

Primary Education in India: Quality and Coverage Issues

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Abstract

An attempt is made in this paper to analyze the state of primary education in India. Using various data-sources and secondary research, we provide a description of the salient features of the public education system in India for primary schools (grades one through five) as well as educational outcomes, both in terms of quantity and quality. Literacy rates, especially in the younger age groups, for both boys and girls are on an upward trend. This is an extremely positive outcome as historically India has suffered from endemic illiteracy. However, rising literacy rates have been accompanied by unevenness of achievements: across Indian states and across various socio-economic groups. States in the Western and Southern zones of India outperform those in the East and Center. Moreover, the densely populated states of Uttar Pradesh, Bihar and Rajasthan continue to lag behind the rest of India. Literacy rates for girls, rural residents, and especially members of scheduled castes and scheduled tribes also lag behind those for boys, urban residents and the upper castes.

In terms of physical access to schools, more than ninety percent of the Indian population now has a primary school located within one kilometer of their place of residence. However, many schools have only one or two classrooms and most lack running water and toilets. These features are not conducive to a learning environment. The really critical aspect of the Indian public education system is its low quality. Even in educationally advanced states, an unacceptably low proportion of children who complete all grades of primary school have functional literacy. There is a lot of 'waste' in the school system as evidenced by the large percentage of children who drop-out before completing primary schooling. Such inefficiency is compounded by teacher apathy, teacher absenteeism, very high pupil-teacher ratios and inadequate teacher training.

Public expenditure on education in India has been rising over time. After the District Primary Education Programme (DPEP) which was launched in 1994, the federal government launched the Sarva Shiksha Abhiyan (SSA) in 2001 with the goal to universalize primary education (grades one to five) by 2007 and elementary education (grades one to eight) by 2010. Unlike the DPEP, SSA is funded entirely by domestic resources and provides the states with a strong initiative backed by funding to tackle illiteracy among the young members of their population. Another policy that has been very successful in increasing enrolments, attendance and retention of students in primary school is that of the provision of mid-day meals. There are lessons to be learnt from the diverse experiences of Indian states in terms of their achievements in literacy. While in Kerala, strong social intermediation by the government has proved successful, in Himachal Pradesh, social capital and community participation seem to have led to similar success.

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1. Introduction

India has made large strides in educating its population of more than a billion people, yet a lot remains to be done. It is commonplace now that education is both intrinsically valuable and also instrumental for economic well-being, and this is true for individuals and entire nations. No country in the world has been able to develop without the spread of mass education. An educated population is a prerequisite for take-off into high economic growth.

Table 1 in the appendix shows literacy rates for India as a whole and by sex. It also shows the decadal rates of change from 1901 to the present.² Literacy rates have increased for both males and females, and though the latter continues to lag behind the former, there has been a narrowing of the male-female gap in literacy: from 24.8% in 1991 to 21.7% in 2001. In 2001, the absolute number of illiterates declined historically for the first time by nearly 32 million. In terms of state-wise performance, Kerala continues to occupy first rank as it has done historically; on the other hand, densely populated states like Uttar Pradesh, Rajasthan and Bihar are yet to overcome their educational inertia.³

The average figures for India as a whole hide a great deal of variation among states. Table 2 in the appendix provides literacy rates for states for the years 1991 and 2001, for the population as a whole, by sex and also provides the decadal rate of change. In 2001, Kerala, Maharashtra and Himachal Pradesh had more than 75% of their population of 7+ years literate. On the other hand, even in 2001, less than half of Bihar's population of seven years and above was literate with female literacy rate only 33.6%. In terms of zones, states in the South and West outperform states in the North and East.

2. Primary Education

Primary education refers to the education of children between the ages 6-11 years (grades 1-5). Universalization of Primary Education (UPE) is a constitutional provision in India and there has been a steady expansion in the spread of primary education since Indian independence in 1947. The Indian educational system is the second largest in the world after China. In 2001-02, there were nearly 0.66 million primary schools in India

¹ This study has been undertaken as part of the United Nations Millennium Development Goals Project.

² Before the 1991 census, only those belonging to the age-group 0-4 years were excluded from the population in order to compute literacy rates and the basis of the computation was the entire population. From the 1991 census onward, literacy rates were computed based on the population aged 7+ years and above.

³ In Bihar, Nagaland and Manipur as well as Delhi and Chandigarh, the absolute number of illiterates has increased in the 1990s.

providing access to 84% of habitations with a primary school located within a distance of one kilometer.

Between 1997 and 2002, the gross primary school enrolment rate⁴ for India was 111 for males and 92 for females. The net primary school enrolment rate⁵ on the other hand was only 78 for males and 64 for females. The net primary school attendance rate between 1999 and 2002 was 79 for males and 73 for females. However, of the children who entered primary school, only 68% reached grade 5 between 1995 and 1999 (UNICEF, 2004).

Table 3 provides data on gross primary school enrolments by sex between 1950-51 and 2001-2002. As can be seen from the table there has been a steady increase in the numbers of boys and girls attending primary school over time. In Table 4, state-wise enrolment of boys and girls as a percentage of their age-group is provided for 1997-1998. Girls' enrolment has been steadily increasing over time and in 2001-02, nearly 45% of girls in the age-group 6-11 were enrolled in school. These statistics are heartening because at least until the 1990s, one of the most dismal aspects of India's education system was the large percentage of the population in the younger age groups that were out of school.

Socio-economic disparities

Despite the strong constitutional backing for the provision of primary education in India⁶ and its expansion over time, the system is characterized not only by low achievements but also by large unevenness of achievements. Huge gaps remain between rural and urban areas, and the probability of getting any education at all sharply depends on gender, caste and income. Women, scheduled castes and tribes and the poor are faced with formidable barriers when it comes to getting basic education. Of the 200 million children in the age group 6-14, it is estimated that 59 million are out of school. Of these 35 million are girls and 24 million are boys (Ministry of Human Development, GOI).

Apart from socio-economic determinants, the educational infrastructure and the management and the governance of the educational system in India are far from efficient or sufficient. The government is the largest provider of education in India with only about 10% of primary schools owned by the private sector.⁷ The quality of education provided by the public education system is low which translates into low educational abilities even for those who are able to complete primary education cycle. Moreover, there is a lot of 'waste' in the educational system with dropout rates as high as 40% for the country as a whole and in some Indian states, they are as high as 75%. Though the number of primary

⁴ Gross primary school enrolment rate is computed as the number of children enrolled in primary school regardless of age divided by the population of that age group.

⁵ Net primary school enrolment rate is computed as the number of children in that age group enrolled in primary school divided by the population of that age group.

⁶ In 2002, the Supreme Court of India decreed that free primary education was a constitutional right.

⁷ Around 3% of private schools are aided by the government, which makes government intervention in the education sector even greater.

schools in the country increased, more than 1 lakh⁸ habitations still do not have access to a primary school within a distance of one kilometer. Teacher-pupil ratios are inadequate: less than 2 teachers are available in rural areas to teach a class size of around 100 students. Teacher motivation and teaching incentives are also very weak. India perhaps has the highest rate of teacher truancy in the world.

Poverty and Education

Empirical evidence strongly shows that, both at the level of the household as well as at the level of the country, there is a positive relationship between income (and wealth) and educational attainment. More income simply means more resources available to spend on the acquisition of education. With more than 250 million people in India living on less than a \$1 a day, poverty remains a major barrier to educational access. Although education is provided 'free' by the government, the cost of uniforms, textbooks and transportation costs are beyond the reach of many households (Tilak, 2004). Added to these direct costs are the indirect (opportunity) costs of wage/domestic labor which children perform and the costs of acquiring education become considerable for households. Graphs 1 and 2 in the appendix show simple regressions of literacy rates for sixteen states against state poverty rates and state per capita income for 2001. As is expected, literacy rates decline with poverty and rise with per capita incomes. State per capita incomes seem to explain literacy rates better than poverty rates. Filmer and Pritchett (2001) using Demographic Health Survey data for India find that the gap in enrolment between the highest and the lowest wealth class is as much as 52 percentage points. Gupta (2003) using the 52nd round of National Sample Survey data finds that the percentage of people who have completed five years of schooling declines as one descends consumption deciles. In the lowest consumption decile, the proportion of people who have not completed the primary school cycle is greater than 80%.⁹

While poverty status and income class are strong determinants of who goes to school and for how long, they do not make up the whole story. Indian states of Kerala and Himachal Pradesh even with fewer resources at their disposal have been able to achieve much better educational and health outcomes compared to rich states such as Punjab and Haryana in India. This is true even when we look at cross-country outcomes. For example, Sri Lanka and Botswana do much better in education and health terms than would be predicted based on their level of resources; the Latin American countries do much worse given their resources (Mehrotra and Jolly, 1998).

⁸ One lakh is equal to 100,000.

⁹ These graphs are meant to be illustrative of the association between resources and education and do not claim any direction of causality. The relationship between resources and educational attainment is bi-directional. The poor cannot afford schooling. With little human capital, the opportunities to escape persistent poverty are very restricted and the poor can be trapped in a low education, low income vicious cycle across generations. A large literature has analyzed both theoretically and empirically persistence of poverty inter-generationally due to lack of resources to invest in education.

Rural-Urban and Gender Disparities

Perhaps, the largest disparity in educational attainment in India is by rural-urban location. Table 5 shows total literacy rates by sex for population belonging to the age category 7+ and above for rural and urban India for the years 1991 and 2001. While there has been some catching up in literacy rates for both males and females between rural and urban areas, the differences continue to be unacceptably large, especially for females. Only 46% of females in rural areas were literate as opposed to nearly 73% in urban areas in 2001, a gap of around 27 percentage points. For males, the gap was lower at around 15 percentage points with 71.18% of males in rural areas and 86.42% in urban areas being literate in 2001.

However, school attendance has been rising for both girls and boys at the elementary school level in both rural and urban areas. The following table, taken from Dreze and Sen (2002), shows school attendance for boys and girls in the 6-14 years age category in 1992-93 and 1998-99¹⁰ for rural and urban areas. Fewer girls attend school in rural areas compared to their urban counterparts, and also compared to boys in rural areas. The proportion of girls attending schools, however, has increased from 59% to 70% between the years under comparison.

School Attendance (%), age 6-14 years

	1992-93		1998-99	
	Female	Male	Female	Male
Rural	52	72	70	81
Urban	79	85	86	89
Total	59	75.5	74	83

While participation of girls in education has seen an increase over time at all levels of education, it continues to lag behind that of boys. In Table 6 in the appendix, the percentage of girls' enrolment to total enrolment at the primary school level between 1950-51 and 2000-2001 is provided. Even in 2001-2002, girls' enrolment remains below 50% of total enrolment at the primary school level. This is true of girls' enrolment at all levels of education, though they have been increasing at levels beyond the primary as well.

Table 6 provides enrolment data, which only takes into account entry into the school system and not attendance or retention, which as we have noted above was 73% for females compared to 79% for males. Moreover, Table 6 provides statistics for India as a whole and therefore, the numbers hide considerable variations. According to the Indian Census of 2001, of the 593 districts in India, 309 districts had (total) female literacy rates lower than the national average and 324 districts had a gender gap in (total) literacy rates

¹⁰ These figures are based on the National Family Health Survey I (1992-93) and National Family Health Survey II (1997-98).

that was greater than the national average. The gender gap in education is mostly due to entrenched gender norms, especially in the states of the north, where girls are married off at very young ages and exogamy in marriage means that any benefits of investment in education of girls will be captured by the household after marriage. This reduces parental incentives in the education of girls. The gender gap in education perhaps reaches its apogee in the North-western state of Rajasthan which can be seen as illustrative of what plagues gender equity in education in India as a whole.

According to the 1991 Census, Rajasthan had 7 million children of primary school going age of which only 52.8% attended school. Moreover, among girls the attendance rate was only 37.4%. The drop out rate from the primary school system was as high as 55%. A large fraction of out of school children were girls. Among scheduled castes and scheduled tribes, the literacy rates for women were as low as 9% and 7% respectively. Thus, gender and caste attitudes have resulted in severe gender inequity in education in Rajasthan. These social attitudes are reproduced officially rendering them invisible, further compounding the low status of women in Rajasthan.¹¹

Scheduled Castes and Tribes

Membership in castes continues to exert a powerful influence on the attainment of socio-economic well being for people in India. This is reflected in almost all the social and economic development indicators for scheduled castes and tribes in India vis-à-vis the rest of the population. Scheduled tribes do worse than scheduled castes and girls belonging to scheduled castes and tribes do much worse than boys belonging to scheduled castes and tribes. At the primary school level, most boys are now enrolled in schools and the percentage of girls enrolled has also improved over time, though it continues to lag in certain states. Table 7 in the appendix provides enrolment ratios for boys and girls belonging to scheduled castes for 1997-98. Enrolment ratios for boys are above 100% for all states. However, drop-out rates for boys and girls belonging to scheduled castes and scheduled tribes are higher than average. In the case of scheduled tribes, nearly 64% of boys and 70% of girls drop out before completing primary school (MHRD, 1994).

3. Quantity and Quality of Education and Educational Deprivation in India

While there has been a continuous upsurge in the number of schools established at the primary level, thus increasing physical access to schools, the low quality of education provided in these schools remains a critical issue in India's educational system. Low quality education implies that even those children who have completed five years of

¹¹ "When we did the household survey we were amazed to note that the number of girls in the total was very low. We inquired further, went over the survey forms and met families that had 'missed out' the girls. They said they did not count them as children, these young ones were married! 100 per cent of girls in Bapini village of Phalodi block of Jodhpur district did not attend school. This was revealed when school mapping was done." – a Lok Jumbish Worker, quoted in Ramachandran (2003).

primary schooling may not be functionally literate and numerate. Thus, while an increase in literacy rates is of significance, we cannot overlook the fact that the numbers may be misleading as to what such literacy rates actually means about the presence of effective literacy (and numeracy) in the population.

Educational deprivation in India has, among others, two crucial dimensions: lack of schools and the low quality of teaching. The latter is the outcome of a combination of lack of school supplies, insufficient incentives for teachers to teach adequately and weak links between the school system and society. In India, there has been a greater emphasis on the provision of more schools ('quantity') than on activities that actually take place inside classrooms ('quality'). Between 1950-51 and 2001-02, the number of primary schools increased nearly three-fold in India (Ministry of Education, GOI), from 209,671 schools to 664,041 schools respectively. Eighty four percent of habitations in India now have a primary school located within a distance of one kilometer. Of the 664,041 schools in 2001-2002, nearly 90% were managed by the government or local bodies. Setting up more schools is crucial, especially in those areas that have a greater concentration of tribals and other backward castes, groups for whom not only physical access but social access is also problematic. Despite this increase, the educational system in India is characterized by inadequacy of school facilities. Many habitations, around a 100,000, still do not have a primary school located within a distance of one kilometer.

Most schools do not have enough classrooms to accommodate all children. School structures also lack basic facilities such as running water and toilets. These problems are more acute in some states than in others. A study of Uttar Pradesh found that 54% of schools did not have running water and as high as 80% of schools did not have latrines (World Bank, 1997). Grover and Singh (2002) in their study of schools in two districts of Tamil Nadu found that of the twenty schools they visited, only two had toilets, one of which was not in usable condition and only two schools had running water on their premises. Lack of access to toilets and running water reduce student attendance as students have to go home to use these facilities. The lack of separate toilets for boys and girls also influence parents' incentives to send daughters to school.

Educational outcomes depend on the number of teachers and their qualifications, availability of teaching and learning resources in schools such as textbooks and blackboards, and their use made by teachers in actual classroom activities. Educational outcomes also depend on how much teaching actually takes place, which in turn depends on the number of hours (and days) the school is operational, whether teachers are present or absent, and for each student, whether he or she attends school or not and for how long. These different elements influencing educational outcomes can be thought of as comprising 'quality' of education.

Teacher availability, especially in rural areas, continues to be low. Teachers posted to rural and remote areas usually apply for transfers and in general, willingness to be posted in such areas is rather low. This leads to severe imbalances in the distribution of school resources between rural and urban areas and adds to the low teacher-pupil ratios generally observed within the school system. Teacher-pupil ratios are very low,

especially in rural areas - around 1.6 teachers per 100 students for India as a whole. Table 8 in the appendix provides pupil-teacher ratio for some select Indian states for 1997-98. The all-India average is 43 students per teacher. In Bihar and Andhra Pradesh, this ratio reaches 50 and 53 students respectively. The low figures of 27 and 25 for Bihar and Rajasthan do not indicate the greater availability of teachers but the low school attendance by students. Additionally, given the large presence of single and two-teacher schools, there is multi-grade teaching, a fact that detracts from the quality of teaching even further and not captured by teacher-pupil ratios. Moreover, teacher absenteeism is a pervasive phenomenon, especially in rural areas. This effectively reduces the teacher-pupil ratio even further. There is little effective monitoring of teacher attendance. A lot of teaching time is devoted in many schools by teachers to paperwork than in actual teaching.

The low quality of the school system contributes to parental apathy towards actually sending their children to school even when most parents recognize the importance of education as a means to social and economic mobility for their children and have strong educational aspirations for both sons and daughters. Teacher apathy comes out very strongly in small surveys conducted by research teams with the aim to adjudge the teaching-learning processes as they are taking place in schools. For instance, the PROBE (1999) team reports that there was no teaching going on in half the sample schools visited by them, a problem further compounded by dismal infrastructure, overcrowded classrooms and lack of teaching materials and resources.¹² Grover and Singh (2002) found that in nearly 70% of the schools visited (unannounced) in two districts of Madurai and Villupuram in Tamil Nadu, no instruction was taking place. Such severe teacher apathy and lack of commitment undermines the efficiency of the education system drastically.

High teacher salaries do not seem to provide adequate incentives for better teacher performance (Grover and Singh, 2002; World Bank, 1997). Moreover, politically strong teacher unions further weakens accountability of teachers. Another lacuna in the education system is teacher qualification. While in some states such as Tamil Nadu, most teachers have the basic requirements of a high school degree and two years of training, in other states, this is not the case. Moreover, teacher training programs do not take the reality of the environments and constraints under which teaching actually takes place into account. No attention is paid to the fact in these programs that in most schools, the same teacher is responsible for more than one grade. More often than not more than one grade occupy the same classroom. In a study of two districts of Tamil Nadu, Grover and Singh (2002) report that nearly 80% of schools have multi-grade classrooms and that this was representative of schools in Tamil Nadu as a whole. The idealized plans and procedures of teacher training manuals and programs that bypass teaching realities are generally not useful or meaningful in actual practice.

In rural areas, opening and closing times of schools may deviate (and they usually do) from the administratively fixed times, depending on the whim of teachers. Moreover, schools may close down unofficially during certain times of the year – for example

¹² These visits were unannounced.

during times of rain or excessive heat, or during the agricultural peak period when families may use every available pair of hands in farm/wage labor and for cultural reasons such as the onset of the wedding season or religious periods. This translates into low and irregular attendance by students who are enrolled.

The caste system also plays a role in the quality of teaching imparted to students. Especially in areas where children belong to castes lower down in the social hierarchy and teachers belong to dominant castes, the social attitudes towards the former are reproduced inside schools. This further de-motivates students from education, and compounds further the problem of non-enrolment, low attendance and dropping out of those enrolled. The linguistic diversity in India also means that language of instruction in schools and the local languages spoken by students are often different. This reduces the effectiveness of any teaching that takes place. Teaching curricula is devised under a centralized system and most textbooks are written from a middle-class perspective which contributes to lack of interest and understanding and leads to poor learning outcomes.

The school system is not without 'corruption'. Misuse of school funds as well as recruitment of relatives and friends as teachers are not uncommon – there is a market in public employment in India, where positions can be bought by means of social connections and bribes. Even in states that are better off in terms of physical infrastructure and other teaching/learning inputs, weak accountability plagues the system and negatively influence learning outcomes, the ultimate goal of education. Some steps in improving the management of the school system has been taken in some states via administrative decentralization, that is by giving control of local schools to village level bodies such as the gram panchayats and the formation of village education committees. Notable in this regard has been the educational reforms undertaken in the state of Madhya Pradesh. However, observers note that while these reforms have increased physical access to schools, quality-wise this new system does not deviate much from the old system and is characterized by the same set of practices that account for malfunctioning of the public educational system (Leclercq, 2002). Moreover, these educational reforms, focusing on 'alternative schools' create a second track school system which can lead to increased enrolment in the short run; in the long run, they contribute to further social differentiation and social inequality (Dreze and Sen, 2002).

Among the dire consequences of low quantity and quality of education, along with demand side constraints, are the very high drop out rates from the primary school system and poor learning outcomes of those who are in school. One World Bank (1997) study estimated that 45% of girls and 41% of boys drop out before reaching grade 5. Table 9 in the appendix shows the drop out rates at the primary school level for a few select states. The all India rate is nearly 40% highlighting the fact that dropping-out still remain a problematic aspect of the public school system. The drop-out rate for girls is greater in all states (except Karnataka) and in five states, namely Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh and West Bengal, the drop-out rates for girls is more than 50%. Thus, there is considerable 'waste' in the school system, reducing further the efficiency of funds allocated to education.

Moreover, the quality of ‘literate’ of the school system is very low. The actual quantity of schooling that children experience and the quality of teaching they receive are extremely insufficient to any mastery of basic literacy and numeracy skills. This seems to be true of both the educationally more advanced states as well as the educationally backward states. In Maharashtra, community based surveys of twenty eight cities and eight rural districts found that only 30% of boys and girls in the age group 6-14 could read basic text fluently or do simple arithmetic (Banerji 2003). Grover and Singh (2002) too found in their study of two districts of Tamil Nadu that most students lacked functional literacy and numeracy skills. We note here that Tamil Nadu and Maharashtra are two of the educationally most advanced states in India. Similar results are reported by the PROBE team (1999) in their surveys of four North Indian states. Leclercq (2002) in his study of two districts of Madhya Pradesh found that in most schools visited, few children could read their basic texts fluently. The emphasis was on rote learning and there was little attempt in teaching activities to impart understanding or comprehension of the text.

4. The Role of the State in Primary Education in India

In recent years, the Indian state, both at the regional level as well as at the center, has undertaken a number of programs to reach the goal of universal primary education. It must be noted that till 1976 in India, education was a ‘state subject’: only the state (regional) government had the right to legislate on this issue. Post-1976 when education ceased being exclusively a state subject, the state can still enact laws modifying those passed by the central government. This implies that the primary responsibility for education rests with the state governments and not the central government.

One of the highly debated issues in India with respect to education has been a Compulsory Education Policy. The advocates of compulsory education see it not only as a basic human right but also as a way forward to eliminate the scourge of child labor of which around 125 million are said to exist in India. As noted above, while direct expenditure on primary education may be nominal or zero, for poor households, especially in rural areas, the opportunity cost of education can be very high. Thus, the existence of child laboring opportunities can weaken incentives to attend school.¹³ However, the issue of child labor, while intricately bound up with the issue of education, requires its own analytical space and will not be pursued here. What we would like to note here, without debating the merits or otherwise of a compulsory education policy, is that such a policy by itself is neither necessary nor sufficient for eliminating child labor. Three Indian states with the lowest incidence of child labor, namely Kerala, Himachal Pradesh and Manipur, do not have a compulsory education policy. Moreover, these states also have the highest enrolment rates as well as the lowest dropout rates in the country. On the other hand, among states where such a policy does exist, enrolment rates are relatively low. These states include the educationally backward states of Bihar, Rajasthan and Uttar Pradesh (Mehrotra and Jolly, 1998). Legislation is only a first step – there has

¹³ Weiner (1991) notes that no country in the world has been able to eliminate child labor without a compulsory education policy.

to be institutional and governance support for legislation measures to be effectively implemented and monitored.

Public Expenditure on Education

In 2001-2002, India spent about 4% of its GDP on education (all levels). This is lower than the targeted percentage of 6% of GDP, though historically public expenditure on education as a percentage of GDP has been rising. The following table shows government expenditure on education (all levels) as a ratio of expenditure on all sectors as well as percentage of GDP.

Public Expenditure on Education in India (Base Year: 1993-1994)

Year	Government Expenditure on Education (in millions Rupees)	Expenditure on Education as a % of all Government Expenditure	Expenditure on Education as a % of GDP	Expenditure on Elementary Education as % of Expenditure on Education*†
1951-52	6.446	7.92	0.64	-
1961-62	26.030	11.70	1.52	-
1971-72	110.107	9.53	2.33	-
1981-73	443.529	13.17	2.92	-
1991-92	2239.369	13.14	3.8	46.3
2000-01	-	-	-	48.9
2001-02	8417.946	13.17	4.02	-

Source: Department of Education, GOI; * Budget expenditure of the Department of Education only;

†Source: Tilak (2004)

In 1990-1991, expenditure on elementary education as a percentage of GDP was only 1.78% reflecting the greater emphasis given to secondary and tertiary education. In 1994-1995, this percentage actually declined to 1.65% and then increased to 2.02% in 2001-2002 (Ministry of Education, GOI). As a proportion of government expenditure on all levels of education, elementary education accounts for around 50%, up from 46.3% in 1990-91 (Tilak, 2004). Elementary education is financed almost completely by the government – central, state and local – and government funds account for 99% of all recurring expenditure in elementary education.¹⁴

District Primary Education Programme (DPEP and Sarva Shiksha Abhiyan (SSA)

The District Primary Education Programme (DPEP) and the Sarva Shiksha Abhiyan (SSA) are two large scale government programs aimed at the universalization of primary and upper primary education in India.

¹⁴ However, there is evidence that due to budgetary pressures, state level expenditure on elementary education as a percentage of state domestic product has been declining on average and in some states (West Bengal and Uttar Pradesh) has even declined in absolute terms (Dreze and Sen, 2002).

District Primary Education Programme (DPEP)

The Government of India launched the District Primary Education Programme (DPEP) in 1994 with the aim to attain the goal of universal elementary education through district specific planning, decentralized management and community participation, empowerment and capacity building at all levels (Ministry of Education, GOI).

The stated objectives of the DPEP are:

- Provide all children with access to primary education.
- Reduce dropout rates at the primary school level to less than 10%.
- Reduce differences in enrolment, dropout rates, and learning achievement among gender and social groups to less than 5%.
- Raise the average achievement of students in language and mathematics by 25% and by 40% in other subjects.
- Strengthen the capacity of national, state and district level institutions and organizations for planning, management and evaluation of primary education.

In order to be selected for the DPEP, the district has to have female literacy rates that are below the national average. Moreover those states are selected for DPEP where the Total Literacy Campaign (TLC) has generated a demand for elementary education. When the program was launched in 1994, it covered forty-two districts in seven states, namely Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu. Later, it was extended to Uttar Pradesh, Bihar, West Bengal, Orissa, Andhra Pradesh, Gujarat and Himachal Pradesh. Currently, the program covers 176 districts in 15 states of India. These states together have 60% of the child population in India. Another 60-65 districts are slated to be brought into the DPEP fold.

DPEP is a centrally sponsored scheme with the central government providing 85% of funds and the state government providing the remaining 15%. The share of the central government comes from external assistance from bilateral and multilateral agencies such as the World Bank, IDA, DFID, EC, UNICEF and the government of Netherlands. Some of these funds are in the form of soft loans while others are outright grants. Under the DPEP, a maximum of Rupees 40 million is provided for implementation and a project's life lasts between five and seven years. Of the total project cost, 70% has to be spent on improving the quality of education, whereas only 24% can be spent on civil works and 6% on management.

The DPEP is the largest scheme of its kind in the world and is now being seen as a successful model for use in implementation in other developing countries as it seems to have generated positive results. In the first phase of DPEP, 1,60,000 teachers were trained, 4,500 new schools, 5,000 class rooms were constructed and 14,400 toilet and water facilities provided. According to a study conducted by the National Institute of Educational Planning and Administration (NIEPA, 1998a), between 1993-1994 and 1996-1997, enrolment rates in DPEP districts increased by more than in non-DPEP districts in four states (Madhya Pradesh, Haryana, Assam and Maharashtra), ranging from

3.7% to 16.8%. Also, in many of the DPEP districts, primary school enrolment of girls increased at a higher rate than that for boys. Of the additional 6,30,000 children enrolled in 39 of the 42 phase I DPEP districts between 1995-6 and 1996-7, 51.5% were girls. Repetition rates which increase the inefficiency of the school system also fell by an average of 50% in 1996-7. Another NIEPA study (NIEPA, 1998b), found that among the DPEP phase I states, the highest enrolment increase of 35.6 % was in Assam followed by Haryana (15.9%) and Maharashtra (14.6%) in 1996-97. The national average was 9.4 per cent. In 1997-98, the highest increase in enrolment was in Madhya Pradesh (10.5%).

Sarva Shiksha Abhiyan (SSA)

The central government launched the Sarva Shiksha Abhiyan (Universal Elementary Education¹⁵) in 2001.¹⁶ And in 2002, the 93rd amendment to the Constitution decreed free and compulsory education to all children between the ages 6-14. The goal of SSA is to provide meaningful and quality education to all children between the ages 6-14 by 2010. It is an umbrella plan for elementary education in India and includes the DPEP.

The objectives of the SSA are:

- All children in school, Education Guarantee Center, Alternative School, 'Back to School' camp by 2003.
- All children complete five years of primary schooling by 2007.
- All children complete eight years of schooling by 2008.
- Focus on quality primary education with emphasis on education for life.
- Bridge social and gender gaps in primary education by 2007 and in elementary education by 2010.
- Universal retention by 2010.

The SSA has been envisaged in partnership with the state governments. It will not seek to dislodge or supersede state educational infrastructure. However, it will seek greater community participation and to that effect will aim at decentralization of the school system with community ownership of schools. The financial obligation by the government towards SSA has been estimated to be an additional Rupees 6,000 million over the next ten years¹⁷ to be shared by the central and state governments. In the beginning, the bulk of the funds will be provided by the central government (75:25 during the 10th five year plan), eventually giving way to a 50:50 responsibility between the center and the state.

¹⁵ Primary education refers to the first five years of schooling and Elementary Education to the first eight years of schooling.

¹⁶ The idea was first mooted and recommended to the Prime Minister of India by Bajpai and Sachs (2000).

¹⁷ There has been a continual upward revision of the estimated financial requirements for achieving universal elementary education. In 1997 when the 93rd amendment bill was introduced, it was estimated that an additional Rupees 800 million would be required annually for elementary education. By 2002, when the bill was passed, the estimate had gone up to Rupees 980 million.

As the SSA is a relatively recent program, we cannot at this point evaluate how well it will be able to attain its aims. However, the SSA is noteworthy on many counts. Unlike the DPEP, the SSA is a program that is entirely domestically funded and does not rely on external resources. The funds for the SSA are allocated from the Union Budget. Secondly, the SSA is an initiative of the Central government, even though education in India is largely the responsibility of state governments. A worrisome factor, however, raised with respect to the SSA is whether the state governments will be able to meet with their share of their financial obligations (which will rise with each five year plan).¹⁸ [] In order to be able to do so, the state governments will need to undertake long overdue fiscal reforms. In 2001/02, the fiscal deficit of all Indian states taken together was as high as 5.1% of GDP. In eight states, their fiscal deficit was more than seven percent of state gross domestic product. States have very high debt burdens; in some states the debt to revenue ratio exceeds 200% (Anand et al, 2001).¹⁹

One of the prime reasons driving high state revenue deficits are large ‘subsidies’ given to power, agriculture, irrigation, transport and many other sectors, mostly to cater to populist demands. For these sectors, neither from the viewpoint of presence of large positive externalities nor from the view point of attaining distributional objectives,²⁰ are subsidies justified. These subsidies not only distort incentives in the economy, reduce economic growth and lead to macroeconomic mismanagement, they also take away resources from crucial sectors like health and education for which subsidies are justified and on which long term economic growth ultimately depends.²¹ Thus, there is a dire need for states to consolidate their fiscal situation, especially by cutting unproductive governmental expenditure. Another aspect of fiscal reforms that again has not seen much action in India despite a lot of debate and discussion, is disinvestment and sale of public sector enterprises. This too has the potential to generate much needed funds for more productive uses (Bajpai, 2001). It cannot be emphasized enough that the SSA is politically a bold move on the part of the Central government and it is up to individual state governments to seize the opportunities provided by the SSA. Otherwise they run the risk of falling behind, not only compared to the more enterprising Indian states, but also globally, now when human capital has become the prime mover of economic well-being worldwide.²²

¹⁸ Budgetary constraints faced by the state governments can have real impacts on the quantity and quality of the education system. It has been noted that financial constraints has given rise to incentives for states to propose alternative plans and options that are low-cost and non-formal, rather than strengthening and extending the formal infrastructure. An example of this is the large recruitment of para-teachers by many states such as Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh and West Bengal (Geetha, 2003). These para-teachers have minimal training (ranging from 10 days to a month) and many of them have not cleared high school.

¹⁹ This figure does not include contingent liabilities such as unfunded pensions or loans to Public Sector Enterprises. These are likely to raise the debt burden even further.

²⁰ Most subsidies, in fact, are highly regressive in their impact (Srivastava and Bhujanga Rao, 2001).

²¹ On the other hand, the education sector which is also publicly subsidized, has high recovery costs and the distributional effects of the subsidies are relatively progressive. See (Tilak, 2004).

²² It has to be noted that in the recently revealed Union Budget 2003-04, elementary education has been allocated Rupees 466.9 million of which Rupees 195.1 million is allocated to the SSA. Even though the budgetary allocation to elementary education is 9% higher than the previous year, it is less than 50% of the estimated additional annual requirement for achieving universal elementary education. Another lesson that

Social Intermediation and Educational Development

Without a doubt, the primary responsibility for the provision of education in developing countries rests with the government. Given the extent of poverty and social inequalities, the private sector cannot be expected to provide education to the bulk of these countries' population. Even in developed countries, governments' share in the direct provision of education (at all levels) continues to be considerable.

The crisis of education in India has not only been financial but also political. While school availability and good quality education are prerequisites for effective literacy, political will and governance also play an important part in the realization of educational goals. In fact, the latter can reduce the time required for educationally backward regions to catch up. A case in point is the southern Indian state of Kerala. Kerala has been able to attain near universal literacy for both males and females. Kerala's success has been the result of a mixture of historical circumstances and political activism from below that were successful in getting the state committed to the educational (and health) development of its citizens. In terms of per capita income, Kerala ranked 12th among all Indian states in 1991. In 1987-88, 32% of Kerala's population was below the poverty line. So, Kerala's success in the social sector is largely due to successful public action in these spheres. Not only does Kerala provide an exemplary instance of how state commitment to education and health can lead to remarkable results, it also provides a lesson in catching-up for socially backward regions. The state of Kerala as it exists today was formed in 1956 by joining the state of Travancore and Cochin and the district of Malabar. The latter significantly lagged behind the former in education and health at the time of the merger. However, within two generations, Malabar had caught up. The plans and policies that were followed in Travancore and Cochin were extended to Malabar: these were a combination of public and private investment in education and health and incentives provided to the private sector to set up educational institutions (Mehrotra and Jolly, 1998).

The following discussion on the reasons for Kerala's success in education is adapted from Mehrotra and Jolly (1998). The near universal literacy in Kerala is the outcome of conscious policy actions that were able to overcome barriers to access along physical, economic and social dimensions. Physical barriers to schools were overcome by establishing schools within walking distance from homes. Economic access was provided by making schools progressively free until high school. While in the other states of India, caste barriers continue to thwart efforts at removing social barriers of access to education, in Kerala the influence of the caste system was weakened by successful political activism from below. Another important aspect of Kerala's educational policy from the 19th century onwards was the large role given to the community in the educational sphere. Resource constraints in the public sector were eased by providing grants-in-aid to the

emerged from the experience of DPEP, and which has relevance for the SSA, was that under DPEP many districts had large proportions of funds released to them unutilized because of inadequate institutional and administrative capacity. Without adequate institutional capacity to manage resources, a similar fate could fall on funds released under SSA.

communities to establish schools. The grants-in-aid were meant only to cover recurrent costs; the capital costs had to be provided by the communities themselves. These grants-in-aid turned out to be powerful incentives for communities to start their own schools. Malabar, at the time of the merger, was quite backward with social indicators not very different from the rest of India. However, the policies prevailing in Travancore and Cochin were extended to Malabar, and within a period of thirty-five years, differentials between the two had been largely eliminated.

Another factor in Kerala's success has been the high status of women in the state: the sex ratio in Kerala is 1058 females for every 1000 males (compared to 933 females for every 1000 males for India as a whole); the total fertility rate in Kerala in 1996 was 1.6 (compared to 3.4 for all India); there are no gender differentials in school enrollments at the primary school level (and even at higher levels of education). In most other states of India, women face strong social barriers to education, a factor absent in Kerala (and other southern states).

Mid-Day Meals

The program of providing mid-day meal to primary school children in India (National Programme of Nutritional Support to Primary Education) was launched on the 15th of August 1995. Under this program cooked mid-day meals were to be provided in all government and government-aided schools within two years. The aim of the program was to improve enrolment and attendance and to take care of nutritional needs of children in grades 1-5.²³ The state governments in the interim were allowed to distribute non-cooked grains instead of cooked meals. Until 2001, however, only the states of Kerala, Gujarat, Tamil Nadu, Madhya Pradesh, Chattisgarh, Orissa, Karnataka and Delhi were providing cooked meals under the scheme, while the remaining states and Union Territories continued to provide food grains (wheat or rice). In 2001, the Supreme Court of India converted the mid-day meal scheme into a legal entitlement where in the state governments were liable to provide nutritious cooked meals for all children in government and government-aided schools (see section A.1 in the appendix).

Mid-day meal scheme was first introduced post-independence in the southern Indian state of Tamil Nadu as long back as 1956. A large part of the successful educational performance of the state is attributed to this scheme, which has been implemented efficiently and effectively, especially since 1982 when it was extended to the whole state. Between 1985-86 and 2002-2003, enrolment in primary schools increased by almost 31%, from 5.09 million children to 6.59 million children. Today Tamil Nadu is one of the most literate states in India with an adult literacy rate of over 70%.

²³ According to the Global Feeding Report of the United Nation's World Food Programme, "School feeding programmes often double enrollments within a year and can produce a 40 percent improvement in academic performance in just two years. Children who take part in such programmes stay in school longer and the expense is minimal."

Not only in Tamil Nadu, but in other states as well, mid-day meals have generated positive results since their introduction. A recent study of three states – Chattisgarh, Rajasthan and Karnataka, finds a positive relationship between enrolments and attendance and provision of free meals (Dreze and Goyal, 2003). In 81 schools that were studied, in which the scheme was introduced in July 2001, enrolment in grade 1 increased by 15% in one year. This was especially true for female enrolments: in Chattisgarh they went up by 17% and in Rajasthan by nearly 29%. Another study noted that the provision of mid-day meals is associated with a 50% reduction in the percentage of girls who are out of school (Dreze and Kingdon, 2001). Similar results have been noted for districts in Rajasthan (Khera, 2001).

Mid-day meal scheme thus has the potential to not only boost enrolments but also to improve daily attendance of students. This reduces both drop-outs as well as waste in the school system. By ending ‘school hunger’, a reason for many children to be out of school and their indifferent response to educational activities when in school, mid-day meal schemes can improve learning outcomes. Moreover, they also take care of nutritional needs of children. Mid-day meal scheme can also be part of the strategy to reduce the gender gap in education as they seem to increase enrolment of girls by more than the enrolment of boys. Given the synergies between health and education, provision of mid-day meal schemes can have spillover effects on both education and health.

There are differences across states in the budgetary allocations to mid-day meals schemes and the infrastructure that is set-up in schools for its provision. This is reflected in the quality of mid-day meals provided (Dreze and Goyal, 2003). However, most observers are in agreement that the mid-day meal scheme is an important step forward in improving both the education and health outcomes of children in India and greater effort and funds should be channeled in improving its quality and implementation.

5. School and Community: Social Capital

One of the unsung states in India as far as educational achievements are concerned is the small hilly state of Himachal Pradesh. Quietly, it has made steady strides in the spread of literacy: with 77.1% (86% for males and 68.1% for females) overall literacy rate ranks third only behind Kerala (90.8%) and Maharashtra (77.3%). The educational performance of Himachal Pradesh has been hailed as a ‘schooling revolution’ (PROBE, 1999; Dreze and Sen, 2002). The following table adapted from Sood (2003) provides some education quality indicators for Himachal Pradesh:

Himachal Pradesh: Some Quality of Education Indicators	
Percentage of Drop outs in Primary Schools	Less than 1%
Pupil-Teacher Ratio	23
Single Teacher Schools	7-10%
School buildings requiring major repairs	20-25% (approx)
Schools without own buildings and using hired premises	8-10%
Gender Equity Ratio	100%

As can be seen from the table, on the quality side, the picture that emerges for Himachal Pradesh is very positive and encouraging. However, what is intriguing about Himachal Pradesh is that it is not readily apparent as to why it has done so well in educational terms. It is contiguous with the Hindi-belt states that include Uttar Pradesh, Rajasthan and Bihar and has similar educational infrastructure and institutions. Studies such as those conducted by the PROBE team attribute the success of Himachal Pradesh to: a) state initiatives and investment in education, b) a relatively less rigid social structure that is found in hill regions, c) greater community participation and d) a better status of women in society. These factors have translated into high enrolments for both girls and boys, regular attendance and low drop-out rates, factors that plague the school system in the other Hindi belt states.

6. Concluding Remarks

Undoubtedly, India has taken large steps forward in the spread of primary education, as is evidenced by increasing enrolment rates for both boys and girls, as well as increasing literacy rates. These achievements have been the result both of greater funds allocated to education and also due to programs and schemes that focus on specific lacunae in the educational infrastructure and the educational system. These programs and schemes seek to align supply side incentives with demand side incentives and generate positive synergy between the two. However, it has become a cliché to say that a lot remains to be done.

Apart from household income/wealth, caste, gender and rural-urban location continue to determine access to education. The poor, girls, rural inhabitants and members of scheduled castes and tribes still face formidable barriers in acquiring basic education. In recent years, the situation has improved for female schooling, especially in the younger age-groups. However, the discrepancies between rural and urban areas continue to be large and the educational situation of scheduled castes and tribes lags considerably behind the rest of the population. Dreze and Sen (2002) note that there may have actually been an increase in educational inequality in recent years, especially if we take the quality of education into account, due to expansion of private schools which is accessible only to children from privileged backgrounds and decline in the quality of schooling provided by the public school system.

Quantity-wise there has been a large increase in the spread of education in India, especially at the primary school level. There is close to universal access to a primary school within one kilometer of the place of residence for most children. In terms of quality of education provided, the system underperforms critically. In terms of learning outcomes, even the graduates of the primary school system lack basic functional literacy and numeracy skills. Weak teacher motivations, their apathy towards teaching and high teacher truancy plague the educational system.

In the last ten years, the government has launched two large scale programs – the District Primary Education Programme (DPEP) and the Sarva Shiksha Abhiyan (SSA) – with the goals of universalizing elementary education. Both programs focus on

administrative decentralization and community participation to institute accountability within the school system. Under both programs, physical access to schools has greatly increased. DPEP has seen increased school enrolments, especially of girls, and more so in the historically more backward states. The SSA is an ambitious program launched in 2001, funded entirely by domestic resources and a major initiative on the part of the central government. It is an umbrella program that includes the DPEP in its ambit. The SSA seeks to universalize primary education by 2007 and elementary education by 2010. To these ends, the government has made large sums of money available to the state governments, providing them with the platform to attain universal primary education.

One policy initiative that has seen success in almost all states where it has been implemented is the provision of mid-day meals in primary schools. It has increased enrolment, attendance and retention, especially of girls. Moreover, it also takes care of nutritional needs of students. This not only affects positively the health of poor students but also improves learning outcomes by ending 'school hunger'.

The quantity and quality of education provided should be such that all children of school going age must be in school, remain in school till they complete the school cycle and when they leave school have mastered the three R's firmly. While the quantity of education has increased substantially in India, the state of the quality of education provided and hence the quality of literacy in the 'literate' population is worryingly low. India cannot allow itself complacency in the field of education due to better numbers alone. Average statistics hide the unevenness of achievements; moreover higher achievements quantitatively by no means imply adequacy of quality. In fact, quality of education in India is the most problematic aspect of its education system today.

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Appendix

Table 1: Crude literacy rates by sex, India, 1901-2001

Census year	Crude literacy rates			Decadal change (in percentage points)		
	Persons	Males	Females	Persons	Males	Females
1901	5.4	9.8	0.6	--	--	--
1911	5.9	10.6	1.0	0.5	0.8	0.4
1921	7.2	12.2	1.8	1.3	1.6	0.8
1931	9.5	15.6	2.9	2.3	3.4	1.1
1941	16.1	24.9	7.3	6.6	9.3	4.4
1951	16.7	25.0	7.9	0.6	0.1	0.6
1961	24.0	34.4	13.0	7.3	9.4	5.1
1971	29.4	39.4	18.7	5.4	5.0	5.7
1981	36.2	45.9	24.8	6.8	6.5	6.1
1991	42.8	52.7	32.2	6.6	7.8	7.4
2001	55.3	64.1	45.8	12.5	11.4	13.6

Source: Registrar General CCI 2001: (2001a: 114)

Notes:

1. Figures from 1901 to 1941 are for undivided India.
2. Figures for 1981 exclude Assam and those for 1991 exclude Jammu and Kashmir as no census could be conducted in Assam in 1981 and in Jammu and Kashmir in 1991.
3. Figures for 2001 exclude the entire Kachchh district; Morvi, Maliya-Miyana and Wankaner talukas of Rajkot district; Jodiya taluka of Jamnagar district of Gujarat state, and entire Kinnaur district of Himachal Pradesh where 2001 census enumeration could not be held due to natural calamities

Table 2: Literacy rates (Persons, Males, Females) for all Indian states, 1991 and 2001

Zone/State and Union Territory	1991			2001			Gains in literacy rates (2001-1991)		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
INDIA	52.2	64.1	39.3	65.2	75.6	54.0	13.0	11.5	14.7
NORTH ZONE	51.2	63.8	36.9	66.5	77.6	54.1	15.3	13.8	17.2
Haryana	55.9	96.1	40.5	68.6	79.3	56.3	12.7	10.2	15.8
Himachal Pradesh	63.9	75.4	52.1	77.1	86.0	68.1	13.2	10.6	16.0
Jammu & Kashmir	51.5	63.3	38.8	65.4	75.9	54.2	13.9	12.6	15.4
Punjab	58.5	65.7	50.4	70.0	75.6	63.6	11.5	9.9	13.2
Rajasthan	38.6	55.0	20.4	61.0	76.5	44.3	22.4	21.5	23.9
Chandigarh (UT)	77.8	82.0	72.3	81.8	85.7	76.7	4.0	3.7	4.4
Delhi (UT)	75.3	82.0	67.0	81.8	87.4	75.0	6.5	5.4	8.0
EAST ZONE	47.6	60.1	33.9	59.0	70.1	47.0	11.4	10.0	13.1
Bihar	37.5	51.4	22.0	47.5	60.3	33.6	10.0	8.9	11.6
Sikkim	56.9	65.7	46.8	69.7	76.7	61.5	12.8	11.0	14.7
West Bengal	57.7	67.8	46.6	69.2	77.6	60.2	11.5	9.8	13.6
Orissa	49.1	63.1	34.7	63.6	76.0	51.0	14.5	12.9	16.3
A & N Islands (UT)	73.0	79.0	65.5	81.2	86.1	75.3	8.2	7.1	9.8
NORTH EAST	54.5	63.2	44.1	65.8	73.0	58.0	11.3	9.8	13.9
Assam	52.9	61.9	43.0	64.3	71.9	56.0	11.4	10.0	13.0
Arunachal Pradesh*	41.6	51.5	29.7	54.7	64.1	44.2	13.1	12.6	14.5
Manipur	59.9	71.6	47.6	68.9	77.9	59.7	9.0	6.3	12.1
Meghalaya	49.1	53.1	44.9	63.3	66.1	60.4	14.2	13.0	15.5
Mizoram	82.3	85.6	78.6	88.5	90.7	86.1	6.2	5.1	7.5
Nagaland	61.7	67.6	54.8	67.1	71.8	61.9	5.4	4.2	7.1
Tripura	60.4	70.6	49.7	73.7	81.5	65.4	13.3	10.9	15.7
CENTRAL ZONE	42.4	56.6	26.5	60.1	72.8	46.2	17.7	16.2	19.7
Madhya Pradesh	44.7	58.5	29.4	64.1	76.8	50.3	19.4	18.3	20.9
Uttar Pradesh	40.7	54.8	24.4	57.4	70.2	43.0	16.7	15.4	18.6
WEST ZONE	63.6	75.4	51.0	73.5	82.9	63.4	9.9	7.5	12.4
Gujarat	61.3	73.1	48.6	70.0	80.5	58.6	8.7	7.4	10.0
Maharashtra	64.9	76.6	52.3	77.3	86.3	67.5	12.4	9.7	15.2
D & N Haveli (UT)	40.7	53.6	27.0	60.0	73.3	43.0	19.3	19.7	16.0
Daman & Diu (UT)	71.2	82.7	59.4	81.1	88.4	70.4	9.9	5.7	11.0
SOUTHERN ZONE	59.3	69.1	49.2	70.4	78.7	62.0	11.1	9.6	12.8
Andhra Pradesh	44.1	55.1	32.7	61.1	70.9	51.2	17.0	15.8	18.5
Goa	75.5	83.6	67.1	82.3	88.9	75.5	6.8	5.3	8.4

Karnataka	56.0	67.3	44.3	67.0	76.3	57.5	11.0	9.0	13.2
Kerala	89.8	93.6	86.2	90.9	94.2	87.9	1.1	0.6	1.7
Tamil Nadu	62.7	73.8	51.3	73.5	82.3	64.6	10.8	8.5	13.3
Lakshadweep (UT)	81.8	90.2	72.9	87.5	93.2	81.6	5.7	3.0	8.7
Pondicherry (UT)	74.7	83.7	65.6	81.5	88.9	74.1	6.8	5.2	8.5

Source: Registrar General CCI 2001

Table 3: Primary School Enrolment by sex: 1950-51 to 2001-2002 (in millions)

Year	Primary School		
	Boys	Girls	Total
1950-51	13.8	5.4	19.2
1955-56	17.1	7.5	24.6
1960-61	23.6	11.4	35.0
1965-66	32.2	18.3	50.5
1970-71	35.7	21.3	57.0
1975-76	40.6	25.0	65.6
1980-81	45.3	28.5	73.8
1985-86	52.2	35.2	87.4
1990-91	57.0	40.4	97.4
1991-92	58.6	42.3	100.9
1992-93	57.9	41.7	99.6
1993-94	55.1	41.9	97.0
1994-95	60.0	45.1	105.1
1995-96	60.9	46.2	107.1
1996-97	61.4	46.8	108.2
1997-98	62.3	48.0	110.3
1998-99*	62.7	48.2	110.9
1999-00*	64.1	49.5	113.6
2000-01*	64.0	49.8	113.8
2001-02*	63.6	50.3	113.9

Source: Ministry of Education, GOI

* Provisional

Table 4: State-wise enrolment (%), 1997-98

State/Union Territory	Boys	Girls	Total
Andhra Pradesh	92.3	86.7	89.5
Assam	113.8	104.3	109.1
Bihar	98.9	59.4	75.9
Gujarat	117.4	113.5	115.7
Haryana	83	84	83.9
Himachal Pradesh	98.5	82.7	90
Jammu & Kashmir	82.6	53.4	67.2
Karnataka	107.2	101.9	104.6
Kerala	91.3	88.7	90
Madhya Pradesh	114.5	89.4	102.3
Maharashtra	115.7	109.9	112.9
Orissa	104.4	76.1	98.5
Punjab	80.3	83.0	81.6
Rajasthan	111.3	80.9	96.9
Tamil Nadu	109.7	107.3	108.5
Uttar Pradesh	74.1	48.9	62.3
West Bengal	98.5	85.6	92.2
Delhi	97.1	81.5	89.0
India	97.5	81.2	89.7

Source: Selected Educational Statistics, 1997-98, MHRD, GOI

Table 5: Rural-Urban Literacy Rates 1991-2001

YEAR	MALE	FEMALE	PERSONS
1991 (7 years and above)			
- RURAL	57.87	30.62	44.69
- URBAN	81.09	64.05	73.08
- TOTAL	64.13	39.29	52.21
2001 (7 years and above)			
- RURAL	71.18	46.58	59.21
- URBAN	86.42	72.99	80.06
- TOTAL	75.85	54.16	65.38

Source: Census of India, 1991, 2001

Table 6: Girls enrolment as a percentage of total enrolment at the primary school level.

Year	Primary I-V
1950-51	28.1
1955-56	30.5
1960-61	32.6
1965-66	36.2
1970-71	37.4
1975-76	38.1
1980-81	38.6
1985-86	40.3
1990-91	41.5
1991-92	41.9
1992-93	42.6
1993-94	42.7
1994-95	42.9
1995-96	43.1
1996-97	43.2
1997-98	43.5
1998-99*	43.5
1999-2000*	43.6
2000-2001*	43.7
2001-2002*	44.1

Source: Ministry of Education, GOI

*Provisional

Table 7: Enrolment Ratio, 6-11 years, Scheduled Castes, 1997-98

State	Boys	Girls	Total
Andhra Pradesh	101.75	96.0	99.37
Assam	0	0	0
Bihar	97.56	65.35	81.73
Gujarat	117.86	116.2	117.16
Haryana	0	0	0
Himachal Pradesh	114.97	75.66	93.82
Jammu & Kashmir	0	0	0
Karnataka	114.52	96.86	105.79
Kerala	107.36	107.54	107.45
Madhya Pradesh	97.64	67.08	82.42
Maharashtra	115.71	109.71	112.73
Orissa	114.21	62.41	88.32
Punjab	0	0	0
Rajasthan	112.88	65.86	90.36
Tamil Nadu	113.65	78.88	96.81
Uttar Pradesh	100.84	86.43	93.64
West Bengal	101.32	100.8	101.86
Delhi	0.1	0	0
India	102.93	78.34	90.73

Table 8: Teacher-Pupil Ratio, Primary School, 1990-1991

	Total
All India	43
Andhra Pradesh	53
Karnataka	44
Gujarat	44
Madhya Pradesh	42
Kerala	32
Uttar Pradesh	45
Bihar	27
Assam	47
Maharashtra	40
West Bengal	38
Rajasthan	25
Punjab	22

Source: www.azimpremjifoundation.org

Table 9: Drop out Rate, Grades 1-5, 1999-2000

	Total	Boys	Girls
All India	39.74	38.62	41.22
Andhra Pradesh	43.64	42.69	44.7
Karnataka	33.48	33.5	33.46
Gujarat	27.75	22.52	33.98
Madhya Pradesh *	23.27	19.79	27.89
Kerala	-7.29	-9.3	-5.2
Uttar Pradesh *	49.85	45.98	55.98
Bihar	59.35	59.39	59.26
Assam *	41.56	40.87	42.43
Maharashtra	22.53	20.45	24.78
West Bengal *	49.92	46.17	54.15
Rajasthan	53.74	49.07	61.59
Punjab	21.79	22.86	20.61

*Data is for 1997-1998

Source: Annual Report 1999-2000, Department of Education, MHRD, GOI

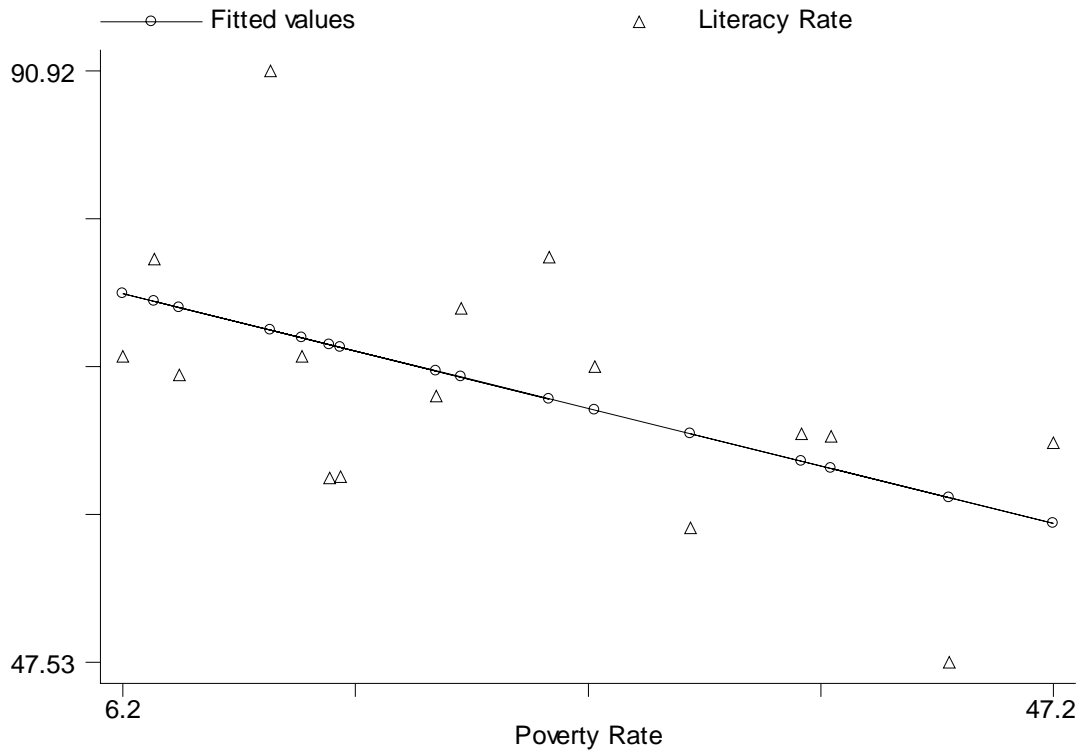
Section A.1: Mid-day Meal as a legal entitlement

The Supreme Court, in its “interim order” passed on 28 November 2001, converted the benefits of eight nutrition-related federal schemes into legal entitlements and directed the state governments to provide cooked mid-day meals for all children in government and government-assisted schools:

- “It is the case of the Union of India that there has been full compliance with regard to the Mid-Day Meal Scheme. However, if any of the States gives a specific instance of non-compliance, the Union of India will do the needful within the framework of the Scheme.
- “We direct the State Governments to implement the Mid-Day Meal Scheme by providing every child in every Government and Government assisted Primary Schools with a prepared mid-day meal with a minimum content of 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days. Those Governments providing dry rations instead of cooked meals must within three months [28 February 2002] start providing cooked meals in all Government and Government-aided Primary Schools in half of the Districts of the State (in order of poverty) and must within a further period of three months [28 May 2002] extend the provision of cooked meals to the remaining parts of the State.
- “We direct the Union of India and the Food Corporation of India to ensure provision of fair average quality grain for the Scheme on time.
- “The States and the FCI are directed to do joint inspection of food grains. If the food grain is found, on joint inspection, not to be of fair average quality, it will be replaced by the FCI prior to lifting.”

This judgment revised the earlier arrangement under which primary school students were to be provided with 100 gm of wheat or rice for a minimum of 200 days in a year free of cost.

Graph 1: Regression of Literacy Rates on State Poverty Rates

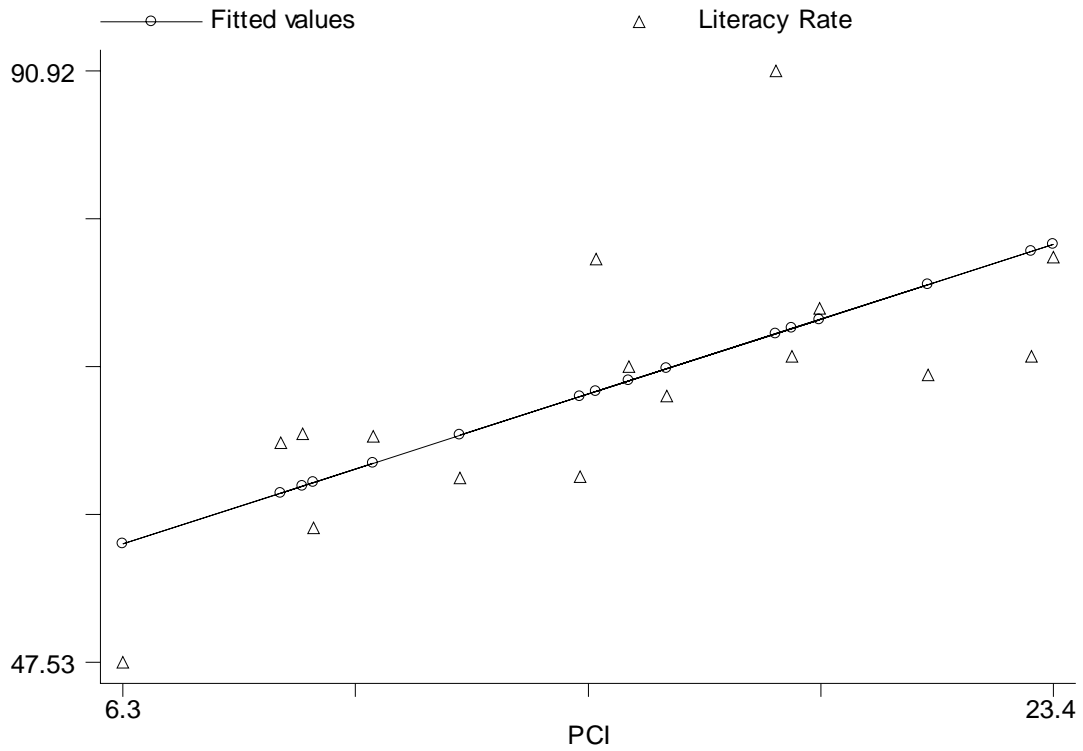


$$\text{Literacy Rate} = 77.12 (4.428) - 0.411 (0.169) \text{ Poverty Rate}$$

Rsquare = 0.2461

Number of observations = 16

Graph 2: Regression of Literacy Rates on State Per-Capita Income



Literacy Rate = 48.01 (5.823) + 1.28 (3.363) PCI
 $R^2 = 0.4331$
Number of observations = 16