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Equity in Enrolment and Completion in Elementary Schooling in India

Evidence from recent household surveys

December, 2003



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Elementary Schooling in India:
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CRITICAL ISSUES IN REFORMING
STATE EDUCATION SYSTEMS

South Asia Human Development Sector
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ABBREVIATIONS AND ACRONYMS

AP	Andhra Pradesh	MS	Mahila Samakhya
ASAR	Age Specific Attendance Rate	NER	Net Enrolment Rate
ASM	Assam	NFHS1	National Family Health Survey 1
BIA	Benefit Incidence Analysis	NFHS2	National Family Health Survey 2
BIH	Bihar	NPE	National Policy of Education
CG	Center Government	NSS42	National Sample Survey 42 nd round
CR	Completion Rates	NSS52	National Sample Survey 52 nd round
CSS	Centrally Sponsored Scheme	NSSO	National Sample Survey Organization
DPEP	District Primary Education Program	OBB	Operation Black Board
EFA	Education for All	OR	Orissa
GDP	Gross Domestic Product	PA	Private Aided Schools
GER	Gross Enrolment Rates	PCR	Primary Completion Rates
GOI	Government of India	PNJ	Punjab
GUJ	Gujarat	PUA	Private Un-aided Schools
HAR	Haryana	RAJ	Rajasthan
HP	Himachal Pradesh	SDP	State Domestic Product
JNV	Jawahar Navodaya Vidyalayas	SG	State Government
KAR	Karnataka	SSA	Sarva Shiksha Abhyan
KER	Kerala	TN	Tamil Nadu
KV	Kendriya Vidyalayas (Central Schools)	UEE	Universal Elementary Education
MDMS	Mid Day Meal Scheme	UP	Upper Primary Schools
MH	Maharashtra	UP	Uttar Pradesh
MHRD	Ministry of Human Resource Development	UPCR	Upper Primary Completion Rates
MP	Madhya Pradesh	WB	West Bengal

EXECUTIVE SUMMARY

This policy note analyses the evidence on the various equity issues relating to the participation and completion of elementary school education in India is based on the data collected by the National Sample Survey (NSS) and National Family Health Surveys (NFHS), the latest year being looked at is 1998-99. This documentation of state-wise regional, community, gender and income inequities therefore do not take into account the progress made by states in reducing the inequities under the District Primary Education Program (DPEP) program for the last 8 years. In fact, some of the issues which comes out of this study and needs attention is probably already addressed under some of the new programs already being undertaken by the MHRD, such as the Sarva Shiksha Abhiyan (SSA). However, by filing these issues in a systematic manner, we hope to draw continued attention to the status of these issues in the programs.

The participation and completion of elementary education here is analysed using a few standard indicators derived from the household surveys such as the Age Specific Attendance Rate (ASAR) for both primary and upper primary and Primary and Upper Primary Completion Rates (PCR and UPCR). Analysing the data from both the conglomerative perspective (captures the advances made by the society as a whole) and deprivational perspective (assess the status of the deprived in the society, such as SC, ST, females, rural poor etc), it is evident that the gender, regional, community and income disparities are still serious issues in elementary education participation and attainments. However, all these disparities are deepened by the state-level differences since the states which are at the lower end of the education attainments are the ones where the disparities were also a serious problem.

While participation in schooling have increased, those who complete the expected levels have not increased as fast as the participation rates, mainly due to the less significant success in reducing the drop outs. The disaggregated analysis of elementary education into primary and upper primary shows that participation in upper primary education is still a serious concern in many states, even though there has been considerable

progress in primary education participation and completion in most of the states. Not only the current level of participation in upper primary education is not up to the desirable level and below that of primary education, the progress made during 1987- 99 period has also been not satisfactory and not kept with the pace of that primary education. However, this is understandable since only those who complete primary education can go to upper primary education and the progress and level at the upper primary level mainly rests upon the primary education participation and completion rates at a period prior to that. Same is the case with primary and upper primary completion rates. States which had already achieved higher levels of school participation and completion rates showed lesser progress during the decade under study, as they have already reached the near optimal level in educational development such as Kerala and Himachal Pradesh. On the other hand, though states like Andhra Pradesh, Madhya Pradesh and Rajasthan showed greater progress in educational attainments from their lower levels in mid-1980s, they have a lot more to go before reaching the desirable levels. However, the states on the Gangetic belt such as Bihar and UP are still laggards in spite of their progress which is well below the desirable levels.

Another major aspect examined in this policy note is the rural-urban disparities. While the developed states have negligible differences between their rural and urban areas, the poorer performing states had the maximum disparities. In some progressing states, the disparities got deepened mainly because of their faster improvements in education participation in urban areas compared to rural areas. Similarly, the participation and completion of schooling among girls have increased, however, in many states, the increase has been not enough to catch up the pace of increase in boys' schooling outcomes, thus resulting in a gender gap in educational outcomes. While this problem is less severe in urban areas, in rural areas, there is much to be improved. The story of socially disabled communities and those in the lower strata of economic hierarchies also do not differ much from such deepened inequity problems. The social and economic disparities are further complicated by the distribution of educational

investments among the beneficiaries by government educational spending.

The importance of this analysis is mainly at the academic level, that they address the educational outcomes in terms of participation and completion in schooling at the disaggregated level. The analysis shows that educational reforms should be aimed at

removing inequalities at all levels of economic, social and regional strata in order to improve educational outcomes. Further, the documentation of the equity disparities from household survey data during 1980s and 1990s would facilitate a comparison with the progress made during the current decade as and when the latest household survey data are made available.

INTRODUCTION

“Education, in the present day context, is perhaps the single most important means for individuals to improve personal endowments, build capability levels, overcome constraints and in the process, enlarge their available set of opportunities and choices for a sustained improvement in well-being.....”

Human Development Report, India. 2002

Education is recognized as a driving force for human development, through the creation of choices and opportunities for people. It acts as a catalyst for social mobility and aids in the upliftment of weaker sections of society by providing them with a set of useful and marketable skills that help in increasing employment opportunities, and thereby reducing an individual's vulnerability to poverty. Traditionally, education has been given high importance in Indian societies, although in these societies access to educational opportunities were defined along lines mirroring the ethnic and societal and religious fragmentation of that time, whether for Brahmin children through *agharas* (community groups for religious learning) or for Muslim children through *madrasahs* (Islamic religious schools), or for other children belonging to other groups through their own societal and skill based guilds, education has been emphasized in historical India. There is ample archaeological support to support the claim that India has been a center of learning for much of history, with subjects as diverse as mathematics to drama being taught at various institutions, the most famous of which are the Buddhist institutions at Takshashila and Nalanda. English education was introduced with the arrival of English missionaries and has since taken a firm root in the Indian system.

India has made steady progress in education since its independence in 1947. Growth in literacy rates since then has been impressive, particularly the gains in literacy that have been achieved in the nineties. The number of children enrolled and attending school, boys and girls, rich and poor, and upper caste and lower caste children, has increased significantly over the years and India is poised to achieve universal literacy and primary enrollment in the future if successive governments continue to exert concerted effort in this direction. Governments, both at the Center and in the states, have enacted policy reforms, increased resource flows into all levels of education. India's new flagship

program to achieve universal elementary education (UEE), Sarva Shiksha Abhiyan, specifically increases resource flows into primary and upper primary education. This is further evidence of the government's determination to achieve universalization of basic education in a time bound manner. Many of these goals have been pursued by the government since independence in 1947, unfortunately they have proven to be elusive. Many factors determine the literacy rates¹, enrollment or attendance, and completion rates in India.

Today, while India can boast of having one of the world's largest pools of technical manpower, it is also home to the world's major pool of illiterates. Although schooling standards for Indian children in many of the major metropolitan cities are some of the highest in the world, the quality of schooling, teacher effectiveness and academic content for the vast majority of India's children leaves a lot to be desired. While the country has one of the largest school networks in the world, it is also true that many of these schools lack even basic facilities. These discrepancies have led to significant and persistent gaps in literacy levels, enrollment and completion at all levels of schooling, across many different socio-economic dimensions of the population, including gender, space and geography, social and economic classes.

India is a land of tremendous diversity and contrasts because of the range of its people, languages, cultures and religions. This diversity that defines India, is also reflected in its social indicators. There remain tremendous disparities in the provision of, access to, and participation in or utilization of key social services in health and education, as in the case of the distribution

¹ Literacy rate is a very crude indicator to use in India. Literacy figures as obtained from decadal national population censuses, is obtained by asking the main respondent in each household as to the number of members in the household who are literate, and not based on any tests of reading proficiency.

of economic resources. The eradication of these discrepancies and contrasts in the socio-economic status of the population is a fundamental objective of the Government of India (GOI). Many studies have investigated the factors contributing to the current position of education indicators. For example, Jabbi and Rajyalakshmi (2001) state that “a review of the existing literature shows that the important gaps in education in India are due to caste/tribe status, gender and poverty”.

The key objective of the study is to document trends and achievements in enrolment and completion of primary and upper primary schooling in the major states of India, specifically, to present an analysis of the disparities across space, gender, social and economic groups. While doing this, the study also aims to document changes in the sector over time and the gaps in education participation and attainment of disadvantaged groups (such as, rural girls, children belonging to back classes, and children of poor households across these major states). By identifying those regions and groups for which progress has been slow, and by assessing the extent to which public spending on education has benefited the poor and socially disadvantaged groups, we will be able to further refine existing policies to achieve the desired objectives. A key aspect of this note is therefore to present a benefit incidence analysis of public expenditures.

The Framework For Analysis

The framework of this analysis is broadly based on the equity issues related to various aspects of education. The equity issues looked at are: (a) regional or spatial equity (b) gender equity, (c) socio-cultural equity issues and (d) Income equity.

Regional or Spatial Equity refers to the disparities in educational opportunities available and availed off by the disadvantaged and underdeveloped regions compared to better-endowed regions. This could be looked at across states, across districts within the states, and across rural and urban areas within the States. The issues related to regional equity also addresses the question of *physical access* to schools, which implies looking at whether certain regions are better endowed with schooling facilities than are other regions.

Gender-Equity refers to the disparities in opportunities of the traditionally disadvantaged gender group, i.e., females, compared to males, in their literacy levels,

access to various levels of schooling, participation and completion.

Socio-cultural equity addresses the disparities in educational opportunities available to the socially disadvantaged groups. The historical biases in providing educational access to specific social groups has led to significant and persistent discrepancies in literacy, enrollment and completion of different levels of schooling in India.

Income Equity refers to the differences in schooling enrollment and attainment in India due to differences in access to economic resources and incomes.

The equitable distribution of schooling aspects across special, gender, social and income classifications are investigated by observing various educational parameters such as literacy rates, the Gross Enrollment Rates (GER) and the Age Specific Enrollment Rates (ASARs)^{2,3}. GERs address enrollment rates without taking into account age-specificity, while ASARs look at enrollment ratios within an certain age groups. Completion Rates refers to the completion of a certain level of education in terms of number of years completed (I-V grades in the case of primary education completion and VI-VIII grades in the case of upper primary education). ASAR is computed as the percentage of children of age 6-10 attending school compared with the total population in age group 6-10. GERs also capture this statistic to a certain extent, except that they include students enrolled in school who are not in the 6-10 age group. GERs presents a picture on current enrollment that includes both overage and underage enrolment, and hence, very often GERs can be greater than 100 percent in value.

Data Sources

Four different data sets are primarily used for the analysis in this note. These include two National Sample Surveys, the 42nd and the 52nd Rounds⁴ and two Family National Family Health surveys⁵. The NSS-42 and

² Similar to Net Enrollment Rates (NERs), the difference being that net enrollment rates looks at (primary) school aged children enrolled in (primary) school, while ASARs presents the ratio of (primary) school aged children enrolled in any class to the total number of primary school aged children in the population.

³ ASAR is computed as shown here: $ASAR = [No. \text{ of children of age 6-10 attending school} / \text{Population in age group 6-10}] * 100$

⁴ Henceforth referred to as NSS42 and NSS52.

⁵ Henceforth referred to as the NFHS1 and NFHS2.

the NSS-52 were conducted in 1986/87 and 1995/96 respectively and are carried out by the National Sample Survey Organisation (NSSO). The NFHS1 and the NFHS2 were conducted in 1993/94 and 1998/99 respectively. Furthermore, secondary data from the various government documents have also been used. With these four surveys, we have information on schooling and completion of 6-14 year olds for four time points from 1986-87 to 1998-99.⁶

Structure of the Note

The structure of the note is as follows. The paper looks at equity issues in school participation and completion across different time points, gender, income groups, social groups and states. Section 1 provides a brief historical overview on the progress that has been made with regards to literacy, enrolment, completion and the provision of schooling services in India. Although the primary aim is to look at schooling enrollment and

completion rates, each section also provides a glimpse at other indicators whenever appropriate, such as, literacy, drop outs and repetition, expenditures, etc. In many ways, the disparities in literacy, enrollment, attendance and completion, witnessed among the population, are closely correlated to factors such as better access to primary schooling, gender, caste groups, birth order, parental education background and occupation, region of residence, etc. The remaining sections are presented according to regional or spatial disparity, gender disparity, social class disparity and economic class disparity. Each of these will be presented in Sections 2, 3, 4 and 5 respectively. Section 6 will present an overview of the financing of education, and the private and public expenditures on education and this section we will also present the results of the benefit incidence analysis of public expenditures on schooling. Section 7 will present some conclusions and questions that need to be addressed further.

⁶Greater emphasis is also placed on NSS52 round on Education for the purpose of analyzing the determinants of schooling enrollment and completion.

SECTION 1 : OVERVIEW

Basic education is a catalyst to social change, and it can be considered as an important ingredient to building human capabilities (as advocated by Dreze and Sen; 1995), which is essential for any society's economic growth. The government has a role and duty in the provision of basic education, as it is a merit good, so that the both public and private returns are maximized. The Directive Principles of State Policy of the Indian Constitution assures the citizens of India that they are entitled to the "provision of free and compulsory education" and the "promotion of education and economic interests of the Scheduled Castes, Schedule Tribes and other weaker sections". Furthermore, Indian lawmakers of the time, through Article 45 of the Constitution, further committed themselves to ensuring that universal elementary education will be achieved within the first ten years of the drafting of the Constitution.

In the early years after independence, emphasis was laid on the development of schools that provided "basic education" and in the area of higher education as this was seen as the avenue towards the country's self sufficiency. Table 1 presents the outlays for education under the First and Second Five Year Plans. Considerable focus was placed on tertiary education, and specifically, technical education.

While significant improvements in the primary and upper primary sectors have taken place since then, many of the concerns that were raised four decades ago mirror the concerns of today and have yet to be dealt with adequately. For example, the 2nd Five Year Plan raises concerns over (i) inadequacy of schooling facilities, (ii) drop outs in the primary cycle, (iii) social and cultural factors that inhibit girl's education, (iv) lack of qualified teachers and women teachers in particular and (v) considerable disparities across gender, regions and socio-economic groups. Many of these issues continues to plague the education system today⁷.

Consecutive Five-Year-Plan documents have highlighted concerns related to enrollment and completion, and have flagged the grave disparities across gender, regions, social and economic classes for marked attention. However, the goal of providing universal basic education has proven to be difficult to attain, and as the Tenth Plan admits, concrete plans of action, gained greater momentum only after the National Policy of Education (NPE), 1986, (and modified in 1992) and the World Declaration on Education for All (EFA) adopted in Jomtien in 1990, which brought into focus basic education in all its facets (including the

Table 1: Intra-Sectoral allocation of Plan Expenditure in Education in India in the Five Year Plans(Rs. In 10 million)

Five year Plan	Elementary	Adult	Secondary	Higher	Technical	Grand Total	% of total Plan outlay
I	85(56%)	5(3%)	20(13%)	14(9%)	20(13%)	153(100)	7.86
II	95(35%)	4(1%)	51(19%)	48(18%)	49(18%)	273(100)	5.83
III	201(34%)	2(0.3%)	103(18%)	87(15%)	125(21%)	589(100)	6.87
Annual Plans	75(24%)	-	53(16%)	77(24%)	81(25%)	322(100)	4.86
IV	239(30%)	6(1%)	140(18%)	195(25%)	106(13%)	786(87%)	5.04
V	317(35%)	33(4%)	156(17%)	205(22%)	107(12%)	912(100)	3.27
VI	883(30%)	156(3%)	736(25%)	530(18%)	324(11%)	2943(100)	2.70
VII	2849(34%)	470(6%)	1829(22%)	1201(14%)	1083(12%)	8500(100)	3.50
Annual Plans	1734(33%)	376(7%)	1079(20%)	595(11%)	848(16%)	5318(100)	4.20
VIII	8936(42%)	1808(8%)	3498(16%)	1516(7%)	2786(13%)	21217(100)	4.50

Source: Five year Plans, Annual Plans, Analysis of Annual Plan, Education Sector (Various years) of GOI and Tilak (2002)

equity and quality considerations). These international events, coupled with many developments on the domestic front, recognized basic education as a fundamental right of every citizen, and the most crucial investment in human development to the center stage⁸. The thrust areas in the Ninth plan included Universal Elementary Education (UEE), girls education, and once again, the issue of literacy. Numerous schemes and programmes aimed at achieving these goals, such as, the Operation Black Board (OBB), the Mahila Samakhyas (MS), the Mid-day meal scheme, and the District Primary Education Program were operationalized during the Ninth Plan period. This initiative for UPE has recently received another boost through a Constitutional Amendment Bill (2001), for enacting the Fundamental Right To Free And Compulsory Education for children in the age group of 6-14 years.

Rules of the Game

According to the Constitution, matters pertaining to education fall under the concurrent jurisdiction of both the Central and the State Governments. Historically, the two authorities have played fairly distinct roles in the education sector with the Central Government focusing more on tertiary, particularly, technical and medical education, and leaving primary, secondary and non-technical tertiary education to the States. However, given that the States' are unable to raise taxes in accordance with their spending, the Center provides support through a complex system of fiscal transfers (Bashir, 2000). These transfers are also fairly well mandated in the IC.

While the states are largely responsible for primary, upper primary and secondary education, the Center does enhance and promote policy reforms through centrally sponsored schemes and programs. The number of centrally sponsored schemes in the area of basic education has increased considerably since the early nineties. The induction of external financing in a substantial way into the elementary education sector was also a fairly radical exercise that began in the nineties. Under the CSS, the entire activity may be driven by the Center or there may be some state contributions in a share that is decided through mutual consultation between the Center and the States. Many of the recently initiated primary education schemes at the national level, such as, Operation Blackboard,

District Primary Education Program (DPEP) and the current Sarva Shiksha Abhyas (SSA), have all been under the CSS category. Through the use of these programs, the CG can influence to some extent SG priorities so as to achieve national policy goals. Other examples of similar programs, would include public works, child nutrition, and other poverty alleviation schemes.

Trends in Education

The status and conditions of access to, and demand for, primary education in India is so heterogeneous, that any unique action plan for providing universal elementary education needs to be contextualized by taking into account equity considerations. Literacy rates and schooling patterns vary substantially across gender, different regions, social and economic groups. The extent of these disparities, and the manner in which they affect school participation and completion needs to be assessed for the reform of the systems in order to be able to achieve the objectives of universal primary education and completion. In this sub-section, we present some macro-trends in educational expenditures, physical access, and outcomes.

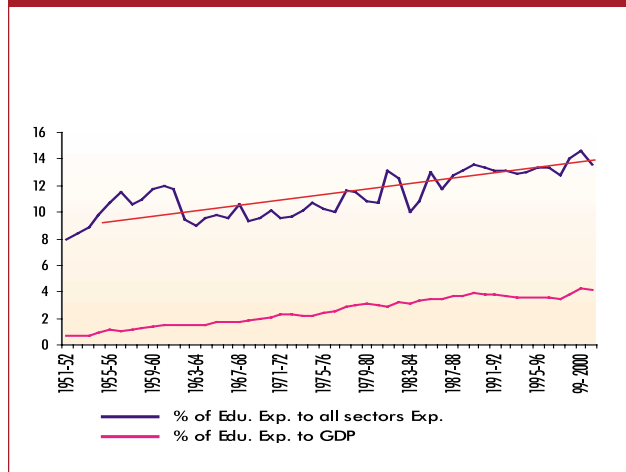
Expenditures on Education

Public expenditures on education both as a percentage of total government expenditure across all sectors, and as a percentage of GDP has increased since 1950-1951. This is quite evident from Figures 1 and 2 which

⁷ It is interesting that the target set for achieving compulsory and free education under the Directive Principles of the Constitution was not only allowed to slip, but was endorsed in the Second Plan as follows "it will be seen that the goal set in the Constitution about free, compulsory and universal education is yet far away... It is, however, necessary to make every possible effort to fulfill the directive of the Constitution within the next ten to fifteen years."

⁸ The Supreme Court of India observed in the Mohini Jain case in 1992 that the Directive Principles, which are fundamental in the governance of the country cannot be read separately from the Fundamental Rights. The more notable part of the judgment was its insistence that the right to education be read as an integral part of the right to life guaranteed under Article 21, Part III. In 1993, the Supreme Court reiterated in the Unnikrishnan vs. State of Andhra Pradesh case that the right to education indeed flowed directly from the right to life; therefore, the state is under an obligation to provide basic education to all citizens during their childhood. The enactment of 93rd Constitutional Amendment Bill (2001), culminated in making free and Compulsory Education for children in the age group of 6-14 years a fundamental right.

Figure 1 Expenditure on Education in India

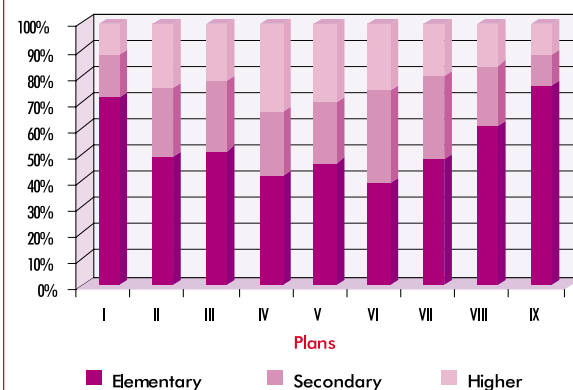


Source: Annual Financial Statistics, MHRD

depicts education expenditures in India between 1951-52 to 2000-2001 and across all the Plan periods.

The percentage of education and training expenditure to total expenditure across all sectors has increased from about 8 percent to a little under 14 percent over this period, or amounting to an annual growth rate of about 0.13 percent. Education and training expenditure as a percentage of GDP was below 1 percent in 1950-1951, and by 2000-2001 had reached a high of 4.11 percent, though education expenditure as a percent of GDP was much more volatile, with irregular increases and falls over the years. Figure 2 illustrates the share that primary education has attracted over the various FYPs. From here it is evident that there was a dip in the emphasis on basic education across the plans as secondary and tertiary education gained in importance.

Figure 2 Share of Expenditure on Elementary, Secondary and higher sectors in the total education expenditure in the Five Year Plans



It is only in the Ninth Plan that the emphasis on primary education was restored.

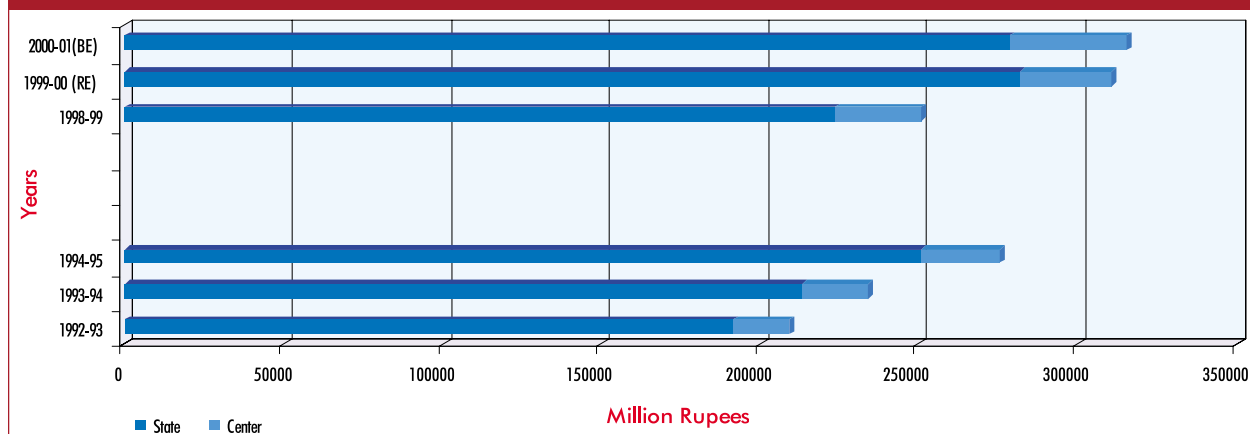
Expenditure shares on education by State and central governments are shown in Figure 3. As stated earlier, the enter does make fiscal transfers aimed at helping weaker states with their development goals⁹.

Physical Access

Accessibility to education can be defined as physical or spatial access, financial or economic access, social

⁹ These extent of these transfers is based on what is referred to as the Gadgil formula. V.N. Gadgil, Former Deputy Chairman PC. Population and per capita income have a weight of 85 percent under the Gadgil formula. The remaining 15 percent weight is equally divided on the basis of state performance in the achievement of priority national objectives and in addressing special problems of the states.

Figure 3 Center-State Shares in Education Expenditure



Source: MHRD

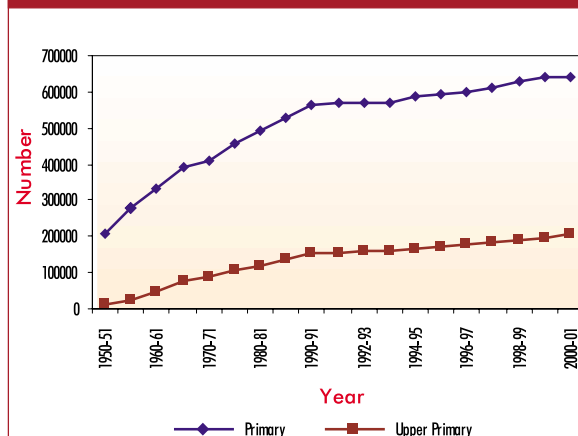
access or even access to quality education. We refer to physical or spatial access to primary and upper primary schooling infrastructure, and not to the participation of this infrastructure. Spatial access is perhaps most important since having these facilities is the first step in availing of the services provided.

Between 1950-51 and now, the number of primary schools in India has increased three-fold, from about 210,000 to a little over 640,000 schools by the end of the last century and the number of upper primary schools has increased by almost 15 times from 13,600 to almost 200,000 schools over the same period. Similarly, access to Secondary and Tertiary institutions has also improved over this time. Considerable successes have taken place due to these efforts, particularly in the nineties which has been referred to as a “watershed decade as far as basic education is concerned” (Planning Commission 2001). Figure 4 shows this trend in schooling infrastructure provision.

Across regions, however, this increase in infrastructure has not been even. Standardizing the access across the states in terms of area coverage, we find that some states are better endowed and better served with school facilities than others. We can see from Figures 5 and 6 that access to primary schooling is quite substantial in most of the states with 75 to 95 percent of villages across these states having a primary establishment within the village itself.

Under the new school mapping exercise undertaken as part of the SSA framework, the norms suggest that

Figure 4 Number of Recognised Primary and Upper Primary Schools in India

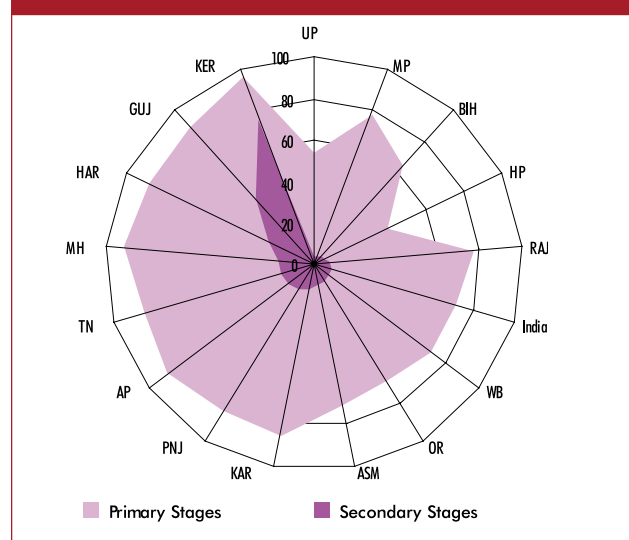


Source: MHRD

there should be a primary school within 1 km of any habitation with a population of 300 or more¹⁰ and that there should be an upper primary within 3 km of any habitation of 500 or more. In the mid-nineties, over 94 percent of all habitations had a primary school within 1 km of it. The two figures above depict the tremendous variation across states in their coverage and accessibility to primary and secondary schooling infrastructure. Many states have almost succeeded in meeting this 1

¹⁰ The SSA being a centrally sponsored scheme, while the conceptualization of the framework would have been prepared in consultation with the states, it merely provides a framework with which the states can act, some states have used a norm of 200 per habitation instead of the 300 stated above, for example,

Figure 5 Statewise percent of villagers served with schools



Source: MHRD

Figure 6 Percent of Rural Habitations with primary schools within and a distance of 1Km

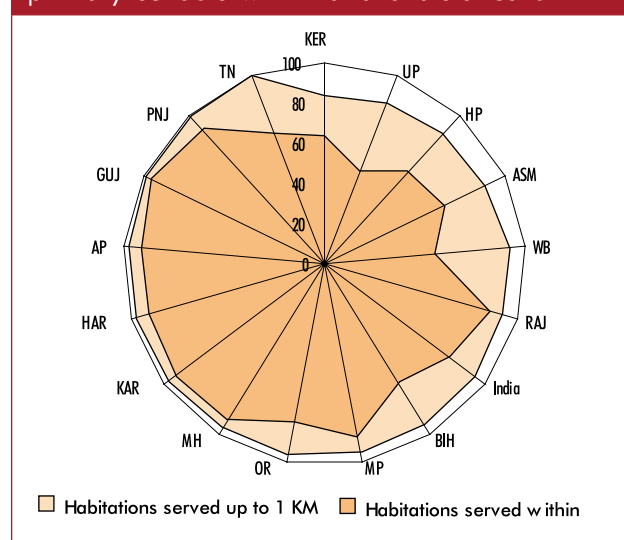
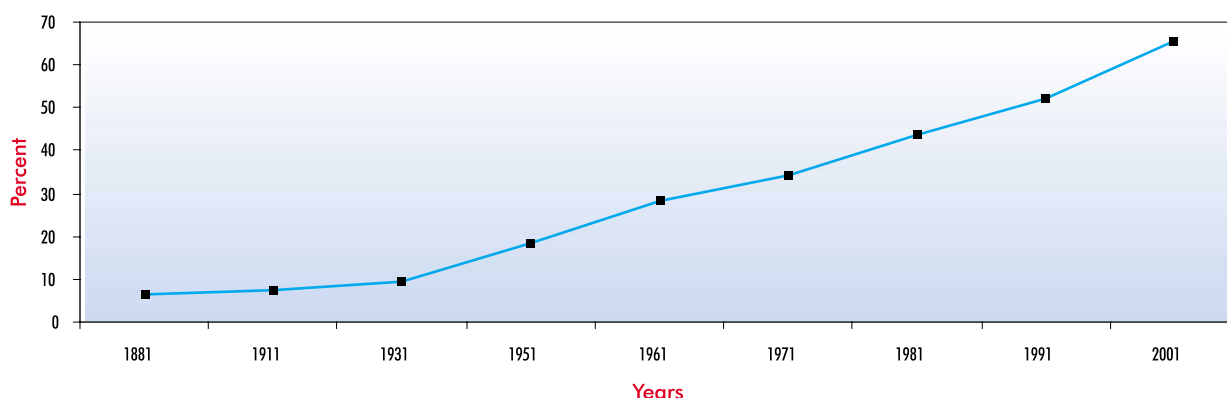


Figure 7 Literacy Rates for Selected Years (1881 - 2001)



km norm, for example, Tamil Nadu, states that 98 percent of its habitations of 300 or more are now served with a primary school within 1 km of the habitation. However, states like Uttar Pradesh, Bihar and West Bengal still seem to be a considerable distance from reaching this target.

Outcomes in Literacy, Enrollment and Completion

Literacy rates in the country have increased from 18.30 percent to 65.38 percent between 1951 and 2001 as shown in Figure 7. In the nineties alone, literacy rates appear to have increased by about 13.51 percentage points.

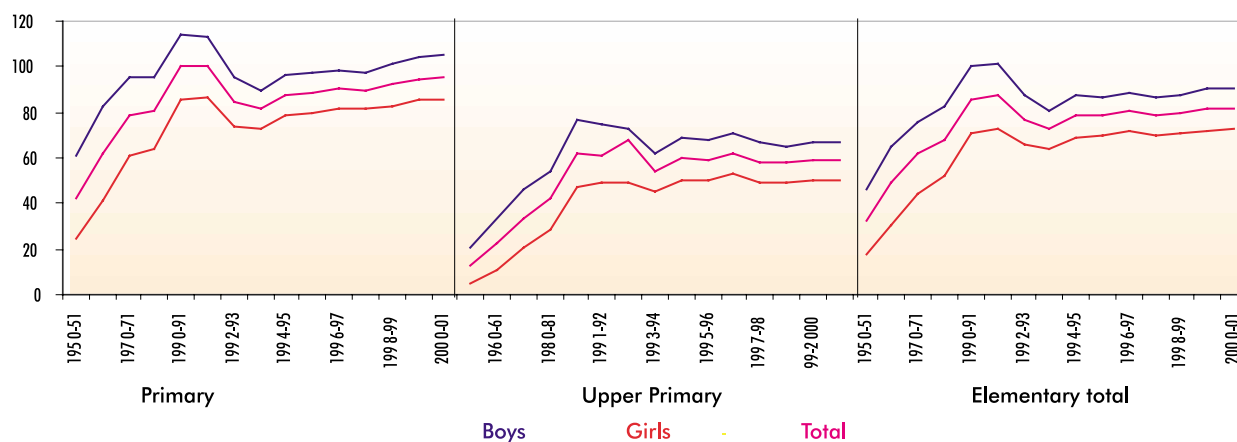
Universal literacy, however, is still a distant dream, and there continues to be sharp discrepancies across regions, and between gender, social and economic

groups. Notwithstanding the considerable successes that have taken place, nearly 300 million people in the 7+ age group are illiterate.

Figure 8 shows that GER has been increasing over the years, and that GERs are higher in primary schools than in upper primary schools. GERs were highest during the late 1980s and early 1990s. However, a weakness with GERs as a measure is that both over-age, and under-age admissions are included in the estimates.

To address these concerns and to obtain a more disaggregated picture of enrollment, Net Enrollment Ratios (NERs) or the Age Specific Admission Ratios (ASAR) are presented in Figures 9 and 10 for primary and upper primary schooling respectively. ASARs have definitely increased between 1986/87 and 1995/96 (and between 1992/93 and 1998/99) at both the primary and

Figure 8 GER in Elementary Education - 1950-51 - 2000-2001



Source: MHRD

Figure 9 Primary Net Enrollment Rate for 6-10 years

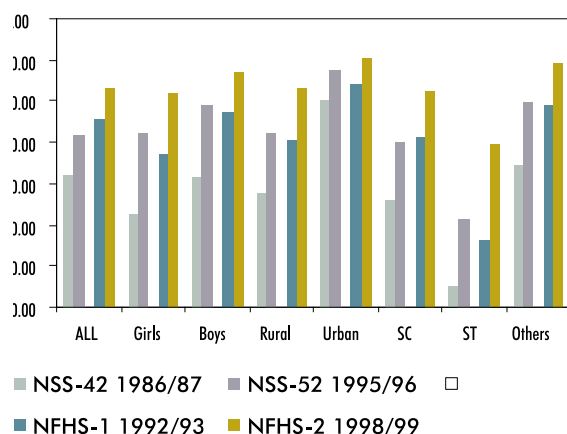
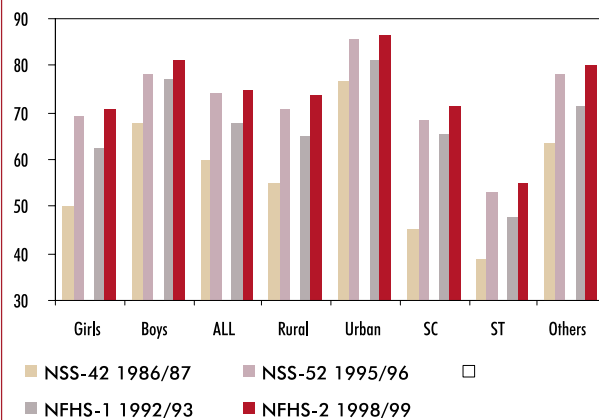


Figure 10 Upper Primary Enrollment ASAR - 11-13 years



the upper primary level as is evident from the survey results.

The increase in NER has been higher for primary grades than for upper primary grades. The disparities in NER between gender, social communities and area (location) have also been lower for the primary grades than for the upper primary grades. Both sets of data reveal that ASARs have increased, but they also reveal considerable discrepancies across gender, urban and rural residents and across social groups. Average figures masks considerable variation at higher levels of disaggregation.

Girls enrollment at the primary and upper primary level increased by almost 20 percentage points between the two rounds of the NSS and has grown faster than boys

enrollment, thus helping narrow the gap. Primary and upper primary enrolment in rural areas has increased substantially, as has enrolled in these two levels of SC and ST children. Changes in SC enrollment in the primary and upper primary level from the NSS data sets shows a 15 and 22 percentage point gain across the two data sets. The NFHS datasets reveals more modest gains in enrollment. ST student enrollments across the two NSS dataset also reveals fairly substantial gains in both primary and upper primary levels amounting to about a 20 and 18 percentage point gain across these surveys.

As in the case of enrollments, completion rates have also been increasing, and are higher at the primary level compared to the upper primary levels. These are

Figure 11 Primary Completion Rates (for 10-12 years)

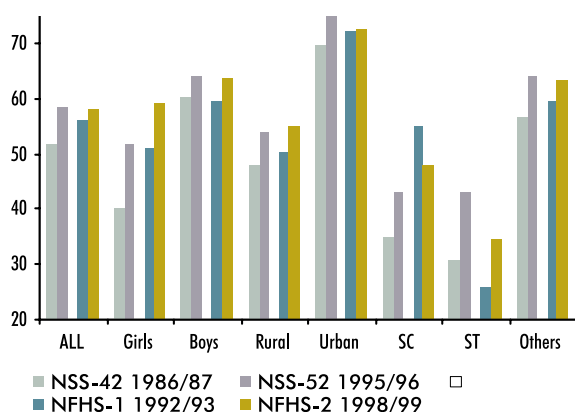
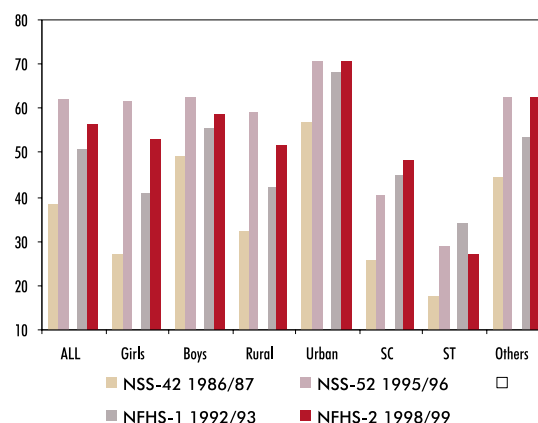


Figure 12 Upper Primary Completion Rates (for 13-16 years)



illustrated in Figures 11 and 12 respectively.

Substantial gains in completion rates at the primary level are seen for girls, SC students and ST students from the NSS-42 and NSS-52 surveys. The NFHS1 and NFHS2 however do not reveal the same gains with regard to SC and ST completion at the primary and upper primary levels respectively, and instead show a fall in completion rates for these groups.¹¹

Overall, the picture is that of an improvement in schooling attendance and completion rates over the periods under reference and across all groups. While the overall disparities across gender, space and community is visible, the range and spread variations and improvements across states need to be carried out to address the micro-level issues in educational parameters.

There are many studies that have looked at the determinants of school participation using various surveys; for example, the studies by Duraiswamy and Duraiswamy (1991), Kingdon (1994, 1996, 1998), Jayachandran (1997), Sipahimalani (1998), Dreze and Kingdon (1999) etc. Their studies have brought out the important supply side and demand side factors that influence the school participation in India. However, this paper is not an attempt to duplicate their studies, rather, keeping those results in mind, it tries to bring out the various inequities in the school participation and attainment as evident from the recent household surveys. The results help to focus on the targets where the school participation determinants are to be improved.

¹¹ This comparison might not be strictly valid considering that the validity of estimates on completion rates from NFHS1 were in question. For the purposes of this study, completion rates are defined as proportion of the relevant age group (10-12 years for primary and 13-15 years for upper primary) that complete primary and upper primary school.

SECTION 2

EQUITY ACROSS SPACE

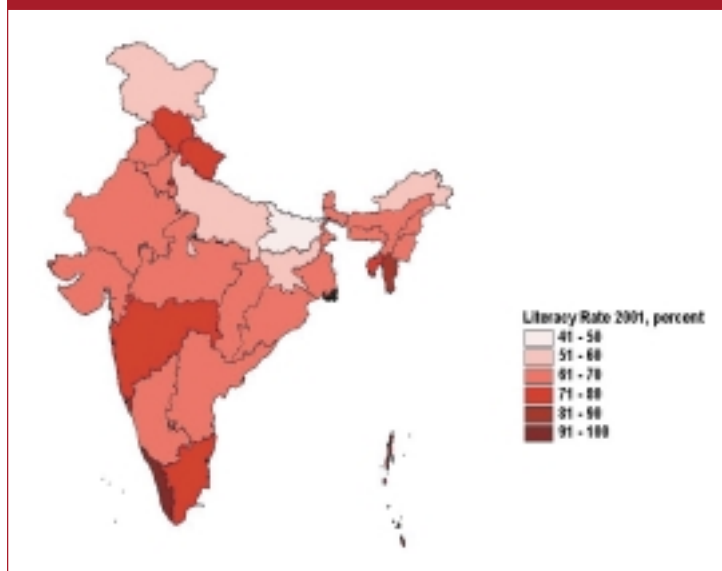
Spatial equity can be broadly classified under two separate categories, (i) urban-rural disparities and (ii) disparities across regions, districts, *taluks*¹, villages within a state and across states. Spatial equity issues relate the geographical access and achievement issues, and hence highly related to the provisions of the education facilities.

Although both the number of habitations, and the population of the country has increased steadily over the years, by 1993/94 over half the villages in the country had a primary school within the village, and about 83 percent of all habitations had a primary school within one kilometer of the habitation (Planning Commission 2001). Although tremendous progress has been made in the 9th FYP, there are presently at least 100,000 habitations that do not have a school within the prescribed norms; there are still many out of school children in these underserved communities; drop out rates are also very high in these areas and completion levels are much lower.

Regional Disparity in Literacy

Any regional analysis of education should start with an understanding of the patterns of the literacy rates in the regions since the literacy rates is an indication of the general education standards of a locality. Since the nationwide averages mask stark disparities across states, and across districts, it is important to look at regional disparity in education. Bihar continues to be the state with the overall lowest literacy rates in 2001, with a literacy rate of about 48 percent, while Kerala continues to be on the other end of the spectrum with a literacy rate of almost ninety percent. Further disaggregating provides evidence of significant within-state variations. For example, the district of Dantewada in Chhattisgarh reports a literacy rate of only 30 percent, while the district of Rajnandgoan (also in Chhattisgarh) reports a literacy rate of 77.58 percent. Figure 13 presents a picture of the literacy rates across the various states.

Figure 13 Literacy Rates Across Indian States, 2001



Source: India Census 2001

Overall literacy increased unambiguously across all states between 1991 and 2001, with the states of Rajasthan and Chhattisgarh, showing an increase of over twenty percentage points during this period. In four districts however, literacy rates seemed to have declined during the period, although these are in states very high initial rates of literacy. These include districts in the states/UTs of Kerala, Tamil Nadu (in fact, the capital city – Chennai), Daman and Diu and Pondicherry.

Rural-Urban Disparities

Literacy rates also vary considerably across rural and urban locations. Across all rural and urban areas of India, the literacy rate varies between about 50 percent and 70 percent respectively. Rural literacy rates in Uttar Pradesh and Bihar are about 43 and 35 percent respectively, while urban rates are about 60 and 61 percent respectively. These wide discrepancies in literacy across rural and urban areas often mirror the wide discrepancies in access to schools across these regions as well.

¹ An administrative unit like block consisting of many villages.

Spatial Variations in Enrollment

Variation Across States

Coming specifically to the education indicators, it could be seen that there is considerable variation in ASAR for 6-10 year olds across the states. For example, Kerala, Tamil Nadu, Maharashtra, Punjab and Haryana have almost achieved universal ASAR in this age group, while states like Uttar Pradesh, Bihar, Orissa and Rajasthan are still lagging behind. Even these seeming enormous statewide variations are considerably narrower than they were at the start of the nineties. The growth in ASAR has been slower in the better performing states like Punjab, Haryana, Tamil Nadu and Kerala (due to the high ASAR base, there is limited scope for improving ASAR over time), and higher in the poorly performing states like Rajasthan, Bihar, Uttar Pradesh and Orissa (due to the low ASAR base to start with, even a slight improvement has a greater growth value to it in these states). For example, the ASAR for 6-10 year olds in Bihar more than doubled from 30 percentage points to 62 percentage points between 1985/86 and 1998/99, the two most extreme surveys temporally². State-level variations in ASAR are also evident for the 11-13 year old cohort. There is almost a 35 percentage point difference between the best and worst state-level ASAR in Kerala (97.59 percent) and Bihar (64.28 percent) respectively. Gujarat is the only state that shows a decline in ASAR between the NFHS1 and NFHS2, all other states show an unambiguous increase in ASAR between these two surveys. From the NSS 42nd and NSS 52nd rounds, we find that the difference between the best performing (Kerala) and the worst performing state (Bihar) in terms of ASAR has reduced to almost 40 percentage points from an almost 50 percentage point difference between the same states in the 42nd NSS Round.

Urban –Rural Variations

Figures 14 and 15 show ASAR for 6-10 year olds and 11-13 year olds from the NFHS II by region of residence, i.e., urban and rural. Data from the two sets of surveys, suggests that ASARs across rural and urban areas for the 15 major states, have narrowed considerably within the state and across states. In all states the gap between ASAR in rural areas and ASAR in urban areas in the 6-10 age group has narrowed considerably. Rural-urban differences in

Figure 14 : Rural-Urban Difference in ASAR for 6-10 years old - 1999



ASAR across states are not uniform, the differences in high performing states, like Kerala, Haryana, Punjab and Tamil Nadu, are markedly lower than the differences in lower performing states like UP, Rajasthan and Bihar. However, even in the states with wider regional disparities, the continued gap seems to be more a function of their base line, as there has been a considerable narrowing of the urban-rural gap in enrollments. This therefore suggests greater thrust in on-going efforts to reduce and rationalize these disparities. For example, in Andhra Pradesh the urban-rural gap has declined for 6-10 year old enrolment from about 25 percentage points in the NFHS-1 round (1993/94) to a little less than 8 percentage points as per the 1998/99 NFHS-2 datasets. In Bihar, across the same two datasets, the urban-rural gap has declined from about 30 percentage points to about 16 percentage points. The results in Orissa are quite staggering across the two NFHS surveys with a decline in the urban-rural enrollment gap from about 15 percentage points to almost no statistical difference. The results clearly suggests that the urban-rural gap has decreased in many states although the decreased across states has not been uniform.

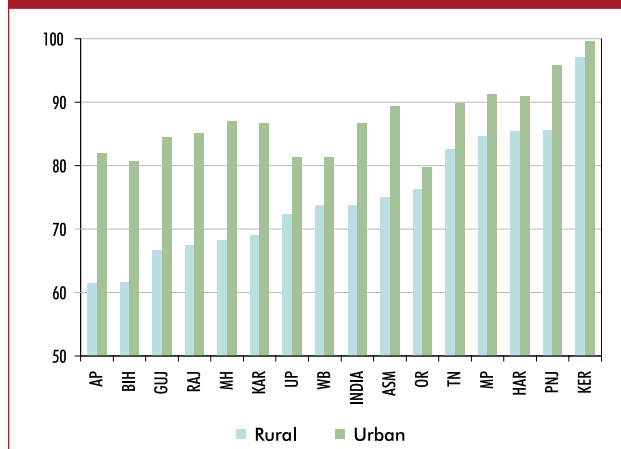
Enrollment in the 11-13 year old age groups also display considerable narrowing of the gap between urban and rural regions, although the changes have not been as dramatic as the changes in the 6-10 year old category. Enrollment of 11-13 year olds has increased steadily across the two sets of data. The urban-rural gaps in

² Though these surveys are not strictly comparable, there is an unambiguous rise in enrollment rates across the country across these two sets of data.

11-13 year old enrollments have also diminished over the same periods, although a sizeable and persistent gap remains in some of the states. The urban-rural gap has closed much faster in the lower performing states as compared to the higher performers. A similar examination of older cohorts suggests that urban-rural disparities are higher for older cohorts. The fact that even the 11-13 year old group displays relatively high urban-rural differentials, although this has narrowed considerably for the 6-10 year old cohort, suggests that the intensive focus of expanding access to primary and upper primary education through a number of recent schemes finally appears to be providing results.

The successes at the primary level is increasing the pressure at the Upper Primary level and in the demand for secondary and higher education. Why are there such discrepancies across districts and states? The possible reasons for such differential educational outcomes across and within states are numerous. For example, some of these factors could be classified as (a) historical, (b) political factors, and (c) economic and development factors. Historical factors include the roles of previous rulers, the damages and contributions made by the colonial legacy; the political factors include the role of democratic governments, the focus of state governments in terms of social sectors such as health and education, and the level of state level spending; and finally, economic and development

Figure 15 : Rural-Urban Difference in ASAR
11-13 years olds - 1999

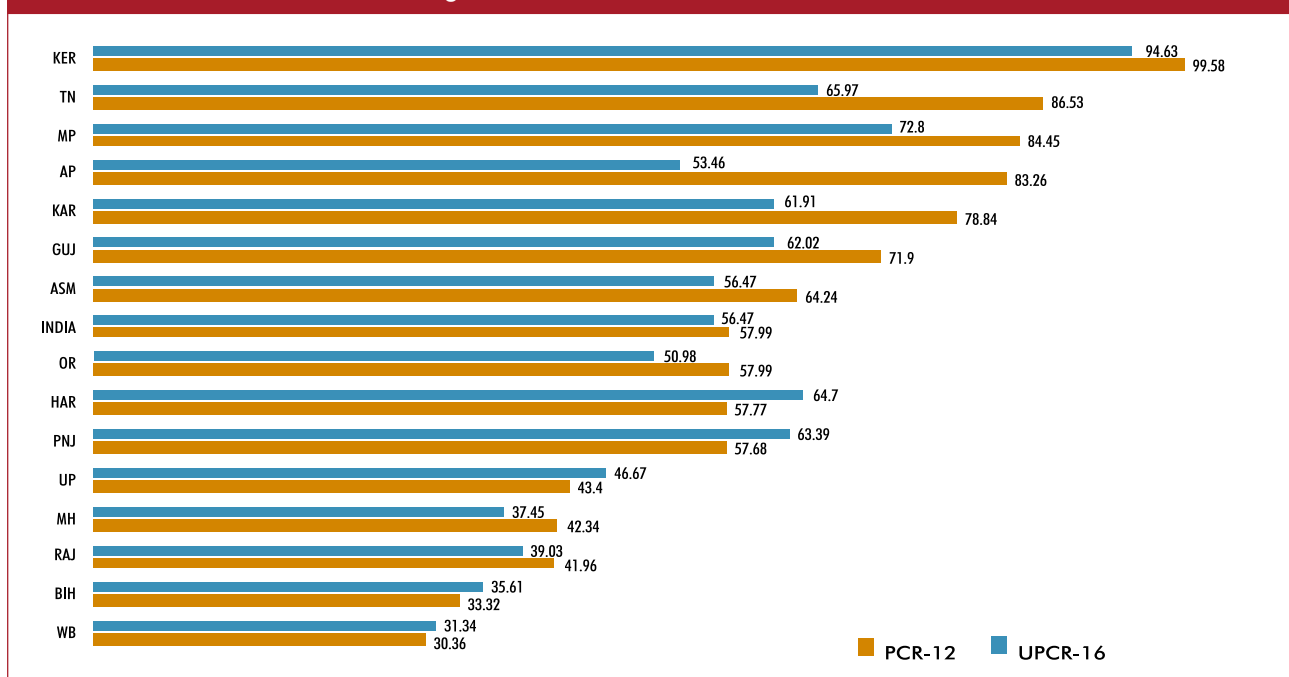


factors includes the development of the state in terms of economy, industry, service sectors and equity in terms of rural-urban divide etc. These factors play a key role in improving participation rates as witnessed positively in Kerala, Tamil Nadu, etc., and in poor outcomes in states like Bihar and UP.

Spatial Variation in Primary Completion Rates (PCRs) and Upper Primary Completion Rates (UPCRs)³

There are significant differences in PCR and UPCR across the states. This is illustrated in Figure 16.

Figure 16 : PCR and UPCR - 1999

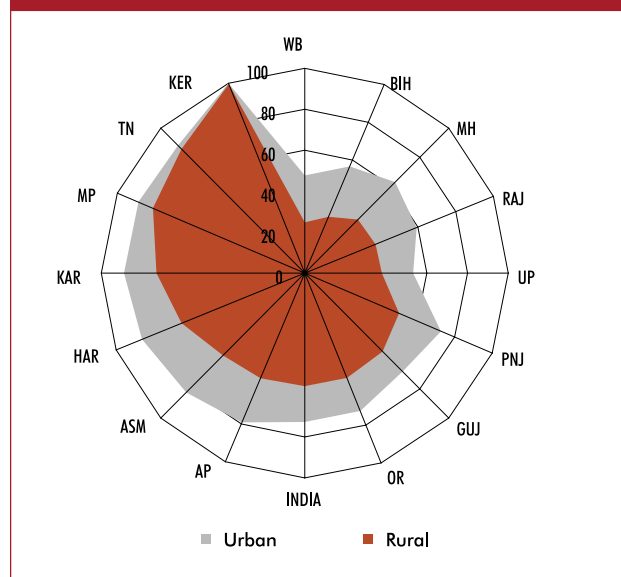


There are six states with PCRs lower than 50 percent—that is, only one out of two children enrolled in class 1 completes primary education: Orissa, West Bengal, Madhya Pradesh, Uttar Pradesh, Bihar and Rajasthan. PCRs and UPCRs in Kerala are well above 90 percent. Completion rates in ASAR-wise better performing states like Kerala, Maharashtra and Tamil Nadu are high, and in lower performing states like Bihar, Uttar Pradesh and Rajasthan, completion rates are very low. With increasing PCRs and UPCRs, there will be a growing need to meet demands for entry into the secondary and higher cycles of educations in the higher performing states and for access to Upper Primary facilities in the states that are now increasing their PCRs. The gap in PCRs and UPCRs is however very large across the states as illustrated in Figure 16. This gap needs to be eliminated and states like UP, Bihar and Rajasthan need to adopt strategies that will not only help enroll children in schools as they have done in the last couple of decades, but also keep them through the elementary cycle at the very least. The factors that lead to high dropouts and poor retention are further analyzed in the multivariate analysis in Section 7. In the case of UP, educational management problems have been cited as a key factor in the poor performance of the state⁴. Efforts to improve matters of governance as it pertains to the education sector at the state and lower levels are already underway in some of the more reform minded states with states like AP and Karnataka taking some very clear policy positions on matters such as transfers and redeployment of teachers.

Urban-Rural Differences in Primary Completion

Primary school completion rates (PCR) have been computed for 12 year olds using the NSS and NFHS data sets for both rural and urban areas in each major state studied here. In Kerala, Maharashtra and Tamil Nadu, for example, both enrolment and completion rates are very high. In other states, enrolment may be high, but completion may only be moderately high (such as in Punjab⁵), and in yet others, both enrolment and completion may be relatively low, such as in Uttar Pradesh and Bihar. Gender disparity in PCR is evident for some of the states like Uttar Pradesh, but only in rural areas. In urban Uttar Pradesh, although completion rates are very low, there is no clear cut disparity between PCRs for men and women. In Bihar, there are significant disparities across both gender and rural-urban differences. Completion rates for rural

Figure 17 : PCR of 12 years



women are about half of the completion rates urban women, and the completion rates for rural women are significantly lower than those for rural men. Urban women too display lower completion rates than urban men in all the datasets, except for the NFHS 2 survey where urban women seem to have a higher completion rate.

Primary school completion rates (PCR) have been computed for 12 year olds from both the NSS and NFHS data sets for each year available. This is illustrated in Figure 16. In Kerala, Maharashtra and Tamil Nadu, the PCRs were high, especially in accord with their high enrollment rates. In other states, enrolment may be high, but completion may only be

³ Completion rates for primary schooling is defined as the ratio of the number of 12 year olds who have completed primary schooling to all the 12 year olds in the population.

⁴ In a recent interview with the Times of India, the Indian Minister for Human Resources Development, Mr. M.M. Joshi, cited the frequent transfers of individuals involved in the state's education ministry as one of the reasons for the poor performance. Interestingly, while the Center can acknowledge this problem, its hands are tied because the decision on transfers and personnel related issues in education falls under the jurisdiction of the State government.

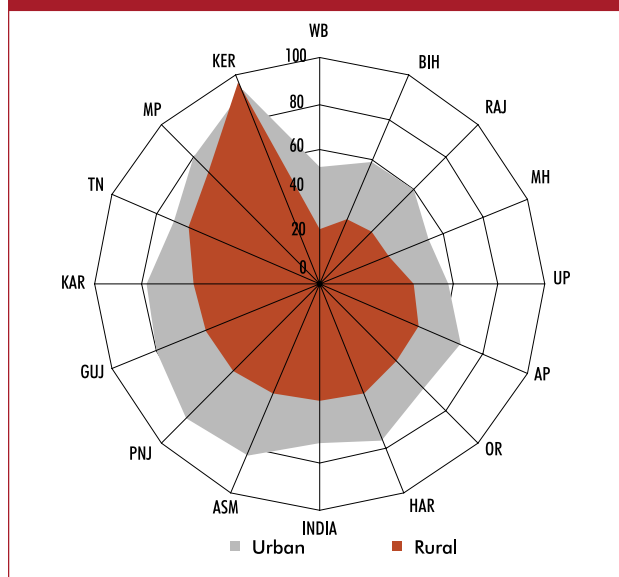
⁵ In Punjab, the NSS data reveals that completion rates improved by almost 17 percentage points between the 42nd and the 52nd Rounds. However, the NFHS 1 and 2 datasets reveals that completion rates have actually fallen. The rural completion rates from NFHS 2 are much lower than even the NFHS 1. This is not easy to explain.

moderately high (such as in Punjab⁶), and in yet others, both enrolment and completion may be relatively low, such as in Uttar Pradesh and Bihar.

UPCRs have also been computed for 16 year olds completing middle school from both the NSS and the NFHS data sets. These are illustrated in Figure 18. The urban-rural differentials in UPCR are quite significant. Interestingly, completion rates also seem to be higher in rural areas of Kerala than in urban areas. In states like Bihar, Uttar Pradesh and Rajasthan, completion rates in rural areas are much lower than completion rates in urban areas.

UPCRs are very high in Kerala while for most other states the UPCR are considerably lower than the PCR. This sharp fall in completion rates for many states is indicative of poor access to Upper Primary facilities, whether that access be physical, economic or socio-cultural in nature. While increasing completion rates at the primary level has increased the demand for upper primary, the ability of students to progress from one to another is not seamless and efforts to bridge this divide are necessary. It is expected that the new framework proposed and initiated by the GoI, the SSA, will address this issue as upper primary education has been brought within the fold of this program. The urban-rural divide in PCRs and UPCR will require both physical and qualitative inputs to ensure its closure. While the physical input requirements are being met through the on-going school mapping exercise, the greater challenge will be to enhance the quality in the provision of primary and upper primary education services.

Figure 18 : UPCR for 16 year olds - 1999



The analysis of spatial diversity in education participation and completion so far has clearly brought out the rural-urban disparities and disparities across states in the schooling parameters.

The issue of spatial equity is being addressed quite markedly under the new government initiative, the SSA. Under this program, a school mapping initiative has been undertaken with the objective that there should be a primary school within one kilometer distance of any habitation in the country with a population of 300 or more⁷. Upper primary institutions are to be located within 3 kilometers of a habitation of 500 or more people⁸.

⁶ In Punjab, the NSS data reveals that completion rates improved by almost 17 percentage points between the 42nd and the 52nd Rounds. However, the NFHS 1 and 2 datasets reveals that completion rates have actually fallen. The rural completion rates from NFHS 2 are much lower than even the NFHS 1. This is not easy to explain.

⁷ While the population of 300 is a central government stipulated norm, many states have set the bar a little higher and have insisted that there should be a school within a kilometer of any habitation with a population of 200 or more.

⁸ While these norms have been followed quite rigorously in many states, they are often relaxed in hilly terrain or other inaccessible areas.

SECTION 3

EQUITY ACROSS SEXES

As stated earlier, gender equity refers to the disparities in opportunities of the traditionally disadvantaged gender group, i.e., females, compared to males, in their literacy levels, access to various levels of schooling, participation and completion. In this section gender-related discrepancies in literacy, enrollment and completion are presented. A persistent and significant gender gap is an unfortunate feature of the education sector in India and is evident in all indicators pertinent to education, such as, literacy, enrollment, retention, dropouts, and learning achievements. When combined with other factors, such as, socio-economic classes or region of residence, this gender gap typically tends to widen even further¹.

Gender Disparity in Literacy

The number of literates in the country has increased by ten-fold, from 52 million to about 570 million literates since 1950. However, during this time the number of illiterates in the country in absolute numbers has also increased. The number of illiterate males and females in India today stands at a staggering 191 million and 269 million respectively. Figure 19 shows the male and female illiterate population in the country between 1981 and 2001. So while there have been considerable improvements in literacy and the provision of education, population has increased at a faster rate, adding to the number of illiterates.

Provisional results from the National Population Census (2001) suggests that over three-quarters of the male

Figure 19 : Number of Non-Literates by Gender (1981 - 2001)

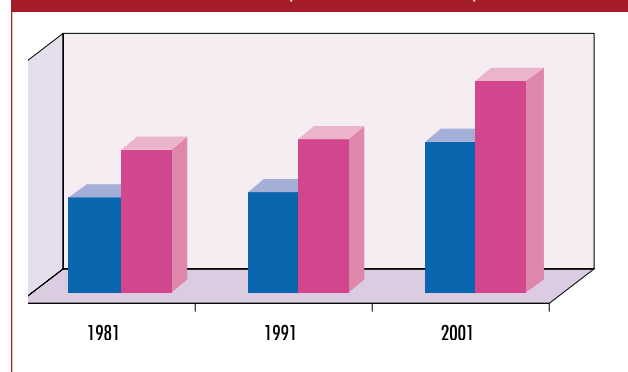
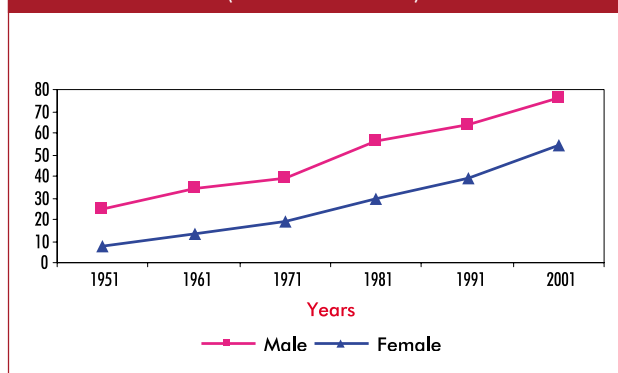


Figure 20 : Literacy Rates by Gender (1951 - 2001)



population today displays functional literacy, while about half the women are said to be literate. In 1951, less than a tenth of the women were said to be literate and only about a quarter of the men were considered literate. The gender gap widened initially and now with a concerted effort by the Central and State Governments, this gap has started to narrow towards the end of the last decade as illustrated in Figure 20. A little over a third of the non-literate population can be found in UP, Bihar and Orissa². The gender gaps in literacy are reflective of the poor base from which efforts to improve this began, and is a function of the continued poor enrolment and completion of girls in the primary cycle. Though the gender gaps in both enrollments and completion have narrowed over the years, they have not completely closed and particularly in states like UP, Bihar and Rajasthan, which also have large populations.

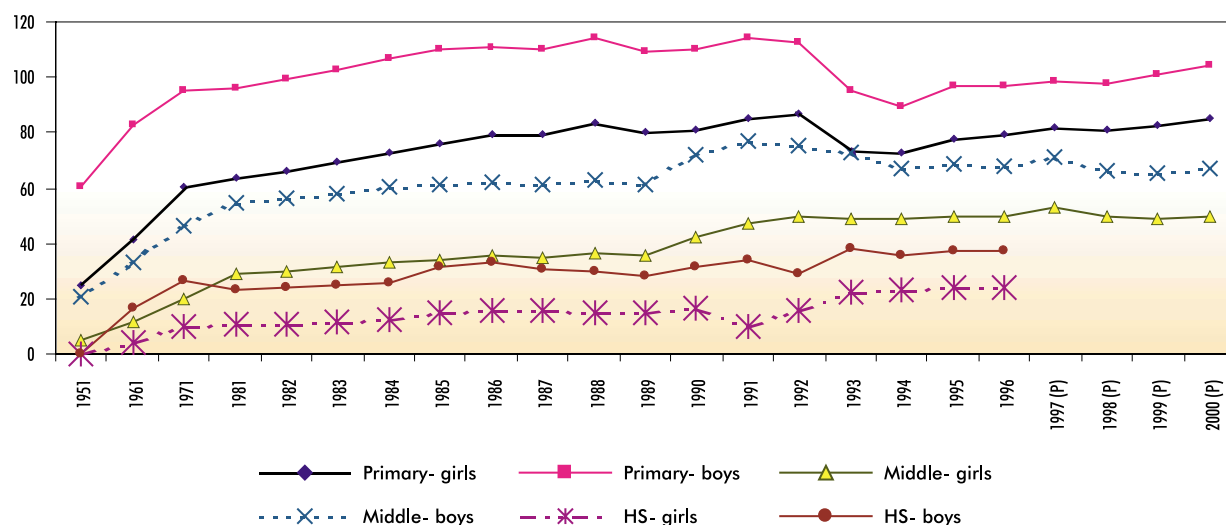
Gender disparities in enrollment

The participation of girls in education in India has increased unambiguously since independence across all levels of education. This can be seen from Figure 21. The percentage of girl's enrollment to total enrollment has increased from about 28 percent in 1951 to a little under

¹ The only exception is in high school pass rates in standardized tests (10+2 examinations) in the major metropolises where girls out-perform boys very consistently.

² Not taking into account Uttaranchal and Jharkhand.

Figure 21 : Enrolment Rates - Girls and Boys



Source: Ministry of Statistics and Programme Implementation

44 percent in 2001 in primary schooling, and from 16 percent to 41 percent in Upper Primary, from 13 percent to 39 percent in Secondary and Higher Secondary, and from 10 to 37 percent in higher education over the same period. In terms of absolute numbers, girls enrolment has been consistently lower than that of boys over this period across all levels of education.

By the late nineties most states had achieved GERs of nearly 100 percent for boys, and for girls many had exceeded GERs of 80. The two worst performing states, Uttar Pradesh and Bihar, had girls GERs of about 49 and 59 percent respectively. While some states were close to achieving parity between boys and girls (for example, Tamil Nadu, Kerala, and Maharashtra) for many of the states there remains significant gaps between male and female enrollment. For example, GERs for boys in Bihar was around 90 percent, while GERs for girls was about 59 percent, similarly the GER of boys in Uttar Pradesh was 75 percent in contrast with the GERs for girls which was about 49 percent.

The gaps between boys and girls in ASAR for the 6-10 year old as evident from the recent most household survey of NFHS II (1999) is illustrated in Figure 22. The gaps in enrollment are quite large for the states of Bihar, Uttar Pradesh, Rajasthan, Orissa, and Madhya Pradesh. On the other hand, Kerala for seems to show a higher girl's ASAR than for boys. The differences in enrollment between boys and girls for the states of Andhra Pradesh, Gujarat, Haryana, Punjab,

Maharashtra, West Bengal and Tamil Nadu are not very large. A key observation that needs to be made from this graph, is that the average discrepancy in all of India is considerably high amounting to almost 20 percentage points. This almost entirely reflects the discrepancies in the five poorly performing states listed above, which also happen to be large states in terms of their populations, and thus the combination of poor performance and large size in these states offsets any positive developments in the other states and renders the overall performance as quite poor.

Figure 23 shows gender disparities in enrollment for an older cohort of 11-13 year old children for Upper Primary classes. The disparities across gender widens

Figure 22 : Gender disparities in ASAR of 6-10 years old - 1999

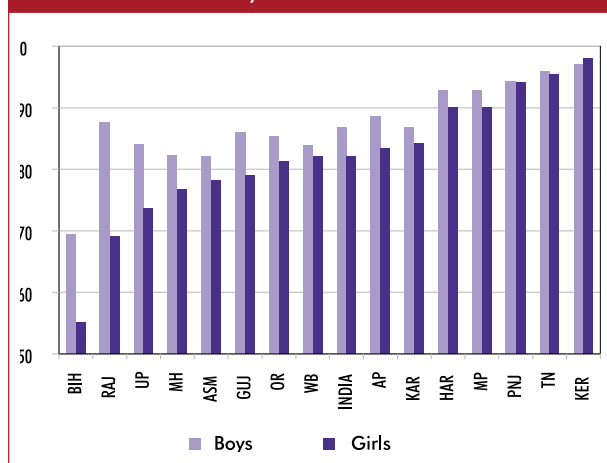
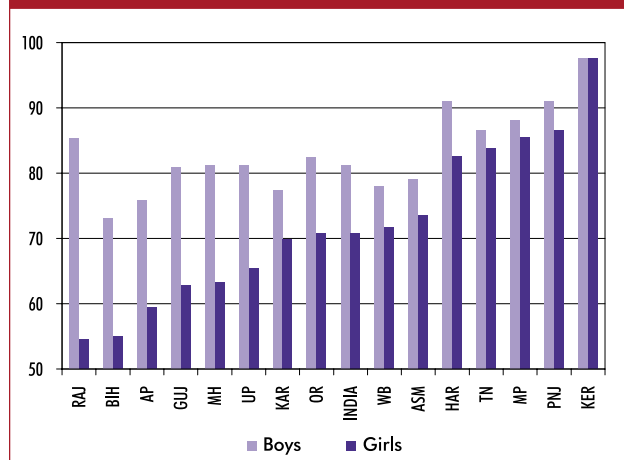


Figure 23 : Gender Disparities in ASAR of 11-13 years old - 1999



at this higher level enrollment suggesting that the retention rate among boys is higher than for girls, and that more girls drop out of the educational system during the transition from Primary to Upper Primary classes. This is true in almost all states except for a few, such as, Kerala, Punjab, Assam and Haryana. The disparities in Bihar, Rajasthan and Uttar Pradesh at this level are tremendous. The graph also illustrates that the girls find it more difficult to make a transition across the barriers between Primary and Upper Primary schooling.

Further disaggregating the available information to look at enrollments across different age groups, by gender and by the location of residence, i.e., urban or rural resident, illustrates the vulnerable nature of girls in general, and in particular the vulnerable nature of rural girls. Rural girls have the lowest ASAR across all possible categories, viz., rural girls, rural boys, urban girls and urban boys, across all four surveys. The sole exception is in Kerala from the NSS 52nd Round, where rural girls enrolment exceeds enrolment for urban girls by 1 percentage point. For the better performing states, such as Kerala, Maharashtra, Punjab, Haryana, and Tamil Nadu, the differences between ASAR for 6-10 year old girls across urban and rural areas has decreased over the years. For example, the 1985/86 NSS 42nd Round survey finds that about 85 percent of the girls aged 6-10 years old in urban areas of Punjab, attended primary school, while only about 62 percent of girls of the same age, living in rural areas of Punjab attended primary school, and in the 52nd Round, these numbers were 86 percent from urban areas and 83 percent from rural areas. The NFHS also reveal a similar trend. The gap between urban and rural boys

and girls decreases between the two rounds. This suggests a considerable expansion of schooling access in rural areas relative to the expansion of access in urban areas in these well performing states. Among the poor performers also there is an unambiguous convergence between rural and urban disparity by gender, although evidence from the NSSs 42nd and 52nd rounds negate this for UP, Bihar and Rajasthan where the urban-rural gap in enrollment widens for girls. This widening is a cause for concern and needs to be studied more carefully. Numerous attempts have and are being made with internal and external support to ensure that girls not only have equal access to schooling, but have preferential access to schooling as a part of a disadvantaged group. The widening of the gap would suggest that these efforts are not paying off and need the design of these interventions need to be revisited.

Primary Completion Rates Across Gender

Primary completion rates across gender varies widely across the states, and within the states across rural and urban regions. The different surveys show that there are fairly wide discrepancies between the percentage of boys and girls completing primary schooling depending on the state where they live and on the region of residence.

West Bengal shows very poor completion rates in rural areas in the NFHS 2 survey with just a fifth of all women reporting completion, while about a fourth of all men, and of men and women combined, reporting the same. The discrepancies across the rural-urban divide are much greater than the discrepancies across gender. Across all four surveys, the difference between rural women and urban women in terms of primary completion varies between 13 and 30 percent, while the difference in primary completion between rural and urban males varies between about 15 and 30 percent. The differences between men and women on the basis of their region of residence varies between 2 and 14 percent, including from the urban areas of the NSS 42nd round and the rural areas of the NFHS 1, where the percentage of women completing primary schooling is higher than that of men completing primary schooling.

In most of the poorly performing states, the discrepancy in completion rates across men and women is higher in rural areas than it is in urban areas. For example, discrepancies in completion rates between rural men and

women in Bihar, Rajasthan and Uttar Pradesh varies between 11 and 30 percent, 20 and 28 percent, and 10 and 28 percent respectively. The discrepancies between male and female completion rates in urban areas of the same states are between 3 and 20 percent, 2 and 24 percent and 2 and 8 percent in Bihar, Rajasthan and Uttar Pradesh respectively. Gender disparity in PCR is evident for some of the states like Uttar Pradesh, but prominently in rural areas. In urban Uttar Pradesh, although completion rates are very low, there is no clear cut disparity between PCRs for men and women. In Bihar, there are significant disparities across both gender and rural-urban differences. Completion rates for rural women are about half of the completion rates urban women, and the completion rates for rural women are significantly lower than those for rural men. Urban women too display lower completion rates than urban men in all the datasets, except for the NFHS 2 survey where urban women seem to have a higher completion rate.

In the best performing states like Kerala, Tamil Nadu and Maharashtra, there has been a convergence in completion rates both across the sexes and across region of residence. While in both Tamil Nadu and Maharashtra the earlier rounds of both data sets depicted fewer women completing primary schooling in rural areas compared to the men from these areas, the more recent surveys indicate near parity in male-female completion in both urban and rural areas. In addition, the gap in completion between urban and rural residents has also narrowed considerably.

Upper Primary Completion Across Gender

Upper primary completion rates are significantly lower than primary completion rates across the country, except in Kerala where both primary and upper primary completion rates are very high. Upper primary completion varies widely across gender in almost all the states, and within the states across rural and urban regions. The different surveys show that there are fairly wide discrepancies between the percentage of boys and girls completing upper primary schooling depending on the state where they live and on the region of residence. In Uttar Pradesh, for example, upper primary completion rates in rural areas are low for women across all the data sets, and the urban-rural gaps on female completion are high across all surveys. From the NFHS 2 a little over a fourth of all women reporting completion, while more than half of all men report the same. The gap across the rural-urban divide are much greater for women than for men. Across all four surveys, the difference between rural women and urban women in terms of upper primary completion varies between 27 and 36 percent, while the difference in upper primary completion between rural and urban males varies between about 2 and 11 percent. The differences between men and women on the basis of their region of residence varies between 23 and 34 percentage points in rural areas across all four surveys, and from 2 to 16 percentage points in urban areas across all four surveys. In fact, the NFHS 2 actually shows

Figure 24 : Primary ASAR, CR and Actual CR - Boys

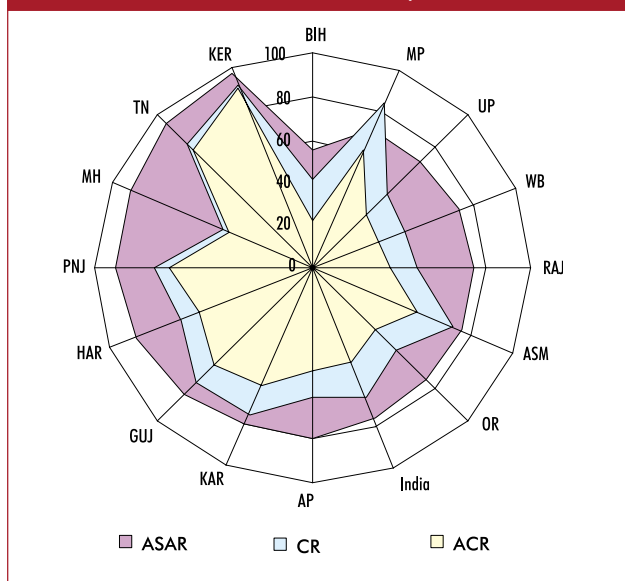
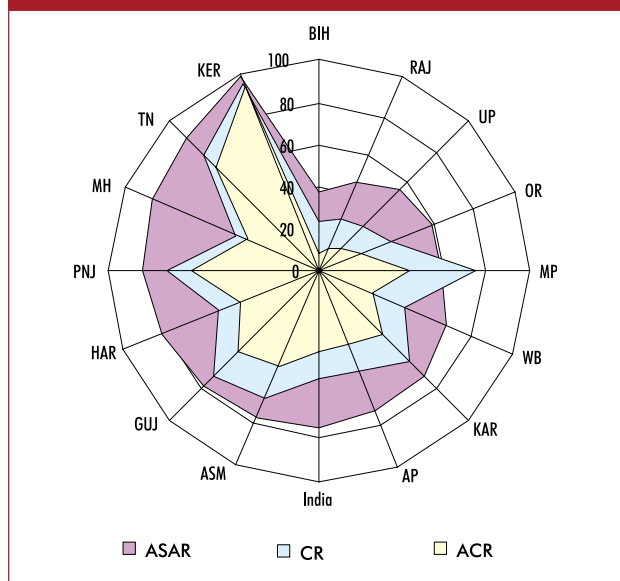


Figure 25 : Primary ASAR, CR and Actual CR - Girls



that in urban areas of UP, the percentage of 16 year old girls completing upper primary school is 4 percentage points higher than for men. While the UP data displays a narrowing of the gap for men between urban and rural areas across all four surveys, in Bihar male discrepancies in upper primary completion does not seem to change much across the surveys.

As already explained in the case of spatial completion rates among the children considered, there is also the case of actual number of girls and boys enrolled and completed. Since the CR is measured on the basis of the GER, the actual CR among all children will be less than the CR as explained earlier in this note. Figure's 24 and 25 shows the CR and actual CR among boys and girls and it shows that the number and percentage of children who complete schooling are indeed low that the non-enrolled and drop outs are quite large.

As seen in an earlier section there are significant variations in literacy across gender groups. Further, disaggregation of data on men and women by where they live, their social caste and their earning abilities, provides insight into how these factors work together to influence educational attainment. The factors contributing to this continued disparity in literacy across gender are numerous and include the poor literacy base from which women started, the continued social, religious, cultural and economic biases against women and their education. Historical factors also play a keen role in the determination of the literacy and/or enrolment status of populations. Economic factors and a lack of interest are often cited as key reasons for girls not being enrolled. The lack of interest is almost certainly a reflection of parental attitudes towards their children, and not the attitude of girls towards schooling. There is evidence from states in India that suggests considerable difference in the attitude of parents towards the education of their sons and daughters. The differences in gender related outcomes stems from differences in decisions on investment arrived upon in the household, and on the value placed on the schooling of boys and girls. Educating boys is seen as an investment since boys are the main source of old age support, while investment in girls' education is seen as a benefit to the family into which she marries, and not her own family. Furthermore, the purpose and value placed in the education of boys is based on the expected earnings or lifetime returns of the son(s) in the future, whereas the value of educating their daughters is traditionally seen on how it improves her likelihood of

marriage³. Other demand side correlates for low enrollment and poor attendance include the number of hours spent on housework, the household size, social caste, literacy status of the head and spouse of head, and main economic activity of the household.

Supply side factors are also very important in determining female enrolment and attendance, and these include quantitative inputs as well as qualitative ones. For example, the proportion of female teachers has been found to be a significant correlate of female student enrollment, the availability of single-sex schools, the distance of the school from the home, and the availability of separate amenities, such as, toilets reserved for girls. This is particularly true for enrollment and attendance for upper primary and middle school students. In addition to these factors, classroom practices are also important. The value placed on the education of girls at the household level (as mentioned above) is also to some extent mirrored in classroom practices, with female students receiving less attention from the teacher than male students.

Numerous programs have been initiated by the governments at the Center and State levels to enhance the enrollment, attendance, retention and completion of female students across all levels of schooling and among all population groups. The results are mixed. While there is no doubt that literacy, enrollment, retention and completion have improved across most states, there are still pockets (fairly sizeable pockets) of tremendous discrepancies across gender. The GoI through its Programme of Action (PoA), 1992, acknowledges the importance of girls education by stating "it is impossible to achieve UEE unless concerted efforts are made to reach out to the girl child". The strategies adopted have included raising community awareness, provision of child care support, transportation support for girls and residential schools, increasing the proportion of female teachers, provision of amenities like a separate girl's toilet in schools, and more direct forms of intervention such as financial support to the household for girls enrolment, notebooks and textbooks provision and uniforms. Different states have even adopted flexible schooling schedules to allow girls to combine household chores with school work.

⁴ *Anecdotally, this is true even for economically well-off households and to those belonging to forward castes.*

SECTION 4

SOCIAL INEQUITIES

Unlike many other countries of the world, where social inequities in access to educational services usually revolves around the access of such services to minority groups, social inequities in India are closely intertwined with the system of castes. Although members belonging to these groups of often lumped either as Scheduled Castes, Scheduled Tribes or Other Backward Castes, in reality there are almost 2000 Scheduled Castes and Tribes in India. Discrimination against under-privileged groups in schooling inputs is endemic in India, although various governments in India have committed themselves to eliminate discrimination across caste lines¹. Such discrimination manifests itself in many ways, for example, the kind of schooling to which children have access, the physical infrastructure in schools based on student characteristics, and to even the direct discrimination of children that exists within classrooms and bureaucracies. This further impacts upon the achievement levels of disadvantaged groups. Given the large number of castes and tribes, intervention that is tailor-made for these sub-groups would likely be needed to see appreciable changes in outcomes.

Social Disparity in Literacy

India has always been identified with its social castes and caste is a fundamental institution of both traditional as well as modern India. Furthermore, caste politics have played an important part in determining the literacy and educational achievements of the country's population to a large extent. The opportunities to attend school and benefit from government programs are critically influenced by social, cultural and traditional perceptions. There is some evidence that literacy and education programs targeted at some of these groups may have had a positive impact, particularly on the participation of scheduled castes and scheduled tribes in schooling activities.

Although the literacy rates by caste groups are not yet available from the most recent census, the results from the 1991 Census reveals that while the overall literacy rate for the country was 52.2 percent, the literacy rate for SCs and STs was only 37.4 and 29.6 percent

respectively. The Census 1991 results however show that this pattern cannot be generalized across all states. For the states of Arunachal Pradesh, Assam, Dadra and Nagar Haveli, and Daman and Diu the overall literacy rates are lower than the literacy rates among SCs. In all states except Mizoram and Sikkim, the literacy rates among STs is lower than the national average. In Bihar, Uttar Pradesh, Meghalaya, Mizoram, and Sikkim, the literacy rates among STs tends to be higher than the literacy rates among SCs. Several studies have confirmed the existence of such wide gaps in educational outcomes across caste groups, like the study by Acharya (2001) on literacy in Maharashtra. Furthermore, districts with large SC and ST populations also show lower overall literacy. The difference between overall male literacy and ST female literacy is almost 50 percentage points.

The lowest literacy rate recorded from the 1991 Census was for ST women in Rajasthan with a little over 4 percent of the women being literate. This compared to a overall literacy rate of about 55 percent for men in 1991. Similarly, ST women in Andhra Pradesh (9 percent) and SC women in Bihar (7 percent) and Rajasthan (8 percent) too show evidence of very low literacy. There is some evidence of students being segregated by castes into different schools. The PROBE (1999) report mentions dalit students in some villages of Mirzapur being sent to government schools, while most high-caste students attend private schools. This could also mean that higher caste families are richer, and spend more to send their children to private schools, but there are signs that an even bigger problem could be emerging on this front. In a short survey of schools in different parts of the country, Ramachandran (2002) writes "there is a divide between the Government Primary School (GPS) located in the *Dalit basti* and the GPS in the forward caste hamlet – only SC students attend the former school, while the latter have very few SC students." This issue has also emerged in focus group interviews with households with members belonging to one of lower castes stating that they were

¹ Tamil Nadu has had much success in eliminating discriminatory practices against groups that were traditionally disadvantaged.

openly advised against enrollment in particular schools on account of their caste, although in household surveys poverty is still identified as the key stumbling block and caste status or tribe status being given much less importance.

Evidence from the PROBE report also suggests that there are considerable differences in schooling infrastructure quality across different regions depending upon the proportion of scheduled caste or tribe members in that population. The report also adds that even in a city like Delhi, there are significant differences in the quality of government schools depending on the social composition of the neighbourhood in which those schools are found.

Disparities in ASAR

Evidence from the various population censuses, the NSS and the NFHS, all suggest that school participation by both SCs and STs is significantly lower than those by other groups. Figure 24 illustrates the disparities across social groups in ASAR for 6-10 year olds from the 52nd Round of the NSS.

As was seen in an earlier section, gender and region related discrepancies can be seen in education and literacy data from all over India. Gender and region related discrepancies can also be viewed through a lens on social differences. Literacy indicators, enrollment and completion indicators are systematically

higher for men than for women across all these social groups, with the disparities widening among SC and ST populations. Similarly, across all social groups, there are significant differences in urban-rural discrepancies in literacy indicators and in enrollment and completion, but the discrepancy associated with the region of residence is higher for SCs and STs as compared to the rest of the population.

While it is difficult to extract a common picture of attendance ratios for SCs and STs in the states across all the different datasets, one clear trend does seem to emerge – the attendance ratios of both SCs and STs increase unambiguously between the two NSS rounds and the two NFHS rounds for almost all fifteen states. Kerala again performs very well with very high SC and ST attendance of above 90 percent for 6-10 year olds. Tamil Nadu and Maharashtra illustrate lower attendance ratios for STs between 80-90 percent². Andhra Pradesh shows the greatest disparity between SC and ST attendance rates for any state using the NFHS 2 data set, with attendance ratios for SCs being in the high eighties and attendance ratios for STs falling to about 50 percent. Bihar is the worst performer from among the fifteen states in terms of ASARs for SCs and STs. Tamil Nadu, Kerala and Maharashtra have done extremely well in 6-10 years ASARs with reported attendance of over 90 percent from the NFHS 2. Three states that are traditionally considered as weaker states, AP, Orissa and West Bengal according

Figure 26 : Social Disparities in the ASAR of 6-10 years old - 1999

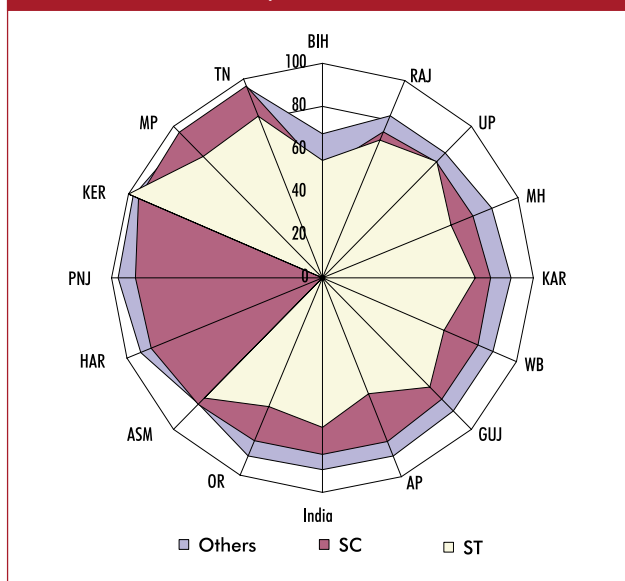
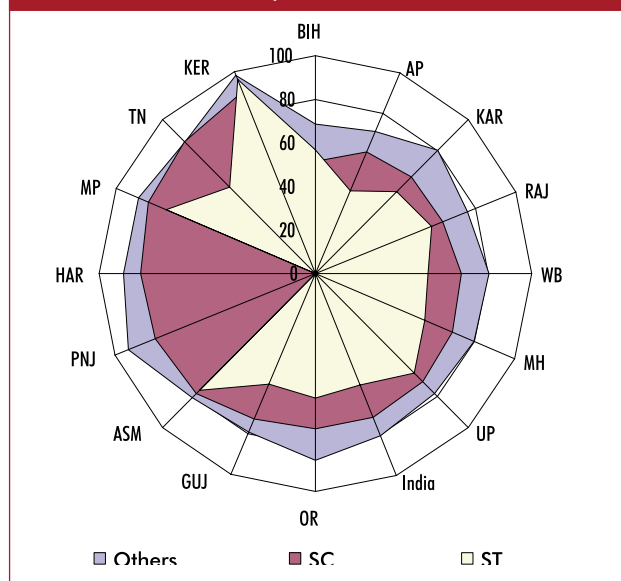


Figure 27 : Social Disparities in ASAR - 11 - 13 years old - 1999



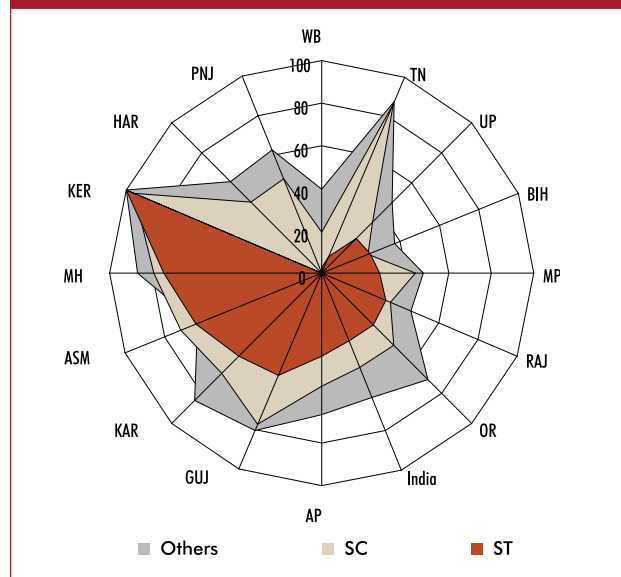
to the NFHS 2 have 6-10 year old ASARs of above 80 percent.

Figure 25 presents a picture of the gaps that exist in upper primary attendance rates from the NSS 52nd Round. It is again difficult to establish any clear, coherent, picture at this higher schooling level across the states. High performers, like Kerala, that have done well continue to do so with attendance rates well above 90 percent for both SCs and STs. States like Bihar who have consistently done poorly, again fare poorly in upper primary attendance among social groups. There are significant discrepancies in attendance between SCs and STs in states like Tamil Nadu and Haryana and Andhra Pradesh, with gaps between SC and ST attendance in the order of 20-30 percentage points. The caveat remains that some states like Kerala, Haryana and Tamil Nadu have small tribal populations and the number of observations in the sample is very small.

Disparities Across Social Groups in Primary Completion

Primary completion rates vary starkly across different social groups. In Kerala, PCRs are high across all social groups (and for the population in general) with more than 90 percent of all children and all SC children completing primary schooling, and more than 80 percent of all ST children completing the primary level. In Tamil Nadu, completion rates are above 80 percent when looking at the general population, and for SC children. The small population of STs in the state, however, do not perform as well and display significantly lower completion rates³. Punjab, Karnataka, Gujarat and Maharashtra have similarly high completion rates in both the NSS 52nd round and NFHS 1999 for the overall population, and for SC populations. For ST populations, the rates of completion are not so high. From the NSS 52nd round, Tamil Nadu, Haryana, West Bengal are seen to perform very poorly with completion rates lower than 10 percent. Surprisingly, this is one statistic where Bihar is not seen to be the worst performing state. There is a fairly consistent trend when comparing the two NSS surveys with each other and comparing the two NFHS surveys with each other and one sees a trend where completion rates are increasing across the surveys.

Figure 28 : Social Disparities in PCR of 12 year olds - 1999



Disparities Across Social Groups In Upper Primary Completion.

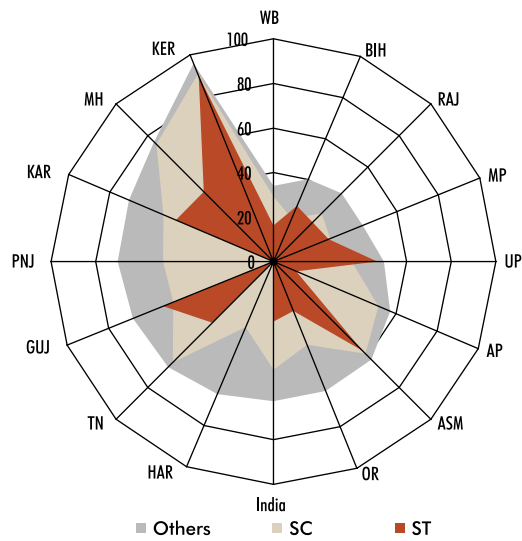
Differences across social groups in completion at the upper primary level reveals a smaller range across states, with a clustering towards a lower average (except for Kerala). UPCR are significantly lower than PCRs for most states. Kerala demonstrates very high rates of upper primary completion across all social groups particularly from the latter rounds of the two sets of data.

The same is not true across other states, for example, in Tamil Nadu, while about two-thirds complete the upper primary level across all groups, and a similar proportion of SCs also complete upper primary schooling. The completion rates for STs drops quite precipitously to about 39 percent in Tamil Nadu however from the NFHS 2. For Tamil Nadu, the NSS

² Haryana, Punjab, Kerala and Tamil Nadu have small ST populations, and the sample on which the above claims are made is very small as well and therefore does not really allow for any conclusive observations.

³ There is a tremendous discrepancy between the completion rates for all children and for all SC children compared with ST from the NFHS 2 survey. While completion rates for all children and all SC children is above 80 percent, completion rates for ST children is seen to be lower than 10 percent. The accuracy of this information might be in some question. From the 52nd Round of the NSS, the differences in completion rates between the overall population of children and all SC children is of the order of 15-20 percentage points.

Figure 29 : Social Disparities in UPCR of 16 years old - 1999



data reveals no improvement in UPCR across the both rounds, while the NFHS data sets actually show a decline in UPCR. The difference between PCRs and UPCR is very high across most states and is in the order of 10 to 20 percentage points. For the worst performing states, like Bihar, UP, and Rajasthan, the overall UPCR are between 20 and 50 percent, with no clear trend emerging across the four data sets. For example, in the case of Uttar Pradesh, while the UPCR for SCs are higher than the UPCR for STs across the two NSS rounds, the reverse seems to hold true for the two NFHS rounds.

SECTION 5

INEQUITIES ACROSS ECONOMIC CLASSES

Income poverty or lack of access to economic resources is often cited as the factor that most influences literacy and schooling attainment in India. Poverty impacts upon educational attainment both at the level of the household and at a more macro level. At both these levels, poor educational attainment reinforces income poverty, thereby creating a vicious loop of poverty and low educational attainment. The role of the public sector in mandated elementary education is often justified on the grounds that equity in enrollment and completion would be inherently more difficult in less developed countries if the responsibility for the provision of education services did not primarily involve the government¹.

Poverty has been seen to impact on educational attainment in many ways including, (i) through the direct costs of schooling (e.g, through tuition payments, costs of textbooks, uniforms, transportation costs and other direct and indirect costs), (ii) through the indirect costs of schooling on poor families (opportunity cost of child labor to poorer families), and (iii) lower expected benefits of elementary schooling for children of poorer families. Therefore, simply providing free and universal primary education will not eliminate the disparities that exist today in educational outcomes across income classes in India today. Economic conditions have often been cited by households as one of the key factors affecting their ability to send children to school. Even in areas where access to a free, government supported public school system may be available, households face direct costs (such as, costs of uniforms, meals/lunches, transportation costs, etc.) and indirect private schooling costs (opportunity cost of child labor and household chores such as child care by young girls of their even younger siblings).

¹ Of course, the same argument holds true for richer countries, with households found in pockets of poverty and deprivation, who would still find it difficult to send their children to school without public assistance as in inner-cities of the United States.

² Q1-Q5 denotes the five income quintiles. The placing of an R or U prior to the Q will denote Rural and Urban quintiles respectively.

³ For the NSS52, income quintiles are defined using consumption expenditure, and for the NFHS2, income quintiles are obtained using asset index.

Disparities in Primary and Upper Primary Enrollment Across Income Quintiles

Figure 30 illustrates the primary enrollment rates across urban and rural areas of India. The total population has been divided into five economic or income quintiles (Q1-Q5)², using data from two different surveys, the NSS52 and the NFHS2³. The graph shows that across both the NSS52 and the NFHS2 surveys, enrolment at the primary level increases unambiguously across income quintiles from the poorest quintile (Q1) to the richest quintile (Q5). However, the enrolment rates in urban areas have always been higher than that of the rural areas across all income quintiles. The increase over the two survey periods have been higher for the lower quintiles, and across all quintile groups in rural areas as their base levels are low,

Further disaggregating primary enrollment rate for 6-10 year olds across states and by rural-urban classification reveals that the disparities across income quintiles were more prominent in rural areas than in urban areas and that across the same quintile levels, the urban children got enrolled more than the rural ones. For example, in Bihar, the ASAR of rural children in

Figure 30 : Primary enrollment rate - 6-10 years - Expenditure Quintile wise

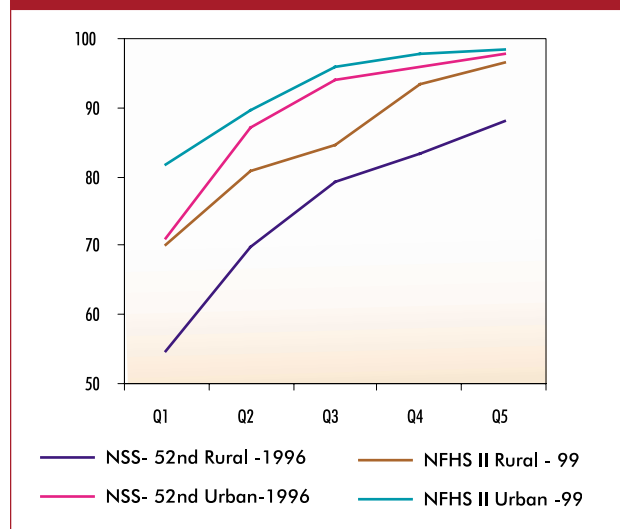
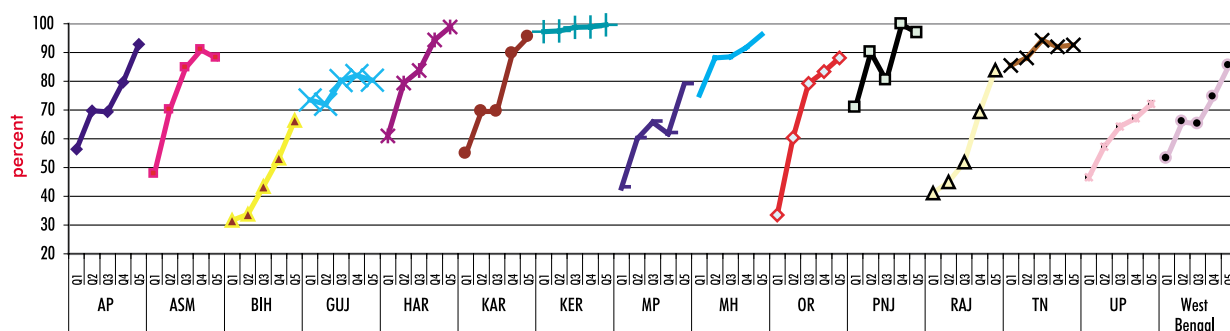


Figure 31 : ASAR (6-10 years) - Rural across income groups

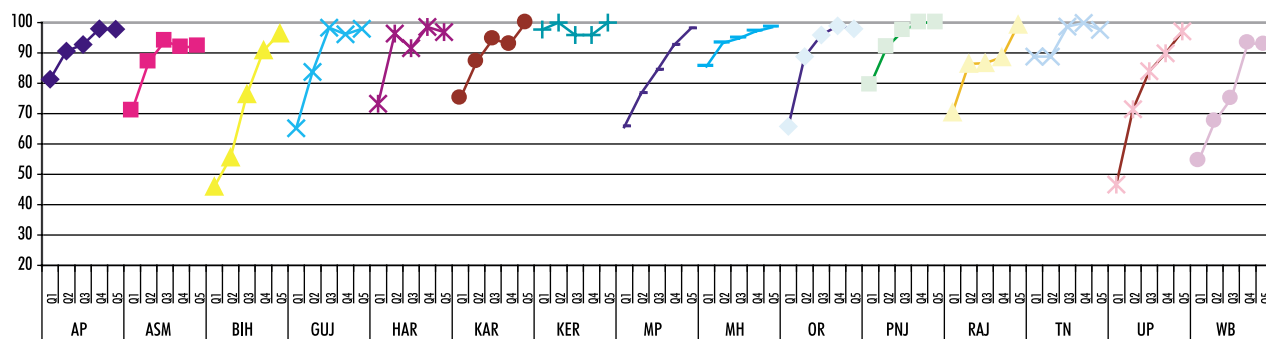


the highest quintile groups were less than 70 percent, while that in the urban areas were more than 90 percent. This shows that the disparities in enrollment across income groups is further deepened by their residential status and the facilities in their locality. Similarly, not all children in the rural areas or lower quintiles in all states are deprived of the schooling facility. In Kerala, the ASAR of children in the lowest income quintile in the rural areas is quite high, around 97 percent, as evident from the graph, compared to the children belonging to the highest income quintile in Bihar, whose ASAR is only around 70 percent. So it is not only the income and residential profile, but the region they belong to also matters in the enrolment rates. The discrepancies across quintiles are very high in states like Bihar, Orissa and Rajasthan amounting to about 40, 55 and 47 percentage points. In Uttar Pradesh although the difference between the enrollment rate of the highest quintile and lowest quintiles is about 30 percentage points, only about 70 percent of individuals in the highest quintile in rural areas are enrolled. Tamil Nadu and Kerala are at the high end of the enrollment spectrum with less than a 10 point difference in enrollment across the highest and lowest income quintiles, and a very

high overall level of rural enrollment. These are illustrated in Figure 31. State-wise primary enrollment rates for 6-10 year olds for urban areas reveals very high enrollment rates for those in the highest income quintiles. Only a fifth of the states, have enrollment rates less than 60 percent for the lowest income quintiles. The discrepancies across quintiles are very pronounced in states like Bihar, Uttar Pradesh and West Bengal amounting to about 55, 55 and 45 percentage points. Except for Kerala, in all other states the urban ASARs are unambiguously higher than rural ASARs with the difference being as little as 4 percentage points in Tamil Nadu to a little less than 30 percentage points in Rajasthan.

The range of disparity between the richest and poorest in terms of enrolment across rural-urban and states have been shown in graph 30. It substantiates our argument that disparity is a cumulative factor, and those states where the disparities are prominent across the rich and poor are the states where the disparities within an income group across rural and urban areas also get deepened.

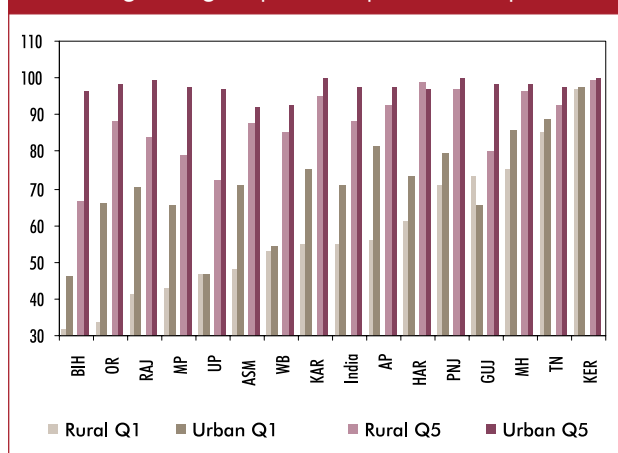
Figure 32 : ASAR (6-10 years) Urban Across Income groups



For all states, ASARs are significantly larger for the higher income quintiles than for the lowest quintiles. In Kerala, the gap between RQ1 and RQ5 is less than a percentage point for the NSS52. Very large disparities in ASAR between RQ1 and RQ5 are evident in states like Andhra Pradesh, Rajasthan and Bihar with differences between 35 and 42 percentage points, however, the overall ASAR in Andhra Pradesh from the NSS52 is about 72 percent compared with Rajasthan and Bihar, where the overall ASARs are 54.72 and 43.85 percent respectively. These two latter states have the lowest ASARs in NSS52. Kerala and Tamil Nadu are on the other end of the ASAR spectrum with the highest rural ASARs of 98.31 and 90.25 percent from NSS52. Maharashtra, Punjab and Haryana have rural ASARs between 80 and 90 percent, while Gujarat, Karnataka, Andhra Pradesh and Assam have rural ASARs in the range of 70 to 80 percent, finally, Madhya Pradesh, West Bengal, Orissa and Uttar Pradesh have rural ASARs between 60 and 70 percent.

It is of particular concern that for many states the gap between the NSS42 and NSS52 in ASAR has increased between RQ1 and RQ5, except for Gujarat, Tamil Nadu, Maharashtra, Punjab, Uttar Pradesh, and West Bengal, where there was a decrease in the gap between the poorest and richest quintile. For those states where there was an increase in the gap between RQ1 and RQ5, the increases range from 5 to 26 percentage points, and for those states that witnessed a decline in the gap between RQ1 and RQ5 between NSS42 and NSS52, the decline ranges from 1 percentage point in Uttar Pradesh to 18 percentage points in Gujarat. Orissa displays the largest gap between RQ1 and RQ5 for NSS52 amounting to a little over 54 percentage points.

Figure 33 : ASAR 6-10 years across the lowest and highest groups of expenditure quintiles



In contrast to rural areas, where most states displayed a widening of the gap between RQ1 and RQ5 across NSS42 and NSS52, in urban areas, most states show a decline in ASAR across UQ1 and UQ5. The only states where the gap between UQ1 and UQ5 has increased are Assam, Uttar Pradesh, Gujarat, Kerala, and Madhya Pradesh from about 1 percentage point in Kerala to about 23 percentage points in Assam. The gap between UQ1 and UQ5 for both NSS rounds is the highest in Bihar equal to about 50 percentage points in each round.

In a couple of the states, viz., Karnataka and Rajasthan, within quintile increases have happened mostly in the higher quintiles in rural areas, and within quintile increases in urban areas have occurred mostly in the poorest quintiles. What this might suggest is that while access has increased in both rural and urban areas, the benefits of increased access in rural areas are being captured by the relatively more wealthy, and the benefits of increased access in urban areas are being captured by the relatively poorer quintiles.

Figure 34 : PCR among income groups - RURAL

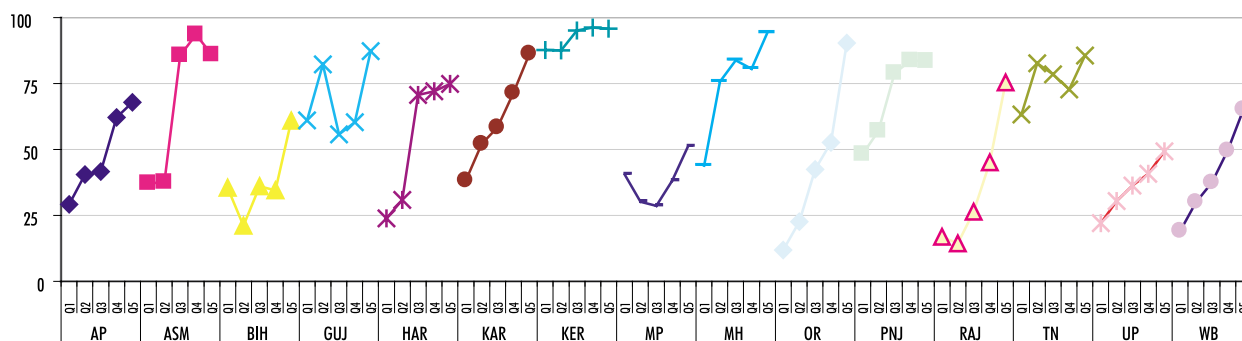
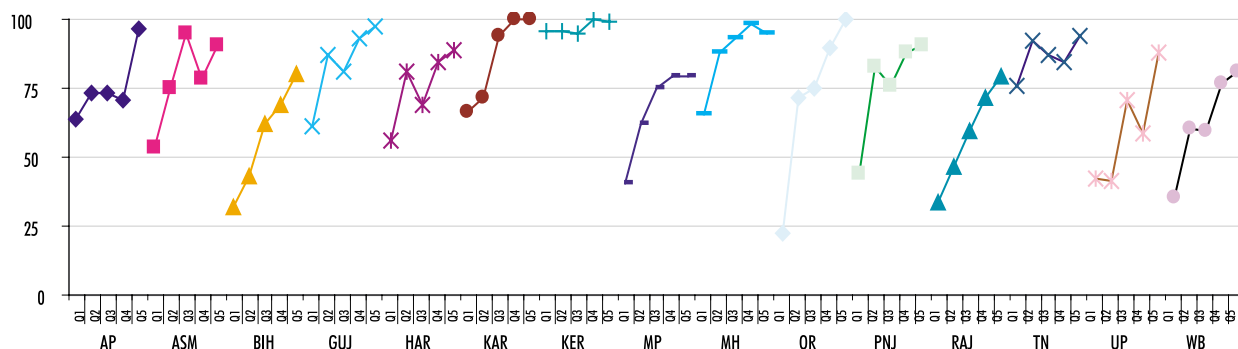


Figure 35 : PCR across income quintiles - URBAN



Disparities in Completion Across Income Quintiles and Across Regions

Primary completion rates across income quintiles are shown in Figures 32 and 32. Clearly, in many states the completion rates are closely associated with the income quintile of the household. The changes in completion are considerably high when we go from Q1 to Q5, with states like Orissa and Rajasthan showing increases in completion rates by almost 80 percentage point. The gap across income quintiles is more pronounced for rural dwellers than it is for urban dwellers, with very low completions rates in MP, AP, Orissa and Bihar.

The case of upper-primary completion rates also produce similar results and the graphs are self-explanatory.

Another dimension to the disparities due to economic status is the impact of it on the enrolment ratios of girls and boys. While the completion rates are higher for boys compared to girls in most of the states, that is not entirely true across all income groups. In the highest quintile groups, the differences between girls and boys are much smaller than that in the lowest quintile groups. To qualify that, in some of the states, girls have a higher completion rates than boys among the rich (Q5), as in the case of states like Punjab and Kerala. So in the lower income quintiles, it is not only a problem of lower completion rates, but of lower gender equity in completion rates.

However, income inequalities have to be qualified by another dimension – that is the expenditure on education. India's education sector is not purely government. A sizeable part of the education – even in the elementary section is provided by the private sector.

Figure 36 : UPCR across income quintiles - RURAL

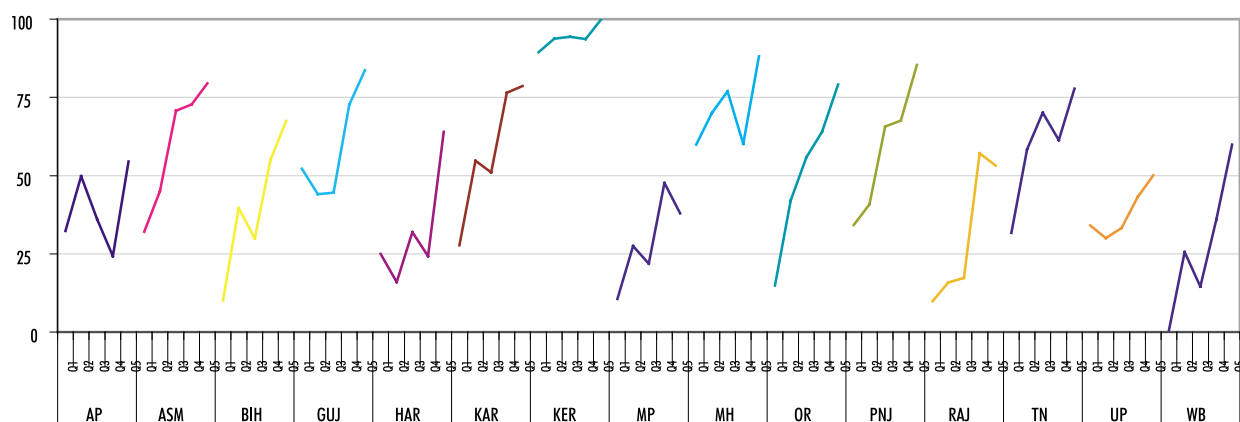
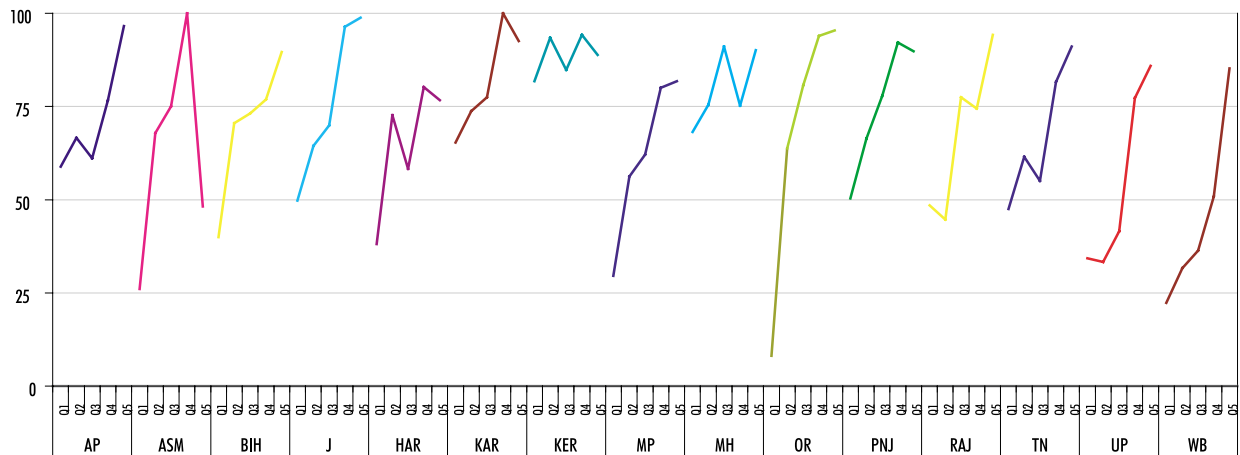


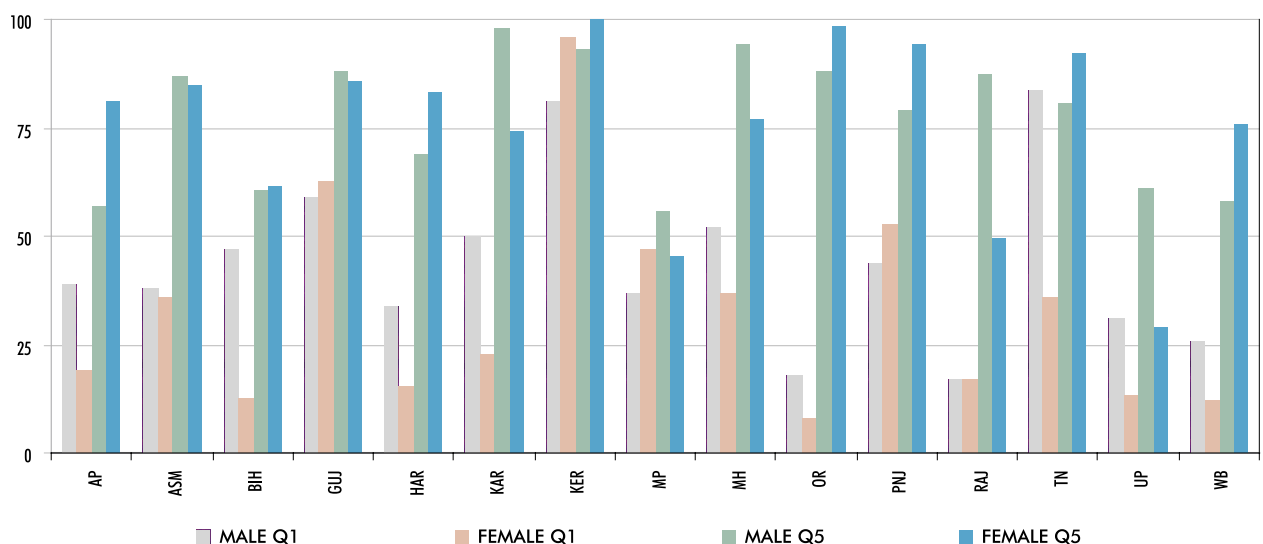
Figure 37 : UPCR across income quintiles - URBAN



In various states, there are different policies towards the role and participation of the private sector. In some states, the private sector is encouraged by the state by providing grants-in-aid facilities. So, the private sector itself is varied with both private aided and unaided schools. The households spent differential amounts on education of the children depending on various factors.

The analysis of the disparities in education spending across these various groups are looked at in the next section.

Figure 38 : Income-Intensified Gender differences in PCR - RURAL



SECTION 6

DISPARITIES IN THE PRIVATE AND PUBLIC EXPENDITURES ON SCHOOLING

Though elementary education is a public good that merits government provision, the private provision in this social sector has been on the rise in India. Some states in India facilitate the private provision in education by providing grants-in aid, the unaided private sector provision, both recognized and unrecognized, are also flourishing in many developed areas of the country, especially in urban areas, notwithstanding the inequity questions that surface due to their increasing presence.

At the outset, the Indian education structure is comprised of five school types, these include (i) central government schools, (ii) state government schools, (iii) local government school, (iv) private aided schools and (v) private unaided schools. Centrally managed schools include the system of Kendriya Vidyalayas (KV) and the Jawahar Navodaya Vidyalayas (JNV)¹. Most recognized primary and upper primary schools are run directly by state and local governments, state schools are funded, managed and operated schools by the state governments and local government schools are funded, managed and operated by municipalities or *panchayats*. Private-aided schools (PA) are those that are managed by private educational societies, but receive funding from the State governments for upto 95 percent of recurring expenditures. Private unaided schools (PUA) on the other hand, are privately funded, managed and operated². PA and PUA schools play a significant role in providing access at the Primary level, although PUAs are not very relevant at the upper primary level.

Indian lawmakers have committed themselves to providing all citizens with free primary (and recently, upper primary) education, and thus, theoretically, primary education should be accessible at no cost to all who demand it. In reality, however, private expenditures on education is sizeable across all levels of schooling. Private expenditures on schooling are incurred on two categories, fees expenditures and non-fees expenditures³. This is true even in government schools that do not charge a fee, and which in many cases also provide free meals⁴, textbooks, and uniforms. These items, such as, books, uniforms, transportation, are often

referred to as non-fee expenditures, and fees-expenditures are incurred on items, such as, tuition fees, examination fees⁵, fees for extra-curricular activities, informal payments to teachers, etc. These private expenditures on schooling vary by the level of schooling, by location and region of the schools, the type or management of the school (i.e., PAs or PUAs) and by socio-economic characteristics of the households whose children study in these schools. These payments can restrict access for those unable to pay for participation and completion at different schooling levels.

Private household expenditures differ across schools on the basis of the type of school the students attend, and within that they vary across states. The household expenditure on children attending schools have been generally high in rich states like Punjab and Haryana and in education wise, traditionally well-ahead states like Kerala and Himachal. Parents spend slightly more on the education of boys than in girls, which was found to be a universal phenomenon.

Precisely, it is due to these private expenditure issues that the presence or absence of private sector schools and their locations becomes an equity issues. While 3/4th of the students in elementary education are enrolled in government and local body schools, around 15 % are enrolled in private aided schools and the rest, in

¹ KVs are schools that were established across the country largely to cater to children of government employees to ensure that transfers from one part of the country to another does not result in a dislocation in the education of their children. JNVs are special residential schools aimed at poor children in rural areas. These schools were set up to attract children from less accessible areas to a central location.

² PUAs are not fully included in government statistics on educational institutions since a large number of PUAs are unrecognized by the government and thus do not figure in the overall assessment of the size of private provision of education services.

³ Sometimes fees and non-fees expenditures are also referred to as school and non-school expenditures respectively.

⁴ Under the Mid-day meal schemes, the government schools provide free meals to all its students.

⁵ This is particularly true for students in unrecognized PUAs.

Figure 39 : Per student yearly average household spending on education

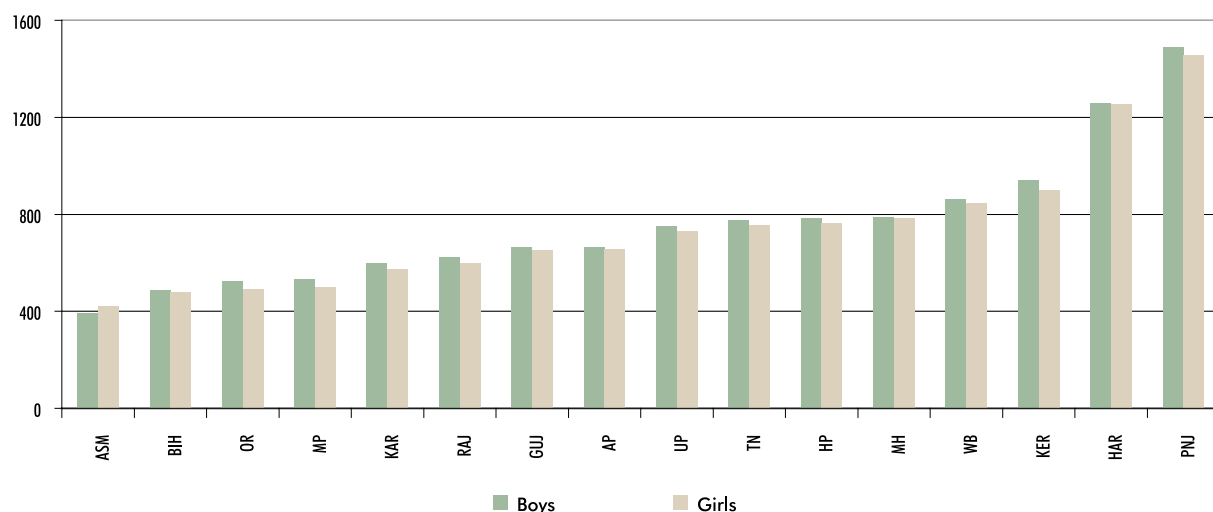


Figure 40 : Per student average household spending on education by school type - for Rural boys

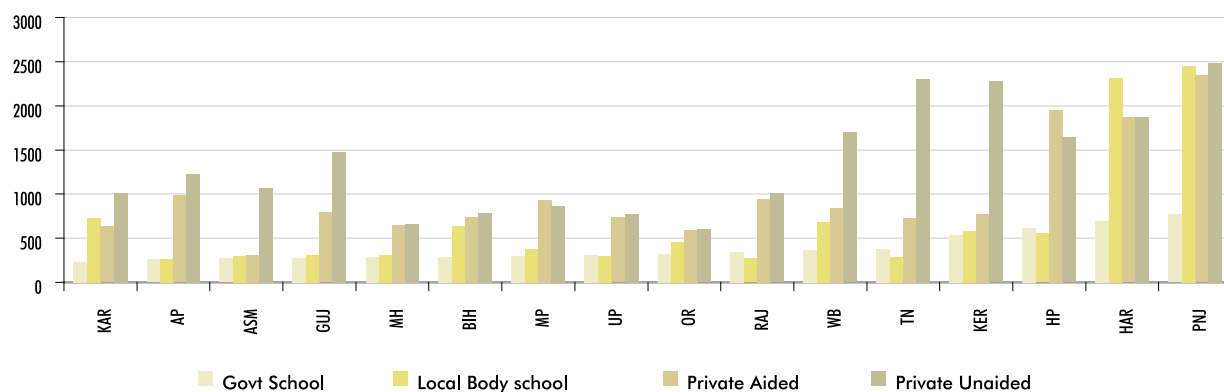


Figure 41 : Per student average household spending for education by school type - for Rural girls

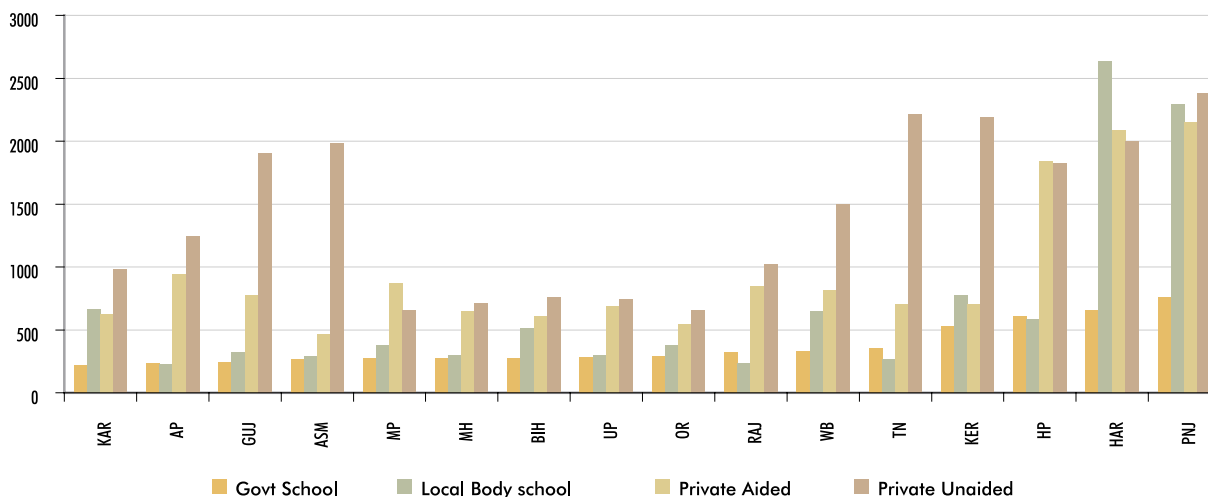


Figure 42 : % of students enrolled in Government Primary schools

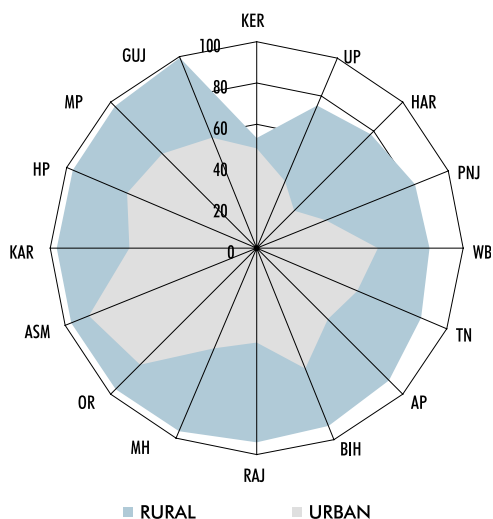
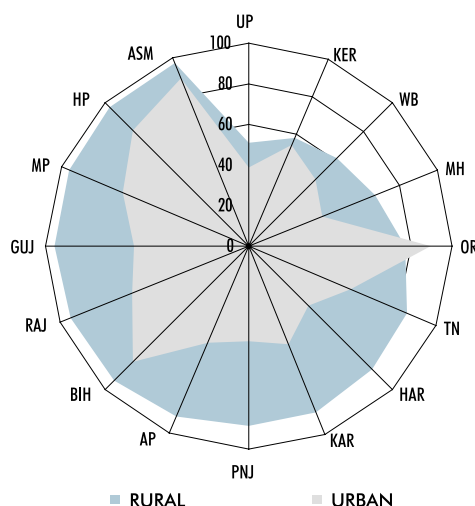


Figure 43 : % of students enrolled in Government schools - Upper primary



unaided private schools. However, in rural areas, 86 % of the students are enrolled in government schools as against 55 % in urban areas. The enrollment of students in government schools also vary across the states and in terms of their socio-economic status. In states like Kerala, Punjab and Haryana, the enrollment in government schools are less as the aided and unaided private schools are attracting students for various reasons – reasons relating to various types of accesses – geographical, economic, social and cultural – which are not addressed in this paper.

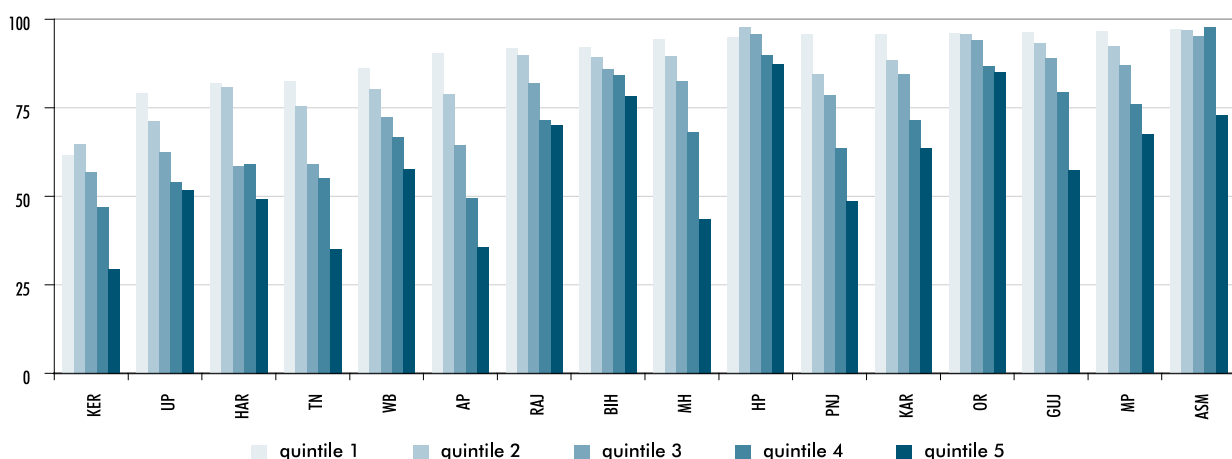
It is also interesting to see that as expected, the students who hail from higher economic background mostly

attend private schools more than the students from poorer background and this is true cutting across all states. It is also true that students from the deprived communities attend government schools more than those from the other communities.

Public Spending on Education

Elementary education is a merit good. It has the characteristics of public good, at the same time, provides private benefit to individuals by enhancing their capabilities. In the welfare paradigm of political economy, state has the responsibility and duty to provide education to the needy, thus facilitating universalisation

Figure 44 : % of students enrolling in govt. schools by expenditure quintiles - Primary



of education, at least at the elementary level. In India, education is placed in the concurrent list and the state governments are given the authority to decide how much to spend on their education budget, most often supported by the central grants. This is to facilitate states at different levels to plan according to their needs. However, different states have placed education at different levels of priority in their investment plans and this is visible in the state spending on elementary education. The implication of such spending is also not unique or uniform across states, and the people who benefit out of state spending on education varies in their socio-economic background. One of the rationale for and expectations of public spending is that it benefits the poor and socially disadvantaged in the society to participate and complete school education. However, as evident from the school enrolment and completion analysis, the states differ enormously in all aspects and with regard to different social and economic as well as gender groups.

Government can use the resources at its disposal in many ways to achieve the education objectives through its spending mechanism. Subsidies could be used as a powerful welfare augmenting instrument of fiscal policy (see GOI, 1997 for further details). Subsidies aim at reducing the price of the goods, so that they are available to larger sections of the population. Government of India (1997) identified in a White Paper a large set of social and economic services, classified them into public goods, merit goods and non-merit goods, and proposed to reduce subsidies to non-merit goods. In case of the education sector, education up to elementary level is considered as a merit good, and education beyond elementary level, i.e., secondary and higher education, is labeled as a non-merit good, as falling outside the ambit of merit category. Subsidies in education are also advocated on the grounds of providing equality of opportunity. Ensuring equality of opportunity in education to every one irrespective of not only social background, but also economic background is considered an important function of the modern State. Education is found to be an effective instrument of equity. In the absence of public subsidies, only those who could afford to pay would enroll in schools. The concern for equality of opportunity has led to almost universal agreement that the government should subsidise education.

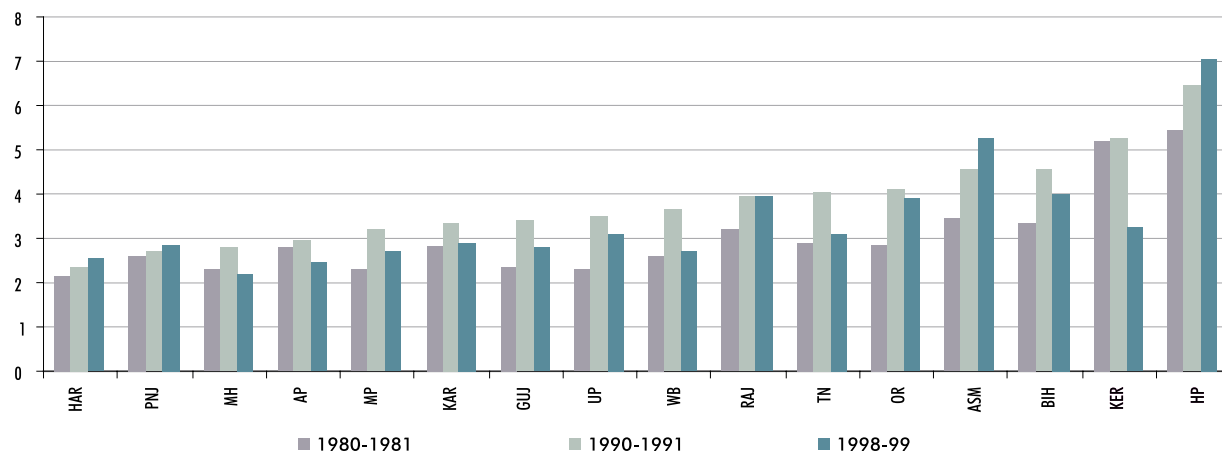
However, there are many who argue that public subsidisation of education produce perverse effects on distribution. It is argued that, public subsidisation of education, especially higher education, would be regressive, increasing income inequalities by transferring the resources from the poor to the rich, as the education (particularly, but not exclusively higher education) subsidies accrue more to the rich than to the poor (Psacharopoulos, 1977; Blaug, 1982, 1992; Mingat and Tan, 1986a, b; Jimenez, 1987, 1994; World Bank, 2000, p.80). Reduction in education subsidies in general is also advocated arguing that education subsidies, including some specific subsidies in basic education, could be targeted to the poor only (World Bank, 1994). The debate between the two sides, familiarly known as liberal *versus* neo-liberal groups, is intensifying in the recent years (Hinchliffe, 1993).

Trends in government expenditures on education is presented in an earlier section. Figure 30 shows public expenditure by state as a percentage of GSDP. It is obvious that Himachal and Kerala spend the most as a proportion of their GDPs on education. Although this might explain their success in achieving near universal literacy (at least Kerala) and enrollment, the same is not true for the other two big spenders, Orissa and Bihar. These two states are characterized by poor outcomes across most of the indicators that have been looked at. The problem with such a measurement of public expenditure as percentage of GDP is that it is heavily dependent on the level of GDP and Bihar obviously does not figure in the list of states with high incomes, and hence, actual levels of expenditure on education is low.

Public expenditures on elementary education in the major states of India have also been assessed on the basis of a benefit incidence analysis (BIA) or an assessment of the incidence of education expenditure relative to the incomes of user households. For the purpose of the BIA, information on public expenditures on education has been collected from the *Analysis of Budgeted Expenditure on Education*⁶ by the Indicus

⁶ Published annually by the MHRD and contains information on government expenditures on elementary and secondary education.

Figure 45 : Public Spending in Education as percentage of GSDP



Analytics group (in a consultancy work carried out for the World Bank). Their study then combined this with information on household expenditures from the NSS42 and NSS52. These datasets also allow us to estimate the number of enrollees in different quintile groups, across different levels and by type of institution as they are representative at the national, state and region level⁷. A description of the methodology of BIA and its limitations are included in the Appendix⁸ at the end of this section.

While the government spending on education as a percentage of State Gross Domestic Product depict the commitment of the states in terms of allocating the resources to education from its overall kitty, they don't reveal the per capita expenditure on education. An analysis of the per student subsidy on primary education using NSS 52nd round for rural and urban areas shows that states like Himachal and Kerala heavily subsidizes primary education (in rural areas, the subsidy amounts to more than 2000 rupees per year) while a rich state like Punjab hardly subsidizes primary education, especially in the urban areas.

While public expenditures do play a redistributive role in most states, in many of them these expenditures are only weakly pro-poor, and therefore there is considerable scope for improving the pro-poor bias of these expenditures, and hence an analysis of the incidence of the public subsidy across income groups are important.

The analysis of per student subsidy across income groups in the primary education sector in rural and urban areas across states highlights the important roles of governments in these states. The analysis reveals that : (a) In almost all states, there is a progressive subsidization across income groups, that is, the poorer get more subsidies than the rich, (b) children in rural areas get more subsidized than those in the urban areas across income quintiles, (c) the disparities between government subsidies received by children in different income quintiles are the least in rural areas while they are of the widest range in the urban areas, (d) the above two results are the outcomes of the fact that children in lower quintiles get enrolled more in the government schools compared to the rich who gets enrolled in the private sector and the children in rural areas generally enrolled in the government schools as there are very few private facilities available even for the rural rich in their locality.

The disparities across states in the level of subsidies provided and the kind of distribution of subsidies across income quintiles that have taken place provide interesting analysis. The distribution of subsidies across income quintiles (see table) are often misleading if we

⁷ A region is not an administrative classification, but represents a set of districts within a state across which most NSS datasets are representative.

⁸ The Benefit Incidence Analysis was carried out by Indicus Analyticus headed by Dr. Laveesh Bhandari.

Table 2 : Percentage Distribution of Public Subsidies to Rural Primary Schools

	1 lowest	2	3	4	5 highest
Andhra Pradesh	21	23	22	17	17
Assam	16	20	22	22	20
Bihar	17	16	20	24	23
Gujarat	22	19	24	21	14
Haryana	15	24	25	18	19
Himachal Pradesh	17	23	19	22	17
Karnataka	18	22	22	22	16
Kerala	25	22	22	19	12
Madhya Pradesh	17	22	21	20	21
Maharashtra	19	23	20	20	17
Orissa	14	21	26	20	19
Punjab	48	31	27	26	-31
Rajasthan	17	20	20	22	20
Tamil Nadu	23	22	22	20	13
Uttar Pradesh	17	22	23	21	17
West Bengal	18	20	20	23	19

Source: Indicus Analytics (2003)

compare it with the levels of subsidies provided (see the figure 46).

A state like Punjab transfers almost half of its subsidies to the lowest quintiles, and taxes the highest quintile students for facilitating this cross-subsidization. However, the amount (level) of subsidies they provide are the lowest in the country and as such, the per student subsidy a poor student in Punjab receives is the lowest

in the country. This is also because of the extent of private sector in providing education in these states, which is not taken into consideration here. On the other hand, the share of total subsidies that the students belonging to the lowest income quintile groups in Himachal Pradesh is less than 1/5th of the total (17 percent) and as such it might look as if the poor are not getting any better deal than the rich in the state. However, the per student subsidy that a student

Figure 46 : Per student subsidy for primary education across economic quintile groups - 1995-96 (Pink-Rural, Red-Urban)



belonging to any income quintile groups in Himachal Pradesh receives in an year amounts to more than Rs. 2500.

Even the weakly pro-poor expenditure patterns that is seen in both rural and urban expenditures on primary schooling, vanishes at the secondary level. The share of subsidy received by the lowest quintile is generally low in all the states. Even at the secondary level, Kerala transfer to the poorest quintile the highest amount of 14.04%, while West Bengal had the lowest share going to the poorest quintile with an amount of 2.01%. A substantial portion of the subsidies went to the richest quintiles and clearly fails to meet the equity criteria. Kerala, which received the minimum share of subsidy was as high as 21.08%. The topmost quintiles in all the

other states received more than 30% of the total subsidy. In fact this is probably a result of the fact that children who enroll in secondary school are typically from the higher income quintiles. In the urban secondary school sector, Himachal Pradesh received maximum share of subsidies (24.19%). Nine states where the poorest quintile received less than 10% of the total subsidy. On the other hand Andhra Pradesh and Himachal Pradesh are the two states where the richest quintile received comparatively lower shares of subsidies (less than 15%). The richest quintile in Rajasthan received the maximum share among all the states (31.15%). Overall, we find that states that are economically better off tend to have a more equitable distribution of subsidies across quintiles. This might be

Appendix

A Note on the Benefit Incidence Analysis

due to the fact that better economic status allows them to charge higher amounts from at-least the better off.

Welfare function of a government oblige them to spend on merit goods such as health and education. In India, social sectors like health and education are in the concurrent list and the state governments are in charge of providing most of the services, whether it is using their own resources or using the funds that come to them through a Centrally Sponsored program. In order to make these services (which provide both public and private benefits) to the needy and the most vulnerable, who probably cannot “buy” the services in a market situation due to various causes (including the affordability and accessibility questions), government has to provide for them. Many times, it is not only in the form of government expenditure, but a lot of direct and indirect subsidies since the beneficiaries need not pay back the costs incurred. However, not all those who deserve gets all the benefits, nor do all the beneficiaries are the one who are to be most concerned. Therefore it becomes important to know how the government expenditures on education are utilized by various socio-economic groups and how many of them benefit.

The major objective for arguing that government should provide services which come under the public/ merit goods category is that those who belong to the lowest

socio-economic group should benefit mostly out of it – which means that the highest subsidies should go to them. On the other hand, from the government’s financial management view, it is important that the government generate some revenue to run their machinery for providing these services. This would mean that those who can afford to “buy” the services should pay for it, hence, should be charged some fees. This basically involves the cross subsidy issues.

However, in reality, this need not happen, especially, different states have different expenditure levels and enrollment levels by socio-economic groups. And the degree and magnitude of costs and subsidies, and hence benefits vary across different states of India. The analysis here is aimed at providing some broad ideas on this direction. This approach that has been adopted to evaluate the distribution of government subsidies in education among students from different quintile groups of population is referred here as “Benefit Incidence Analysis”.

The term ‘benefit’ to captures the enrollees who benefit from the ‘subsidies’, and incidence refers to as the amount of subsidy received. This paper studies the distribution of both. This essentially involves allocating the subsidies to different quintiles groups based on their utilization of the subsidies i.e. enrolment in those schools having access to government subsidies. This will help

us analyze whether the subsidies are reaching those who require them the most. In this paper we have conducted this analysis for 16 major states in India.

There are two broad categories of schools through which subsidies are provided – government and local body schools, and private schools that receive some aid from the government (henceforth referred to as private aided schools).

Source of data

National Sample Survey Organization had conducted two large education based surveys in its 42nd and 52nd rounds conducted in 1986-87 and 1995-96 respectively in all the states of India. The datasets have been used to calculate the number of enrollees across different quintile groups and in different levels and types of institutions specifically for three reasons. One, these are large datasets with significant sample sizes and two, such fine break-ups on the characteristics of the students are not available in other data sources. And three, these datasets have information that will help us evaluate private expenditure on education that directly goes to the school authority. For data on Government expenditure on education we are using data contained in “Analysis of Budgeted Expenditure on Education” published by “Ministry of Human Resource and Development, Government of India”. The publication contains government expenditure (revenue account) data on education separately for elementary and secondary education across states every year. The same have been used for the years 1986-97 and 1995-96.

Limitation of data

At the outset, it should be mentioned that the latest data on education expenditures by households disaggregated at the gender, and other socio-economic groups could be made available latest for the year 1996 and not after that due to the lack of education surveys that are collected at household level. Though the consumer expenditure surveys of the NSS collect data on education expenditure at some aggregation, since they don't really provide the information as to whether the children in the household are attending government or private schools, it is not possible to use the data for finding out the incidence of government education expenditures.

Secondly, although we had similar data in both 42nd and 52nd rounds, the 42nd round does not provide a break up for private aided and private unaided schools. The dataset contained only two broad categories for the variable “Type of institution”, namely “Government” and “Private”. But as a considerable share of the government subsidies goes to private aided schools as well, this information is essential for the analysis. In other words, since we are looking at how the government subsidies are utilized by various quintiles it will be incorrect if we only consider the subsidies received by government schools. As a result, the comparison of the subsidies as well as beneficiaries across time could not be conducted.

Methodology

Who are the beneficiaries?

All the enrollees in Government, Private-aided and Local Body schools were combined into one group and were considered to be the beneficiaries as were accessing the government subsidies because of the type of institution they are enrolled in. This was done as we have used the total budgetary expenditure on schools at this aggregate level. Enrollments are also available separately for elementary and secondary schools in rural and urban areas across quintiles and gender. The quintile groups have been generated on the basis of per capita household expenditure separately for rural and urban areas in the individual level. There will not be more number of people in the lower quintiles in rural areas which would have been the case had we generated the quintiles in the household level. This is mainly because the household sizes tend to be larger in rural areas as compared to the urban areas. Therefore equal number of individuals (not students) will be there in each of the quintile groups.

How is subsidy calculated?

The overall government subsidy was available from government state budget documents separately for elementary and secondary. The distribution of these subsidies were made according to the manner in which the distribution of enrollment of students belonging to the different expenditure quintiles were in government and government aided schools. This distribution, as explained earlier, was calculated using the NSSO 52nd round data. In other words, the Government expenditure for elementary and secondary education for each state has been sub-divided across various

quintile groups, sector and gender using the same distribution in which the beneficiaries are distributed. To calculate government revenue from education, private expenditure on tuition fees, examination fees, and other fees in the last academic year has been used. This data was also available from the 52nd round NSSO data. This also allowed us to have a state, quintile, sector, and gender distribution of government revenues as reported by each respondent. The distribution of total

(respondent) reported government revenues is therefore not the same as the government expenditures (distributed purely on the basis of enrollment). From the above two steps we get two similar tables for government expenditure and revenues from education sector. Subsidy is then calculated by subtracting revenue from expenditure in the corresponding category. After that we have calculated the percentage distribution of the subsidies across all the quintiles in the respective categories.

SECTION 7 : SUMMARY

The development of school education, participation and completion is characterized by disparities across socio-economic, gender and regional disparities. The equity issues are often masked due to the averages resulting from extreme inequalities in education indicators. The efforts to reduce the disparities across gender, caste and economic classes are not met with uniform success; rather, the vicious circle of inequities and unequal progress across various groups continue to haunt the states with lower and higher education indices. The higher performing states have been continuously been reducing most typical of inequities and the have been moving higher on education ladder while the efforts of poorer performing states are not enough to enable them to break the vicious circle of lower education attainments and higher inequities and move ahead. Indeed, the growth of education sector in India has been an inequitable one, one that is characterized by unbalanced growth. Now to facilitate the under-performing states to catch up with the better performing states, a huge effort is needed,. To rectify these equity gaps, a “big push” to education in these disadvantaged regions/ gender/ community/ economic groups and much better targeting is necessary.

A summary table at the end of this paper summarises the findings from this study. The facts that come out of the summing up is as follows: (a) the level of ASAR and the progress in ASAR are not synonymous. (b) The level as well as the progress (and the pace of progress) in ASAR in the primary stage and upper primary stage are not of the same range. (c) It is easier to get children enrolled in school, but difficult to retain them there to complete that level, as evident from the relatively lower completion rates, both at the primary as well as upper primary levels. (d) As in the case of ASAR, the CR is better for primary level compared with UP. (e) rural –urban disparities still persists and rural areas are yet to catch with the ASAR (and PCR as well as UPCR) in the urban areas, especially in the upper primary stage of education (f) Though the rural ASAR is progressing fast, it needs further momentum to reach that of the urban ASARs. (g) PCR and UPCR progress are less than that of the ASARs across all groups (h) Gender disparities are also evident, with male children getting enrolled more than the female children,

especially in the upper primary stage. (f) the SC/ST children are getting enrolled more, but still they are way behind the other general communities. (i) in all areas, in both gender and in all communities, children from a higher income background get enrolled as well as complete schooling more than that of the lower income groups. (j) inter-stage disparities are wide and the some states like Kerala, Maharashtra and Punjab do better in most of the indicators while Bihar, UP and Rajasthan lag behind others confirming their traditionally held status as “*bimaru*” states. (k) the rural-urban, gender, caste and income disparities are least in better performing states while they are worst in the poorer performing states.

Now given the current trends and patterns in schooling attendance and completion rates, and also the disparities that exist across states, and within states, across rural-urban, gender, social and economic classes, there are many sets of questions that arises which needs to be answered, either through governmental efforts, or private initiatives or community mobilization, or through a combination of all these. Though finding answers to these questions or providing policy prescriptions will be beyond the scope of this documentation, it is important to identify these gaps and follow up questions so as to ensure that future efforts shall be directed or evaluated based on the progress made on these issues.

One important factor that comes out of the study is that even though most children get enrolled in schools, there is a sizeable number of children who never got enrolled, thus did not even have an opportunity to see what schooling is all about. It is important to identify the size of these children and get details as to what could be the factors that prevent them from being in school. Many times, the domestic and family factors are reasons for their being out of schools. Social deprivations and gender factors within family often intensify the problem. Economic factors could be another major reason. Many children are out of schools in order to supplement the family income by engaging in activities that fetch some wages. Other family responsibilities of helping in household duties and sibling

¹ A term coined taking the first few alphabets of the states who were really backward, and the term means “sick” in India.

care also have been important factors in preventing children attending schools or dropping out. Lack of opportunities and access is hindering many a children's education and hence future. Physical disabilities and other health factors could be another hindering factor.

There are miscellaneous issues which are not directly related to schooling participation trends and completion rates. However, they could be the most crucial aspects.

For example, the quality of education, which cannot be captured through a household survey like NSS or NFHS as the perception and importance of quality in relation to availability and accessibility is a relative one. However, while addressing the question of low completion rates and socio-economic disparities, the quality issues also become an important factor to be looked at

Table 3. Equity Study – Summary

Education indicators	Across Education category	Scenario across surveys	Scenario across states	Better performing states	Worst performing states	Type of attention needed
Level of ASAR	- High in the primary level; not so in the Upper primary level.	-increasing over the years; high for primary ASAR compared to Upper Primary ASAR.	Some states like Kerala have already reached high ASAR while some states are laggards – like Bihar	Kerala, Punjab, Tamil Nadu, Maharashtra	Bihar, UP	Increase level of ASAR, especially in the Upper Primary level
Progress in ASAR	Primary ASAR has increased faster compared to Upper Primary ASAR	The rate of increase in ASAR have been different across 4 survey time points	Increase in ASAR have been different across states – states at already higher level of ASAR had little to improve while the states at bottom have improved their ASAR considerably, though they are yet to achieve the desirable level	AP, MP and Rajasthan started at low level and have high rates of growth in ASAR	Bihar, UP and Orissa started at low level and yet to speed up their pace of ASAR increase. States at a high level of ASAR have lower growth in ASAR over the survey time as they have little to improve	Need for special focus to increase the enrolment in states with low levels of ASAR as well as where the increase in ASAR is not up to the desired level
Rural-urban disparity in ASAR	Rural –urban disparity is evident in both primary and Upper primary ASAR; Disparity is higher in Upper Primary ASAR	Rural ASAR lower than Urban ASAR Progress in ASAR is more in rural areas as Urban ASAR has already been on high and increased at slower pace at that level	Regional variations in rural-urban ASAR are evident. Though the rural urban gaps have been narrowing down in better performing states, the gap has been on increase in states with low ASAR as the progress in urban areas are faster here and ASAR progress in rural areas are not enough to catch up with that of the urban areas.	-States like Kerala, and TN have always had lesser rural-urban gaps. - States like Haryana and Punjab have been successful in narrowing down the rural-urban gaps faster in the last two decades.	Bihar and UP had huge rural-urban disparities These states have also been less successful in reducing the rural-urban gap over the two decades of 80s and 1990s.	Need for focus to improve level and pace of ASAR in worst performing states, especially in their rural areas.
Gender disparity in ASAR	Gender disparity highly visible in the Upper	Over the period, the ASAR of both boys and girls	Some states have lesser gender disparity in ASAR than some	-Kerala, Punjab and TN have lesser gender gaps in	High gender gaps in Bihar Much to be desired in Bihar in	Need for focus on girls education in

Education indicators	Across Education category	Scenario across surveys	Scenario across states	Better performing states	Worst performing states	Type of attention needed
	Primary ASAR compared to the primary ASAR.	have been increasing Generally more boys get enrolled than the girls The increase in ASAR of girls and boys have not been uniform during the 80s and 90s	other states	ASAR.-Haryana and Punjab, along with MP and Rajasthan, have progressed in reducing gender gaps over the decades	terms of the progress in reducing gender gaps	most of the states, especially in States where the gender disparity is so stark and the progress in gender equity is slow
Caste-disparity in ASAR	Scheduled Tribe's ASAR lower than that of SC, which in turn is lower than the general community	Though the ASAR increase over the period, the gap between different groups don't get reduced, though at the primary level, it is not so.	ASAR among SC/ST lower in most of the states compared to the general population. Some states have better equity among social groups in ASAR	Kerala and TN have high ASAR rates for SC/ST caste groups and also more equitable ASAR across caste groups	Haryana and Punjab, along with Bihar, UP and Rajasthan show low ASAR among SC/ST groups as well as wider caste disparity in ASAR.	More education facilities for children born to under-privileged communities and special grants/ scholarships, fee waiving etc needed
Disparity across Economic quintiles in ASAR	Primary enrolment disparities are lesser across economic groups than the upper primary ASAR	Over the years, ASAR of children from lower quintile has increased faster than the higher quintile, as higher quintile children has already a high ASAR and the lower ones were catching up with them	Wide inter-state variations in the level as well as disparities in ASAR of the economic quintile groups. Urban areas having less inequities and higher levels of ASAR for all quintile groups compared to rural.	Kerala – Q1 to Q5 have high ASAR. Disparities are less. TN & Gujarat – disparities are less across quintile groups	Bihar – Q1-Q5 ASAR is well below the desirable levels. The disparities between Q1-Q5 is also large. Also, large rural –urban differences.	
Completion Rate – Level	Low compared to ASAR. UPCR better than PCR because there are more children enrolled in PCR who drop out.	Increase over time; but the increase is much slower than the ASAR.	Inter-state disparities are wider than that of the ASAR. Generally UPCR is higher in states where PCR is also high. In states where PCR is at a higher level, UPCR is less than PCR, and in states where PCR level is low, PCR is below the UPCR.	Kerala, Tamil Nadu and Maharashtra	Rajasthan, Bihar and UP.	Reduction in drop out rates; bringing back the children who are dropped out
Rural-urban disparities in CR	Urban CR is better than the rural CR.	Increase in PCR and UPCR over time is higher in urban areas than in rural areas	Inter-state disparities are wider for UPCR compared to PCR.	Rural-urban disparities are least in Kerala and MH.. For PCR, it is less in TN and Punjab along with these states.	UP, AP and Orissa for PCR and AP, Rajasthan and Haryana for UPCR	Increase the retention rates in rural areas to bridge the rural-urban gaps in certain states in CRs

Education	Across Education	Scenario across surveys	Scenario across states	Better performing states	Worst performing states	Type of attention needed
Gender disparity in CR	Generally boys CR is more than girls in both PCR and UPCR	Gender gap in CR and UPCR are coming down. Gender gaps more pronounced for the UPCR	Gender gaps across states exists.. Gender gaps are higher in states where the sex ratio is highly skewed and states where the sex ratio is favor of girls, the CR among girls are better.	Kerala, TN and Punjab has lesser gender disparity in completion rates.	Bihar, Rajasthan and UP	
Caste-disparity in CR	SC/ST students' CR is low compared to the general	CR among SC/ST is improving over time	In some states, the CR among SC/ST is better than other states. States with better CR in general have more SC/ST CRs also.	Kerala, Assam among the bigger states as well as the North Eastern states (not analysed here in detail) where the proportion of ST is higher as well as where the general education indicators are also better	The “Bimaru” states where the conditions of the SC/ST in general leaves much to be desired also have lower CR among the states	
Economic class disparity in CR	PCR disparities are lesser across economic groups than the UPCR	Over the years, PCR of children from lower quintile has increased faster as the base line figures were pathetic for them, but with sustainable efforts, drop out rates among the lower quintiles are now being reduced. However, CR rates among even the highest quintiles, especially in the rural areas, is not as encouraging as the growth in ASARs	Wide inter-state variations in the level as well as disparities in PCR among the economic quintile groups. Urban areas having less inequities and higher levels of CR for all quintile groups compared to rural.	Kerala – Q1 to Q5 have high CR. Disparities are less. TN & Gujarat –disparities are less across quintile groups	Bihar – Q1-Q5 CR is well below the desirable levels. The disparities between Q1-Q5 is also large. Also, large rural – urban differences.	

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