of Local Governance* (Govinda and Bandyopadhyay, forthcoming). In addition, a comprehensive bibliography on access issues in India has been prepared, and is available through the CREATE database¹.

An initial version of the CAR was presented and discussed with the National Reference Group and detailed comments were received from several CREATE partner researchers, including Dr. Frances Hunt. We are particularly grateful to Professor Keith Lewin, Professor Angela Little and Dr. Michael Ward for their insightful observations on the larger version of the CAR. We would also like to acknowledge the continued support and cooperation extended by the authorities of NUEPA, and in particular the Vice-Chancellor, Professor Ved Prakash, for his personal interest and involvement in the project.

¹ These and other CREATE documents are available at: www.create-rpc.org. The CREATE database is accessible at: <http://www.create-rpc.org/database/>.

Preface

This Analytic Review is extensive in scope and comprehensive in ambition as it is an attempt to come to terms with the issues that surround access to basic education in India. The scale of the problems is vast and the diversity inevitable across a population of more than 200 million primary age children daunting to grasp. The CREATE team in NUEPA have distilled many of the key issues that pre-occupy policy and practice and have provided a wide ranging view of baseline data that maps the current status of access. The Zonal model of exclusion that CREATE has developed has been applied to structure discussion and draw attention to the differences in the topography of exclusion in the different zones.

The analysis identifies many fertile areas for research within CREATE not all of which can be covered in depth. These include needs to understand the dynamics of extending access at system level, and at the level of the individual and households that make local decisions on sustained participation; develop more integrated analysis of the multiple causes of exclusion that embrace poverty, gender, social discrimination and location; recognize that silent exclusion is real for those enrolled but learning little and for those who are displaced and outside normal educational administrative systems e.g. migrants; highlight the importance of early childhood health and nutrition and its consequences for subsequent successful completion of basic education; revisit issues that surrounded public school financing in pro-poor ways and the opportunities, limitations and hazards associated with new forms of public private cooperation with both for profit and not for profit providers; and to develop more sensitive and useful indicators and data interpretation methods that capture the nuances of equity and distributional injustices that are often concealed by existing targets for universalizing access.

With such an ambitious agenda it would be surprising if the analysis captured all that it should and plenty of scope remains to extend and deepen the insights in this report.

As noted by the authors this Analytic Review is part of a programme of research that will generate a series of research reports in the Pathways to Access series and other publications that should fill at least some of the gaps.

The team are to be congratulated on an extensive piece of working adding dimensions to the debates around Sarva Shiksha Abhiyan.

Professor Keith M Lewin (Director of CREATE)

Summary

This analytical review aims to explore trends in educational access and to delineate different groups which are vulnerable to exclusion from educational opportunities at the elementary stage. This review has drawn references from a series of analytical papers developed on different themes, including regional disparity in education, social equity and gender equity in education, the problem of drop out, education of the children of migrants, inequity in educational opportunities, health and nutrition, and governance of education, among others. The first and second sections of the paper present a brief review of the state of elementary education in India with particular focus on regional disparities and social inequities in provision. The third section delineates different zones of exclusion, highlighting the nature and magnitude of the problems of access, transition and equity. The fourth section captures the profiles of the varying groups of children and addresses the questions: 'who is excluded from schooling?' and 'why are they excluded?'. In the final section, the paper makes an effort to identify gaps in our understanding which point to the need for further research and also identifies strategies that have had some success in addressing issues of access to elementary education in India.

Access to Elementary Education in India: Country Analytical Review

1. Introduction

India made a Constitutional commitment to provide free and compulsory education to all children up to the age of 14 nearly sixty years ago. The goal, which was expected to be achieved by 1960, remains elusive, even now. Yet, one has to admit that developments in recent years have had significant impacts on the situation, raising the hope that universal basic education could be a reality within a reasonable period of time. Three factors seem to be making a distinct difference in the growth trajectory of elementary education in the country.

The first factor is the increased direct involvement of the central government in strengthening infrastructure and delivery of elementary education. This is important as historically the state governments have had almost complete responsibility for producing and delivering public elementary education. State governments, of course, continue to provide a major share of recurring financial expenditure, but the proactive manner in which the Government of India has acted following the adoption of the National Policy on Education 1986 stands out as a landmark innovation in educational policy. This changed centre-state framework of action has made the central government the prime mover in designing and implementing development initiatives in elementary education in many states, although the situation is not uniform across the country. This relationship has become further reshaped as external aid agencies have also claimed an important place in the partnership framework involving the central as well as state governments.

Coupled with this enhanced initiative from the central government is the adoption of the district level as the base for planning development inputs for elementary education, and the concurrent move to decentralize governance by empowering local self-governance mechanisms through *panchayati raj* (local self-government) institutions. This second factor has added a new dimension to the multi-layered planning and implementation framework and created a new dynamic at the grassroots level.

The third factor that has begun to significantly reshape the elementary education scene in India in recent years is the massive social mobilization drive. This has been encouraged over the last 10-15 years within the elementary education sector, under the auspices of the National Literacy Mission. This has resulted in increased demand for elementary education, on the one hand, whilst substantially enhancing the role of non-state actors in the provision of elementary education and support services in the country, on the other.

Almost all official documentation, and in particular the successive Five Year Plans at national level, acknowledge these factors as significantly impacting the progress of elementary education. But what is the nature and extent of impact of these developments on improving access to and participation of children in elementary education across the country? Are more children accessing and completing the elementary education cycle and moving to secondary schools? How different is the

scene across different regions and social groups in the country? To what extent has the system overcome social and gender inequities in progressing towards the goal of universal elementary education? What factors seem to facilitate or hinder the smooth flow of children within the school system? To what extent are school factors responsible for ensuring that children attending schools achieve the expected levels of learning? These are critical questions that might possibly determine whether India achieves the targets and goals set at the national level under the flagship programme of Sarva Shiksha Abhiyan (SSA), as well as the international level under the Dakar Declaration on Education for All (EFA) and the Millennium Development Goals (MDGs).

The present paper attempts to address some of these questions through analysis of the existing databases and empirical research studies. The focus will be specifically on delineating the problems involved in achieving the goal of Universal Elementary Education (UEE) and identifying knowledge gaps in understanding the issues involved. Much of the information will be taken from research studies and project evaluation reports carried out by government agencies as well as independent researchers. It will also rely on data from a range of sources. This includes (1) annual data published by Government of India under the title, Selected Educational Statistics, (2) data from the District Information System for Education (DISE) at the the National University of Educational Planning and Administration (NUEPA) which collects and presents basic information annually on all elementary schools in the country under the auspices of Sarva Shiksha Abhiyan, (3) large-scale sample surveys such as the National Sample Survey (NSS) and the National Family Health Survey (NFHS) which have been conducted on a periodical basis, and (4) the All India Educational Survey (AIES) conducted by the National Council of Educational Research and Training (NCERT) which periodically covers every school on a census basis, the last one being carried out in 2002.

This Country Analytic Review (CAR) will present data on the current status of elementary education in the country to highlight the gaps in achievement towards UEE, alongside an analysis of the issues which affect the access and participation of children in elementary education. With the latter objective in mind, the paper utilises CREATE's model of Zones of Exclusion (see Lewin, 2007):

- Zone 0** children who are excluded from pre-schooling
- Zone 1** children who have never been to school, and are unlikely to attend school
- Zone 2** children who enter primary schooling, but who drop out before completing the primary cycle
- Zone 3** children who enter primary schooling and are enrolled but are 'at risk' of dropping out before completion as a result of irregular attendance, low achievement, and silent exclusion from worthwhile learning
- Zone 4** children who fail to make the transition to secondary school grades
- Zone 5** children who enter secondary schooling but who drop out before completing the cycle

Zone 6 children who enter secondary schooling and are enrolled but are ‘at risk’ of dropping out before completion as a result of irregular attendance, low achievement and silent exclusion from worthwhile learning

Specifically, the paper identifies groups of children who fall into these zones of exclusion and also identifies some of the factors which shape access in India². It is intended that such an analysis will help understandings of the issue of equity in educational provision. The analysis will also identify gaps in our understanding which point to the need for further research, and identify strategies that have had some success in addressing access, transition and equity in elementary education in India.

The remainder of the paper is divided into four sections. The following section (Section 2) presents a brief review of the state of elementary education in the country with particular focus on regional disparities and social inequities in provision and public expenditure patterns. Section Three delineates the different zones of exclusion, and highlights the nature and magnitude of the problems of access, transition and equity. Section Four captures profiles of different groups of children who are excluded from schooling and answers questions about why they might be excluded. The last section deals with gaps and priorities for action and research in the area of elementary education in India.

² National data on Zone 6 does not exist since there are no monitoring assessments that capture how many children fail to reach national norms for achievement, so this issue is not included in the following monograph. This is an area that requires more research.

2. The State of Elementary Education in India: An Overview

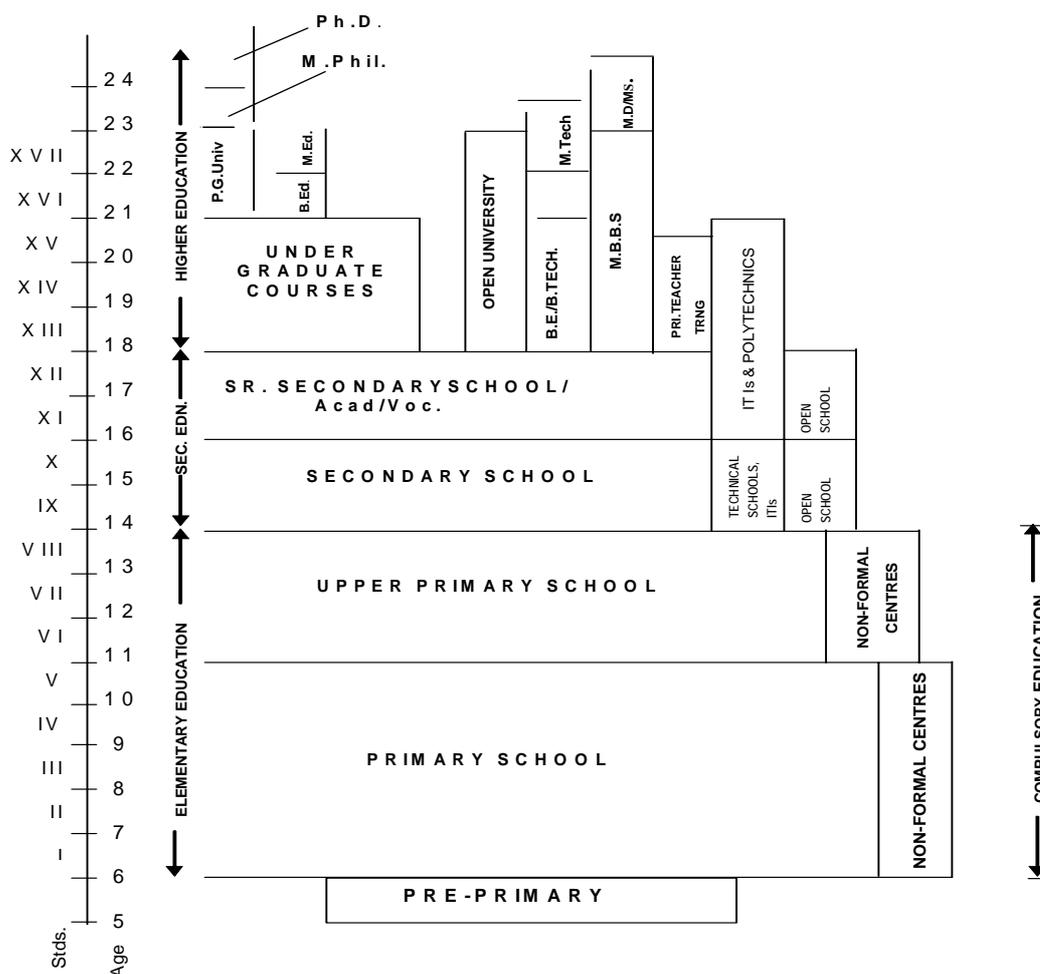
The Indian scenario is too complex and varied to be effectively captured through aggregate national figures in relation to the availability of schooling facilities across the country and their optimum use for educating all children. At one end of the spectrum, there is Kerala with practically every child completing elementary school and transitioning to secondary school; and almost every school having at least five teachers and five classrooms. At the other end, there is Bihar where only one out of two children in the relevant age group is in school; the majority of children entering school fail to complete an elementary cycle; many schools are understaffed; and teachers are often untrained and given little academic support.

2.1 The Education System in India

Education in India is the joint responsibility of the central and state governments, and educational rights are provided for within the Constitution (GoI, 1949). Following the recommendations of the National Policy on Education (NPE) 1968 and subsequently by NPE 1986, attempts are being made to adopt a common structure of schooling across the country. The general pattern adopted at the national level, commonly known as the 10+2+3 pattern, envisages a broad-based general education for all pupils during the first ten years of schooling. Diversification of courses takes place only at the higher secondary level (grades 11 and 12), and is reliant on students successfully completing the secondary school examination at the end of grade 10. Successful completion of the public examination at the end of grade 12 qualifies the student for university entry. Of these twelve years of schooling, the first eight years are termed 'elementary education', and this should broadly correspond to the compulsory education period of 6-14 years of age.

At the operational level, elementary school is generally divided into two parts with five years of primary schooling (grades 1-5) followed by three years of upper primary or middle school (grades 6-8). While the above description (also see Figure 1 below) gives the general picture found in national level, actual decisions regarding the organization and structure of school education are the prerogative of state governments. Consequently, considerable variations are found in the organizational patterns of schooling across the different states of India. Several states follow patterns in which elementary schooling consists of seven years, divided into four years of primary followed by three years of upper primary. Thus, even while grade 8 is part of the compulsory education age range, it is part of the secondary school cycle. Correspondingly, the length of secondary schooling also varies, 'while in 22 states/UTs, secondary stage consists of classes IX and X, it consists of classes VIII, IX and X in 13 states/UTs' (GoI, 2003a: 1). Variation is also found at the higher secondary level; in some states the higher secondary stage is part of collegiate education known as junior college.

Figure 1: The Structure of the Education System in India



Source: NUEPA (2007a)

2.2 Coverage and Growth of Schooling Facilities

The Seventh All India Educational Survey (AIES) conducted by the National Council of Educational Research and Training (NCERT) provides an overview of the availability of schooling facilities in 2002 in India (NCERT, 2005). In 1993-1994 according to the Sixth AIES, 83.4% of habitations in the country had primary schooling facilities within a distance of 1 km (NCERT, 1998). The percentage of habitations served by upper primary schools at a distance of up to 3 km was 76.2% of the country. By 2002, around 87% of habitations had a primary school within a distance of 1 km, while 78% of habitations had an upper primary school within 3 km (NCERT, 2005). This suggests that physical access to school has continued to improve over the years, although at a relatively slow pace. The Seventh AIES reveals that among the major states in India, numbers of habitations with access to primary schools within walking distance, varied between around 94% in Andhra Pradesh; 75% in Himachal Pradesh and 77.2% in Jharkhand (which has a large tribal population). The survey also shows that the percentage of habitations having primary schools within the habitation was less than the national average in 2002 in states such as Assam, Jharkhand, Orissa and Rajasthan, where educational indicators are also often lower. With respect to the availability of upper primary schools, Jharkhand comes at

the bottom of the table, with only 61.4% of habitations having access to upper primary schools within a distance of 3 km. Having said this, the Seventh AIES data shows an increase of more than 50% in primary schooling facilities in Assam, and a more than 30% increase in Chhattisgarh, Jammu & Kashmir, Madhya Pradesh, Punjab and Uttarakhand during the period 1993-2002.

During the same period, substantial numbers of primary and upper primary schools were closed down in Kerala, probably due to demographic changes³. The growth of schools remained slower generally in states with lower educational indicators. Having said this, Table 1 indicates a phenomenal growth of the total number of schools in the country as a whole, with a rapid increase in student enrolment and numbers of teaching staff at the primary and upper primary levels in recent years. Available data shows that in 2005-2006, 107,539 schools were constructed and another 42,144 were under construction, and as many as 309,005 additional rooms were also constructed, while 270,581 more were under construction (GoI, 2007b).

Table 1: Progress in Education in India since 1950

Indicators	1950-1951	2000-2001	2001-2002	2002-2003	2004-2005
No. of Elementary Schools	223,600	845,007	883,667	897,109	1,042,251
No. of Teachers in Elementary Schools (in millions)	0.624	3.22	3.39	3.49	3.75
Enrolment in Primary Schools (in millions)	19.20	113.83	113.90	122.4	130.8
Enrolment in Upper Primary Schools (in millions)	3.00	42.81	44.80	46.9	51.2
Enrolment in Elementary Schools (in millions)	22.20	156.64	158.70	169.3	182.0

Source: GoI (2007a)

The rapid increase in the number of schools, teachers and students seems to be attributed, to a great extent, to an increase in single-room and single-teacher schools which invariably have inadequate physical and academic infrastructures (see Blum and Diwan, 2007). For instance, the Seventh AIES (NCERT, 2005; see Table 2) shows that 15% of all primary schools in the country are single teacher schools. The share of single teacher schools is much higher in rural areas than in urban areas. Barring a few states such as Tamil Nadu and Kerala, all major states have a substantial number of schools in this category. The occurrence of these small schools seems most prevalent in Jharkhand and Bihar, followed by states like Maharashtra, Orissa and Karnataka. In terms of absolute numbers, Uttar Pradesh has the highest number of such small schools in rural areas, followed by Andhra Pradesh, Madhya Pradesh and West Bengal. These states also have a large number of small schools in urban areas.

³According to the 61st Round of NSS, similar changes were noted at the national level: 'During the five years separating the present survey from the last quinquennial one, a small shift is visible in the population, especially among the younger groups. A decline in the share of the youngest age-group (0-4 years) as well as of the children aged 5-14 years is noticeable in all the categories in both rural and urban areas' (GoI, 2006b).

Table 2: Single Teacher Primary Schools in Major States (2002-2003)

State	Rural		Urban		Total	
	Percentage of single teacher schools	Total number of primary schools	Percentage of single teacher schools	Total number of primary schools	Percentage of single teacher schools	Total number of primary schools
Andhra Pradesh	19.9	53,916	8.8	7,251	18.6	61,167
Assam	18.8	28,630	2.3	1,415	18	30,045
Bihar	24.3	38,428	12.6	2,083	23.7	40,511
Chhattisgarh	15.4	22,477	2.7	1,474	14.6	23,951
Gujarat	14.6	5,862	6.4	1,383	29	3,245
Haryana	7.7	8,504	1.8	1,109	7	9,613
Himachal Pradesh	13.6	10,614	0.4	254	13.3	10,868
Jammu & Kashmir	22	9,745	5.1	743	20.8	10,488
Jharkhand	32.8	16,164	14.4	895	31.8	17,059
Karnataka	20.4	23,450	6.9	2,804	18.9	26,254
Kerala	0.7	5,251	0.1	1,446	0.5	6,697
Madhya Pradesh	16.1	47,383	2.7	6,850	14.4	54,233
Maharashtra	25.5	34,560	4.3	6,290	22.2	40,850
Orissa	23.2	34,541	5.6	2,136	22.1	36,677
Punjab	17	12,042	5.7	1,298	15.9	13,340
Rajasthan	13.5	29,438	6	3,315	12.7	32,953
Tamil Nadu	0.0	26,341	0.0	7,053	0.00	33,394
Uttar Pradesh	11.6	96,331	4.1	17,215	10.5	113,546
Uttarakhand	19.3	12,466	3.4	1,436	17.7	13,902
West Bengal	8.1	41,845	5.7	8,006	7.7	49,851
All India	16.4	573,085	4.6	78,290	15	651,375

Source: Estimates from NCERT (2005)

Provision of quality education in these schools has become a major concern as, with only one teacher, the schools do not open whenever the teacher is on leave, busy with other work or on training courses. With these schools in mind, it is important to develop a disaggregated analytical picture of the improvement in the physical infrastructure of schools in order to make a reliable assessment of their adequacy for achieving the goal of universal access. Merely counting school and classroom numbers may not reveal the whole picture, particularly in terms of their ability to attract, retain and provide education of satisfactory quality. This is undoubtedly an important area demanding in-depth empirical exploration.

Improvements in the physical access to elementary education by providing primary and upper primary schools seems to have also impacted on the ratio of upper primary sections to lower primary sections. In 1957, at the time of the First AIES (NCERT, 1967) there was only one upper primary school for every six primary schools. Data from successive AIES shows that the ratio was 3:1 by 1993 (NCERT, 1998). Data for

2002 indicates that the ratio has further improved to 2.7:1 (NCERT, 2005)⁴. This also indicates an increased demand for upper primary education and improvements in transition rates from primary to the upper primary stage.

The Seventh AIES (NCERT, 2005) also gives important information on the state of physical infrastructure in schools. For example, of a total of nearly 900,000 lower and upper primary schools, only around 80% have *pucca* (all-weather, usually concrete) buildings. The situation seems to be most disturbing in Assam as less than 40% of schools have pucca buildings, and serious in several other states, such as Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Orissa and West Bengal. That said, there have been considerable improvements in the situation in these states over the last few years.

2.3 Education Providers

Besides government managed schools, private pre-primary, primary and upper primary schools have also increased in numbers in recent years. Many of these schools are equipped with better facilities and are generally considered to function better and more regularly than government schools. It should, however, be noted that despite the expansion of private schooling in recent years, government and local bodies⁵ continue to be the main providers, managing around 91% of primary schools and 73% of upper primary schools (Table 3).

Table 3: Number of Schools by Provider

Type of School	Government		Local Bodies		Private Aided		Private Unaided		Total
	Number	%	Number	%	Number	%	Number	%	
Primary	332,565	43.3	359,772	46.9	19,593	2.6	55,590	7.2	712,239
Upper Primary/ Middle	118,026	43	80,327	29.2	17,616	6.4	58,762	21.4	274,731
Pre-primary	34,597	54.4	18,369	28.9	4,359	6.9	6,271	9.9	63,596

Source: GoI (2007a)

While the number of private schools has increased in almost all states, their distribution is highly uneven across the states, usually depending upon the policy of each state. Another significant issue is that the ratio of primary to upper primary schools is better in the case of privately managed schools (1:1.26) as compared to government/local body schools (1:3.13) (NUEPA, 2007b: 25). This is possibly a result of many private schools being comprehensive schools, covering all stages of education. It is also noticeable in DISE data from 2005-2006, that while nearly 1,000 private schools were found without a building, more than 40,000 government-run schools were found without buildings (NUEPA, 2007b). Similarly, while only 2.3% of private schools at that time were single classroom schools, around 12% of government-run schools had a single classroom. Government schools have an overall

⁴ This figure was 2.8:1 according to GoI (2007a).

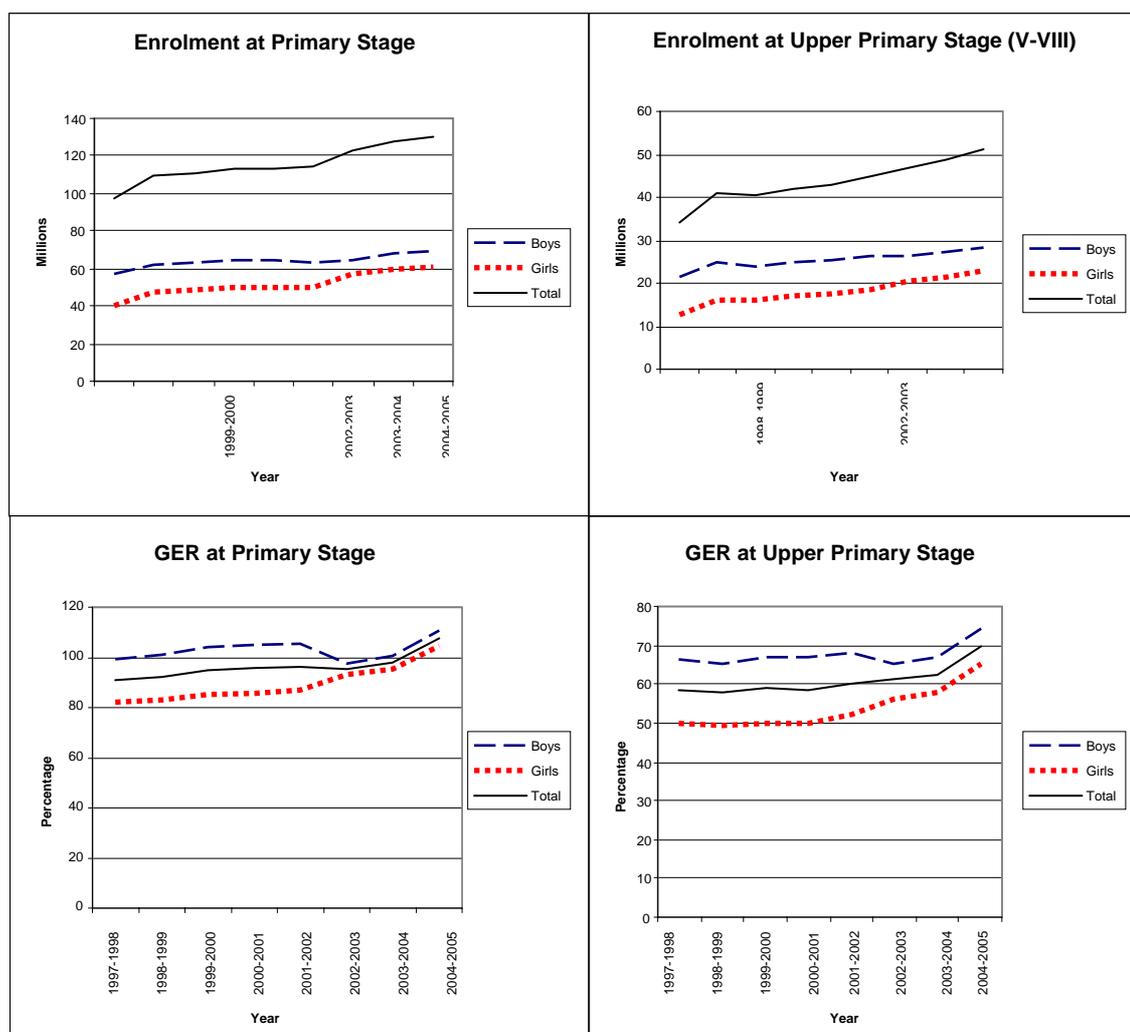
⁵ Local bodies are responsible for significant number of schools in some States. These organizations receive subsidy for salaries etc but are responsible for school governance.

student-classroom ratio of 42:1 compared to 30:1 in the case of schools managed by private providers (NUEPA, 2007b: 55). Only 11% of private schools had a student-classroom ratio of 60:1 and above, compared to 22% of government schools.

2.4 Enrolment and Participation

According to average data available at the national level, the country has achieved near universal enrolment in many parts of the country, as indicated by Gross Enrolment Ratio (GER) statistics. According to the Selected Educational Statistics (GoI 2007a) as many as 182.0 million children were enrolled in schools in 2004-05. The GER of the 6-14 age-group increased from 96.3 in 2001-2002 to 108.6 in 2004-05 at the primary level; and from 52.1 in 2001-02 to 70.5 in 2004-05 at the upper primary level. However, if we examine age-specific data, there is still a sizeable gap in Net Enrolment Ratios (NER). Low enrolment ratio is not a problem in all parts of the country. Several states show a NER of more than 80. But some states such as Bihar, Jammu and Kashmir, Nagaland, Rajasthan and Uttar Pradesh seem to face a serious problem demanding immediate attention.

Figure 2: Progress in Enrolments at Primary and Upper Primary Stages



Source: GoI (2007a)

Table 4: Average Annual Growth Rates (%) in Enrolment at Primary, Upper Primary and Elementary Levels in India

Period	Primary level			Upper Primary level			Elementary level		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1990-1991 to 2000-2001	1.2	2.1	1.6	1.6	3.4	2.3	1.3	2.4	1.8
1997-1998 to 2001-2002	1	1.4	1.8	2.4	4.3	3.2	1.4	2.2	1.6
2000-2001 to 2002-2003	0.7	7.2	3.6	2.0	8.5	4.7	1.1	7.5	3.9

Source: Govinda and Biswal (2006: 14)

The 61st Round of National Sample Survey (NSS) data from 2004-2005 (GoI, 2006b) reveals that about 83% of males and 77% of females in the 5-14 age group were attending educational institutions in rural areas (a total of 80% overall in rural areas). This is compared to around 89% of children aged 5-14 in urban areas (89% of urban boys and 87% of urban girls) (see Bandyopadhyay and Subrahmanian, 2008 for more information on this).

Table 5: Current Attendance Rates of Children Aged 5-14 (per 1000) in Educational Institutions

Age group	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
5-14	835	767	890	879	847	792

Source: GoI (2006b: 32)

According to the same source of data (GoI, 2006b), around 82% of children in the 5-14 year age group were currently attending schools in 2004-2005 (Table 5). While around 88% of boys were attending school, around 79% of girls were. Large variations were observed in the attendance rates of children across different states (see Table 6). While around 90% (or more) of children were attending school in Kerala, Chandigarh, Delhi, Goa, Himachal Pradesh, Maharashtra, Manipur, Mizoram, Nagaland, Punjab, Tamil Nadu, Sikkim, Andaman & Nicobar Islands, Daman & Diu, Lakshadweep and Puducherry, in states such as Rajasthan, Madhya Pradesh, Jharkhand and Uttar Pradesh 75%-78% of children were attending school. In Bihar this percentage went down to 65%.

Table 6: Current Attendance Rates of Children Aged 5-14 (per 1000) by State

States	Rural Area		Urban Area		Rural + Urban Area	
	Male	Female	Male	Female	Male	Female
Andhra Pradesh	902	824	911	911	905	846
Arunachal Pradesh	720	667	886	914	742	696
Assam	875	868	900	843	877	865
Bihar	691	574	805	764	700	593
Chhattisgarh	854	750	890	867	858	764
Delhi	970	908	885	913	895	913
Goa	937	964	937	938	937	954
Gujarat	870	779	924	910	887	818
Haryana	905	812	923	878	910	827
Himachal Pradesh	961	936	980	936	962	936
Jammu & Kashmir	909	827	978	860	926	835
Jharkhand	781	692	908	928	799	728
Karnataka	876	840	950	931	898	866
Kerala	962	983	987	993	968	985
Madhya Pradesh	803	699	908	874	825	736
Maharashtra	872	874	931	915	893	889
Manipur	922	911	978	963	937	925
Meghalaya	834	892	971	887	850	891
Mizoram	924	932	990	987	952	955
Nagaland	948	924	929	924	941	924
Orissa	827	753	882	875	837	768
Punjab	896	883	900	878	897	882
Rajasthan	853	681	824	803	847	710
Sikkim	929	966	923	825	929	954
Tamil Nadu	976	939	975	958	975	946
Tripura	856	910	868	911	857	910
Uttarakhand	889	850	914	882	895	856
Uttar Pradesh	806	730	789	803	803	743
West Bengal	831	814	848	871	834	824
Andaman & Nicobar Islands	964	990	984	955	972	976
Chandigarh	841	917	959	938	942	935
Dadra & Nagar Haveli	937	722	966	863	939	733
Daman & Diu	992	998	941	956	975	984
Lakshadweep	902	892	991	960	945	927
Puducherry	965	966	983	987	977	981
India	835	767	890	879	847	792

Source: GoI (2006b: 76-84)

The Annual Status of Education Report (ASER) 2006 conducted by Pratham also found that more than 90% of children were enrolled in school (see Pratham, 2007). Comparing the results of the 2006 and 2005 ASERs, it was found that enrolment remained steady at around 93% for the 6-14 age group at the national level. Out of all 5 year-old children, 46.6% were enrolled in formal schools; while in the 6-10 age group, national enrolment stood at 95.3%. In most states (with the exception of Rajasthan, Bihar, Orissa, West Bengal, Jharkhand, Arunachal Pradesh and Meghalaya) enrolment in the 6-10 age-group was above 95%. In the 11-14 age group, national enrolment stood at 91.1%. In most states (except Rajasthan, Bihar, Orissa,

West Bengal, Jharkhand and Chhattisgarh) enrolment for this age group was above 90%. Also according to the survey, enrolment of girls improved to some extent between 2005 and 2006, with more than 95% of girls in the 7-10 age group enrolled in schools in most states (with the exception of Rajasthan, Bihar, Orissa and Jharkhand). In the 11-14 year age group, many states showed enrolment rates of girls varying between 80% and 90%. For example, 19.6% of girls in Rajasthan and 18% in Bihar were reported to be out-of-school.

The ASER 2006 also identified a large number of five-year old children enrolled in grade 1 (Pratham, 2007). At the national level, 5 year olds formed 21.8% of all children in grade 1. Indeed, more than 30% of children enrolled in grade 1 in schools in Orissa, Rajasthan, Madhya Pradesh, Himachal Pradesh, Uttarakhand and Haryana were 5 years old. Other states, e.g. Maharashtra (3.2%), Nagaland (5.1%) and Karnataka (6.9%) had lower levels of 5 year olds in grade 1. Similarly, the ASER 2006 report indicated that there were many over-age children in elementary schools. It was found that 14.4% of 14 year olds in school were studying in grade 6 or lower. Similarly, in the 15-16 age group, national enrolment stood at 78.7%. However, 24.7% of the 15-16 year olds in school were enrolled in grade 8 or lower, and still in the process of trying to complete elementary schooling. The Report analyzed the extent of the presence of over-age children at the primary stage and observed that if grade and age were compared across the country, 21.4% of grade 3 children were 10 years old or older. However, there were significant variations across states. In Bihar and Jharkhand, for example, the corresponding figure was more than 35%, and it was 28% in Uttar Pradesh. On the other hand, in Tamil Nadu and Kerala, the percentage of children in grade 3 who were 10 years or older was less than 3%. This also indicates that apart from state policy on age of admission, as the system becomes more inclusive, age-grade relationships tend to stabilize, reducing the incidence of under-age and over-age participation in schooling (see Lewin, 2007).

2.4.1 Enrolment and Types of Schools

It is also important to identify the types of schools in which children are enrolled. The ASER 2006 reported that there had been a significant increase in private school enrolments in recent years (Pratham, 2007). Also according to the report:

‘Eight states have more than 30 per cent of children in non-government run schools whether primary (I-V) or upper primary (VI-VIII) – Manipur (56.7 per cent), Nagaland (46.1 per cent), Kerala (45.2 per cent), Meghalaya (44.6 per cent), Goa (44.65 per cent), Haryana (40.35 per cent), Punjab (37.25 per cent) and Uttar Pradesh (30.25 per cent). Ten states have between 15 per cent and 30 per cent of children in non-Government run schools.’ (Pratham, 2007: 23)

These figures, of course, include both government-aided and self-financing private schools and states differ widely in the ratio of aided to unaided schools within the private sector. The ASER 2006 recorded big shifts in that year into private schools (Pratham, 2007). For example, an increase of more than 5 percentage points was recorded in Punjab (16+), Goa (15.35+), Haryana (9.8+) and Karnataka (6.1+). Invariably, the shift to private schools was found to be at the expense of government school enrolment.

There is also a gender variation in private school participation, as more boys (20.4%) were enrolled in private schools compared to girls (16.8%). Among 7 to 10 year old children, large differences in enrolment rates in private schools by gender were found in Punjab (50% boys; 43% girls) and Haryana (51% boys and 39% girls). Similarly, the recent 61st Round NSS (with data relevant to 2004-2005) found a substantial share of students attending private-aided and unaided schools (GoI, 2006b). It observed that higher proportions of students in urban area were attending private institutions than their counterpart in rural areas.

Despite this substantial increase in private school enrolments, the majority of students remain in government-run schools or schools managed by local bodies. Additionally, a relatively small number of children are also enrolled in NGO-run schools, some of which function under the Education Guarantee Scheme/ Alternative and Innovative Education (EGS/AIE) Scheme of the Government of India. Yet, increasing enrolment in full-fledged formal primary schools, private as well as government, does not fully account for the big jump in the overall enrolment of children in primary schooling in recent years. In fact, the steep reduction in out-of-school children seems to be mainly due to expansion of small schools, many of which are run by low-paid single teachers who are employed locally on a contract basis (see Section 2.2).

2.5 Schooling in Small Habitations and for Hard-to-Reach Children

Provision of primary schools in the villages/habitations that qualify for the opening of formal a school is generally at a satisfactory level⁶. However, children who live in smaller habitations with very small population groups continue to face difficulties in accessing schooling facilities within walking distance (i.e. 1 to 3 km). These habitations now are being provided with small schools under the Education Guarantee Scheme. Known as EGS Centres or alternative schools, these function as transitory facilities until they can be replaced by formal government primary schools (see DPEP, 1999). The centres are opened in habitations with at least 25 out-of-school children in the 6-14 age group (or the 6-15 age group in case of hilly, desert and tribal hamlets). The teachers or instructors in such centres are recruited by local self-government bodies and are managed locally. In addition, around 2,785 NGOs are involved in implementation of EGS and AIE schemes (GoI, 2007b).

More generally, the EGS and AIE schemes support diversified strategies for educating under-privileged children who are at risk of not enrolling or not completing elementary education. These include:

- Provision of education to children living in remote, habitations which do not have schools.
- Provision of education for children who migrate.
- Support to Maktabas/Madrasas to adopt a formal curriculum.
- Bridge courses/back to school camps for the re-entry of drop out children into formal schools.
- Long duration residential camps for older out-of-school children.

⁶ National policy stipulates that every habitation with a population of 300 persons which does not have a school offering primary level classes within a distance of 1km qualifies to have a formal government primary school. Similarly, a habitation with a population of 300 which does not have a school with upper primary level classes within a distance of 3 km qualifies to have a formal upper primary school.

- Centres for remedial teaching.
- Short duration summer camps or schools.

In addition to EGS/AIE centres, other flexible strategies are being implemented for the education of children who cannot attend formal schools for a range of reasons. The strategies include residential and non-residential bridge courses, back to school camps, seasonal hostels, drop-in centres and other alternative schools. In 2005-2006, over 111,000 EGS centres were identified, reaching more than 4 million children. In 2006-2007, the number of children attending such centres is expected to have increased to 4.771 million (GoI, 2007b: 17).

The AIE scheme mainly provides education to older children, who either have never been enrolled in school or who had to drop out from school for various reasons. These children include those who migrate seasonally, live on the streets and in difficult situations, working children, children of sex workers and the destitute, and so on. In 2005-2006, over 3 million children benefited from a range of activities conducted under the AIE scheme. In 2006-2007, the number of children targeted for coverage under AIE was 5.6 million (GoI, 2007b). An interesting aspect of the EGS and AIE schemes is that the amount earmarked for them should be spent on a per child basis. At present, Rs. 1535/- per annum per child is provided for primary EGS/AIE and Rs. 2960/- per child per annum for upper primary centres. In addition to EGS/AIE centres and bridge courses, as many as 4,867 Madrasas have been supported under AIE as of 2005-2006.

In recent years, a substantial number of EGS/AIS centres have been upgraded to formal primary schools (as many as 85,924 by December 2006). In Bihar and Rajasthan, for example, 15,428 and 13,303 EGS centres were upgraded to primary schools respectively. Another 55,196 EGS centres were upgraded to primary schools by March 2007 (GoI, 2007b). Quality continues to be a matter of concern in these centres, however, so the following measures have been taken up:

- The school must operate at least for four hours every day.
- Textbooks, teaching, learning materials and equipments must be provided before the centre begins functioning.
- Induction training of 30 days must be given to volunteers before they begin teaching at the centre, followed by regular refresher courses.
- The headmaster of the local school should be involved in regular supervision of the centres and their activities.
- Regular evaluation of children should be conducted.
- Regular monitoring and academic support must be ensured from the relevant block and cluster resource centres⁷.

The functioning of EGS centres depends on the ability and commitment of the instructor and the local governing body, namely, the *panchayat* in most cases. While these centres have enrolled many children, they are often not be able to take the students beyond second or third grade. Thus, while the strategy has increased access

⁷ The 'block' is an administrative level below the district. The 'cluster' is a group of villages/schools below the block level. Block and cluster resource centres provide support and training for teachers at the local level.

and enrolment, it also raises questions around quality, equity, and the transition from primary to higher levels of schooling. What happens to these children as they complete their initial years of schooling? Are the centres sustainable? These are important questions which demand empirical studies to develop a better understanding of the issues. It is also important to examine what factors have contributed to such a fast pace of growth of these institutions in hitherto un-reached areas. Could this be attributed to improved supply or is it due to unexplored demand side factors?

2.6 Disparities and Inequities in Elementary Education

It is important that access and equity go together in order to make UEE a reality. Almost all programmes and plans aim at bridging gender and social gaps in enrolment, retention and learning achievement at the primary stage. As mentioned earlier, special interventions and strategies have been adopted to include girls, SC/ST children, working children, children with special needs, urban deprived children, children from minority groups, children living below the poverty line, migratory children and children in the hardest-to-reach groups. These are indeed children who have historically remained excluded from education and are at a high risk of dropping out even after enrolment if special attention is not paid.

Recent years have witnessed some positive developments with respect to girls' education in India. For instance, since the beginning of 1990s, progress in girls' enrolment has been faster than that of boys (Govinda and Biswal, 2006). In the 6-11 age group, this could possibly be explained by the fact that the GER for boys was already around or above 100% and was, therefore, in a stabilization phase. Despite positive trends in the enrolment of girls, however, gender disparity does not seem to have reduced significantly over the years. Indeed, the GER for girls does not reach 100% at the lower primary stage. If one assumes that 18-20% of this is due to the presence of over-age and under-age children, the proportion of girls in the age group of 6-11 who are enrolled in primary schools would be less than 80%. The overall difference in the enrolment ratio between boys and girls continues to be around 10 percentage points. The situation is even more disturbing at the upper primary stage where the enrolment rate for girls falls below 60%. Particular attention in this regard is required in four states, namely Bihar, Jammu & Kashmir, Rajasthan and Uttar Pradesh.

The disaggregated data according to social groups and gender suggest that there is still a large gap in terms of age-specific participation of children in primary and upper primary levels in rural as well as urban areas. For example, in rural areas, 37% of six year old children were enrolled in school, in urban areas more than half of six year old children were going to school. It seems that rural children are later starters in school in comparison to their urban counterparts, possibly because urban children tend to live nearer to schools than rural children. The gap between rural and urban areas persists even at higher grades. At present, around 68% of 6-14 year old children from rural areas are attending school while around 81% are attending school in urban areas. Furthermore, although six is the official age for entering primary school, the majority of children, particularly in rural areas, continue to enroll only when they are seven or eight years old. Also, despite reported improvement in girls' enrolment during the 1990s, the gender differential continues to be significant, especially if one compares

the participation levels of boys and girls in urban and rural areas. In fact, a wide gap in participation rates of rural girls and urban boys from all age groups persists (Bandyopadhyay and Subrahmanian, 2008).

A similar problem of inequity in coverage and participation can be observed with respect to different social groups, traditionally identified as under-privileged. Despite special provisions in the Constitution to meet the educational requirements of groups such as Scheduled Castes (SC) and Scheduled Tribes (ST), the situation has remained far from satisfactory. The likelihood of exclusion is compounded if the children live in rural areas and are female. Tribal girls in rural areas are in the most disadvantaged position, as only 51% of them are enrolled in schools, whereas around 80% of all girls in urban areas are enrolled (Sedwal and Kamat, 2008). Additionally, as the recent Sachar Committee report has pointed out, the situation of children from the Muslim minority community seems to be even worse than that of SCs and STs (GoI, 2006a).

Some special initiatives have been taken in recent years to bridge the gap between boys and girls, between different social groups and also between rural and urban areas. For instance, the Government of India has recently identified more than 3,000 'Educationally Backward Blocks' (see Table 7) that need greater attention. It also is involved in implementing different educational schemes including the National Programme of Education of Girls at Elementary Level (NPEGEL) (GoI, 2007b). 31,450 model schools have been developed and 197,000 teachers in educationally backward blocks have been trained, and 10,419 additional rooms have been constructed for conducting bridge courses, teacher training and skill building for girls. Also, 354,000 *anganwadis* (community nurseries) and 50,000 early childhood care and education (ECCE) centres are being supported to help free girls from sibling care in order that they can attend schools regularly. Further, as many as 933,000 girls have benefited from remedial teaching, and 80,183 girls had benefited from bridge courses as of October 2006. Free uniforms have also been provided to about 20 million girls in the Educationally Backward Blocks.

Table 7: Progress made under NPEGEL

	2004-2005	2005-2006	2006-2007
Blocks covered	2,157	3,164	3,122
Clusters covered	19,575	28,917	38,748
Fund Allocation (in million Rs.)	65,393	68,654	81,336

Source: GoI (2007b)

Another scheme launched in 2004, the *Kasturba Gandhi Balika Vidyalaya* (KGBV), involves providing residential schooling facilities for girls at the upper primary level, mainly in areas with predominantly under-privileged communities. For example, 2,075 residential KGBV schools have been sanctioned in SC/ST and minority dominated areas. According to the Annual Report of the Ministry of Human Resource Development (MHRD) (GoI, 2007b), 428 KGBVs have been set up in Muslim dominated blocks and 441 in ST dominated blocks.

2.7 Children with Special Needs

According to the estimates made under Sarva Shiksha Abhiyan (SSA), around 1.5% of children in the 6-14 age group have special needs, while the 2001 Census data

indicated the proportion to be around 2% (GoI, 2007c: 61). A recent SRI-IMRB report (SRI, 2005) estimated that around 38% of such children are out of school. Special measures are needed for such children ranging from appropriate school infrastructure to special training for teachers, and provision of suitable learning material, aids and appliances.

The DISE Report (NUEPA, 2007b) estimates that about 1.4 million disabled children are currently enrolled in elementary schools across the country, of which 1 million are in lower primary and 0.4 million are in upper primary classes. This accounts for around 1% of the total enrolment in elementary schools. In 2004, the figures were 1.75 million children enrolled in elementary (1.23%) which included around 1.35 million in lower primary (1.22%) and 0.41 million in upper primary (1.24%) classes (Table 8). A marked decline in the enrolment of disabled children between 2004 and 2005 has been noticed which needs further investigation.

Table 8: Enrolment of Children with Disabilities, 2003-2005

Grades	All Areas	Rural Areas	Urban Areas
2003			
1-5	772,922	684,054	8,8868
6-7/ 8	197,394	158,366	39,028
1-7/8	970,316	842,420	127,896
2004			
1-5	1,341,800	1,187,677	154,123
6-7/ 8	411,245	341,577	69,668
1-7/8	1,753,045	1,529,254	223,791
2005			
1-5	1,015,803	892,191	123,612
6-7/ 8	381,404	260,260	121,144
1-7/8	1,397,207	1,152,451	244,756

Source: NUEPA (2007b)

According to DISE (NUEPA, 2007b), almost one in every three disabled students in elementary education had a movement problem (36.7%), while about 18% were visually handicapped, 10% had hearing disabilities, 13% had speech impediments, 15% were mentally challenged and 8% had other types of disability. Considerable difference is noticed in the nature of disabilities in primary and upper primary classes (Table 9). This seems to be the result of the drop out of children with mental disabilities as they reach the higher grades.

Table 9: Enrolment (%) of Disabled Children by the Nature of Disability, 2005

Disability	Grades		
	1-5	6-8	1-8
Seeing	15.39	24.78	17.95
Hearing	9.11	12.14	9.94
Speech	13.82	11.71	13.24
Moving	34.85	38.08	35.73
Mentally Retarded	18.44	6.25	15.12
Others	8.39	7.04	8.02
Percentage of disabled children to total enrolment	0.86	1.01	0.90

Source: NUEPA (2007b)

Almost all states have taken steps to identify disabled children and provide them with education in regular schools. For example, the state of Andhra Pradesh has given high priority to the integration of children with special needs into regular schools (see Government of Andhra Pradesh, 2001: 11). As many as 211,189 children in the 5-14 year age group were found to have disabilities at the time of the survey in 2000. Out of these, 154,610 were enrolled in schools. Teachers had been trained to identify such children and respond to their special educational needs. In addition, efforts are continuously being made to prevent educational disadvantage due to disability through early intervention at a pre-school stage and early detection followed by suitable assistance.

2.8 Teacher Provision and Management

It is widely acknowledged that the availability of adequate numbers of well-qualified and trained teachers is the key to educational development. In view of this, most countries spend huge resources on teachers' salaries and their professional development. Data on teachers in India reveals a significant increase in the number of teachers alongside the expansion of educational facilities. The number of teachers in primary schools increased from 1.6 million in 1990-1991 to 1.9 million in 2000-2001. The rise in the number of teachers in upper primary schools over the same period was from 1.1 million to 1.3 million. In addition, 2 million para-teachers (teachers employed on a contract basis, often without qualifications) were appointed in 2003. The number further increased because of the requirement under SSA for schools at the primary level to have at least two teachers. The total number of teachers employed in lower and upper primary schools in India is nearly 3.7 million. However, only 96,762 primary schools have four or five teachers (See Table 10). It appears multigrade teaching is a common phenomenon across India.

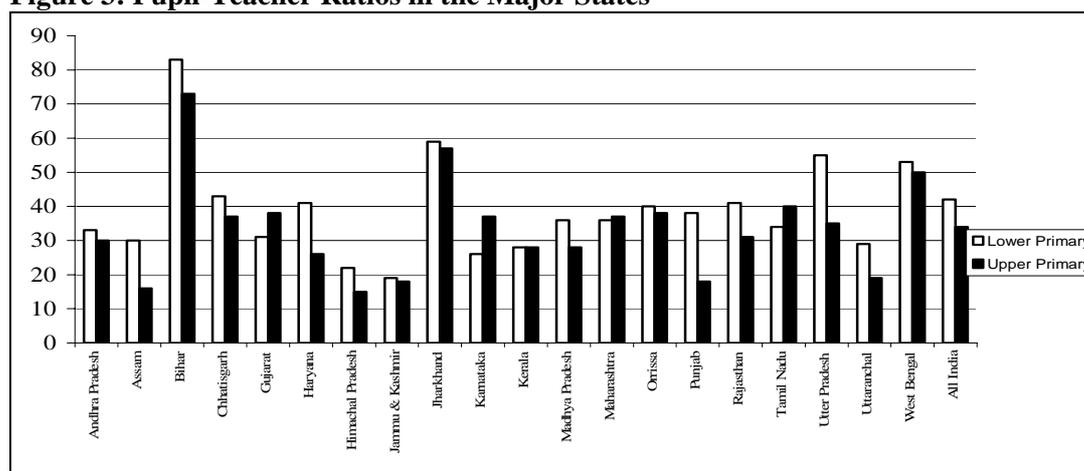
Table 10: Teacher Numbers in Primary Schools

Type of School	Number
Primary schools with no teacher present (on the days of the survey)	8,465
Single teacher schools	97,670
Primary schools with two teachers	281,278
Primary schools with three teachers	108,228
Primary schools with four teachers	57,538
Primary schools with five teachers	39,224
Total Schools	651,381

Source: NCERT (2005)

It was also found that around 5%-6% of these teachers were para-teachers, who often did not have professional training qualifications. This raises concerns about the quality of education being offered (see Section 2.8.4). It is also a matter of concern that while there has been an enormous increase in the enrolment of children in primary schools, the recruitment of adequate numbers of teachers to teach them has not happened. In fact, in general, state governments are slow in recruiting teachers even to fill existing positions, resulting in a huge backlog of vacant teacher posts in all states.

Figure 3: Pupil-Teacher Ratios in the Major States



Source: NCERT (2005)

Notwithstanding the recruitment of teachers on a contract basis, the teacher-pupil ratio is far above the norm of 1:40 in many individual states, pushing even the national average to 1:42. In particular, the situation remains worst in Bihar, Jharkhand, Uttar Pradesh and West Bengal (Figure 3).

In addition to dealing with crowded classrooms in these states, in a large number of schools there is minimal infrastructure and few academic facilities. Around three out of four primary schools in the country involve multigrade teaching, requiring the teachers to be innovative in simultaneously teaching students of several grades. A substantial proportion of schools also do not have proper building facilities. These conditions are particularly challenging for teachers working in single teacher schools. The SSA proposal to provide one teacher for every class in every school has provided for the opening of new schools in small habitations, but needs to be examined

carefully in terms of its impact on social inequalities and the quality of education provided in such schools.

2.8.1 Varying Levels of Demand for Teachers Across the States

The situation with respect to demand for additional school places and the consequent need for additional physical infrastructure and teacher supply is not uniform across the states. Kerala, Tamil Nadu, Karnataka and Andhra Pradesh, for example, have experienced declining trends in child population figures, leading to a shrinking of the cohort entering the primary age range. This may, in turn, result in a decline in demand for school places and teachers at the primary stage.

As some states have lower enrolment rates and relatively fewer teachers at the upper primary stage, there should be an increased demand for school places and teachers in the near future (Table 11). This trend will continue for some time. Additionally, states such as Bihar, Uttar Pradesh West Bengal, Assam and Orissa, will require more teachers at both the primary and upper primary stages⁸. Some states also have large numbers of single teacher schools, so equipping these with the minimum national norms of at least two teachers per school (GoI, 1986) would also require more teachers. In other words, the demand for teachers across states is still fluid and considerable time is needed to establish stable mechanisms for the supply of qualified teachers in adequate numbers. While appointing qualified teachers is preferred, some state governments, in order to reduce costs, have recruited large numbers of para-teachers on a contract basis (see Section 2.8.4). This reduces the recurrent financial burden on the state because para-teachers are dispensed with every term and are paid much less than regular teachers.

⁸ More than 75% of out-of-school children are located in 5 or 6 states of India, including large states such as Bihar and Uttar Pradesh. The demand for additional resources both in terms of school places and teachers continues to be greatest in these states (Govinda and Biswal, 2006).

Table 11: Projected Child Population Numbers, Enrolment and Additional Teacher Requirements, 2004-2005 to 2014-2015

Year	Child population (in millions) per age group			Net enrolment (in millions) per age group			Enrolment in bridge courses for out of school children (in millions)	Gross enrolment (covers children from bridge courses and under and overage children) (in millions) per age group			Additional teachers required*
	6-10	11-13	6-13	6-10	11-13	6-13		6-10	11-13	6-13	
2004-2005 [^]	12.1	7.3	19.5	11.4	4.2	15.6		13.1	5.1	18.2	
2005-2006	12.1	7.4	19.4	11.4	4.4	15.8		12.8	5.2	18.0	
2006-2007	12.0	7.4	19.4	11.5	4.6	16.1		12.7	5.5	18.2	
2007-2008	11.9	7.3	19.2	11.5	4.8	16.4		12.7	5.7	18.4	72,853
2008-2009	11.8	7.3	19.0	11.6	5.2	16.8	0.7	12.9	6.7	19.5	264,938
2009-2010	11.7	7.2	18.9	11.7	5.6	17.3	0.5	12.7	7.1	19.8	128,042
2010-2011	11.5	7.2	18.7	11.5	6.1	17.6	0.5	12.6	7.6	20.1	131,442
2011-2012	11.4	7.1	18.5	11.4	6.5	17.9	0.5	12.4	8.1	20.4	70,325
2012-2013	11.4	7.1	18.4	11.4	7.1	18.4		12.2	8.1	20.3	69,570
2013-2014	11.5	7.1	18.7	11.5	7.1	18.7		12.3	8.1	20.4	8,378
2014-2015	11.7	7.2	18.9	11.7	7.2	18.9		12.4	8.1	20.5	13,582

Note: Projections calculated by the National University of Educational Planning and Administration as part of an exercise on financial estimates for the implementation of the Indian Right to Education Bill (see GoI, 2005a).

*No additional teachers are required at the lower primary level until 2007-2008. At the upper primary level, the increase in the requirement of teachers from 2008-2009 to 2010-2011 is due to mainstreaming of out of school children and the appointment of project teachers.

Source: [^]2004-2005 enrolment data from GoI (2007a)

2.8.2 Teacher Management and Training

Historically, state governments have not had total control over the management of teachers in publicly-supported schools. While state schools were large in number, a sizeable number of schools were under the management of District Boards, Taluka Boards, Municipal Corporations, and so on. In the early 1970s, many state governments took direct control of these schools, creating a mega system of primary schooling. This arrangement began to undergo transformation in mid-1990s, following a Constitutional Amendment which called for the empowerment of

panchayati raj bodies. Some, but not all, state governments took this opportunity to wholly or partially decentralize the teacher management system. Over time, the unevenness in service conditions of teachers within and between states has increased. In some states, local self-governing bodies are given a reasonably free hand to decide on teacher recruitment at a local level, and operate within a broad framework provided by the state government. While all teachers are technically state government employees, therefore, some teachers are employed by local village level bodies, whilst others are employed by block or district level bodies.

Another significant development during the 1990s, which has the potential to significantly influence the professional development of teachers, is the creation of a system of district and sub-district level teacher resource centres. Following the recommendations of the National Policy on Education 1986, every district in the country was provided with a district-specific teacher education institution, a District Institute of Education and Training (DIET). Subsequently, under the District Primary Education Programme (DPEP), block resource centres and 10-15 cluster resource centres (each covering about 20 schools) were established in each of the 42 districts (in 7 states) which participated in the project (see Aggarwal, 1998). This is now being universalized to reach all districts of the country under SSA.

2.8.3 Availability and Deployment of Teachers

Mere availability of schools does not ensure children's participation. More than schools, motivated teachers play a vital role in ensuring that children attend school regularly and take an active part in the learning process. Though there has been an impressive increase in the number of school teachers in India in the 1990s, the imbalances in intra-state teacher allocation between districts and within districts, and between rural and urban areas continues to be a major concern. An increase in the numbers of upper primary teachers has taken place in rural areas in Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, and Rajasthan indicating improved completion of the lower primary cycle and increased transition to upper primary classes. Indeed, in most of states, the percentage increase in upper primary teachers has been more than that of the primary teachers (see Table 12; NCERT, 1998; NCERT, 2005). This indicates a positive trend in transition rates from lower to upper primary classes. However, the allocation of teachers particularly between rural and urban areas continues to be a major concern in many states.

In almost all states, trained teachers with higher qualifications are generally concentrated in urban areas. Several factors, including political and bureaucratic interventions, non-availability of qualified local teachers in remote areas, lack of a proper database on the status of teachers at the school level and the low motivation of urban teachers to serve in rural areas, are obstacles to the rational deployment of teachers. Moreover, teacher transfer is highly influenced by political interventions, and more influential teachers are more likely to be found working in urban schools and schools located in habitations well connected with road or rail transport networks. The lack of basic facilities (for instance, residential facilities in remote rural areas) also act as de-motivating factors, particularly for female teachers. These factors undoubtedly influence pupil-teacher ratios (PTRs), with the average PTR higher in rural areas than in urban areas (see Table 13).

Table 12: Numbers of Teachers, Student Enrolments and Pupil-Teacher Ratios by Type of Institution and State

State/UT	Lower Primary Schools				Upper Primary/Middle Schools			
	Total Teachers	Percentage of Trained Teachers	Percentage of Female Teachers	Pupil-Teacher Ratio	Total Teachers	Percentage of Trained Teachers	Percentage of Female Teachers	Pupil-Teacher Ratio
Andhra Pradesh	172,601	94	79	33	100,365	88	73	30
Arunachal Pradesh	3,195	28	41	27	2,969	33	40	25
Assam	83,919	73	53	30	73,147	36	30	16
Bihar	95,815	95	22	83	56,654	95	27	73
Chhattisgarh	68,512	52	37	43	25,213	59	30	37
Goa	2,313	94	420	21	564	98	266	16
Gujarat	18,482	98	128	31	199,341	94	115	38
Haryana	46,565	89	105	41	8,389	92	57	26
Himachal Pradesh	28,738	87	73	22	9,199	99	44	15
Jammu & Kashmir	29,846	61	68	19	26,624	69	71	18
Jharkhand	31,150	100	26	59	26,536	100	41	57
Karnataka	51,308	100	85	26	189,768	100	129	37
Kerala	40,559	98	264	28	45,164	97	206	28
Madhya Pradesh	197,102	65	51	36	132,183	65	60	28
Maharashtra	187,819	96	154	36	186,821	96	76	37
Manipur	8,249	22	63	21	8,834	19	69	17
Meghalaya	13,745	45	88	22	6,607	36	85	17
Mizoram	5,849	82	94	19	5,606	80	42	11
Nagaland	7,474	37	53	12	5,365	42	42	13
Orissa	78,182	90	43	40	49,786	91	39	38
Punjab	40,805	95	167	38	13,543	98	104	18
Rajasthan	120,368	86	36	41	15,4921	91	37	31
Sikkim	5,031	50	89	12	1,140	42	56	15
Tamil Nadu	121,236	100	172	34	60,079	100	132	40
Tripura	14,606	28	95	23	7,022	20	36	20
Uttar Pradesh	39,5202	98	50	55	156,674	95	41	35
Uttarakhand	40,527	100	112	29	16,080	100	53	19
West Bengal	157,397	67	34	53	11,388	84	35	50
Andaman & Nicobar Islands	956	93	127	17	737	96	108	17
Chandigarh	315	100	408	34	178	100	1,013	24
Dadra & Nagar Haveli	678	96	133	40	213	97	40	44
Daman & Diu	426	100	330	39	281	100	111	31
Delhi	24,699	100	217	40	9,192	100	272	27
Lakshadweep	313	100	83	20	111	100	91	21
Pondicherry	2,876	96	267	21	1,593	92	117	23
All India	2,096,858	86	66	42	1,592,287	87	69	34

Source: NCERT (2005)

Table 13: Pupil-Teacher Ratios in Rural and Urban Primary and Upper Primary Schools

State/UT	Primary Schools			Upper Primary Schools		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	32	35	33	31	27	30
Arunachal Pradesh	28	22	27	25	27	25
Assam	30	23	30	16	18	16
Bihar	85	60	83	77	51	73
Chhattisgarh	43	40	43	40	29	37
Goa	17	25	21	13	21	16
Gujarat	28	37	31	38	40	38
Haryana	42	35	41	27	22	26
Himachal Pradesh	22	23	22	15	13	15
Jammu & Kashmir	21	11	19	20	14	18
Jharkhand	59	53	59	60	48	57
Karnataka	26	28	26	37	37	37
Kerala	28	28	28	28	26	28
Madhya Pradesh	38	29	36	31	22	28
Maharashtra	30	46	36	35	42	37
Manipur	23	15	21	17	17	17
Meghalaya	21	24	22	16	21	17
Mizoram	21	16	19	9	14	11
Nagaland	12	7	12	12	17	13
Orissa	41	36	40	40	30	38
Punjab	39	36	38	17	24	18
Rajasthan	42	33	41	34	25	31
Sikkim	12	0	12	15	18	15
Tamil Nadu	35	33	34	42	38	40
Tripura	23	21	23	20	16	20
Uttar Pradesh	61	36	55	37	29	35
Uttarakhand	29	27	29	19	22	19
West Bengal	55	43	53	52	39	50
Andaman & Nicobar Islands	16	23	17	17	20	17
Chandigarh	38	33	34	35	13	24
Dadra & Nagar Haveli	41	26	40	43	46	44
Daman & Diu	42	34	39	34	28	31
Delhi	38	40	40	26	27	27
Lakshadweep	19	21	20	20	21	21
Pondicherry	20	23	21	25	20	23
All India	44	36	42	35	32	34

Source: NCERT (2005)

Note: Pupil-teacher ratios are based on numbers of full-time teachers, including para-teachers.

2.8.4 Recruitment of Para-Teachers

In the 1990s, a number of states began appointing para-teachers (variously known as *Shiksha Karmis*, *Shiksha Mitras*, *Gurujis*, etc.) and other types of temporary teachers, mainly at the primary level. This was justified as necessary to meet the additional teacher requirements caused by increased enrolments. However, in some states para-teachers have been appointed to fill vacancies left by regular full-time teachers. Available data shows that the relative share of primary and upper-primary para-teachers is high in Gujarat, Andhra Pradesh, Himachal Pradesh, Uttar Pradesh, Uttarakhand and Maharashtra. The trend for appointing para-teachers continues in

rural primary and upper primary schools in some states. In Gujarat, for example, more than 43% of rural primary teachers and 31% of rural upper primary teachers are temporary teachers. According to the Seventh All India Educational Survey, there were 103,270 para-teachers at the primary level, 104,894 para-teachers at the upper primary level, 37,950 at the secondary level, and 33,911 para-teachers at the higher secondary level in 2002 (NCERT, 2005).

A study conducted under the District Primary Education Programme in 1998, covering 21 para-teacher schools over five states, highlighted that there were distinct advantages if the teacher was a local resident, including better community interactions, teacher punctuality and efficiency of schools (Nawani, forthcoming). While acknowledging some short-term advantages of the system, Pandey (2006) reiterates that, by accepting the scheme of para-teachers, the central government is encouraging states to evade their responsibility for building a strong cadre of qualified teachers. The trend has also challenged teachers' professional identities. Para-teacher schemes may therefore serve the immediate purpose of universalisation of access to elementary education in far flung rural and hilly areas, but replacing regular teachers with para-teachers is in general detrimental to the quality of education and the effectiveness of schools, and should be avoided if possible. Large-scale non-formal education and alternative schools with para-teachers are often concerned with physical access over quality of provisions. Meanwhile, investment in improving the capacity of teachers and organizing continuous educational resource support and pedagogic renewal has taken a backseat (Ramachandran, 2005).

The biggest problem with the concept and rationale behind these schemes, as pointed out by the PROBE Report (1999), is that the *Shiksha Karmi* approach involves the potential risk of institutionalized dualism in the schooling system. This issue may not be so prevalent when *Shiksha Karmis* are posted as auxiliary teachers in mainstream schools and are spread evenly through the schooling system. However, *Shiksha Karmis* tend to be posted in areas where regular teachers are reluctant to go, such as tribal or backward villages. In these deprived areas, *Shiksha Karmis* tend to be used as low-cost substitutes for non-performing teachers, often managing the entire school on their own. This policy is often supported by regular teachers who, as a result, are more likely to be posted to more attractive areas. This results in deprived children being taught by poorly-qualified, low paid *Shiksha Karmis*, while those from more privileged families are more likely to be taught by a fully qualified teacher (PROBE, 1999).

It is worth noting, however, that regular school teachers are not necessarily better than contract teachers. Problems relating to classroom processes, pedagogic techniques, classroom management and other constraints which affect para-teachers also impact on the quality of education offered by trained and qualified teachers. Ramachandran et al (2005) in their study on teacher motivation, for example, found that trained teachers indicated several reasons for dissatisfaction, including high teacher-pupil ratios, inadequate infrastructure, erratic disbursement of salaries, being 'forced' to teach children of poor communities and specific social groups who are 'dirty' (which seems to reflect a class / social bias in teachers), irregular attendance of children, and illiterate parents, all of which add to teacher workloads.

Tilak (2004: 4720) also points out that most state governments favour para-teacher schemes and EGS schools as they save huge resources and avoid teacher managerial problems. So while the central government can claim to have gone a long way towards fulfilling the constitutional directive on universal elementary education, little attention has been given to the likely effects on quality of education or the long term implications of the schemes. As Govinda and Josephine (2004: 42) argue,

The schools, which are targeted for employment of contract teachers, are those where children from the poorer sections of the society study. Thus it would exacerbate inequity in the society by creating classes of government schools with different kinds of teachers for different classes of population.

To avoid such a situation, Govinda and Josephine suggest the creation and nurturing of a professional cadre of teachers governed by well-designed norms and standards as agreed by the state and teachers. A transparent process of recruitment, posting and promotion of teachers is therefore urgently required. Even though the appointment of contract teachers has come in for considerable questioning in public discourses, there are no systematic studies to analyse the long-term impact of such recruitments on the quality of schools on the one hand, and on the development of a professional cadre of teachers, on the other.

This suggests that a focus needs to be placed on the larger implications of policies related to (a) the professional morale of teachers and the manner in which para-teacher schemes may jeopardize efforts to build a strong cadre of professionally trained elementary school teachers and (b) the impacts of provision of a second-grade alternative education for children from already deprived and disadvantaged sections of society.

2.8.5 Teacher Motivation and Performance

There are several factors that significantly impact on teacher performance and motivation. These include the actual amount of time the teacher spends in class teaching, the proportion of time spent in maintaining order and doing other administrative tasks, the pedagogic techniques used by them in the classroom and disciplinary policies adopted by the teacher and the school. A number of official policies and programme documents over the years have reiterated the significance of teachers in the education of children, including the *Education Commission Report* (GoI, 1966), the *National Policy on Education 1986* (GoI, 1986), and the *National Policy on Education: Programme of Action 1992* (GoI, 1992a). A school without adequate numbers of teachers is non-functional, but a school which has an adequate number of teachers who are neither empowered nor professionally qualified nor committed to the basic ideals of their profession, with low morale and self-esteem, are likely to do more damage than good to students (Nawani, 2008).

Sub-optimal use of teachers is another serious concern in most states. Generally, teacher absenteeism is high in India. Even if teachers attend schools, their presence in classrooms is often low. This happens at least partially because of their engagement in non-teaching activities. According to a recent study on teacher absence in 20 states (Kremer et al, 2004), nearly one quarter of teachers were absent from government

primary schools on a typical school day⁹. Absence rates ranged from around 15% in Maharashtra to 38% in Bihar and 42% in Jharkhand. The absence rate was also more than 30% in Chhattisgarh, Uttarakhand, Assam, Punjab, Bihar and Jharkhand.

One factor determining the motivation and performance of teachers is the status they enjoy in society (SIDA, 2000). There is a general perception that in, recent years, the teaching profession has experienced a lowering of its status. Batra (2005) suggests that teaching has declined to a least favoured profession status. A recent study (CIE, 2001) reveals that teaching is considered as more of a 'safe fall back option' than a formal career choice. Further, the social distance between teachers and students is one reason why many teachers have limited commitment to the educational advancement of their pupils, as well as have limited understanding of their problems (PROBE, 1999: 56). Research indicates that the attitudes of teachers can be particularly discriminatory in the case of working children. Ramachandran et al (2003) points out in a study of working children that both children and parents see teachers treating poor children differently; they do not appreciate the predicament of children who have to work before and after school hours. This not only has a significant negative impact on the participation of those children in schooling, but also creates negative attitudes towards schooling for those who continue with their education.

There is, in fact, a discernible hierarchical division of schools in India with selected urban schools with good infrastructural facilities and teaching staff catering to rich students, while schools with poor facilities and inadequate numbers of teachers tend to cater to the poor and deprived sections of society. Educational provision has in recent years become much more diverse owing to the rapid growth of private sector provision. There is now a greater range of choice for parents who can afford to pay for their children's education, while government schools are usually the only option for those from lower economic strata who cannot exercise such choice. As a result, many teachers working in state-run schools perceive themselves to be in a 'deficit' situation. A typical profile of a government school teacher tends to be of someone who is poorly educated, with little or no teacher education and training, limited or almost no contact with books, technology and science, and increasingly recruited from among low income backgrounds. The majority of untrained or under-trained teachers work in rural areas, where the poorest and most deprived schools are situated. There is also a growing criticism of public schools which coincides with a decreased confidence in teachers, when in reality teachers are often not given the conditions to ensure teaching and even less learning. Teachers, who are themselves products of the poor education system, are often seen as obstacles to educational change rather than as key human resources. Consequently, teachers tend to respond defensively by overemphasizing problems outside their direct influence (SIDA, 2000).

⁹ The study is based on a nationally representative survey of 3,750 primary schools in India. Ten districts in each state and 10 primary sampling units within each district have been selected in the study using geographically stratified random sampling. The study considers a 'teacher to be absent' if the investigator cannot find the teacher while looking for him/her in the school during the regular working hours of the school, excluding cases where the school was closed due to official or scheduled holiday, extreme weather, construction or repair of the school building and official school function such as examinations, picnics, sports days, etc. The survey focused on government primary schools but also covered rural private schools and private aided schools, and the estimates of teacher absence are based on the 'direct physical verification of presence or lack thereof'. Over 16,500 teachers have been covered across the sample schools.

2.9 Financing of Elementary Education

In general, experts consider that India is not investing adequate financial resources to provide quality education for all (Dreze and Sen, 1995; Tilak, 2004) as reflected in the trend of financial allocations made for elementary education through Annual as well as Five Year Plans. According to the Human Development Report (UNDP, 2004), India ranks at number 78 in terms of share of public expenditure on education in Gross National Product (GNP), out of the 137 countries on which data is available. Successive governments have pledged to increase public spending on education to at least 6% of the GNP, so that education, and elementary education in particular, does not suffer from a paucity of financial resources. In fact, this was part of the proposals made by the Education Commission (GoI, 1966) and reiterated in the National Policy on Education in 1986 and 1992. However, as of 1990-1991, as the Eighth Five-Year Plan unfolded, only 3.9 % of GNP was being invested in education in India, and it has been consistently in decline ever since. During the Ninth Plan (1997-2002), for example, only 3.7% of GNP was spent on education. Education has been made part of the Common Minimum Programme of the present United Progressive Alliance (UPA) government, but this only outlines the issues in vague terms, with a lack of coherence. One of these is the promise to increase government spending on education to at least 6% of Gross Domestic Product (GDP), but this has remained an elusive target.

The rate of increase in investment in education has been very slow over the last sixty years as the proportion of GNP invested in education has increased from about 0.72% in 1951-1952 to about 4% of GNP in 2001-2002. However, expenditure on education in the total budget – plan and non-plan components – increased substantially in the year 2001-2002¹⁰. However, an analysis of budgeted expenditure for the four years 1999-2000 to 2002-2003 shows that this increase was almost entirely absorbed by non-plan expenditure, most of which goes to meet teachers' salaries. The share of planned expenditure, which contributes to the development of the system, went up only marginally from 15.18% to 16.97%. Planned expenditure on education as proportion of planned expenditure in all sectors by the central government increased from around 9% to little above 10% between 1999 and 2002. However, during the same period, both the share of education in total plan expenditure as well as total expenditure by the states, fell sharply from around 13% to 9%. In 1986-1987, the share of central and state government expenditure (plan and non-plan) on education relative to the total expenditure (plan and non-plan) of the states and the centre was 8.6%, which increased to 11.0% in 2000-2001, but has since decreased, reaching 9.8% in 2003-2004 (GoI, 2004; see also Govinda and Biswal, 2006: 34-37). This aspect requires closer examination to see if the fall is real and uniform across states, triggered by poor fiscal conditions of some selected states, or due to gradual absorption of plan expenditure into non-plan by the states.

2.9.1 Spending on Elementary Education in Recent Years

In the last few years, a substantial shift in financial allocations has taken place in favour of elementary education. However, since 1990-2000, the share of elementary education in the total education expenditure (plan and non-plan) both by the central

¹⁰ Plan expenditure is determined by the Planning Commission, and refers to capital and current spending on development projects. Non-plan expenditure is regulated by the Finance Commission, and refers to spending on maintenance (of facilities, projects, etc.).

and state governments has only marginally fluctuated around an average of 48-49%. All 28 states put together spent 49.5% of the total education expenditure (revenue account) on elementary education in 2000-2001. However, variations across states are very wide, ranging from 4.77% in Bihar to 68.46% in Madhya Pradesh for the same year. Since 1990, the share of public expenditure on elementary education as percentage of GDP has changed only marginally; it was around 1.78% of GDP in 1990-1991 and after fourteen years it was almost the same with a figure of around 1.89% in 2004-2005 (GoI, 2007a: xlix). The recent move made by the Government of India to create a *Prathamik Shiksha Kosh* (a nonlapseable central fund for elementary education) by levying a surcharge of 2% on income tax, corporate tax, excise and custom duties, and service tax is a radical move to significantly enhance the funding for elementary education. The surcharge has recently been increased to 3% with a view to financing the development of secondary education also.

2.9.2 Fund Flow, Utilization and Accountability

With a view to cutting down on bureaucratic delays in channeling resources for action in the field, State Implementation Societies were established under DPEP. The system with minor modifications has been extended to cover most of the states under the SSA. This undoubtedly has helped overcome such avoidable situations as funds for education received by the state exchequer from the central government not finding their way to the schools where they ought to be spent. However, flow and utilization of resources also depend on the capacity of the various states. For instance, a review of the central grants released against approved outlays under the SSA and the DPEP during 2002-2003 showed that at least 12 states including Andhra Pradesh, Bihar, Jharkhand and West Bengal utilized less than 50% of the grants received. Such gross under-utilization of funds in some states would have serious consequences on all aspects of schooling, including access and participation. This issue requires analytical studies to understand inter-district and intra-district variations in the level of fund utilization and their impacts on school participation.

A conscious effort has been made in recent years to transfer funds directly to schools and school level management bodies for the implementation of specific components of the SSA. For instance, several states have resorted to transferring funds particularly for the construction of school buildings as well as for the repair and maintenance of decentralized management structures such as *panchayati raj* bodies, School Management Committees and Village Education Committees. In addition, every school is given direct funding to the tune of Rs. 5000 to Rs. 7000 every year for the purchase of teaching and learning materials and the upkeep of school premises. Every permanent teacher in a primary school receives a grant of Rs. 500 per year for developing innovative and locally relevant teaching and learning materials. It is expected that all these funds are utilised carefully, and the use of these funds is subjected to a process of social audit at the community level. Again several questions need more focused empirical analysis: while decentralization of fund flow and utilisation should be welcome, it is important to find out if this has helped to improve the functioning of schools; is any social audit taking place to ensure effective utilization of resources?; and how is such a direct transfer of funds addressing school-specific requirements? These are important questions, answers to which could make a vast difference to the functioning of the schools and, in turn, on the level of participation of children.

2.10 Overall Observations

The analysis presented in this section points to significant improvements in the access and participation of children in elementary education, particularly in lower primary schools. It can also be safely concluded that certain programmes and strategies adopted in recent years have helped bring more children in to school and improve the quality of education provided. Implementation of these programmes has also brought forth some critical lessons that should guide further progress (see Govinda and Biswal, 2006; Govinda, 2008). For instance, modifying traditional distance and population norms and opening schools in small habitations has yielded some positive results. Similarly, moving from state level planning to district level planning for educational development has helped identify variations in the conditions at the sub-regional level, and developmental inputs have been adjusted accordingly.

Several strategies and programmes, such as those related to quality improvement and teacher education, are quite limited; often focusing on input provision and coverage of certain numbers of teachers. An example of this is the programme of direct grants to schools and teachers to improve school quality and classroom instructional processes. However, an absence of a systematic empirical evaluation of these programmes has left them vulnerable for criticism and potential rejection.

Another important aspect of the programmes and strategies over the last few years has been to reform the governance system by emphasizing community involvement. (Govinda and Bandyopadhyay, forthcoming) This is also linked to changes and developments in the strengthening of *panchayati raj* institutions in different states. The last few years have seen the emergence of a variety of mechanisms to facilitate community involvement in school governance such as School Development Management Committees in Karnataka, empowered School Management Committees in Andhra Pradesh, Committees of *Panchayati Raj* Institutions in Madhya Pradesh through the new *Jana Shiksha Adhiniyam*, and the revamped Village Education Committees in several other states. But in most of these cases, there is a danger that they will dissipate or become less effective over a period of time unless efforts are made to link them to administrative reform measures within the education department. It is important to note that such measures do not involve any financial investment, but would play a critical role in giving stability to the management system and have a positive impact on the participation of children in schooling.

Sarva Shiksha Abhiyan, the main vehicle for elementary education development, consists of an integrated programme, which interlinks various inputs flowing through a number of component activities. It is in line with this thinking that all component activities are designed and incorporated into a perspective plan for each district. It is on such District Plans that substantial amounts of funds are being spent in all districts with regard to both equity and quality considerations. This is indeed a positive move that should help bridge the persisting disparities and social inequities in access to elementary education in the country.

It is recognized that teacher and teacher-related factors seriously affect students' participation in schools at various levels. Teachers who have inadequate qualifications and training and perhaps do not display a sympathetic and sensitive attitude towards students' needs and differences are likely to impact on students' experiences in class,

making them vulnerable to drop out and / or low achievement. Moreover, as Pandey (2006) suggests, teachers are better able to relate to students with whom they share a common first language and cultural understandings, and to be able to effectively facilitate communication in class and to incorporate students' experiences into classroom practice. It is also argued that teacher's lack of knowledge of students' languages, cultures and communities might inhibit the development of close relationship with students (Pandey, 2006). In a culturally diverse society such as India, it may not always be possible to have a teacher with a similar background to his or her students, so it is important that the teachers be sensitized, educated and trained to acknowledge and be respectful of the various diversities among students. Issues related to teachers and their training also cannot be considered in isolation from the curriculum they teach in schools. Batra's (2005) reflection on the voice and agency of teachers in relation to the National Curriculum Framework (NCF) suggests that there are two major gaps in relation to teacher education. First, it views teachers as people who need 'to be persuaded and trained... oriented to the perspective...(and) should have the skills to teach...' (Batra 2005: 4350), as opposed to those who need to be empowered to evolve pedagogies that foster critical thinking within a consciously created democratic environment of learning for all children irrespective of caste, religion, region, community and gender (Nawani, 2008). Secondly, it assumes teachers exist in isolation from the socio-political contexts that actively discriminate between people from different backgrounds; and that teachers can be 'oriented' successfully to 'implement' the articulated new perspective of the NCF (Batra, 2005).

Finally, as has been highlighted, the last 10-15 years have witnessed unprecedented levels of attention to the improvement of elementary education both in terms of quantity and quality. This has been spearheaded by the Government of India through major programmes such as DPEP and currently through Sarva Shiksha Abhiyan. While one may question if the levels of resources mobilized have been adequate, the overall expenditure on the development of the education system (as opposed to recurrent expenditure on teachers salaries, for example) has increased. However, common questions posed by many people in the field are: What efforts have been made to track cumulative changes and improvements in districts, some of which have received financial support for nearly a decade? And, do the district plans and the strategies adopted by the SSA reflect changed realities in quantity as well as quality of elementary education in the country? These questions point to the need for a more permanent arrangement for continuous and systematic assessment of educational conditions and processes as they unfold in each district, and for incorporating emerging lessons into the design of subsequent action plans, instead of engaging in temporary and arbitrary actions which may show results in the short-term but which may not contribute to the development of the system in a sustainable manner.

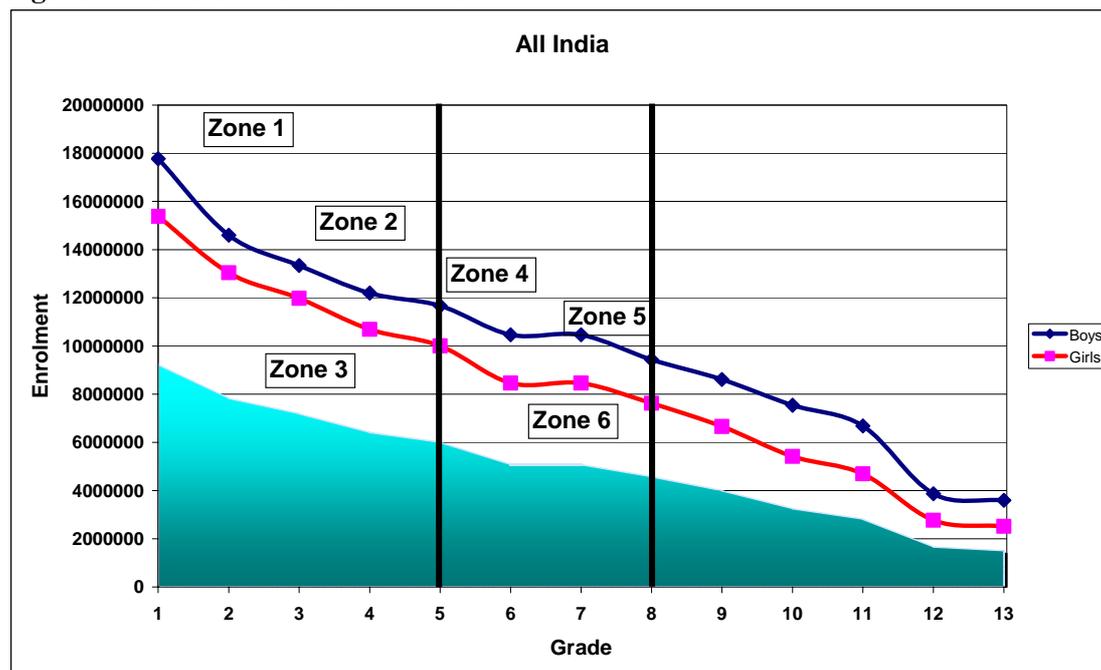
3. Zones of Exclusion: Drawing the Contours

Children who fail to access or complete a basic education cycle do not constitute a homogenous group. For some children physical access to school is difficult, others fail to access school due to socio-economic reasons. Some join school, but are silently excluded and rarely participate in the educational process. Some children leave school without completing the lower primary cycle, whilst others complete the cycle but do not move to upper primary. There are some who are enrolled in school, but at risk from dropping out, they are often absent and do not benefit from meaningful learning. There are also those who complete the primary cycle, but learn little during the process.

It is important not to categorize all these children together, as they have different access needs and contexts. Rather, one may wonder whether it is demand or supply driven: is it children who are failing to benefit from education or is it the school system that is failing to give education to children? Educational access is a complex process and is about more than numbers. Out of school children might be from different socio-economic backgrounds, have different individual contexts and interact with the school system in different ways. Understanding the dynamics between schools and children requires an analysis of access from a range of viewpoints, looking at children in different circumstances. In addition, one has to address questions such as: What is the actual nature and magnitude of exclusion of children from schooling? Who are the children who are excluded and where are they? Answers to these questions are of critical value in designing programmes that would make the school system more inclusive and ensure that progress of children through the school system is meaningful. With this purpose in mind this section will attempt to configure the different zones of educational exclusion in India and assess the magnitude and nature of exclusion in each zone. The Zones of Exclusion model has been developed by the Consortium for Research on Educational Access, Transitions and Equity (Lewin, 2007).

These Zones have been adapted to suit the structure of the Indian education system (see section 2.1). **Zone 1** contains those children who have never enrolled in school and as such do not have educational access. This might occur in situations where the school is inaccessible due to physical location or where family circumstances do not allow access. **Zone 2** consists of children who have previously enrolled in primary school, but who have dropped out before completion of the primary cycle. **Zone 3** can be called the zone of silent exclusion, with children enrolled at primary school but at risk of dropping out. They might attend irregularly or fail to learn at appropriate levels. **Zone 4** includes those children who complete the lower primary cycle but do not join upper primary school, either by choice or due to inaccessibility. **Zone 5** consists of children who complete Grade 5 and join Grade 6 (i.e. upper primary), but leave school without completing this cycle. In India the compulsory education cycle runs from grades 1-8, and as such children who leave upper primary before the end of grade 8 are not considered to have completed the basic education cycle. By this stage reasons for drop out may differ greatly from what is observed at the lower primary stage. **Zone 6** children are those at risk of drop out from the upper primary (or the middle school) cycle. They might attend irregularly or fail to learn at appropriate levels.

Figure 4: Zones of Exclusion in India



Source: CREATE calculations based on GoI (2007a)

The following section provides a zone-wise analysis of educational access in India and attempts to capture the intricacies of journeys that children in India pass through. The analysis is two-fold. It gives a quantitative picture of the children in various zones of exclusion on the one hand, and on the other, reviews available research findings on the processes involved and the reasons for children continuing to face the risk of exclusion. It should be mentioned at the outset that databases in India do not fully follow the categories identified under the different zones. Consequently, discussions of the different zones to some extent over-lap.

3.1 Zone 1: Children Not Entering Primary School

Are there children who never enroll in primary school? What proportion of children in India fall in this category? These are difficult questions to answer. Regular datasets collected by the Education Department in India do not provide this information, as educational statistics published at national or state level focus either on Gross Enrolment Ratios (GER) or Net Enrolment Ratios (NER). These figures do not identify children who are never enrolled in school. Thus, the answer to this question has to be located in specially conducted surveys that try to identify if children have been to school or not. Findings of some of these surveys are discussed here.

The National Sample Survey Organization (NSS) in its survey conducted in 2004 (GoI, 2006b) asked whether respondents had ever been enrolled in school. The findings of the survey showed that 35% of individuals between the ages of 5-29 years old had never attended an educational institution (although in the case of younger children, there is a possibility that some of these would subsequently enroll). Table 14 suggests that boys were more likely than girls never to enroll because they had to contribute to household income; this was more pronounced in the older age groups. Girls were more likely than boys never to enroll because they were engaged in domestic chores. Whether education was considered necessary was an important

reason for non-enrolment of rural children in particular, i.e. 23% of never enrolled 5-14 year old rural girls; 22% of never enrolled rural boys. This is compared to 15% of never enrolled urban girls and 12% of urban boys.

Table 14: Distribution of Children Aged 5- 14 Years Who Have Never Attended School (per 1000)

Reason	Category and Age											
	Rural Male			Rural Female			Urban Male			Urban Female		
	6-11	10-14	5-14	6-11	10-14	5-14	6-11	10-14	5-14	6-11	10-14	5-14
School too far	63	37	55	54	26	43	31	8	18	11	7	22
Has to support household income	17	66	30	11	35	19	38	94	52	10	21	14
Education not considered necessary	173	156	124	234	184	172	138	86	83	135	117	102
Has to attend to domestic chores	11	22	12	40	73	44	9	7	7	27	63	36
Other	631	289	579	482	702	482	602	222	520	659	278	519

Source: GoI (2006b)

Earlier surveys also pointed out that a considerable proportion of children never attended school due to their engagement in work either at home or in order to support household income. Some children found it difficult to attend school due to financial constraints. Table 15 highlights reasons for children from rural areas' non-enrolment revealed by earlier surveys conducted by NSS in 1986-1987 (GoI, 1992b) and again in 1995-1996 (GoI, 1998).

Table 15: Why Children in Rural Areas Never Enroll in School

Reasons for never enrolling	1986-1987		
	Males (%)	Females (%)	All (%)
Too young to go to school	5.7	3.9	4.6
Schooling facilities not available	9.9	10.5	10.3
Not interested in education	25.2	32.3	29.5
Needed for household economic activities	18.9	9.0	13
For other economic reasons	31.1	23.6	26.6
Busy attending to domestic chores	1.3	10	6.4
Other	7.9	10.9	9.7
	1995-96		
No tradition in the family	1.5	5.4	3.9
Child not interested in studies	20.5	15.1	17.3
Parents not interested in studies	27.8	35.6	32.6
Education not considered useful	2.7	2.9	2.8
Schooling facilities not available conveniently	2.0	2.3	2.2
The child has to work for wage/salary	2.2	0.9	1.4
The child has to participate in other economic activities	4.6	3.0	3.6
The child has to look after young siblings	0.7	1.6	1.3
The child has to attend other domestic activities	0.7	4.0	2.7
Financial constraints	16.3	13.6	14.6
Other	21.0	15.5	17.6

Source: Tilak (2000) based on NSS data from 1986-1987 and 1995-1996; see also Reddy (2004)

The National Family Health Survey (NFHS II) in 1998 (see IIPS and ORC Macro, 2000) of 6-17 year old children reported costs of schooling as the main reason for the largest proportion of boys and girls never enrolling in school (see Table 16). 29% of never enrolled urban boys and 26% of rural boys; 30% of urban girls and 24% of rural girls cited this as the main reason for never attending school. Other important reasons included boys (both rural and urban) not being interested in education; and girls (particularly rural) being required to work either in the home or outside; this was also high for rural boys.

Table 16: Reasons for Never Attending School, Children Aged 6-17 years

	Males (%)		Females (%)	
	Urban	Rural	Urban	Rural
Percentage of total children aged 6-17 years who never attended school	6.4	13.6	9.0	25.7
Reasons for never attending school				
School far away	1.5	4.4	3.4	5.2
Education not necessary	6.1	7.8	12.9	13.1
Required for work at home or outside for cash/kind	12.6	17.1	15.4	24.5
Education costs too much	28.5	25.8	30.1	23.8
Not interested in studies	26.5	25.7	15.7	15.9
Other reasons	26.5	17.0	19.7	15.4
Don't know	3.0	2.0	2.8	2.1
Total	100.0	100.0	100.0	100.0

Source: IIPS and ORC Macro (2000)

Examining the state-wise distribution of people in the age group 5-29 years who have never attended school, the NSS survey (GoI, 2006b) found that the states which have low educational indicators, such as Bihar, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and West Bengal, had higher proportions of never enrolled male children than the national average (13.2%). The proportion of female children who have never attended school is highest in Bihar, followed by Rajasthan, Jharkhand, Dadra & Nagar Haveli, Madhya Pradesh and Uttar Pradesh.

The analysis presented above highlights two main reasons for children never enrolling in schools. Firstly, poverty and the cost of attending school is crucial; this includes the large proportion of children who cited working at home or outside as reasons for never enrolling. Without any doubt, it is the poor who are more likely to be found in Zone 1. Secondly, children's lack of interest in studying was put forward as a major reason. This suggests that many non-enrollers do not find schooling relevant to their needs. This could reflect both individual and parental perceptions of education. Whether schooling facilities are accessible does not appear to be a major reason for non-enrolment, either for boys or girls. However, the fact that girls continue to be at disadvantage is clear because of the higher proportion of girls never attending, particularly in rural areas.

The establishment of a primary school is invariably bound by considerations of population size and distance. As mentioned earlier (see section 2.2), only a small percentage of the population remains unserved by a primary school and distance to school is not noted as a major reason for non-enrollment in school. However, the actual numbers included in this small percentage could mean denial of access to a sizeable number of children. When data from the Seventh AIES (NCERT, 2005) is

disaggregated in terms of habitations, it is found that approximately 11% of habitations do not have a school either within the habitation or within a distance of 1 km. Similarly, around 22% of children do not have upper primary facilities within a distance of 3 km.

Further, the analysis suggests that the problem of non-enrolment is concentrated in a few selected states, which have lower educational indicators. This highlights the need for more and better strategies in these states to reach children in Zone 1. The struggle to make primary education inclusive and to ensure that every child is enrolled in primary school will probably continue in these states for some years to come. It is also necessary to conduct more systematic studies at the micro level to understand the magnitude of the problem of non enrolment in poor and rural areas in these states. Such studies would be of particular value for taking forward the Sarva Shiksha Abhiyan goal of universal enrolment, the targeted date for which has already passed.

3.2 Zone 2: Children Dropping Out from Primary School

Although most states in India have done well in enrolling more children in recent years, the inability of schools to retain those children has continued to be a serious problem. Table 17 and Figure 4 present progress made in reducing drop out rates over the last decade and a half. The highest reduction in drop out rates seems to have been achieved 1980-1991, both at primary and upper primary stages. Only marginal change was recorded in the following decade, 1991 to 2001, even though there was an unprecedented level of developmental action in primary education, through programmes such as Operation Blackboard and DPEP¹¹.

Table 17: Drop Out Rates (%) in Primary Education, 1990 to 2005

Year	Primary (Grades 1-5)		
	Boys	Girls	Total
1990-1991	40.1	46.0	42.6
1995-1996	41.4	43.0	42.1
2001-2002	38.4	39.9	39.0
2002-2003	35.9	33.7	34.9
2003-2004	33.7	28.6	31.5
2004-2005	31.8	25.4	28.5

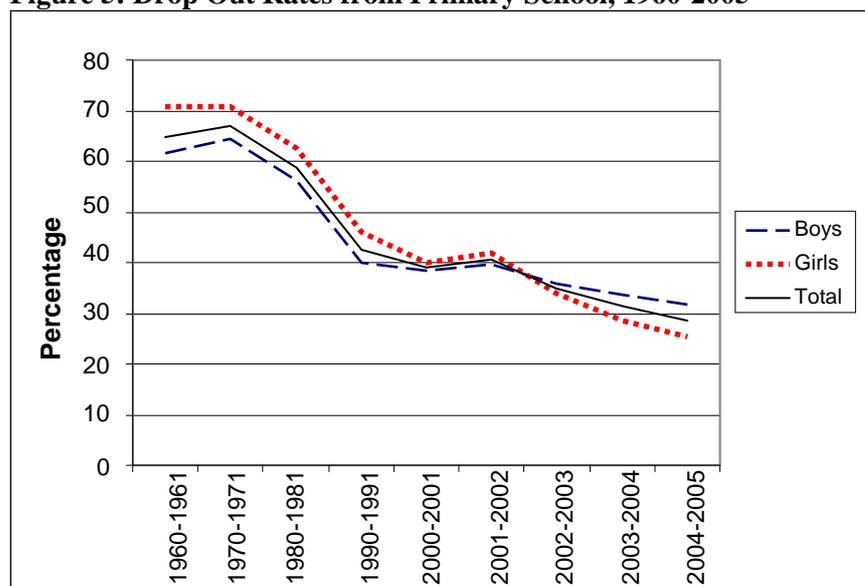
Source: GoI (2007a)

The situation seems to have improved in recent years showing a reduction of 10.5 percentage points from 39.0% in 2001-2002 to 28.5% in 2004-2005. It is most impressive for girls over the same period, where drop out rates declined by 14.5 percentage points. While drop out rates for girls was higher than boys up to and including 2001-2002, the trend reversed thereafter, with lower drop out rates for girls (25.4%) than for boys (31.8%) in 2004-2005.

Having said this, drop out rates in primary schooling in India remain high. This raises many questions about the efficiency and effectiveness of the schooling system.

¹¹ Operation Blackboard (1987) was a central government initiative which aimed to provide minimum resource levels in elementary schools across the nation – defined as two teachers, two classrooms, and a set of teaching and learning materials.

Figure 5: Drop Out Rates from Primary School, 1960-2005



Source: Government of India (2007a)

Drop out rates among Scheduled Caste (SC) and Scheduled Tribe (ST) girls continued to be higher than that of the SC and ST boys (with the exception of ST girls in 2004-2005) (see Table 18). Similarly, the drop out rates of SC/ST girls in particular is higher than drop out rates of non SC/ST children. Even with substantial reductions in drop out rates, the situation with respect to SC/ST children is alarming. Indeed, less than two thirds of SC children enrolled at school complete five years of primary education. The situation is worse for ST children. Recent figures (2004-2005) show the survival rate among ST children is around 58% at the lower primary stage and only around 30% survive to reach the upper primary cycle. There is, however, no significant difference in the drop out rates for boys and girls among ST children.

Table 18: Drop Out Rates (%) for Scheduled Caste and Scheduled Tribe Children at the Primary Stage (Grades I-V)

Year	SC Children			ST Children		
	Boys	Girls	Total	Boys	Girls	Total
1990-1991	46.3	54	49.4	60.3	66.1	62.5
1995-1996	43.7	48.5	45.7	55	58.9	56.6
2001-2002	43.7	47.1	45.2	51	54.1	52.3
2003-2004	36.8	36.2	36.6	49.1	48.7	48.9
2004-2005	32.7	36.1	34.2	42.6	42.0	42.3

Source: Government of India (2007a)

3.2.1 Why Do Children Drop Out?

After examining the data from the field, the National Sample Survey 52nd Round concluded that, ‘drop out is a serious phenomenon in our educational system’ (GoI, 1998: 32). The situation continues to be serious. Reasons for dropping out of school were explored in the NFHS-2 (IIPS and ORC Macro, 2000) (see Table 19). It was found that the predominant reason mentioned both in rural and urban areas was children not being interested in studying. Children being engaged in wage labour and home-based work was another major reason.

Table 19: Reasons for Dropping Out of School (%), 1998-1999 (Age 6-17 years)

Reason for Dropping Out	Males		Females	
	Urban	Rural	Urban	Rural
School far away	0.3	1.4	1.2	7.5
Education not necessary	2.4	2.3	5.4	4.3
Required for work at home or outside for cash/ kind	21.9	28.4	20.8	26.2
Costs too much	15.2	13.3	17.0	11.4
Not interested in studies	42.5	40.0	30.2	24.8
Repeated failures	6.0	5.3	6.1	3.7
Other	5.9	5.5	14.3	18.2
Don't know	5.7	3.8	5.1	4.0

Source: IIPS and OCR Macro (2000)

The 61st NSS (2004-2005) (GoI, 2006b) shows the problem of drop outs continues. Data in Table 20 shows physical access to school is only a minor reason for dropping out. A substantial number of children were found to be dropping out because education was not considered necessary, they had to support household income (especially urban boys) or they had to attend to domestic chores (girls in particular).

Table 20: Reasons for Dropping Out of School (per 1000), 2004-2005 (Age 5-11 years)

Reasons for Dropping Out	Rural Male		Rural Female		Urban Male		Urban Female	
	5-9	6-11	5-9	6-11	5-9	6-11	5-9	6-11
School too far	1	1	0	2	0	0	0	3
Has to support household income	4	16	2	10	6	44	12	21
Education not considered necessary	5	21	16	35	15	35	9	24
Has to attend to domestic chores	0	1	1	14	5	7	4	32
Other Reasons	34	65	37	62	40	96	54	78

Source: GoI (2006b)

3.3 Zone 3: Children At Risk of Exclusion

In addition to children who never-enroll or drop out, there are also children who continue to be enrolled at school, but who are at risk of dropping out. These children are often silently excluded from schools; they are physically present but gaining little cognitive benefit from the experience. These children are generally first generation learners and many of them live in an environment that does not encourage them to study. Irregular attendance, low levels of learning, previous temporary withdrawals, overage learners and grade repetition tend to make children at risk from more permanent exclusion. In this section data on these issues is reviewed.

Many of these children are characterized as 'not interested in studies' and eventually drop out from school after attending school for some time. According to NFHS-2 (IIPS and ORC Macro, 2000), 32.6% of boys and 28.4% of girls cited 'lack of interest in studies' as the reason for dropping out from school. The NSS Survey of 1998 (GOI, 2001) also recorded 'child not interested in studies' (24.4%) or 'unable to cope with or failure in studies' (22.5%) as the predominant reasons for children dropping out of schools. The PROBE Report (1999), like the NFHS-2 in 1998-1999 (IIPS and ORC Macro, 2000) and the NSS 1995-1996 (GoI, 1998) surveys also found 'lack of interest in studies' as the main reason for dropping out of school. These groups of reasons, however, may be related more to school-related factors which act as barriers for children to learn effectively and to move further in the ladder of education, rather than to children's lack of interest in studies. It is the responsibility of the school system to

make the experience pleasant and interesting to the children, so what is required is to reform the contents and processes and make them more relevant to the lives of the children and linked to the environments in which they live.

Figure 6: Learning Levels of Children in Grades 1-8

Learning Level						
Reading: % Children who CAN read						
Std.	Nothing	Letter	Word	Level 1 (Std 1) text	Level 2 (Std 2) text	Total
I	38.4	38.3	16.1	4.0	2.6	100
II	14.2	30.1	32.5	15.0	8.3	100
III	6.3	16.5	29.3	28.0	19.9	100
IV	3.2	8.9	18.7	31.7	37.6	100
V	2.1	4.9	11.9	28.1	53.0	100
VI	1.3	2.5	6.7	22.9	66.6	100
VII	0.8	1.5	4.1	17.5	76.1	100
VIII	0.6	0.9	2.3	12.6	83.7	100
Total	9.9	14.8	16.5	19.8	39.0	100

Arithmetic: % Children who CAN					
Std.	Nothing	Recognise numbers	Subtract	Divide	Total
I	53.8	38.5	5.7	2.1	100
II	26.1	49.0	18.9	6.0	100
III	13.5	38.0	33.3	15.2	100
IV	7.5	24.6	37.4	30.6	100
V	4.7	16.0	34.0	45.3	100
VI	2.9	10.1	28.5	58.5	100
VII	1.9	7.5	23.3	67.4	100
VIII	1.2	5.0	18.8	75.8	100
Total	16.1	25.7	24.6	33.6	100

Comprehension: % Readers (Level 2) who CAN					Writing: % Children who CAN correctly write		
Std.	Answer at least one question	Answer both questions	Solve at least one word problem	Solve both word problems	Std.	One simple dictated sentence	
III	89.0	80.3	78.7	64.2	I	15.6	
IV	92.3	84.3	82.0	67.5	II	35.9	
V	95.1	88.5	86.9	74.4	III	56.9	
VI	96.2	90.4	89.3	77.6	IV	74.4	
VII	97.0	92.2	91.2	80.3	V	83.5	
VIII	97.9	93.3	93.0	83.7	VI	90.0	
Total	95.6	89.6	88.4	76.7	VII	93.5	

Source: Excerpt from Pratham (2007)

Several studies have demonstrated poor quality of teaching-learning processes in many schools, which results in low levels of basic skill attainment, i.e. reading, writing and arithmetic, often after children have attended school for five or even eight years. Low levels of learning put children at risk of drop out as parents can withdraw their children for this reason. Sinha and Reddy (forthcoming) point out that, ‘many children find it difficult to cope with as they have little or no family atmosphere and support for learning and find it difficult to catch up with their peers.’ This is often the case for first generation learners who might not receive appropriate support at home. Additionally, some children have problems with the language used in the textbooks and classroom transactions, because they are different from the dialects they speak at home.

The Annual Status of Education Report (ASER; Pratham, 2007) conducted a household survey based on an all-India sample of rural areas and found the learning levels to be low in most areas, even though there were considerable variations across different states (see Figure 7). The ASER study revealed that in states where large numbers of children did not recognize letters or numbers in grades 1 and 2, reading and arithmetic ability in later years was poor. The study concluded that it was not the lack of parental demand that kept children out of school, but supply side factors such as inadequate infrastructure, insensitive teachers, and uninteresting (or irrelevant) curricula.

The ASER study (Pratham, 2007: 5) also found a strong correlation between parental education, particularly the mother’s education, and children’s education. It states that, ‘educated mothers are more likely to send their children to school and to have healthier and better educated children’. An educated mother serves as a multiplier when it comes to educating her children The study also found that:

‘Children of mothers who had not been to school were five times as likely to be out of school. The impact of mothers’ schooling on the learning levels of children could also be observed. 6-8 year old children of mothers who had not been to school were three times as likely not to be able to read the alphabet as children of mothers who had completed at least Grade 5’ (Pratham, 2007: 5).

Other literature points to the links between low levels of learning and risk of drop out. Reddy (2004: 24) points out that studies show, ‘poor performance and learning outcomes among children from poor economic backgrounds has an adverse impact on their continuation’. Ramachandran, et al (2003) also found that in Uttar Pradesh, children in grade 2 who could not recognize letters or children in grade 3 who were unable to read/write, were withdrawn from school by their parents.

The ASER data also indicated a positive correlation between children’s reading ability and their capacity for comprehension. It states:

If a child (at any age or standard) can read Level 2 text fluently, his or her ability to answer comprehension questions is high. By Standard Four, over 90 percent of fluent readers are able to answer simple comprehension questions. Fluent readers’ ability to correctly solve word problems in arithmetic is limited only by their inability to do arithmetic operations. This finding underlines the

importance of ensuring fluent reading as a foundation for any educational progress (Pratham, 2007: 28).

Grade repetition levels also seem to be high. In India at the lower primary level children are either promoted automatically to higher grades or they are evaluated by teachers and approved for promotion. There is no formal examination for progression. Data collected for the all-India District Information System in Education (NUEPA, 2007b: 18) in 2006-2007 showed that on average 16% of students failed to progress to a higher grade, with 6.3% of elementary school children (6.6% at primary and 6.4% at upper primary levels) repeating grades (NUEPA, 2007b: 17). There were considerable variations across states. Some states had higher repetition rates in elementary education than others, including Sikkim (21.6%), Arunachal Pradesh (15.7%), Tamil Nadu (15.3%), West Bengal (13.6%), Bihar (13.5%), Chhattisgarh (12.1%), Gujarat (11.1%), Rajasthan (10.8%), Delhi (9.1%), Meghalaya (8.3%), Punjab (8.2%) and Uttarakhand (7.4%). The significance of this on a child's chances of completing the primary cycle and transitioning to the next level cannot be taken lightly. Moreover, as children move to higher classes, low levels of attainment become more significant, making children at risk from drop out.

3.4 Zone 4: Children Who Complete Primary School But Do Not Enter Upper Primary School

Systematic data on an annual basis on student flows from grade 5 to grade 6 (i.e. primary to upper primary level) is not available. However, time series data compiled for the period from 1991 to 1999 throws significant light on the state of entry into upper primary schools. In recent years, DISE data has also been available on examination results for the end of the lower primary cycle which, although it does not give information on transitions, could be a useful proxy. In many states this is the first examination monitored by Education Department authorities.

In India as a whole, the transition rate from primary to upper primary school was 89.4% in 1991-1992 and 85.9% in 1998-1999 (see Table 21). Thus, around 14% of children belonged to Zone 4, as they completed the primary stage of schooling but did not make the transition from primary to upper primary level. However, the situation varied across states.

Table 21: Transition Rates from Primary to Upper Primary School Across the Major States in India, 1991-1998

State	Transition Rate from Primary to Upper Primary		
	1991-92	1995-96	1998-99
Andhra Pradesh	87.5	78.5	81.6
Assam	78.6	79.1	77.6
Bihar	77.4	75.9	76.4
Gujarat	71.3	66.8	73.9
Himachal Pradesh	92.6	86.0	92.2
Haryana	80.0	80.9	97.4
Jammu & Kashmir	133	98.0	99.6
Karnataka	93.0	92.9	99.8
Kerala	90.2	93.0	93.4
Madhya Pradesh	77.8	85.3	75.7
Maharashtra	90.0	86.2	89.7
Orissa	86.2	92.9	98
Punjab	94.0	95.8	96.3
Rajasthan	95.3	101.5	97.1
Tamil Nadu	81.6	80.8	79.7
Uttar Pradesh	87.5	86.6	87.8
West Bengal	131.6	80.6	88.4
All India	89.4	84.4	85.9

Source: GoI (1995), GoI (2002), and GoI (2005b)

In 1991-1992, the states which recorded transition rates from primary to upper primary schools above the national average were Maharashtra, Kerala, Himachal Pradesh, Karnataka, Punjab, Rajasthan, West Bengal and Jammu & Kashmir. In fact, the transition rate from primary to upper primary level in West Bengal and Jammu & Kashmir was more than 100%, possibly because of lateral entry into the initial grade of upper primary school or it could be a result of incorrect data. Another notable fact is that even educationally 'backward' states such as Rajasthan and West Bengal had very high transition rates in 1991-1992. Of these states, all except Himachal Pradesh, West Bengal and Jammu & Kashmir registered increases in transition rates over the period 1991-1999. Gujarat had the lowest transition rates followed by Bihar, Madhya Pradesh and Assam in 1991-1992. Apart from Haryana, Orissa and Uttar Pradesh, most other major states with low transition rates in 1991-1992, had even lower rates by 1998-1999.

According to DISE data, the trend for transition rates from primary to upper primary in India as a whole declined further, with overall rates as low as 74% in 2003-2004. Yet, DISE data for 2005-2006 shows a substantial increase in transition rates from primary to upper primary school over the preceding two years. In 2003-2004 transition rates were 74%, in 2004-2005 they increased to 78% and in 2005-2006 they rose again to 83.4%. States like Bihar (66.3%), Uttar Pradesh (67.9%), Madhya Pradesh (73.2%), Meghalaya (77.7%), Haryana (80.3%) and Orissa (82.5%) reported lower transition rate than the national average. With some states (e.g. Bihar and Uttar Pradesh) having low enrolment and high drop out levels, transition rates of only 66%-68% from lower to upper primary are a cause for concern. This indicates that large proportions of children attending lower primary schools in these states do not learn basic competencies, which leads to exam failure and as a result exclusion from the schooling system beyond grade 5.

Indeed, data suggests that examination results are low in many states. DISE data from 2005-2006 shows low percentage marks from students in exams in grades 4 and 5. More than 50% of children performed at an average or below average level; only 47.8% of boys and 48.5% of girls passed these exams with grades of more than 60%. In several states, the proportion of boys and girls with marks of 60 and above is lower than the national figure. These include the Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Daman & Diu, Goa, Haryana, Jammu & Kashmir, Jharkhand, Lakshadweep, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal (see NUEPA, 2007b). In some of these states, less than 20% of students secured 60% or above in the final year exam at primary school. Having said this, there has been a gain of four percentage points in overall proportion of students reaching 60% or above between 2003-2004 and 2005-2006.

Simply passing the grade 5 examination, however, does not ensure transition to upper primary school. In several states a large proportion of upper primary schools are privately managed secondary schools (Juneja, 2005) and securing access to these schools is not guaranteed.

3.5 Zone 5: Children Who Drop Out from Upper Primary School

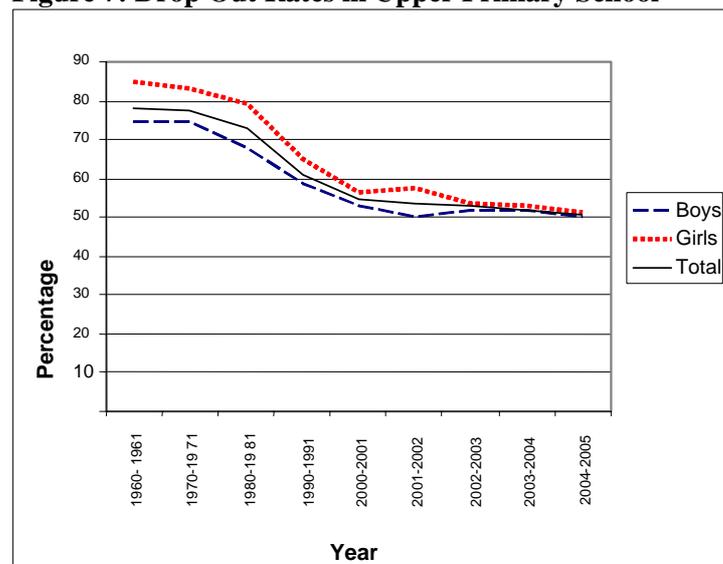
Almost all data sources indicate that drop out rates among older children (11-14 years) is much higher than among lower age groups. The situation at the upper primary level (grades 6-8) is quite alarming as around half of the children who enroll in upper primary schools do not complete the upper primary cycle. Time series data given in the government's *Selected Educational Statistics, 2004-05* (GoI, 2007a) shows that over a period of 45 years drop out rates have decreased substantially, from 78.3% in 1960-1961 to 50.8% in 2004-2005, but this is far from satisfactory. As the data presented in Table 22 and Figure 6 illustrates, the decrease is essentially due to the improved retention of girls in the school system, as between 1990-2005 the drop out rate reduced by nearly 15 percentage points for girls. Gender disparities have therefore practically disappeared in drop out / retention rates at the upper primary level.

Table 22: Drop Out Rates (%) from Upper Primary School

Year	Upper Primary (Grades 5-8)		
	Boys	Girls	Total
1990-1991	59.1	65.1	60.9
1995-1996	56.6	61.7	58.8
2001-2002	52.9	56.9	54.6
2002-2003	52.3	53.5	52.8
2003-2004	51.9	52.9	52.3
2004-2005	50.5	51.3	50.8

Source: GoI (2007a)

Figure 7: Drop Out Rates in Upper Primary School



Source: GoI (2007a)

The situation is particularly serious with respect to socially under-privileged groups, as is evident from the data in Table 23. The rate of drop out of SC children, which was 67.8% in 1990-1991, came down to 57.3% in 2004-2005. There has also been considerable decline in the drop out rates of ST children over the same period (78.6% in 1990-91 to 65.9% in 2004-2005). It remains clear that much still needs to be done to retain SC and ST groups in upper primary education. That said, it is also encouraging to note that drop out rates for SC and ST girls have declined steadily at the upper primary stage, although the rates continue to be higher than SC and ST boys.

Table 23: Drop Out Rates (%) for Scheduled Caste and Scheduled Tribe Children from Upper Primary School

	SC Children			ST Children		
	Boys	Girls	Total	Boys	Girls	Total
1990-1991	64.3	73.2	67.8	75.7	82.2	78.6
1995-1996	64.7	70.5	67	62.3	71.2	66
2001-2002	58.6	63.6	60.7	67.3	72.7	69.5
2003-2004	57.3	62.2	59.4	69	71.4	70.1
2004-2005	55.2	60.00	57.3	65.0	67.1	65.9

Source: GoI (2007a)

Mukherjee (2005) observed that although the years enrolment rates for children have substantially improved over the years, poor retention and completion rates in school are a matter of continuing concern. According to her analysis, only 32% of enrolled students completed their school education in the year of 2000-2001. She also observed that even in 2000, only 63% of the relevant age group children completed primary; 46% completed upper primary and 33% completed secondary schooling. The situation was found to be most alarming in Bihar where 70% of children dropped out at primary and upper primary levels; more than 80% dropped out at the secondary level in Bihar and West Bengal between 1995-2000. At the same time, completion rates in Bihar and West Bengal were only 10% and 22% respectively. Her study also revealed that regional disparities in completion rates increased at all stages of schooling during the period 1995-2000. As far as completion rates in primary and the upper primary

levels education are concerned, the study showed that some states, for example Bihar (with 22% completion at primary; 20% at upper primary), Uttar Pradesh (39% at primary; 26% at upper primary), and Rajasthan (43% at primary; 38% at upper primary), have low completion rates. Other states, including Andhra Pradesh, Delhi, Gujarat, Madhya Pradesh, Orissa and West Bengal have also experienced low completion rates (below 45%) at the upper primary level, although in some of these states more than 60% of children completed primary education. In general, the proportion of girls who completed primary or upper primary schooling continued to be much lower than boys at the national level. Inter-state variations in school completion rates for girls were particularly striking. While several states had more than 70% of girls completing primary education, Bihar had only 15% of girls completing, Rajasthan had 23%, Uttar Pradesh had 28%, Orissa had 45%, West Bengal had 53% and Andhra Pradesh had 58%. Mukherjee's analysis revealed considerable gender inequalities both in access to and completion of education. It identified poverty, child labour, the absence of secure employment after schooling and infrastructural problems as factors responsible for the large numbers of drop outs. In 1999-2000, for example, 14% of the out-of-school children in the 5-14 year old age group cited supplementing household income as the main reason for dropping out of school (Mukherjee, 2005).

3.5.1 Why Do Children Drop Out from Upper Primary Schools?

Table 24 presents information on why children drop out of primary and upper primary schools. The data indicates that boys aged 10-14 were more likely than girls to drop out in order to support household income, while girls are more likely to drop out in order to carry out domestic chores. In contrast, a smaller proportion of children in the 6-11 year age group were found to be leaving school for those same reasons. Apart from this, a large proportion of girls of 10-14 years old had to leave school due to 'other' reasons, which could include socio-cultural factors such as early marriage.

Table 24: Children Aged 5-14 (per 1000) Who Dropped Out of Schooling in 2004

Reason	Rural Male		Rural Female		Urban Male		Urban Female	
	10-14	5-14	10-14	5-14	10-14	5-14	10-14	5-14
School too far	3	2	16	8	0	0	5	3
Has to support household income	171	72	70	36	231	116	57	36
Education not considered necessary	73	33	21	53	116	14	98	56
Has to attend domestic chores	12	5	109	54	15	10	177	95
Other Reasons	170	89	142	88	221	129	176	118

Source: GoI (2006b)

Other surveys seem to confirm that income earning is a major reason for older boys to drop out. The NFHS-2 (IIPS and ORC Macro, 2000) found that 38% of boys and 32% of girls in the 6-17 year old age group dropped out because they were engaged in work either at home or outside (Sinha and Reddy, forthcoming). According to the 52nd NSS (GoI, 1998), the most important reason cited for boys to drop out was the need to carry out paid work (20.3%). Other reasons included financial constraints (12.4%), parents' lack of interest in the education of their children (9.4%), and participation in other economic activities (7.8%).

Currently there is no national data that allows estimates of children falling into Zone 6 – i.e. enrolled but failing to learn at an appropriate level. It is clear that many children

are failing to reach attainment levels that indicate mastery of outcomes at different grade levels. More research is needed to produce estimates of the magnitude of under achievement since this is part of a definition of loss of access.

3.5.2 Transitions from Upper Primary to Secondary: Backwash Effects on Upper Primary Schooling

As noted earlier, the free and compulsory education period described in the Indian Constitution corresponds to the eight years of elementary schooling, generally divided into lower primary and upper primary. The availability of facilities for accessing secondary education could have a significant backwash effect on the participation of children in the elementary stage, and particularly in upper primary schools. Some parents are likely to view elementary schooling as inadequate, but in the absence of further schooling opportunities nearby may decide not to bear the costs of upper primary schooling. Moreover, due to low achievement levels many children are unable to make the transition to secondary school. In 1998-1999, around 30% of students at the upper primary level did not perform well enough in their final examination or found it difficult to get entry into an appropriate secondary school, and so dropped out of school after 8 years.

Table 25: Transition Rates (%) from Upper Primary to Secondary Schools in Major States in India, 1991-1998

State	Upper Primary to Secondary Transition Rates		
	1991-1992	1995-1996	1998-1999
Andhra Pradesh	98.4	91.7	91.6
Assam	77.5	85.7	83.8
Bihar	80.2	79.9	83.5
Gujarat	81.7	81.1	80.3
Himachal Pradesh	82.9	62.7	74.2
Haryana	72.9	49.4	73.9
Jammu & Kashmir	101.3	91.7	90.4
Karnataka	86.8	95.5	90.2
Kerala	83.2	83	84.5
Madhya Pradesh	60.9	74.6	60.7
Maharashtra	91.6	86.2	88.9
Orissa	85.6	85.6	83.5
Punjab	87.5	79.3	83.6
Rajasthan	91.4	79.9	62.9
Tamil Nadu	66.0	59.3	53.7
Uttar Pradesh	70.2	73.5	95.5
West Bengal	62.1	83.4	75.6
All India	77.9	78.7	72.3

Source: GoI (1995), GoI (2002) and GoI (2005b)

In 1991-1992, transition rates from upper primary to secondary level at the all India level was 77.9%, which declined to 72.3% in 1998-1999. In 1991-92, states having a less than 70% transition rate from upper primary to secondary stage were Madhya Pradesh, West Bengal and Tamil Nadu. Uttar Pradesh, Haryana and Assam had

transition rates ranging from 70% to 80%. Surprisingly, while an educationally advanced state like Tamil Nadu had a very low transition rate from upper primary to secondary level in 1991-1992, transition rates in educationally backward states like Bihar, Rajasthan and Andhra Pradesh was much higher, and above the national average. During the period from 1991 to 1998, there was a decline in the transition rate from upper primary to secondary level in many states, including Madhya Pradesh, Tamil Nadu, Gujarat, Himachal Pradesh, Orissa, Punjab, Rajasthan, Maharashtra, Andhra Pradesh and Jammu & Kashmir. Interestingly, educationally backward states such as Uttar Pradesh, West Bengal and Assam performed much better in terms of increasing the transition rate during the same period. This shows that merely increasing enrolment in lower levels of schooling is no guarantee that participation in higher levels will improve.

3.7 Out-of-school Children and School Enrolments

As mentioned earlier, it is difficult to provide accurate information on excluded children in terms of whether they are never enrolled (Zone 1), drop outs (Zones 2 and 5), at risk of dropping out (Zones 3 and 6) and so on. The focus in Indian data collection has been to identify children in the age group 6-14 who are not currently in school, rather than differentiating between their educational backgrounds. Moreover it is difficult to attribute children to a school grade (and thus zone) based on age, as there are many overage learners and repeaters in the system. It is therefore most useful to examine the data on an overall group of 'out-of-school children'.

The Sixth AIES (NCERT, 1998) found that around 38.5 million children aged 6-10 years of age were out-of-school in 1993. This number had declined to 22 million by 2002 as indicated by the Seventh AIES (NCERT, 2005). Thus, while there has been a considerable decrease in the population of out-of-school children of this age group in recent years, the numbers remain significant. Examining the situation with respect to children aged 5-14 years, the 61st NSS data (GoI, 2006b) found that as many as 174 out of every 1000 children (17.4%) were not attending any educational institution. Also, more girls than boys were found to be not attending school (14% of girls in the 6-11 age group; as opposed to 10% of boys).

Table 26: Distribution of Children Aged 5-11 Currently Not Attending School (per 1000)

Age Group	Children Not Attending School					
	Rural Male	Rural Female	Urban Male	Urban Female	Total Male	Total Female
5-9	192	224	114	120	175	203
6-11	113	159	65	80	103	142

Source: GoI (2006b)

According to Annual Reports of the MHRD of the Government of India (GoI, 2007b), in recent years there has been a steady decline in the number of out-of-school children. The number was 44 million (around 28.5% of the total child population) in 2001, but reduced to 7.05 million in 2006-2007 (GoI, 2007b). The independent national level sample survey conducted by SRI-IMRB in 2005 (SRI, 2005) estimated that about 13.4 million children in the 6-14 age group were out of school, constituting around 7% of the total number of children of the relevant age group (Table 27). These differing estimates arise from differences in methods and data collection.

While the overall reduction in numbers is substantial, in spite of several programmes targeted at reducing inequalities in access, the problem of social inequity remains significant. While the situation with respect to SC children is less problematic, both ST and Muslim minority children continue to remain seriously marginalized.

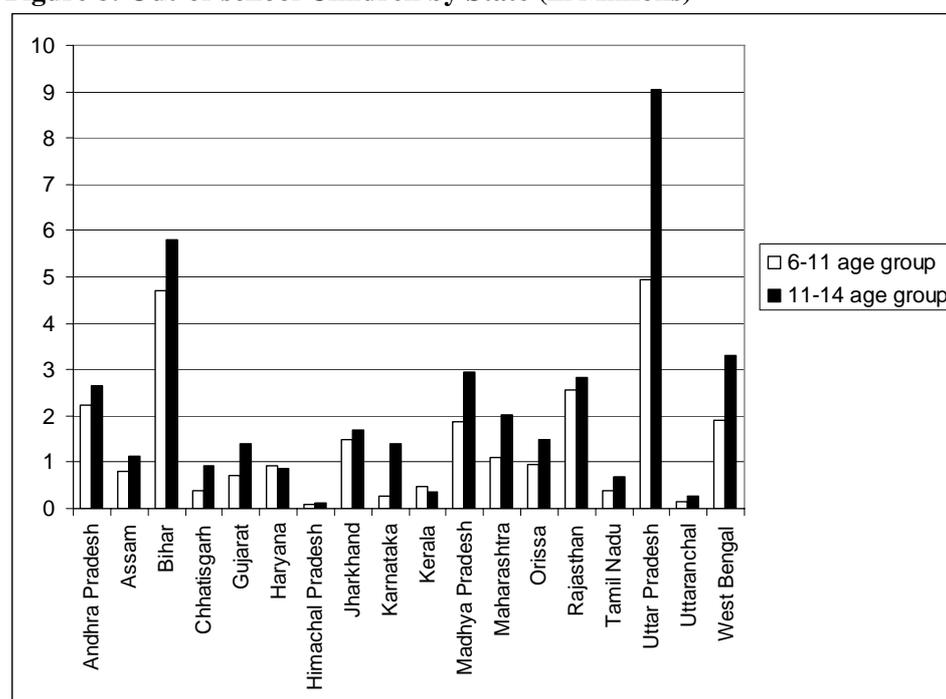
Table 27: Out-of-school Children Aged 6-13, 2005

Categories	Number of Out-of-School Children			Percentage of Out-of-School Children		
	Rural	Urban	Total	Rural	Urban	Total
All Children (6-13 years)	11,353,597	2,106,137	13,459,734	7.8	4.3	6.9
SC Children	2,706,025	398,841	3,104,866	8.55	6.25	8.17
ST Children	1,585,833	71,145	1,656,978	10.11	4.21	9.54
Muslim Children	1,567,717	685,535	2,253,252	12.03	7.17	9.97

Source: SRI (2005)

As one would expect, inter-state variations are quite vast. Towards the end of the 1990s, it was estimated under the Seventh AIES (NCERT, 2005) that three quarters of all out-of-school children lived in six states in the country, namely Andhra Pradesh, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal. At the upper primary stage, even states which perform relatively better at the primary level such as Karnataka and Maharashtra, show substantial proportions of children remaining outside the schooling system.

Figure 8: Out-of-school Children by State (in Millions)



Source: NCERT (2005)

The Census of India (2001) reported similar findings. In 2001, about 70% of the total out-of-school children in India in the age group 6-10 years were concentrated in five states: Uttar Pradesh, Bihar, Madhya Pradesh, West Bengal and Rajasthan. These five states are also home to around 76% of the country's out-of-school Scheduled Caste children in the 6-10 age group. Madhya Pradesh, Bihar, Orissa, Rajasthan and Gujarat

accounted for around 68% of the out-of-school Scheduled Tribe children in the 6-10 age group. Similar trends in the concentration of out-of-school children in the 11-13 age-group were found in the country in 2001 (See Govinda and Biswal, 2006 for a detailed analysis).

Between 1991-2001 the number of the out-of-school children aged 11-13 years decreased by 13.1 percentage points (Census of India, 1991 & 2001). Over the same period, there was a significant reduction in the number of out-of-school children in Rajasthan, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh. Assam was the worst performer in reducing the number of out-of-school children in the age group 11-13 over this period. Between Sixth and Seventh Survey conducted by NCERT (according to NCERT, 1998 and 2005) the proportion of out-of-school children in the age group 11-13 reportedly increased to around 37% (up around 20%) at the upper primary stage. In 2001, out of 15.8 million out-of-school children in the 11-13 age range in India, more than 40% were in Uttar Pradesh and Bihar. In the same year, nine states, namely, Uttar Pradesh (and Uttarakhand), Bihar (and Jharkhand), Madhya Pradesh (and Chhattisgarh), West Bengal, Rajasthan and Andhra Pradesh accounted for more than 70% of the country's out-of-school children in the 11-13 age range. However, between 1991-2001, all major states, except Bihar and Assam, had reduced numbers of out-of-school children in the age range 11-13 years.

Looking at the situation of out-of-school children in India in comparison to several other countries of the world, UNESCO describes the progress made by India as inadequate (UNESCO Institute for Statistics, 2005). India has the largest primary school-age population in the world and also the largest number of out-of-school children. Conducting a sample study of 70,466 children, it was found that the average attendance rate in the sample was only 82.5%. It was observed that, although 6 years of age is the official entry age, 6 year-old children in India are more likely to be out-of-school, indicating late entry into the education system as a common feature. The data suggests the likelihood of increased school attendance with age and according to gender. While 49% of children sampled were girls and 51% were boys, only 46% of pupils enrolled in schools were found to be girls and as many as 59% of out-of-school children were girls. Statistical analysis showed that the likelihood of boys to be in school was 5.9 percentage points above that of girls of the same age, demonstrating the degree to which girls are disadvantaged in the Indian school system. Also, the number of out-of-school children was disproportionately higher in rural households, with a share of 87% in the total number of out of school children in the sample.

3.8 Overall Observations

The analysis of India's educational access according to CREATE's Zones of Exclusion highlights the distance India still has to go in order to achieve the goal of universal elementary education. Both demand and supply issues are recognized as being critical to problems of access. These would include a range of personal, household, community and school based factors. But despite improvements, the completion of a full cycle of eight years of schooling has remained an elusive goal for many children in India. And while large scale surveys and field studies have identified the causes of low retention, the dynamics underlying the phenomenon of dropping out remains under-explored. Greater understandings are of critical importance for national planners if further progress is to be achieved towards UEE.

The situation of children in Zone 3 (i.e. those vulnerable to drop out) is also serious, with limited progress on providing meaningful access to education which ensures that children move successfully from grade to grade with adequate learning, commensurate with their age and grade. This issue demands the immediate attention of planners as well as researchers. Children who attend but remain inadequately equipped with relevant knowledge and skills are also excluded from education. The task involved in this is enormous. Empirical explorations are needed to find and unravel school processes to find out why children fail to learn, despite attending school for a number of years. Action is also needed by curriculum planners and administrators to identify and learn from those school contexts that seem to succeed in retaining children for the full cycle of schooling, whilst imparting effective learning to them.

Current efforts to identify and tackle issues related to out-of-school children have the potential to bring children back into the education system. However, short-term engagements with bridge courses, EGS or alternate schools may not wipe out the problem of out-of-school children. Without adequate attention to curricular issues, school processes and practices, getting children back into school may not be entirely successful. In particular, the previous section (section 2) has indicated the centrality of teachers to taking UEE forward and highlighted the need for an increased focus on building a strong professional cadre of teachers and investing in building their capacity.

4. Profile of Excluded Children: Who Goes to School and Who Does Not?

Provision of free and compulsory education to all children is a commitment made by the Indian Constitution six decades ago. In the initial years, the state had to focus on expanding the schools network by establishing new schools and raising the demand for education among the masses, which had up till then largely been ignored by the colonial regime. Assessing the progress made in this regard involved measuring the availability of schools and counting the number of children who were enrolled. Policies and programmes launched in the early decades after independence, therefore, focused on expanding the system to make it more inclusive through incentives and other promotional mechanisms. It was, however, recognized that the narrow perspective of viewing UEE merely in numerical terms was inadequate and did not guarantee full participation of children in the educational process. With this in mind, the National Policy on Education 1986 (GoI, 1986) defined universal elementary education as a compact focusing on universal access, universal participation and universal achievement. This is in tune with the perspective adopted under the international EFA declarations in Jomtien and Dakar which view provision of basic education as a 'basic right.' In fact, the Indian Parliament amended the Constitution in 2002 to make free and compulsory elementary education in the age group of 6-14 a fundamental right. Despite these positive shifts in the policy perspective on providing free and compulsory elementary education to all children, the goal of UEE, as captured in the previous section, continues to be elusive, leaving millions of children outside the frame of elementary education. Questions that the country continues to face are: Why do children continue to stay away from school? Why do parents hold their children back from attending school even though schooling has been made free and compulsory? Answering these questions requires careful analysis of the empirical realities in terms of who the children are who remain excluded and why they are excluded. The present section attempts to review the findings of research studies done with a focus on these questions in order to construct a profile of children who are not benefiting from the education system in the country.

The Global Monitoring Report on EFA (UNESCO, 2004) points out that the achievement of universal participation in schooling depends on many factors, including, how regularly children attend school, how well pupils are taught and how much they learn, and how long they stay in school. For school participation to be meaningful, experiences provided through schooling should do more than teach the curriculum. Along with cognitive development, children must also develop creatively and emotionally and acquire the skills, knowledge, values and attitudes necessary to become responsible, active and productive citizens. A study of meaningful access to and participation of children in elementary education has to include an understanding of the various contextual and background factors that interact to influence the participation of the children. The previous section presented the picture of exclusion from education in the different zones which characterize the nature and magnitude of exclusion from primary and upper primary classes in India. The present section takes forward the discussion and attempts to identify the excluded children and the factors and processes contributing to their exclusion by reviewing the findings of existing research on the subject. The main observations emerging from the analysis are organized under seven subsections: health, nutritional status and school participation;

poverty, child labour and elementary education; children of illiterate parents: first generation learners; children from SC and ST communities; disadvantaged girls; children in difficult circumstances; and children with disabilities.

4.1 Health, Nutritional Status and School Participation

The Indian Constitution guarantees the right to education from the age of 6. However, for many children reaching primary school age may be too late, and attention should be paid to ensuring children have the quality of life in their early years which enables meaningful access. An understanding of the factors that facilitate or hinder children's ability to access primary schooling are of critical value.

4.1.1 Quality of Life of Indian Children

Recognizing the critical relationship between early years' quality of life and its impact on schooling access is important. A UNICEF report on the State of the World's Children (UNICEF, 2005) identifies good health, nutrition and educational participation as critical components of an 'ideal childhood'. It also points out that health and nutrition are pre-requisites for ensuring effective participation in schooling (see also Pridmore, 2007). The report states that of the millions of children under 5 who die each year from diseases easily preventable by vaccines, many are from India. Only 64% of 1 year old children in India are fully immunized against diphtheria, pertussis and tetanus (lower than China at 79% and Nepal at 72%). In addition, hunger, starvation and malnutrition are prevalent to varying levels among young children, particularly in poor families. Table 28 presents a comparative picture of the quality of life status of Indian children against those in other countries in South Asia and the rest of the world.

Table 28: Indicators of Children's Quality of Life

Item	India	South Asia	World
Under 5 mortality rank - 2004	85	92	79
- 1990	123	129	95
Infant mortality rate* - 2004	62	67	54
- 1990	84	89	65
Number of births, 2004 (in thousands)	26,000	37,052	132,950
Number of under 5 deaths, 2004 (in thousands)	2,210	3,409	6,298
Life expectancy at birth, 2004 (years)	64	63	67
Infants with low birth weight, 1998-2004 (%)	30	31	16
Children under 5 (1996-2004) who suffered from:			
A. Underweight - moderate and severe (%)	47	46	26
Underweight - severe (%)	18	16	10
B. Wasting - moderate and severe (%)	16	14	10
C. Stunting - moderate and severe (%)	46	44	31
Vitamin A supplementation coverage rate for children between 6-59 months (2003) (%)**	45	58	61
Households consuming iodised salt (1998-2004) (%)	50	49	68
Child labour (5-14 years old), 1998-2004 (%)*	14	14	18
Child marriage (1986-2004) (%)***	46% (55% in rural area)	46% (54% in rural areas)	36% (45% in rural areas)

Source: UNICEF (2005)

* Probability of dying between birth and exactly one year of age expressed per 1,000 live births.

** Percentage of children aged 6-59 months who received at least one high dose of vitamin A capsules.

*** Percentage of women 20-24 years of age that were married or in a union before the age of 18.

It is estimated that one in three malnourished children in the world lives in India (UNICEF, 2004: 24). Deficiency of Vitamin A is of particular concern across the world as around 40% of children under 5 were not covered under supplementation programmes in 2003. The share of such children was much higher in South Asia, and especially in India, where more than half of children under 3 are reportedly not covered under Vitamin A supplementation programmes. Even though infant and under 5 mortality rates declined between 1990 to 2004, the figures included in Table 28 suggest that the levels are still high in India and South Asia in general. Around 47% of children under 5 in India are underweight, 18% are severely underweight and another 46% of children are stunted. The share of malnourished children is higher in India than the other countries in South Asia, and substantially higher than the world average (UNICEF, 2005).

As of 2006, India also ranked quite low (at 128th) in the Human Development Index (HDI), although it fares better in terms of the Human Poverty Index (at 62nd) (UNDP, 2007)¹². Among other South Asian countries, Sri Lanka is far ahead of India in terms of the HDI (Sri Lanka ranked at 99) and also ranks higher on other indicators which have a direct impact on the quality of life of children. For example, Sri Lanka has a life expectancy at birth of 74 years, compared to 63 years in India, and 14 in 1000 children die before they reach 14 years of age in Sri Lanka, compared to 85 in India (UNICEF, 2005: 98-99). This confirms that India has a long way to go to improve the quality of life of its children and to promote the equitable distribution of its growing GDP to help improve children's chances of meaningful access to education.

The incidence of malnourishment among children in India has been associated with many factors such as parental knowledge of infant feeding, hygiene and care of sick children; the quality of the health service and its delivery; and gender-related socio-economic issues (UNICEF, 2004: 9). In addition to poverty, many other issues are closely linked to malnutrition, including food insecurity, poor delivery services, the distribution of poor quality food through public distribution services, inadequate care and unsafe water. Drawing reference from other studies, Sood (forthcoming) states that the risk of malnutrition decreases with an increase in family income. A mother's nutritional status, educational level, age and working status also impact on the nutritional and health status of her children. Malnutrition also has other gender dimensions. According to some studies a considerable proportion of adolescent girls are malnourished (Choudhary et al, 2003) and the children of illiterate mothers are most likely to be malnourished (IIPS, 2000). The high prevalence of malnutrition among children also highlights the importance of providing a balanced diet, food supplements in schools, and health and hygiene education programmes.

With the persistence of malnutrition, poor health and hygiene in India, a reduction in the infant mortality rate is hard to achieve. While it decreased by 17% between 1986 and 1990, it declined by only 7.5% between 1991 and 1995. About 40% of children

¹² The HDI measures the average progress of a country in human development. The Human Poverty Index for developing countries (HPI-1), focuses on the proportion of people below a threshold level in the same dimensions of human development as the HDI - living a long and healthy life, having access to education, and a decent standard of living. By looking beyond income deprivation, the HPI-1 represents a multi-dimensional alternative to the \$1 a day (PPP US\$) poverty measure (see UNDP, 2007).

under 3 years of age in 13 states in India are currently suffering from malnutrition and are underweight for their age (UNICEF, 2004). The UNICEF Report (2004: 9) indicates that malnutrition is common in India as a whole, but the situation is especially alarming in the states of Bihar, Orissa, Madhya Pradesh, Rajasthan and Uttar Pradesh.

Malnourishment of children in India is strongly linked to socio-economic status, with a much higher incidence of malnourished children found in SC and ST groups. Around one third of SC children in Chhattisgarh and one third of ST children in Bihar and Uttar Pradesh, for example, were found to be malnourished in 1998 (IIPS and ORC Macro, 2000). During that same year, one quarter of SC and ST children in Rajasthan and Orissa, and 30% of SC and ST children in Madhya Pradesh were severely malnourished. Malnourishment is also prevalent among the Other Backward Classes (OBCs) in these states as indicated by estimates in NFHS-2 (IIPS and ORC Macro, 2000). In addition to nutritional disadvantage, these children also tend to experience poor living conditions, and to have poor access to health care and schooling. These multiple social and economic disadvantages are likely to significantly impact their school participation.

4.1.2 Health, Nutrition and Educational Participation

The impact of health and nutritional status on education is well established (see Pridmore, 2007 for a comprehensive summary of the arguments). Malnutrition limits the capacity to learn by drastically affecting the motor, sensory, cognitive, social and emotional development of children. Research also suggests that learning is limited if children are hungry at school. Vitamin, calcium and iron deficiency affects functioning of the brain. Iodine deficiency, in particular, can drastically affect the mental development of children. Alderman et al (1997) found that an improvement in nutrition improves enrolment and cognitive development.

In India, 74% of children under the age of three and around 95% of adolescent girls suffer from anemia caused by iron deficiency, which has serious impacts on learning capacity (UNICEF, 2004). Iodine deficiency, which reduces learning capacity by about 13%, is likely to be widespread, as according to NFHS-2 (IIPS and ORC Macro, 2000) over 30% of households use salt without iodine. Some studies have shown that malnutrition can also lead to deficiencies in intelligence (Liu et al, 2003; Levinger, 1996; Pollitt, 1990 cited by Sood, forthcoming). A WHO study (1997) clearly showed that iodine deficiency is the single most common preventable cause of mental retardation and brain damage in children. It also causes goiter, which is widespread in the Himalayan region of India.

Malnutrition can be reduced by providing nutritional inputs to children via educational and health facilities. In India, supplementary nutrition is given to children below 6 years of age through the Integrated Child Development Scheme (ICDS), and school-going children in primary schools are given food as part of the Mid-day Meal scheme, initiated by the Government of India. However, it is argued that more attention is needed to improve the quality of life of children in a more comprehensive manner, since many children are not covered by the ICDS and many children are still not attending school, particularly in poverty-stricken areas. Micro-level research is

also needed to explore the magnitude of the problem of malnutrition and its impact on school participation.

Although child welfare has received considerable attention and has been a part of government planning since 1951, according to a report on early childhood care and education in 2003, (GoI, 2003b) barely 19.6% of children were covered under ECCE programmes. These include ICDS and preschool programmes, crèches and *balwadis*. Research suggests good quality early childhood education programmes can yield significant short and long-term benefits, particularly for children 0-6 years of age from underprivileged backgrounds. For instance, a study by Ramachandran et al (2003) focuses on children, their families, the larger community and available education and health services, in an effort to understand the causality and social processes that affect, partially or wholly, children's full participation in schooling. They claim that an adequate pre-school education component within the ICDS programme could make a difference to the health, nutritional status and school participation of all children irrespective of their socio-economic backgrounds.

Gragnotati et al (2005) studied the prevalence of child under-nutrition in India and found that although the ICDS appears to be well-designed and well-placed to address the multidimensional causes of malnutrition in India, there are several mismatches between the programme's design and its actual implementation that prevent it from reaching its potential. It also faces substantial operational challenges and suffers from a lack of high-level commitment which needs immediate attention. Recent data also indicates its inadequate coverage. According to a position paper on the National Curriculum Framework 2005, with regard to Early Childhood Care and Education:

Against the target of 2 million ECCE centres in 2000, only 0.55 million centres were operational. In programmes like the District Primary Education Programme (DPEP) and SSA, efforts have been made to partially fill the gaps left by ICDS. As per the estimates of the Department of Elementary Education and Literacy, total number of children enrolled at the pre-primary level is 4,623,168. Thus, it is clear that, despite the expansion of the ECE programmes, only 22 percent children of relevant age-group receive any kind of early childhood education (NCERT, 2006: 10).

Under the SSA programme, amongst other things, efforts are being made to increase the coverage of ECCE and strengthen the ECE component in ICDS.

The National Programme of Nutritional Support to Primary Education (NPNSPE), also referred to as the Mid-day Meal Scheme, was launched in 1995. The programme was envisaged to contribute to the increased participation of children in schooling and towards improving the nutritional status of children in primary classes in government, local body and government-aided schools. This was later extended to cover children in EGS and alternate schools also. A Supreme Court Order in 2001 made it obligatory for states to provide cooked meals instead of dry rations, which had been provided earlier. Following this directive, most states now provide cooked meals. The Mid-day Meal scheme was revised in mid 2006. Currently the cost per child is Rs. 2 per day, of which Rs. 0.50 is borne by the state government and the rest by the central government. This will provide 450 calories and 12 gms of protein to each child, against the 300 calories and 8 gms of protein that was being given earlier. According

to the Annual Report of the GoI (2007b) around 106 million children benefited from the Scheme in 2003-2004. Although implementation of the SSA and the Mid-day Meal Scheme have had varied impacts at the grassroots level, it is claimed that, with the implementation of SSA and cooked Mid-day Meal Scheme, the number of out of school children has been reduced to less than 5% of the total population in the 6-14 year old age group, i.e. from 44 million in 2001-2002 to 7 million in 2006.

Some researchers are unequivocal on the value of the scheme, but are also critical of its implementation and management at the field level. For example, according to Zaidi (2005) and Jain and Shah (2005) the provision of the cooked mid-day meal has helped raise enrolments (particularly of children belonging to marginalized groups) and reduce child labour. However, implementation of the scheme suffers from a number of inadequacies and faces significant challenges in improving the coverage and quality of services (see Blue, 2005; Afridi, 2005; Khera, 2006).

4.2 Poverty, Child Labour and School Access

India is home to 19% of the world's children and every year another approximately 26 million children are born. As discussed in section 4.1, a large number of these children struggle to survive with limited access to adequate food, proper hygiene, shelter and health care facilities, and this can lead to their exclusion from the education system. In addition to this, many children from poor families work rather than attend school (either for paid income or within the household) and some migrate to urban areas with or without their parents, often suffering hardships. These children are highly vulnerable to educational exclusion. The following subsections present research on these issues.

4.2.1 Education of Children from Low Income Groups

The relationship between income levels and educational access may appear obvious, but does poverty really hinder children from participating in education and, if so, at what stage does poverty become significant? Here we look at poverty indicators to identify those who are particularly vulnerable to exclusion from schooling. In India there has been a reduction in poverty levels in recent years though there are contesting positions on the nature and extent of the reduction (see Dev and Ravi, 2007; Himanshu, 2007). However, according to current estimates, around 250–300 million people in India could be categorized as poor. According to the NSS (2004-05) (GoI, 2006b), although there has been a decline in the percentage share of the poor between 1999-2005, more than a quarter of the total population can still be considered poor (28.3% of the population in rural areas and 25.7% in urban areas)¹³. In 1993-1994, the rate of poverty was much higher, at 36%, for the country as a whole. Thus despite a reduction in the poverty level, India is still has a large percentage of poor people.

Correlating income levels with education attainment, the National Sample Survey 61st Round (NSS, 2004-05) (GoI, 2006b) found that the proportion of non-literates was highest in the lowest Monthly Per Capita Consumption Expenditure (MPCE) groups, and literacy levels increased as the MPCE increased. Similarly, the proportion of educated people was highest in the top MPCE group and it decreased as the MPCE

¹³ Data based on mixed recall period (consumption pattern over last 365 days) and uniform recall period (consumption pattern over last 30 days).

decreased. There is considerable difference between rural and urban areas. For instance, while the proportion of non-literates was 69% of the lowest MPCE group in rural areas, it was 18% in the top MPCE group. The corresponding proportions in urban areas were around 51% and 2%. In terms of the proportion of educated (literate with schooling) people, the difference in rural areas was as high as 42 percentage points with only 4% of educated people in the lowest MPCE group. The difference in urban areas was even more glaring, with 78 percentage points difference, and only 9% of the people in the lowest MPCE group having been educated to secondary level and above. It was also found that the proportion of non-literates was highest in households engaged in rural labour (56%) and casual labour in urban areas (41%). The lowest proportion of non-literates was found in the households of regular wage/salaried employees (13%) in urban areas.

Another important feature was the wide gap that persists between men and women in rural, as well as, urban areas. In rural areas, around 68% of rural female labourers were not literate, as opposed to 44% of rural male labourers. Around 56% of female self-employed workers in rural areas were not literate, as opposed to 28% of non-literate self-employed men. Only 5%-10% of women were educated in households including labourers as well as the self-employed. In urban areas, 36% of women were educated, compared to 48% of men. The highest proportion of educated females (44%) were living in households categorized as including 'regular salaried/wage employees'.

4.2.2 Children Affected by Migration

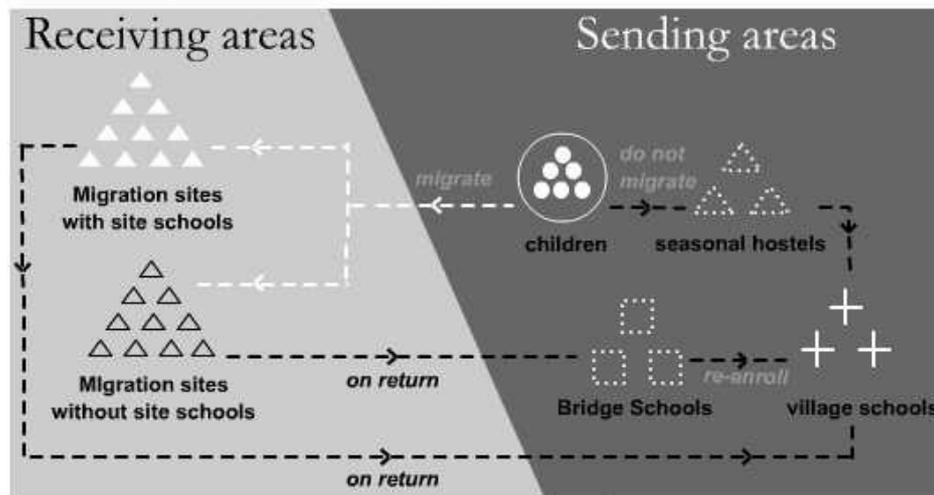
Due to poverty and lack of employment opportunities, a section of the landless poor periodically migrate to nearby urban areas or other agriculturally productive places in search of jobs and income. Often the entire family migrates, which can have an effect on the education of children. According to the UNICEF Report (2004: 56), roughly 20% of the Indian population is considered migrant, of whom 77% are women and children. They are often at greater risk of exploitation and tend to accept jobs on unfair terms. Deprived of family and community support networks at the site of migration, women and children often suffer most and are frequently denied access to basic services including education. Children accompanying their parents also often work, usually in the informal sector where they face exploitation and abuse. Wadiker and Das (2004) reported that seasonal migration within Maharashtra is a very common phenomena (it has the third highest rate in India for child labour). There, poor people migrate every year during lean agricultural seasons to work in sugar factories, brick kilns, quarries and various construction sites. Women and children form a high proportion of these migrants. Such migration often involves longer working hours, poor living and working conditions and poor access to basic facilities like access to education, health, food distribution systems, etc. Problems faced by migrant children in sugar factories include: lack of school access whilst families migrate (from October to the end of the academic year), lack of educational facilities available to them at work sites (including nonformal opportunities), and employers not looking on children's education as their responsibility (Wadiker and Das, 2004).

The non-participation of children due to such seasonal migration has received little attention in the discourse on educational access. As Smita (2008: 1) points out:

With the collapse of rural livelihoods in many parts of the country, hundreds of thousands of families are being forced out of their homes and villages in search of work for several months every year. These migrations force adults to take their children along, making them drop out of school and closing the only opportunity available to them for an alternate future. Evidence indicates that such migrations are large and growing, and the number of children below 14 years involved may be close to 9 million.

The incidence of such migration is reportedly high in industrial sectors such as brick making, salt manufacture, sugar cane harvesting, stone quarrying, construction, fisheries, plantations and rice mills. Agriculturally rich areas also attract large numbers of migrant labour for sowing, harvesting and other operations. Industrial migration tends to be for long periods of 6-8 months a year, whilst agricultural migration is shorter, but can take place several times a year.

Figure 9: Migration and Schooling



Source: Smita (2007)

The problem has attracted the attention of several NGOs in recent years¹⁴. Their work has helped build strategies to address the issue of migrant populations and schooling continuity (see Figure 8). The work of these NGOs spans three sectors and four states – sugarcane cutting in Maharashtra, salt pan, brick kilns, charcoal making and fisheries in Gujarat and migration from Orissa to Andhra Pradesh. Interventions have generally dealt with only one end of migration, either the sending end (seasonal hostels) or the receiving end (work site schools). The significance of recent NGO efforts lie in the fact that they have attempted to capture migration at both ends, linking seasonal hostels, site schools and work in the sending and receiving areas. Bridge courses have also been included for children who are covered neither in hostels nor at work sites in order to help them catch up with school work and gain the necessary skills to attend formal schools. The model gives primary importance to interventions in villages, and secondary importance to those at work sites. It has stressed the critical importance of revamping government schools in the migration-

¹⁴ For example, Janarth in Maharashtra; Setu – Centre for Social Knowledge & Action, Cohesion Trust, and the Yusuf Mehrally Centre in Gujarat, as well as Vikalpa, Lok Drishti, Adhikar and Jan Mukti Anushthan in Western Orissa which focus on migrant children and their education. See Smita (2007) for further discussion.

prone areas, so as to motivate children and parents towards education, and to make schools and the different levels of administration responsible for the education of migrant children. But these are small-scale efforts; understanding the underlying processes and identifying workable propositions in a sustainable manner would require both large-scale experimentations and in-depth empirical studies.

4.2.3 Education and Child Labour

Links between child labour and education access have received much attention over the last two decades. The issue received increased attention with the publication of Myron Weiner's seminal work, *The Child and the State in India* (Weiner, 1991). As he pointed out: 'Primary education in India is not compulsory, nor is child labour illegal. The result is that less than half of India's children between age six and and fourteen – 82.2 million – are not in school' (Weiner, 1991: 3). He also stated that 'depending upon how one defines "work" (employment for wages, or full time work whether or not for wages), the number of child labourers in India varies from 13.6 million to 44 million or more' (Weiner, 1991: 3). More than fifteen years later, the situation is still not satisfactory, with large numbers of children continuing to languish as child workers instead of attending school regularly. The practice of employing child labour persists throughout the country. According to Multiple Indicator Cluster Survey (MICS) data conducted by UNICEF (2004: 57), there are more than 12 million child labourers in India.

Poverty is often quoted as the reason for the perpetuation of child labour and the linked exclusion of the children from schooling. Many scholars also blame the government for non-implementation of the Child Labour Act and for a failure to provide equitable and universal access to education to all children. Kabeer et al (2003: 18) note that, 'labour is widely recognized as the key asset of the poor and the mobilization of household labour in a variety of paid and unpaid activities is the essence of their livelihood strategies.' Although some observers suggest that changes in labour markets because of globalisation and liberalization contributes to the problem of child labour, it is generally argued that in India, the problem of child labour 'lies largely in the collusion between government officials, local politicians, big landlords and industrialists in ensuring the perpetuation of child labour' (Burra, 2003, cited in Kabeer et al, 2003: 19). Bajpai (2006), examining cases of child labour, argues that child labour legislation is inadequate in its understanding of the situation. A large number of activities in which children are engaged remain untouched by legislation since, although it has listed certain activities as hazardous and gives legal protection to children engaged in these activities, children engaged in domestic work (and other such activities) are not protected by this law. Yet domestic work can be hazardous and children engaged in these activities can be exploited, and often do not attend school¹⁵. Since the legal framework and National Policy and Child Labour Act, 1986 allows child labour in non-hazardous occupations, a large number of child workers are not protected by laws governing child labour. As Jhingran (2003: 206) states, 'only 15 percent of working children are actually covered within the framework of labour laws'. Similarly, Sinha (2006: 19) points out that:

¹⁵ New legislation has recently been enacted making the engagement of children in domestic labour a punishable offence.

they [child labourers] live lives of drudgery, surviving against all odds – uncared or unprotected and unnoticed.... [The practice continues because] tolerance of child labour is explicit in all arguments, beginning with the position that poor families depend on children for their livelihood.

Whether poverty is the cause of child labour or not, experience and evidence indicates that it is the children of poor parents who face difficulties in attending school because of child labour. The persistence of child labour is therefore also linked to the conditions under which adult labour is organized. Kaushik Basu and Pham Hoang Ban (cited in Sinha and Reddy, forthcoming) argue that ‘if parents had higher wages or better employment prospects, children would not be sent to work’. As a result they argue that the Government should focus on improving the adult labour market in order to have an impact on reducing the child labour market. Sinha and Reddy (forthcoming) also argue that ‘only those policies, which aim at altering modes of exploitation and the division of labour directly, would result in the reduction of child labour’.

Studies also suggest a strong relationship between poverty, development and child labour (see Kabeer et al, 2003; Chaudhuri, 1997a and 1997b; Chandra, 1997; Duraisamy, 1997; Gupta and Voll, 1999). One cannot deny the fact that the economic status of a family is a powerful force in shaping its behaviour in many aspects of life, including the engagement of their children in productive labour and schooling. However, recent trends in enrolments clearly indicate that poor parents are increasingly sending their children to school, and even to private fee-charging schools. Moreover the government has, in recent years, launched several programmes to educate older children who missed out on schooling due to their involvement in child labour. Sinha (2006) argues for residential bridge course camps and motivation centers for children currently engaged in labour which provide them with appropriate educational inputs, and subsequently mainstreams them into formal schools.

Some researchers (see Bashir, 1994; Kanbargi and Kulkarni, 1991) have pointed out that the number and proportion of working children is greater in labour intensive activities like agriculture, cattle rearing and other household-based economic activities. In contrast, children belonging to non-agricultural households and whose parents were working in the formal sector are more likely to attend school (Unni, 1995). Some scholars argue that it is not just poverty and agriculture, but also the commercialization of agriculture which seems to intensify child labour. Venkateswarlu (2000), for instance, points out that the fast growth of hybrid cotton seed production has led to an increase in child labour, because it is a highly labour intensive sector and children are used in most of its operations. In a village level study in Gujarat and Karnataka, he further reveals that children below 14 years of age account for 34.9% of the total labour force engaged in these operations, with girls outnumbering boys. Of the three states, the proportion of children in the total workforce is more in Andhra Pradesh and Karnataka than in Gujarat, with most of the labourers belong to Scheduled Tribe groups.

4.2.4 The Magnitude of Child Labour and School Attendance: State-level Analysis

According to the Census 2001, there has been a sharp decline in the proportion of children working full-time from 4.3% in 1991 to 2.3% in 2001. At the same time, the number of marginal workers increased from 2.2 million to 6.9 million, so in effect the total number of child workers increased from 12.9 million in 1991 to 16.35 million in 2001. Most of these children were engaged in agricultural activities on a part-time basis. Burra et al (2006) also refers to a substantial decrease in the number of child workers, alongside an increase in school enrolment and a reduction in the percentage of out-of-school children in some states, including Andhra Pradesh, Kerala and Tamil Nadu. In contrast, along with improvements to enrolment, the percentage of child workers in Himachal Pradesh increased from 5.5% in 1991 to 8.6% in 2001. Table 29 provides information on the changing situation of participation of children in education and workforce in some states between 1991 and 2001.

Table 29: Participation of Children in School and Workforce in Selected States

State	Literacy Rate			School Attendance			Child Workers		
	1991	2001	% increase	1991	2001	% increase	1991	2001	% increase
Andhra Pradesh	62.5	83.5	33.6	49.2	73.8	50	10.0	7.7	-23
Himachal Pradesh	85.8	94.8	10.5	72.4	85.0	17.4	4.5	8.1	80
Karnataka	72.8	85.4	17.3	56.5	70.3	24.4	8.8	6.9	-21.6
Kerala	97.5	96.2	-1.3	85.5	89.2	4.3	0.6	0.5	-16.7
Madhya Pradesh	57.5	79.5	38.3	45.7	65.4	43.1	8.1	6.8	-16.0
Maharashtra	80.8	91.9	13.7	64.6	79.2	22.6	5.7	3.5	-38.6
Rajasthan	47.2	77.5	64.2	39.5	65.3	65.3	6.5	8.2	26.2
Tamil Nadu	85.0	91.0	7.1	69.8	83.9	20.2	4.8	3.6	-25
All India	64.2	77.8	21.2	49.7	65.6	55.6	5.4	5.0	-7.4

Source: Compiled from data given in Burra (Burra et al 2006)

Some studies have attempted to assess the magnitude and extent of child labour, the nature of work children are engaged in and its impact on their health, education and well-being. Burra et al (2006) refers to a number of such studies (e.g. Anthony, 2002; Bhattacharya and Sahoo, 1996; Nangia and Khan, 2002; Ramachandran, 2002; Chaujar, 2002) which point out that a large proportion of children in the states of Andhra Pradesh, Bihar, Rajasthan and Madhya Pradesh are engaged in farming activities and household chores. A large section of these child workers are girls who work for long hours to earn meager wages. Based on the variety of work contexts in which children are engaged in labour, Burra et al (2006: xl) argue that 'the circumstances under which children work in any number of activities gives the lie to the view that work is a form of socialization into adulthood.' This is also supported by findings that work conditions do not leave scope for children to pursue schooling even on part-time basis. A time-use study conducted in Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu and Meghalaya throws light on to the kind of activities in which children aged 6-14 years are engaged (Hirway, 2002). The survey points out that while 67.1% of children surveyed were engaged in educational activities, about 17% were engaged in purely economic activities.

Table 30: Children's Work Activities

Activities	Percentage of Children Involved	
	Boys	Girls
Animal husbandry	11.5	10.7
Collection of fuel-wood, water, fodder, fruits	4.5	13.8
Farming	6.2	6.2
Petty services (informal sector activities)	5.4	4.7

Source: Hirway (2002)

MICS data from 2000 referenced by UNICEF (2004) also throws light on child labour and school participation in different states. According to the report, the proportion of child labour is more than 15% in the following states: Rajasthan (20.3%), Andhra Pradesh (25.2%), Tamil Nadu (21.6%), Chhattisgarh (19.2%), Jharkhand (20%), Orissa (15.4%), Arunachal Pradesh (23.3%) and Sikkim (16.4%). In Maharashtra, Karnataka, Chhattisgarh and Manipur the proportion varies between 5%-15% of children. According to the same UNICEF report (2004), over 20% of India's working children are from Uttar Pradesh, most of whom work at odd jobs, such as in factories and in the carpet industry, for meagre wages. They are found in districts like Bhadohi, Mirzapur, Jaunpur, Varanasi, Allahabad and Sonbhadra, areas that account for over 85% of the country's total carpet exports. One of the main reasons for the high prevalence of child labour in these areas is the burden of debt, which forces families to send their children to work, combined with low literacy rates (UNICEF, 2004: 60-61).

Drawing reference from different research studies Bhatti (1998) argued that poverty is an inadequate explanation of regional variations in educational achievement. While some parts of the country which are experiencing relative economic prosperity lag behind in terms of educational progress, in other parts even extreme poverty does not prevent parents sending their children to school. For instance, states like Haryana and Punjab, which are considered economically progressive, still have a lot to do to achieve the goal of UEE. Dreze and Gazdar (1997) found that despite having economic prosperity, literacy rates and school participation rates of children in western Uttar Pradesh were far from satisfactory. Moreover, Bhatti (1998, drawing on Maharatna, 1997; Unni, 1995; Majumdar, 1996; Jabbi and Rajyalakshmi, 1997) points out that the opportunity costs do not prevent schooling and many unschooled children are also found not working anywhere. Children are more likely to participate in the workforce after reaching a certain age. For example, the study of Kanbargi and Kulkarni (1991:137) reveals that, 'working for wages is significant among children in the 12-14 age groups'. Similarly, Bhatti (1998: 1735) found that 'labour driven drop out rates are more likely to be low in the early grades and to rise significantly around the ages when children become more productive'.

It is clear from the above discussion that more studies are required to establish the interconnection between poverty, child labour and schooling. Studies have to explore the question of how the extent of poverty compels children to work, as well as whether working children have to drop out of school, or whether they work after dropping out. The costs to parents for educating children is one of the important reasons for their non-attendance and drop out. If they are unable to meet these costs, many poor parents withdraw their children from school (Mehrotra, 1995; Sinha and Sinha, 1995; GoI, 1992b; Tilak, 1996). Based on this evidence, Bhatti (1998) has stressed that instead of emphasizing child labour and parental motivation as major

obstacles to the universalisation of primary education, it is also important to consider that the costs of schooling for parents may reduce children's educational access. The state needs to play a pro-active role in reducing private costs of education and improving the quality of education, both of which would benefit children and encourage parents to send their children to school. Ray (2000: 3511-3520) using data from expenditure and employment surveys collected by NSS examined the types of households that are facing higher levels of poverty and how it impacts on child labour practices. The study identified certain types of households, namely the backward classes and female-headed households as being exposed to greater chances of poverty. It has also been found that children from backward classes are more likely to be involved in wage-based labour, and less likely to be enrolled in schooling than other children, while the children from female-headed households combine schooling with employment and they are less likely to lose educational access.

The discussions above highlight the complex relationships between poverty, child labour and schooling exclusion. While some poor households may withhold their children from school, others with similar conditions ensure schooling for their children. Engagement in child labour, which usually blocks school participation, is also a complex issue, often dependent on extraneous factors such as the implementation of adult wage labour policies and not so much on the conditions and intentions of the children and their families. In this, school-related factors also play a significant role in influencing parental decision making about whether to continue with schooling or the move into the labour market. While macro level data on the issue of child labour and poverty can be found, very little empirical evidence from the field is available to understand the underlying interactions between family economic circumstances, engagement of children in remunerative work and exclusion from schooling.

4.3 Children of Illiterate Parents: First Generation Learners

Many children excluded from the education system are first generation learners and their parents or guardians are illiterate. According to the 61st Round NSS (2004-2005) (GoI, 2006b), although there has been considerable progress in alleviating the extreme forms of educational deprivation over the years, the problem of illiteracy is still pervasive. In rural areas 37% of households did not have a single literate member aged 15 years or older in 1993-2003, but the proportion decreased to 32% in 1999-2000 and to 26% in 2004-2005. The corresponding proportions of households without adult literates in urban areas were about 14%, 12% and 8%, respectively (GoI, 2006b: 22). As much as 50% of rural and 20% of urban households had no literate female adults present in 2004-2005 (GoI, 2006b). So, in spite of the progress made, an absence of adult literates occurs in a large number of households and this has considerable impact on the lives and education of children.

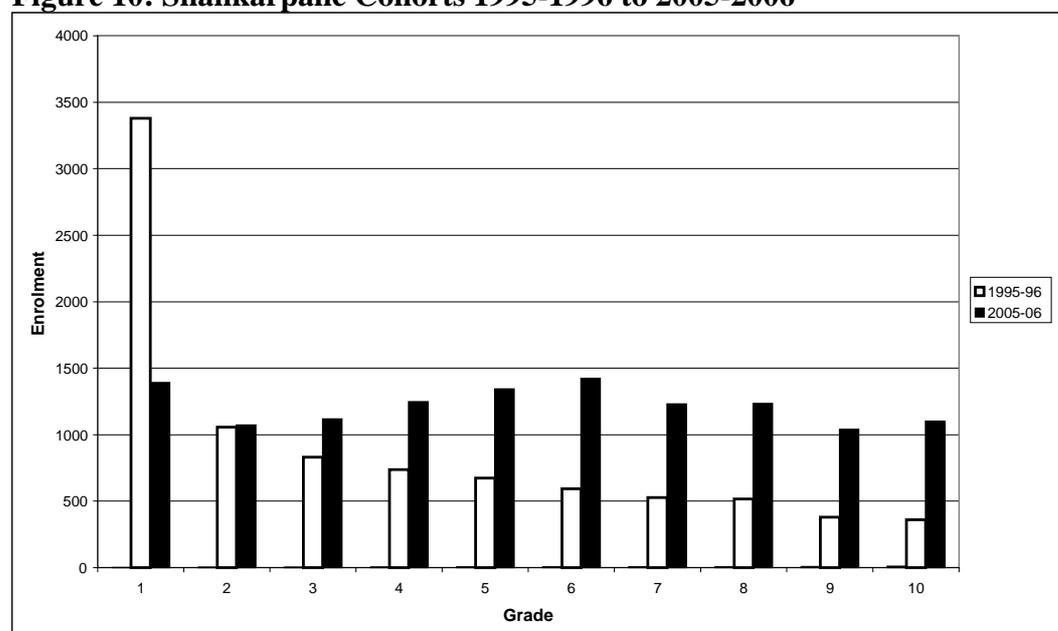
Among the major states, the proportion of households with no literate adults in rural areas is lowest in Kerala (3%) and highest in Bihar (38%). In urban areas also, it is lowest again in Kerala (1%) and highest in Rajasthan (16%), followed by Bihar (15%) and West Bengal (14%). Participating in schools and successfully completing the whole cycle with no one at home to support and to understand schooling processes is an uphill task for many learners. Moreover, many of these households are from low socio-economic groups. The solution to providing support for first generation learners

seems to lie in concerted effort by government (through appropriate policy measures) and community-based campaigns for effective school functioning. One such initiative can be found in Shankarpalle, Andhra Pradesh.

4.3.1 The Shankarpalle Experience

Evidence from the Ranga Reddy district of Andhra Pradesh, which is home to a substantial number of first generation learners and child workers, illustrates some of the potential actions which can improve educational access for children. Results of innovative efforts/projects in the Sankarpalle mandal district suggest that the problems of non-enrolment, drop out, and low attendance among such communities can be reduced. The effort also illustrates the value of pursuing measures over a long period of time instead of taking up short term measures that yield quick results but dissipate over the long term. As described by Sinha and Reddy (forthcoming), in Shankarpalle mandal a campaign was launched by the M.V. Foundation which aimed for the total abolition of child labor and to ensure that every child goes to full time formal schooling as a matter of right. The campaign had a significant impact on the way in which schools are governed in the area. When the experiment began in 1994-1995, the Mandal Education Officer accepted children into school at any time during the academic session. This was done with a view to facilitating the re-entry and participation of older drop out children (this subsequently became a state government policy). In addition, a programme called *Class one khali karo* (clear class one) was taken up for three consecutive summers to prepare older children who were stuck in grade 1 to move to higher grades in accordance with their age, and to have children of only the 5-6 age group in grade 1¹⁶. This was supported by the Andhra Pradesh state government, which adopted an automatic promotions policy in primary schools. The result of these simple moves changed the pattern of student flows in village school.

Figure 10: Shankarpalle Cohorts 1995-1996 to 2005-2006



¹⁶ This programme was also implemented in 1997-1998 through UNICEF in Andhra Pradesh.

Other measures were also included. It was found that on several occasions transfer certificates were not issued and many children could not get admission into upper primary school even after the completion of their primary education. As a result, the Government of Andhra Pradesh issued an order that no child be denied admission to upper primary for want of a certificate, which would be the responsibility of schools (rather than households). It also issued an order that primary schools with classes up to grade 5 could be upgraded to include grades 6 and 7 in order to prevent children, and particularly girls, from dropping out of school. All of these initiatives responded to the demands of the community. As a result, there was a substantial improvement in the retention of children in schools by 2005-2006. For example, there were now 1,391 children in grade 1 and 1,345 in grade 5. This also signified higher rates of completion of schooling. Over the last decade there has also been an increase in school and teacher supply (see Table 31) corresponding to the improvements in access.

Table 31: Improvements in School Infrastructure in Shankarpalle, 1997-2006

Year	Classrooms	Teachers	School Level	
			Upper Primary School	Secondary School
1997-1998	198	124	6	7
2005-2006	246	214	17	11

Source: DISE data from the Department of Education, Government of Andhra Pradesh, as cited in Sinha and Reddy (forthcoming)

The experience of Shankarpalle highlights that what often seem like demand-side barriers to schooling access are in reality supply side factors which can be addressed to some extent by pro-active policies. As Sinha and Reddy (forthcoming) put it:

The programme in Shankarpalle began with community mobilization and building a social norm that ‘no child works and every child is in school’. A synergy between civil society and public institutions was seen as indispensable. In the process of children accessing schools, the gaps in the system were noticed and got corrected inch by inch.

The effort in Shankarpalle mandal made an impact on the entire state of Andhra Pradesh. While around 28.5% of children dropped out of schooling between grades 1 and 2 in 1996-1997, with the introduction of the automatic promotions policy this drop out rate was reduced to 10.1% in 2004-2005. Similarly, the drop out rate of students moving from grade 7 to grade 8, which was 21.34% in the year 1996-1997, came down to 12.60% in 2004-2005. Thus, slight shifts in school governance seem to have helped in retaining these children, most of whom would have otherwise been ignored as first generation learners incapable of moving further up the ladder of education.

4.4 Children from Scheduled Caste and Scheduled Tribe Communities: Poverty and Social Discrimination

Data presented in Section 3 gave a macro-level description of the educational deprivation experienced by the SC and ST communities. Despite progress in enrolments, 53% of children drop out at the elementary level itself and this percentage is particularly high among SC/ST and minority populations. Low levels of school participation also correlate with higher levels of poverty, with ST/SC groups

particularly prone to poverty. According to the NSS data (GoI, 2006b) 36.5% of SC groups in rural areas and 38.5% in urban areas are below the poverty line. The corresponding figures for ST groups are 45.9% and 34.8%.

Studies show that the schooling system is inequitable and discriminatory towards these groups. For instance, reviewing the experiences of SC and ST community children in the school system, Ramachandran (2004: 27) stated, 'the process of increased universalisation is accompanied by growing segregation by class, caste and gender'. Poverty is not the only cause of child labour or poor levels of schooling access, but rather it intersects with other forms of disadvantage such as caste and gender. Indeed, the 'intersection between caste and economic disadvantage is evident if we examine the social composition of wage labour, one of the poorest paid occupations in the economy' (Kabeer, 2003: 356). The majority of the wage labour work force is drawn from SC and ST communities. According to a government survey in 1995, 66% of bonded labourers were from SC groups and a further 18% were from ST groups. Drawing from NSS findings, Thorat (1999) found that the proportion of child labour was two to three times higher among SC and ST groups than in the rest of the population. Consequently, factors like caste, religion, ethnicity and gender act in conjunction with poverty, as well as independently of it, to explain variations in the incidence of child labour as well as children's absence, or irregular presence, in the educational system (Kabeer, 2003: 382).

Quite often poor and SC and ST children, and particularly girls, have access only to low quality education in a single room, single teacher school. Even if they are mainstreamed into a school with better physical and academic facilities they tend to face difficulties as children from SC and ST communities often have lower grade attainment than children from other household (Duraisamy, 2004: 504).

Venkatanarayana's study in Andhra Pradesh (2004) points out that girls belonging to SC and ST groups in rural areas are the most disadvantaged in terms of education. The study also highlights the complex interactions between location, gender and caste that crucially influence schooling access. He found that even though a few districts have improved their position, the 'historical legacy of educational development or backwardness still holds' (Venkatanarayana, 2004: 4). Classroom practices also keep these children isolated and do not allow them to participate in learning activities effectively. While the introduction of initiatives and innovative practices has brought some positive changes to classroom practices, a lot of ground still has to be covered to ensure the full participation of all children without forms of discrimination. This is because, even while teaching processes have become more child-friendly, the discriminatory practices and attitudes of teachers often persist. Social attitudes and community prejudices play an important role in determining the ability and willingness of teachers to empathize with children. Studies on classroom processes done under the aegis of the DPEP confirmed this prevalence of caste and community prejudices (Ramachandran, 2005: 2142).

Reviewing recent research, Sedwal and Kamat (2008) highlighted a number of issues confronting the education of children from SC and ST communities. While SC children face the problem of 'untouchability,' tribal children face the problem of physical and cultural isolation, although the degree of their isolation varies considerably. For example, some tribal groups still live in dense forests, hilly or desert

areas and are engaged in occupations such as hunting and gathering etc., while others are settled agriculturalists. A large percentage of tribal communities also work in exploitative industries, for example, in tea gardens, mining and industrial areas. The educational needs of these children vary, and so does the nature of their deprivation and discrimination. Recognizing the discrimination these children face and their educational deprivation, an approach paper for the 11th Five Year Plan (GoI, 2006c: 64) notes:

Development and empowerment of socially disadvantaged groups is a commitment enshrined in the Constitution. And, education is the most effective instrument of social empowerment and change. Schemes for educational upliftment of SCs/STs and minorities have fallen far behind the national average in education. It would be necessary to go to the root of the problem and examine the reasons for the divisions so that remedial measures can be taken during the Eleventh Plan.

4.5 Gender and Social Background: Double Disadvantage for Girls

As noted previously, girls in India tend to be more disadvantaged than boys in terms of access to education. Girls from poor, SC, ST and Muslim communities are more disadvantaged. They are prone to Zone 1 exclusion (i.e. no access to schooling), but more likely drop out in primary schooling (Zone 2). A larger proportion of girls than boys from these groups are denied access to schooling in both primary and upper primary schools. Girls are also more likely to be irregular in their attendance in schools than boys; and more girls, particularly at the upper primary stage, are likely to drop out from school (see also Bandyopadhyay and Subrahmanian, 2008).

Going beyond macro-level analysis, many researchers in recent years have looked at the subject of low educational indicators for girls in India. While some studies have focused on the magnitude of problems of gender inequality and its interface with social inequalities in terms of caste, class and location, others have focused on factors that contribute to the perpetuation of gender inequalities in education. Velaskar (2005b) examined the implications of the interaction between caste, class and patriarchy for educational access of *dalit* (SC) girls in Maharashtra and tried to find out whether girls and dalits continue to remain excluded or not. Traditionally, urban upper caste girls in Maharashtra had access to education. Velaskar (2005b) concludes that in Maharashtra gender continues to be a formidable structural obstacle in accessing education. In addition, the influence of caste has certainly not disappeared and class is also an exclusionary factor for many. While some dalit girls are able to access dalit scholarships which were earlier taken largely by boys (Wankhede and Velaskar, 1999), the majority of dalit girls in Maharashtra ended up accessing poorly equipped schools located at some distance, resulting in drop outs as well as low attendance. In view of this, Velaskar stressed, 'the mass inclusion that has been achieved by the State system of education is an incredibly weak inclusion' (Velaskar 2005b: 478; see also Velaskar, 2005a). Echoing this perspective, Ray (2000: 3519) has suggested that measures to improve schooling infrastructure and enhancing social awareness of adults would prove more effective in increasing school enrolment rates, particularly among girls, than current measures.

While studying the educational situation in the educationally progressive state of Tamil Nadu, Duraisamy (2004) points out that gender differences in educational attainment are probably the outcome of intra-family allocations of resources to schooling. As he points out, several studies have accumulated evidence to show that a variety of reasons could be attributed to the persistent gender bias in parental decision-making on resource allocation for schooling of girls and boy children. Some research (cf. Bhatta 1998; Karlekar 1994) highlights a parental preference for the education of sons over daughters. In many households, whether girls access school, and the type of schools they might access, is a decision based on both financial imperatives and social preferences. Ray (2000) also found that the chance of a child being in school or in the labour market also depended on the awareness and educational levels of adult members of the household. The household size, its composition, and intra-household resource allocation have direct impacts on the schooling of children, particularly girls. However, an overall increase in the economic well-being of the family could result in the bridging of the gender gap in enrolments, at least partially, as one finds in urban areas. Further, examining various studies on the issue of household gender discriminatory choices, Duraisamy (2004: 493) points out that the:

economic factors such as benefits from children (Sen and Sengupta, 1983) and the differential market returns to educational investments of boys and girls (Bardhan, 1974) may be important reasons for the observed gender inequality in educational investment.

The Tamil Nadu study also showed that in rural areas the availability of schools within a close proximity of the household could significantly affect the schooling participation of boys and girls. Thus, the supply of schools influence some parental decision-making. The distance of schools from the settlement was found to be inversely related to enrolment and participation levels:

‘an increase in the distance to primary school by one kilometer reduces the probability that a daughter attends schools by two percent while a similar increase in the school distance reduces boy’s schools enrolment by only one percent (Duraisamy, 2004: 505).

Similarly, Ray (2000) also found that household location has a close association with educational access, as well as gender. In case of girls, there was also an urban bias in education – in other words, urban girls were more likely than their rural counterparts to attend school. In contrast, boys in urban areas were more likely to work due to increased wage-earning opportunities and as a consequence less likely to attend school (Ray, 2000: 3519).

Are the barriers to girls’ education insurmountable? Undoubtedly, transforming social attitudes and practices that militate against the education of girls requires a substantial effort, involving many actors who are not necessarily directly involved in providing education. This should include parents, educational professionals and others concerned with education. However, studies show that considerable reductions in gender disparities can be achieved with even simple readjustments in the location and infrastructure of schools. In addition, Duraisamy’s (2004) study in Tamil Nadu indicates that improvements in parental education, and particularly a mother’s

education, can contribute substantially to the reduction in the gender gap in schooling. If this is the case, a carefully designed programme of adult education for mothers of school-going-children could be part of the answer.

4.6 Overall Observations

This section gives a quick overview of the complexities involved in trying to delineate which children are being excluded from elementary schools. It points to the interaction of a number of factors. While persistent gender disparities is one of the most serious factors affecting the goal of UEE, research studies reveal that it is more complex than this. Gender discrimination invariably combines with socio-economic disadvantage to limit access to school. Socially disadvantaged groups continue to lag behind in terms of educational progress, and this is made worse by high levels of poverty for these groups.

Both supply and demand factors combine to restrict educational access for children from socially-disadvantaged groups, and in particular girls. Developments over the last few years have significantly improved the supply of schools, schooling infrastructure and facilities. In fact, the situation is continuously being improved through the Sarva Shiksha Abhiyan programme. However, measures need to involve the improvement of governance mechanisms and the promotion of active involvement of the community to improve access further.

A large number of children enrolled in schools are first generation learners whose parents are illiterate, and many live below poverty lines. These children may need additional support. Improving retention rates and the learning progress of these children is critical to breaking the inter-generational cycle of illiteracy and poverty. Are schools doing enough to meet the special needs of these children? As of yet, there are no empirical studies which focus specifically on this issue.

Another category of children who are often excluded from schooling are working children. A large number of NGOs and civil society coalitions have been involved in issues of child labour and yet the problem remains intractable. To date, there is no good data on how many children are deprived of schooling as a result of their work engagements. Undoubtedly, there is a need to conduct empirical studies in order to arrive at a reasonably dependable figure of the number of children engaged in labour and also to design comprehensive strategies for their educational inclusion. Working children do not constitute a single homogeneous group, however, and solutions need to be researched in ways which account for this.

Children with special educational needs such as physical and mental challenges have received considerable attention at the policy level in recent years. The 'Persons with Disabilities Act' passed by the Indian Parliament in 1995 provides concrete guidelines on the provision of education for these children. The Draft Bill on the Right to Education (GoI, 2005a) also makes explicit reference to children with special educational needs. However, action on the ground seems to be slow. Problems of disability are also often compounded by malnourishment and undernourishment. In this context, the provision of nutritional support through the Mid-day Meal Scheme on a universal basis in all schools is of special importance.

There are children who face multiple disadvantages based on poverty, economic deprivation, caste and gender-based discrimination and living in extremely difficult circumstances. These might include street children, the homeless, orphans, displaced and destitute children, sex workers (or children of sex workers), and children with HIV/AIDS or with parents infected by HIV/AIDS. Some strategies like mobile schools and bridge course camps have been adopted to educate these children, but it is still far from adequate to meet their needs. Indeed, these children in the 'hard-to-reach' group, are often 'invisible' and 'unheard' by policy makers and practitioners. Not much empirical work can be found to understand the nature and extent of their exclusion from schooling.

5. Issues and Priorities for Action and Research

Nearly six decades ago India began building a mass programme of education for all by transforming the elite school system inherited from the colonial past to a system open to all. Indian leaders made a commitment to provide free and compulsory education for all children in the country within a period of ten years. The non-availability of school infrastructure was identified as the single most important barrier for achieving this goal. Since then the number of schools in the country has grown significantly in an attempt to keep pace with the fast growing population. Indeed, the situation has changed enormously in the last sixty years. The non-availability of primary schools is no longer seen as a major cause for the non-participation of children in schooling, particularly due to the opening up of small schools in isolated areas. If surging enrolments and the fast expansion of private schooling facilities are any indication, lack of demand for schooling is also less of an issue than it previously was. The Census 2001 figures also show that demographic pressures due to the high population growth rates are decreasing. In fact, the cohort entering primary schools has begun shrinking in several parts of the country. The task of universalizing access to elementary education is not yet over, however, even though it seems potentially achievable within a reasonable period of time. There is even an optimism that the country can go beyond UEE and aspire to universalize secondary education, although this may be some way off.

The school education programme in India is poised at a critical juncture. There is an unprecedented level of groundswell in all sections of society in favour of universalizing quality education. The fast growing economy ushers in new confidence that adequate resources might be available. A special education surcharge at the national level now raises significant funds exclusively for school education. The Constitutional amendment making elementary education a fundamental right and the establishment of the National Commission for the Protection of Child Rights (invoking provisions of the UN Convention on the Rights of the Child) mark a definite shift in the political mood of the country. However, the task to achieve UEE remains large. The major challenges seem to lie in tackling the problems of exclusion represented in Zone 2 (drop out from primary school) and Zone 3 (children at risk of dropping out). Figures indicate that the problem of drop out persists on a large scale. The problem of children who attend school but continue to remain marginalized in terms of their active participation and learning is also serious. There are questions about how the country can go further to realize the goals of UEE. Perhaps old strategies should give way to new ones. New indicators to assess progress should also be designed. What kind of new knowledge base should planners and policy makers look for in order to make informed decisions at this stage? The review carried out in this paper attempts to address this question. There is no doubt that a careful analysis of data and the findings of empirical investigations hold very important lessons for future courses of action. There are also demonstrable success stories in different parts of the country which can be drawn upon. Research has begun to identify factors that influence children's participation in schooling. The present section attempts to consolidate understandings emerging from the analysis of the previous sections.

5.1 Understanding Exclusion as a Process

For statistical purposes, non-enrolment, drop out and non-transition to upper primary are 'events', with the child categorized accordingly. But in reality, exclusion from schooling, where going to school is the norm, is not merely an event. It is not a momentary decision, but a complex process involving a range of factors in the personal lives of children and households, as well as the schooling contexts available to them. When a child drops out of school, a number of events and contexts have preceded this, working to influence educational decision making. Influencing factors are located in the family, in the community, in peer groups and in schools. Understanding exclusion demands the exploration of these personal histories of children. Such explorations cannot be done by merely asking questions to parents and teachers, or even the children themselves. It demands tracking children over a sustained period of time and capturing the events that surround their lives. Studies which track children individually and in groups as they join school and progress through subsequent grades are critical in order to build up a description of the complex processes involved in exclusion and to delineate the underlying causes.

5.2 Unraveling the Nexus of Poverty, Social Inequity and Gender Discrimination

An analysis of data and findings from field studies brings forth four factors which seem to significantly influence patterns of exclusion. The first and the most significant factor that continues to limit schooling access is gender, as girls continue to be excluded at higher rates than boys. The enrolment of girls has been growing at a faster rate than that of boys, and gender disparities in enrolments have reduced substantially in recent years. Gender is a key element to programmes such as NPEGEL and KGBV, and has been at the centre of much educational policy movement. Yet, analysis shows that as girls move up the grades, their retention and transition rates in higher levels of schooling continue to be lower than those of boys.

The trajectory of progress is similar with respect to the educational access of children from traditionally disadvantaged social groups, such as Scheduled Castes and Scheduled Tribes. Many programmes have been instituted to bridge these gaps in access for SCs and STs. Positive discrimination measures have been guaranteed by the Constitution, which recognizes the historical legacy that militates against their progress. Several special incentive schemes have been initiated to target children from these communities. Yet available data reveals that educational access and retention remain unsatisfactory. In particular, in recent years (especially after the Sachar Committee findings, see GoI, 2006a) Muslim minority children have been identified as having unusually low levels of educational access.

The third factor that seems to inhibit the participation of children in schooling, particularly girls, is a result of locational factors. In addition to rural-urban disparities, the remoteness of habitations within rural areas seems to affect the participation of children significantly. This issue has attracted the attention of planners, and special measures have been initiated such as EGS and Alternative Schools which aim to bring children in remote or disadvantaged areas into schools. The results of these initiatives show that many children who had been left out of school have now enrolled, but the task is quite complex. While small community-based alternatives help enrolments at the entry level, there is less evidence of meaningful progression through the grades.

There are few well designed studies to understand the long-term impacts of such measures.

The fourth factor affecting schooling access, which is highlighted in much macro level analysis, is poverty. The children of the poor tend to be relegated to the margins of the system, and eventually pushed out altogether. At one level the relationship between the economic situation of the family and schooling participation seems to be quite straight forward. However, a closer analysis shows that economic impoverishment itself is deeply embedded in discriminatory social practices. It is almost difficult to disentangle children's non-participation in schooling from issues of child labour and poverty. There are, however, many measures initiated by the national and state governments to compensate for the direct and indirect costs involved in sending children to school.

There are a number of studies which correlate each of these factors as decisively influencing access to and participation of children in schooling. These include analyses based on large macro-level databases as well as small scale field-based studies. One significant point emerges. The Indian context is so diverse that issues of social and gender inequity, as well as location and poverty cannot be treated as singular factors which cause educational exclusion (with a single 'cure'). Rather, the analysis shows that they act together to form a complex nexus of exclusion. In fact, it is necessary to explore the relationships between the four factors in terms of their influence on the process of exclusion, as the crisis seems to deepen as one examines the impact of gender, social and caste affiliations, urban-rural disparities and economic conditions. For example, girls continue to be more likely to be excluded than boys in schooling, but this disadvantage increases as girls move down the social and caste 'hierarchy'. Vulnerability for girls also increases in rural areas, and the more remote the location, the more probable it is that girls will be excluded from school. Overall, poverty seems to force families into making choices that directly affect the educational access of girls.

This is not to say that boys from socially disadvantaged groups do not suffer and face educational exclusion. Rather it highlights the need to conduct studies that look at these issues in greater depth and analyze these complex relationships. However, macro-level data analysis alone may not capture the complex interactions fully. It is necessary to conduct field-based community studies that delve deeper into the complex relationships between these factors. Studies that help illuminate our understandings of the interactions between such variables should be carried out in multiple contexts, which are carefully selected in terms of demographic, geographical and social characteristics. The studies will also require longitudinal elements that throw light on the varying combinations of influence and process factors which lead families to make certain choices. The focus has to be on understanding processes of exclusion, on how the interactions unfold at the local level and within family decision making. It would be equally important to capture supply side dynamics in terms of what type and quality of schooling is on offer. This could include schooling choices, teaching and learning practices, costs of schooling, curriculum content and certification processes, as well as expected prospects for future life.

5.3 Including 'Invisible' Children from the Margins

While statistics and official programmes recognize large groups of children that might be excluded from education, a substantial number of children in India seem to be unaccounted for and unregistered. These children might be migrants whose parents move for economic reasons on a seasonal basis, street children, or children from unauthorized urban slums. They are scattered and heterogeneous but their numbers are not small. Given that the total number of children between 6-14 years in India is around 200 million, if even 0.5% of this child population fell into these categories, it would include approximately 5 million children. A large proportion of children who are physically and mentally challenged, may also be unaccounted for or unregistered, and therefore facing educational exclusion. Studies show that only a very small proportion of mentally and physically challenged children, who account for around 2% percent of the total child population, have access to schooling. There has been some progress made in reaching these chronically underserved groups. However, neither the data nor empirical studies adequately draw a conclusive picture of the situation.

5.4 Diversification and Disadvantage

Recent years have witnessed considerable variety in the delivery of schooling. In order to make access to schools more inclusive, many new educational and schooling structures have emerged, such as alternate schools and EGS centres. Most of these schools are small with one teacher and one classroom and little academic infrastructure. Teachers are often appointed on an *ad hoc* basis from the local community. While these schools could be viewed as pragmatic measures helping to extend educational coverage, it is important to examine their long-term viability and impacts on equity and quality of provision.

The creation of temporary facilities or the enrollment of children in residential camps in an attempt to mainstream them into formal schooling should be viewed as distinct from developing a sustainable system based on acceptable standards. It is quite clear that most of these alternate mechanisms are not be able to take the students beyond the lower grades (i.e. up to grade 2 or 3). So what happens to these children as they complete the initial years of schooling? To what extent do such temporary measures contribute to improved access in quantitative terms? Since these are temporary measures, is there a plan envisaged to replace them with formal structures in the long term? How are state governments and local authorities addressing these issues? These are important research questions that need to be addressed through carefully designed field investigation.

Since these delivery structures occur in small, remote locations generally inhabited by traditionally marginalized communities, it is important to note who attends such schools and what benefits they might receive, especially when many of the schools do not have provision for the full cycle of elementary schooling. It is also worth examining whether such efforts, while serving communities well in the short term, might fail to break the cycle of illiteracy and marginalisation by providing lower quality provision. Do such measures simply further entrench social divisions? As yet, however, there are no empirical studies to examine the realities on the ground by tracking children who enroll themselves in such schools.

A related issue which should be examined through empirical investigation is that of small schools. It is evident from earlier discussions that the last 10-15 years have witnessed the establishment of a large number of small government schools in many parts of the country. Consequently, the number of schools with sub-optimal levels of physical and academic facilities has increased substantially. Available data indicates that one quarter of the total number of primary schools (around a million in all) are small with only one teacher and/or one classroom and generally located in small habitations. While the process of establishing small and under equipped schools is likely to continue in many states, it is important that attention is paid to consolidating the existing provision available. While the norms of one kilometre distance from habitation to primary school, and three kilometres from habitation to upper primary school might be a general rule, it need not be implemented blindly. A careful analysis of the situation with school mapping and micro-planning are required to guide this consolidation exercise. Also the demographic changes taking place in several southern states where primary age cohorts are gradually shrinking, might mean that existing schools are no longer viable. Policy propositions made in recent years need careful consideration in such contexts, particularly as demographic changes vary within and between states. Indeed, it will be important to analyze the impact of these factors on the demand for school places through both macro analysis at state and national levels as well as micro-level studies.

Even with the consolidation of schooling facilities in some areas, it will still be imperative that small schools continue to operate in many other isolated and low population areas (see Blum and Diwan, 2007). It is important, therefore, to develop more focused strategies for dealing with small schools. At present, apart from the limited promotion of multigrade teaching strategies, no special scheme has been worked out for addressing the problem of sustainability and quality in small schools. It would be useful to work out norms for physical and academic facilities in small schools to ensure the situation in all such schools is brought up to agreed levels. It is also necessary to conduct empirical studies and research programmes which assess the nature of requirements in different contexts.

5.5 ECCE, Nutrition, Health and Schooling Access

There is increasing empirical evidence to suggest that by the time some children reach school-age, it might already be difficult to stop their exclusion. This is particularly the case for children with poor nutrition and health status. Therefore the importance of initiating action before schooling begins has gained considerable attention in recent years, particularly with respect to health and nutrition programmes. With nearly 40% of children in India identified as malnourished, the issue demands attention. It would be useful to look at on-the-ground realities in order to strengthen existing mechanisms to reach young children before they reach primary school age. The major arrangement for delivering this is the Integrated Child Development Scheme (ICDS) which has significantly expanded in its coverage since it began in the 1970s. The massive investment being made to provide meal supplements in all schools under the Mid-day Meal scheme should also be viewed within this larger context. Despite the significant inputs the ICDS and Mid-day Meal Scheme make, however, empirical studies which look at ECCE and elementary education are rare. Moreover, there are currently limited preschool education components within the ICDS. The central government's

policy to pursue the strengthening of preschool education as an activity under the ICDS, and not to open a new sub-sectoral window under the Education Department, gives this greater importance.

5.5.1 Understanding the Implementation of the Mid-Day Meal Scheme

The universal provision of a nutritious meal to all children in primary schools began in 1995. However, it acquired its present shape after the Supreme Court judgment mandating the State to provide a cooked meal in schools. According to official reports, nearly 120 million children take part in the Mid-day Meal Scheme across the country. The implementation of the scheme has brought in a variety of stakeholders at the field level ranging from religious bodies such as International Society for Krishna Consciousness to women's self-help groups. The scheme was extended to upper primary classes in the 11th Five Year Plan (GoI, 2007c). It is worthwhile examining what impact these initiatives have on the participation of children in schooling, as well as on their health and nutritional status.

At least one of the original objectives of the scheme was to view the provision of nutritional support as part of a package to improve the overall health and nutritional levels of children. However, arrangements for regular health check-ups and other related medical support to children have remained beyond the reach of most children in government schools. It would be appropriate to examine the possibility of introducing an appropriate scheme for health and medical support to elementary school children which would run alongside the provision of nutritional support through mid-day meals. Most studies on the impact of the Mid-day Meal Scheme have looked at participation levels of children at the macro level. Yet, in depth studies of the dynamics of school participation of children from different social and economic background are not yet available.

5.6 Schooling Governance, Community Participation and Educational Exclusion

Studies on educational exclusion often see schooling exclusion as a demand side issue, rather than a supply side one. However, the analyses of large surveys conducted by the National Sample Survey Organisation (NSSO) repeatedly highlight the importance of school-related factors in family decision-making processes around education. Field investigations and evaluation studies have indicated possible ways and means to improve the functioning of schools. In recent years there have been several measures taken up by government to address supply-side issues. For example, community participation has been found to be useful in monitoring the physical aspects of school functions, including teacher and student attendance rates. The SSA framework has sought to institutionalize community participation. Several state governments have also taken steps in this direction, with many of them developing legislation to empower communities to become more involved with the schools, using bodies such as school management committees, parent-teacher associations, and village education committees. As yet though there is little research to guide these processes. The decentralization of school governance through the transfer of authority to *panchayati raj* bodies has also been identified as a positive step in reducing the deficiencies in the functioning of schools, but there is inadequate empirical evidence to understand patterns of interaction between the decentralization of system level management functions and school level management practices.

There is no denying that schooling access and attitudes towards schooling are influenced by the type and quality of learning that happens in schools. Considerable evidence has been collected in recent years regarding the learning outcomes of children in primary school. Relationships between schooling processes, teaching and learning experiences, and schooling access are context specific. Thus, if improvements in learning (and therefore schooling participation) are important, more locally-focused, in-depth studies are required.

5.7 Re-examining the Role of Private Providers

Policy documents such as the National Policy on Education 1986 and the Plan of Action 1992, refer to the creation of public-private partnerships in the implementation of elementary education. However, no attempt has been made to define the nature of such relationships, which raises questions around privatization and the reduction of government responsibility. It is important to examine the extent and range of private provision of education in India, as well as its potential and appropriateness to achieve UEE goals. The education landscape is changing quickly in India, and sits within the wider framework of transformation characterized by the liberalization of the economy. These external forces have a huge impact on the educational sector. It is important to explore how private providers, for example, deal with issues of equity and quality, but also to remember that under the Constitution of India the government is committed to providing free and compulsory education for all. Many observers have pointed out that the existing understanding of the producer-provider framework in elementary education needs to be reexamined. For example, there is no reason why non-profit private providers (NGOs) could not be encouraged to participate in the process of both producing and providing elementary education on a larger scale. This would require identifying specific areas where such involvement would bring added value without diluting the commitment of the state to provide free and compulsory education. Civil society organizations could also potentially be given a greater role in the implementation of educational activities in the formal school sector. Some work has been done in this field, but the operationalisation of such inputs requires considerable research and field trials in order to properly define the roles of government and non-government providers.

5.8 Breaking the Inter-generational Cycle of Illiteracy: Acting Beyond the School Walls

It is clear that endemic poverty, along with household illiteracy and lack of educational experience, has limited many children's access to education. Research also points to the lack of intellectual stimulation and support from family members to first generation learners. Improving adult literacy has the potential to increase the demand for children's education and improve the chances for attendance as well as retention of children in school. Literate parents are more likely to participate in school activities compared to illiterate parents. As ASER 2006 (Pratham, 2007) has already pointed out, parental education, and particularly the mother's education level, have a positive impact on the participation of children in schooling and also on their learning achievements. Therefore, greater attention should be given to adult education programmes than has been the case in the past few years. Unfortunately, research on school education and adult education have so far remained separate areas of work. The challenge for researchers is to explore the interface between adult education programmes and schooling access, particularly in the context of poverty.

5.9 Analysing Expenditure in a Cumulative Change Framework

Recent analyses of financing elementary education have raised several issues around state-initiated spending on elementary education development. In the final analysis, progress in school education will almost entirely depend on the state governments. While central support to elementary education development has consistently increased, it is unclear how different state governments are investing their resources in the development of the sector. For instance, the recent step taken by several states to virtually dismantle the professional cadre of teachers by appointing para-teachers – essentially a cost saving measure – raises serious questions about the wisdom of investing plan funds without adequate commitment from a state government. It is possible that by trying to ward off current deficits, some states have become completely dependent on central grants for even minimal expansions of their education systems.

In this context, there is an urgent need to conduct a detailed analysis of state expenditure on elementary education, as differentiated from the proportion offered as complementary funding under central grants received under SSA. How much investment is being made by individual state governments towards building a sustainable system of elementary education in terms of infrastructure development and maintenance, teacher supply, the development of learning material and so on? With changing demographic conditions, the demand for schooling places will also change. How are the states prepared financially to adapt to these situations? What level of contribution will be required from the centre to each state if a sustainable system of elementary education is to emerge?

While decentralization of fund flow and utilisation would be welcome, it is important to probe this phenomenon in greater detail to find out if this has helped improve school level realities. Are funds being utilised effectively by the grassroots level bodies? Is any social audit happening to ensure the better utilization of resources? If these funds are being earmarked to address particular problems, how do they address school-specific requirements? Most importantly, how have school level expenditures helped improve the effectiveness of funding? Without expenditure autonomy, have social audits and/or community based monitoring helped improve the transparency and accountability in the utilization of school level resources? These are important questions with significant implications for the absorption of funds from the centre, which in the past has been less than impressive in many states.

Finally, the *Sarva Shiksha Abhiyan*, the main vehicle for elementary education development in the country, is based on an integrated programme which interlinks various inputs flowing through a number of component activities. It is in line with this way of thinking that all component activities have to be designed and incorporated into a perspective plan for each district. It is on the basis of such ‘district plans’ that substantial amounts of funds are spent in every district. Important research questions in this regard include: what efforts have been made to track cumulative change and improvements in the districts, some of which have received financial support for nearly a decade under DPEP and SSA? Do the district plans for successive periods reflect the changed realities in quantity as well as quality of elementary education at the district level? Such analyses will be extremely important to understanding the educational conditions and processes as they unfold in each district, and to incorporate

the lessons emerging from them into the design of subsequent annual and long-term district plans.

5.10 Monitoring Progress in Access and Participation

In order to be aware of progress towards universal elementary education, effective assessment and monitoring systems need to be in place. These would take into account both supply-side and demand-side factors and respond to queries about the supply and location of schools, and whether the facilities provided are being used effectively. The supply and location of schools can be monitored through on pre-specified norms of provision. But the second question is more complicated and requires the collection of relevant information from the field at regular intervals. Traditionally, enrolment ratios take stock of the situation and assess progress made towards UEE, making accurate information on enrolments critical. There are several sources that provide macro-level data on this. The main official source is the annual data published by Government of India under the title, Selected Educational Statistics. The second major source of information is the National University of Educational Planning and Administration, which collects and presents basic information annually on all elementary schools in the country via the District Information System for Education (DISE). DISE comes under the auspices of Sarva Shiksha Abhiyan, and supports the implementation of SSA. In addition, information on some indicators is periodically collected through large-scale sample surveys such as the NSS and NFHS. The AIES (conducted by NCERT) covers every school on a census basis on a periodical basis, the last one being in 2002. One would expect that these multiple sources of information together would provide a reliable source for assessing and monitoring progress towards UEE. However, data collected through the various sources has remained mutually incompatible in terms of age-specification and other data sources. While the sample surveys use household data to gather information, government and DISE data uses schools as the basic source of information. Thus, while these sources together give a picture of the situation, it is difficult to make an accurate assessment of the realities on the ground.

The provision of universal elementary education assumes certain systemic requirements, in terms of an agreed age of entry to the school system and standard frameworks for progression of children through grades and levels of schooling. This is essential to make accurate assessments of the progress made towards UEE and to determine the nature and extent of exclusion. Information on NERs is also necessary in order to map patterns of student flows through grades and to identify failures and drop outs. Stabilizing enrolment processes and maintaining an official age of entry to primary school are critical for the sustained progress towards UEE. It would be expected that as enrolment becomes universalized, differences between GER and NERs will decrease. Available data suggests that even though the expansion of schooling facilities have increased access for many children in India, the problem of over-age and under-age learners has persisted. Late entry is a common phenomenon in rural areas, particularly for girls from SC and ST communities. There are also clear indications of the enrolment of a large number of children below 5 years of age in primary schools (Pratham, 2007; NUEPA 2007b). The large scale prevalence of underage entry to primary schools deserves further investigation.

This raises several questions around working out how many children are in school. If entry age is not properly monitored, however, it is impossible to determine whether all children aged 6-14 are attending school as specified by the Constitution. According to ASER (Pratham, 2007), underage enrolments are largely due to the lack of preschool facilities in rural areas and urban slums. The issue is more complicated than this, however, because there is no uniform policy adopted across the country on age of entry to primary school. Official legislation in several states, including Delhi and Andhra Pradesh, specifies 5 years of age as the minimum age for admission to grade 1 (rather than 6 years of age, as is the case elsewhere). This diversity in the age of entry has made it difficult to work out net enrolment ratios at the national level. The issue is not merely statistical, however. By not streamlining the age of entry (and thus progression to higher levels of schooling) there are serious implications for dropping out (see Hunt, 2008), teaching and learning processes, and the compatibility of curricular inputs with students' diverse levels of cognitive development. This issue demands serious consideration by planners and policy makers in order to consolidate achievements made in the last decade and to move towards the goal of providing free and compulsory education for all.

There are also other problems of data inherent in the structural arrangements for delivering school education across the country. For instance, several states have only seven years of elementary schooling (four years lower primary followed by three years upper primary), whereas others have eight. This creates an incompatibility between the national format for collecting school statistics and the actual divisions in the delivery frameworks on the ground. Also, in some states, the majority of government primary schools consist of five years, with upper primary being part of the secondary school system – many of which are in the private sector. In the absence of any legislative binding, the supply of data from private schools has never been comprehensive, which leaves large gaps in knowledge. Whether the country should adopt a uniform structure for the delivery of schooling at least during the free and compulsory education period is, of course, a larger policy level issue. However, with the existing incomparability of school-going age data across the country and the prevalence of incompatible and fragmented structures for the delivery of elementary education, statistics consolidated at the national level will remain suspect in their reliability and validity.

The school system and statistical collection procedures have evolved differently in the various states over time. Even if a National System of Education is launched (as envisaged by the Education Commission (GoI, 1966) and the National Policy on Education 1986 (GoI, 1986), it would take a long time to streamline age of entry and progression across the country. It is therefore important that current age-grade specifications across the country are examined carefully and that the statistics collected at the state level a realistic picture of the situation in the country. It will be a complex task to determine the actual progress of the various age groups towards eight years of schooling. It is essential not only to assess this progress, but also to refine strategies and programmes to move towards universal elementary education.

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Report Summary:

This analytical review aims at exploring trends in educational access and delineating different groups, which are vulnerable to exclusion from educational opportunities at the elementary stage. This review has drawn references from series of analytical papers developed on different themes i.e. regional disparity in education, social equity and gender equity in education, problem of drop out, education of the children of migrants, inequity in educational opportunities, health and nutrition, governance of education and so on. The first and second section of the paper presents brief review of the state of elementary education in the country with particular focus on regional disparities and social inequities in provision. The third section delineates different zones of exclusion highlighting the nature and magnitude of the problems of access, transition and equity. Fourth section captures the profiles of the varying groups of children responding to the questions of who are excluded from schooling and why are they excluded. In the final section, the paper makes an effort to identify gaps in our understanding of the issues pointing to the need for further research as well as identifying strategies that seem to work in addressing issues of access to elementary education in India.

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