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Abstract

Using the most recent data available -- 52nd round of the National Sample Survey, supplemented by the data available from the latest All-India Education Survey, this paper presents a brief analysis of quite a few important dimensions of education poverty in India. It is an attempt at unraveling several dimensions of deprivation of education of the poor in India. The paper exposes the most disturbing feature of the Indian education system, i.e., utter lack of equity in access to education over different economic classes of people. The evidence on Indian states and also the evidence by household expenditure (income) groups confirm significant, strong and inverse correlation between levels of educational attainment and levels of poverty. Participation in education is a consistently increasing function of household economic levels and the conformity of such a systematic pattern in case of all groups of population -- rural and urban, male and female, rather with no exception at all is strikingly clear. The factors that explain low participation and high dropout rates of the poor are also analysed.

A detailed discussion on the recent efforts of the State, international organisations and also of the non-governmental organisations in improving education is also attempted here. Educational opportunities provided by the society to the poor are inadequate -- in terms of access to schools, and access to quality education in the form of schools with good infrastructure, trained and skilful teachers and attractive learning environment. The role of the international organisations, private schools and also non-governmental organisations is important but is limited, and can be viewed at best as peripheral, and the responsibility of the State remains of paramount importance.

Education Poverty in India*

Jandhyala B G Tilak

Education is the root of all progress and every educational problem is at bottom an economic one. (Mokshagundam Visvesvarayya, 1931).

Education pays significant dividends in reducing poverty. Good education pays high returns in the contributions to economic growth ... Educating the poor, women, and the disadvantaged is as good an investment as any India can make. India faces many educational challenges and particularly those of narrowing or closing the gaps between rich and poor, boys and girls, privileged groups and undercastes... (World Bank, 1998, pp. 25-26).

1 Introduction

Poverty is conventionally defined in terms of income poverty, i.e., number of people below the poverty line and is measured in different ways, predominantly in terms of inadequacy of income to procure a minimum level of calories. Quite a few indices are developed in the literature that broadly relate to this phenomenon. Many scholars also have highlighted the limitations of income poverty as a measure of the complex phenomenon of poverty. An Expert Group of the Planning Commission (1993) recommended the broadening of the concept of poverty, so as to include, *inter alia*, education needs. As the World Bank (1994, p. 9) rightly recognised, "Poverty is not only a problem of low incomes; rather, it is a

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multi-dimensional problem that includes low access to opportunities for developing human capital and to education..." The World Summit for Social Development (1995) also opted for a broader definition of poverty and correspondingly for a broader integrated strategy for its eradication (see also Drèze and Sen, 1989). As UNDP (1996, p. 27) commented, " 'income poverty' is only a part of the picture. Just as human development encompasses aspects of life much broader than income, so poverty should be seen as having many dimensions" and accordingly developed the concept of 'human poverty'. It observed, "human poverty is more than income poverty: it is a denial of choices and opportunities for living a tolerable life" (UNDP, 1997, p. 2). In this sense, denial of human rights itself constitutes poverty, and accordingly a rights-based approach to poverty eradication is being increasingly argued (see e.g., Speth, 1998). At the same time human poverty and income poverty are closely related.[1] Accordingly poverty is seen as deprivation of opportunities that enhance human capabilities to lead a tolerable life. Education is one such important opportunity, deprivation of which in itself represents poverty -- poverty of education or 'education poverty'. In this sense, educational deprivation or poverty of education becomes an integral part of human poverty. Education poverty and income poverty are also closely related. Poverty of education is a principal factor responsible for income poverty; and income poverty does not allow the people to overcome poverty of education. Even when education, generally the first level, is freely provided by the State -- as indeed is the case in most developed countries, and indeed is in principle so in India -- poverty may force children to be out of school for various reasons, and thus they are denied the opportunity of participating in schooling. Thus the relationship between income poverty and education poverty is mutually reinforcing. Income poverty of the households does not allow them to make adequate investments in education; and low or zero levels of investment in education accentuate their income poverty. This mutually reinforcing relationship is also true both at macro level and also at household levels -- including at the individual, the family, the community, the region and the wider nation-society levels. The most effective way of breaking this relationship is to begin 'educational reconstruction' (Education Commission, 1966). The focus of this paper is on education and it analyses how does income poverty constrain educational development or leading to educational deprivation and education poverty in India.

It is now widely realised that investment in human capital is one of the important keys

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1 See Prabhu and Kamdar (1998) for a discussion on the linkages between the two and their implications.

to break this cycle, to reduce income poverty, in addition to, of course, eliminating poverty of education. Education is related to poverty[2] at both micro and macro levels. At the micro level, illiterate individuals or households are less productive, join less paying occupations, thus earn less, and remain at very low levels of living, mostly below poverty. At macro level also, nations with illiterate or less educated masses cannot progress, increase their output substantially, and as a result remain at low standards of living.

This was recognised long ago by many. For example, Alfred Marshall (1920, pp. 138-39) stated: "Knowledge is our most powerful engine of production; it enables us to subdue Nature and force her to satisfy our wants..." In India Mokshagundam Visvesvarayya highlighted as long as in 1931 the pivotal role of education in economic welfare of the country and cautioned: "the economic future of India is placed in grave peril by the slow progress which mass education is making..." While there is along tradition of economics who recognised the value of education in development (see Blaug, 1975), the importance of education in the well being of the nations is clearly recognised since the 'human investment revolution in economic thought', initiated by Theodore Schultz (1961). Schultz has not only demonstrated that education is an investment leading to human capital formation, but also emphasised and proved empirically from data pertaining to the USA that education and research would lead to 'increasing returns' even in agriculture, where all traditional thought has suggested that 'diminishing returns' must obtain in the area of agriculture. In the twenties of the last century, Perrro Sraffa and Allyn Young also emphasised that 'diminishing returns' is not inevitable, and that 'increasing returns' are possible, indeed are likely as a result of education, training, research and new production methods. The externalities, including dynamic externalities of education that cause increasing returns are again emphasised recently by Romer (1986) and Lucas (1988) among others. In India Rao (1964; see also 1970) and the Education Commission (1966) are first of its kind that had emphasised the links between education and development. Though the earlier research in India and abroad concentrated more on the role of education in economic growth, the impact of education on poverty and well being of the masses was also clearly recognised and of late this began receiving more serious attention in the wider framework of human development.

Available research in the last couple of decades (e.g., Fields, 1980a, 1980b; Tilak, 1986, 1989a, 1994a) clearly shows that education and poverty are inversely related: the higher

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2 Unless otherwise mentioned, for brevity poverty hereafter refers specifically to income poverty.

the level of education of the population, the lower would be the proportion of poor people in the total population, as education imparts knowledge and skills that are associated with higher wages. In addition to this direct effect of education, the effect of education on poverty could be indirect through its fulfillment of basic needs like better utilisation of health facilities, shelter, water and sanitation, and its effects on behaviour of women on decisions relating to fertility, family welfare and health etc.. (Noor, 1980; Cochrane, 1980; Jeffery and Basu, 1996) which in turn enhance the productivity of the people and yield higher wages. The relationship between poverty and education is further strengthened, as education and other basic needs reinforce each other (Noor, 1980; Tilak, 1989b; Unesco-PROAP, 1998). Poor households and nations are also characterised by high mortality rates, poor health conditions, etc. The role of education in reducing relative income inequalities is also found significant. It is also noted that, thanks to education, especially of women, a society could move out of poverty traps and progress into prosperity. It has also been observed historically that education helps to broaden the base of understanding among people, and thereby helps to strengthen the democratic process, which in turn could pave the way to the promotion of sustainable development, through a better understanding of the intimate relation between environment, ecology and sustainable development. Thus by strengthening democratic forces, education would help in promoting sustainable human development, making rapid social progress, including abolition or containment of the elite's discretionary power (see Cohen, 1998, p. 15).

Micro level investigations have highlighted the role of education in reducing poverty. The incidence of poverty is the largest among the illiterate households, and it declines consistently by increasing levels of education in developing countries (Tilak, 1994a). For example, nearly all of the poor in Pakistan were illiterate; and in Thailand, almost 99 per cent of the poor had no education or less than middle/secondary education (Fields, 1980a, pp. 158-60). Poverty was found varying inversely with education and training and household income in India (Harris, Kannan and Rodgers, 1990, p. 102). In short, poverty is predominant among the illiterates and it is almost a non-existent phenomenon among the educated households.[3] As Galbraith (1994) observed, there is "no well educated literate population that is poor, [and] there is no illiterate population that is other than poor." Education and incidence of poverty are inversely related, with a large drop in poverty occurring between illiterates and primary/secondary school graduates.

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3 It is possible that when there is a sudden change in technology, even educated people may loose their jobs and could sink into poverty. But this would be a short term phenomenon.

Thus, education is rightly regarded an important component of anti-poverty programmes in many developing countries. Within education, the focus is on primary education, including non-formal education and adult education that could ensure sustainable literacy (non-relapsing of the literates into illiteracy), as they are found to be having more significant effects on poverty and also income distribution (e.g., Coombs and Ahmed, 1974) than secondary and higher education.[4] But over the years, primary education expands, the relative effect of secondary and higher education increases.

Using the most recent data available, this paper presents a brief analysis of a few dimensions of education poverty in India. To start with, the education-poverty profile of the South Asian countries is briefly described in the following section. Using state-wise data, Section 3 presents a brief analysis of education-poverty relationship in India. Section 4 attempts at unraveling several dimensions of deprivation of education of the poor in India. A detailed discussion on the recent efforts of the State, international organisations and also of the non-governmental organisations in improving education is attempted in Section 5. Section 6 presents a short summary with a few concluding observations.

2 Education and Poverty in South Asia

South Asia stands as the poorest region of the world, with more than 500 million people below the poverty line (of US$ 1 per day in 1985 PPP), accounting for the largest proportion -- 40 per cent of the world's poor. South Asia is also described as the most illiterate and 'anti-education society' (Haq and Haq, 1998), accounting for nearly 400 million adult illiterates, who form 46 per cent of the world's illiterate adults. Further, nearly 40 per cent of the population in South Asia is poor and a little more than half the adult population is illiterate.[5]

Several countries have adopted varying development strategies to reduce poverty and inequalities; some have succeeded and some have not. For example, Sri Lanka first tried export oriented policies during the 1940s and the 1950s, but they led to economic crises. Decline in poverty, reduction in inequalities, and the present better levels of quality of living in Sri Lanka can be largely attributable to welfare state policies. In fact, Sri Lanka is regarded as one belonging to a unique category of 'welfare-statism' (Perris, 1978, p.22) with extensive public subsidies, and investment in education and health, which are regarded as basic welfare

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4 The effects of education is found more pronounced in any analysis, if some time lag is allowed for education to influence poverty (see McMahon, 1999; also Tilak, 1989a).

5 These figure are from Haq and Haq (1998).

services. In fact, even under severe economic conditions, the investment priority for these two sectors has remained intact (Gunatilleke and Kurukulasuriya, 1984), and this has paid rich dividends, making the country singularly distinct in terms of physical quality of life indicators, including poverty and distribution, not only in South Asia, but also among many developed countries of the world as well (see Tilak, 1996c).

On the other hand, India concentrating on measures such as nationalisation, and rural employment programmes, and also initiating land reforms, tried to ensure relatively equal distribution of land. However, none of the programmes were satisfactorily implemented. Land reforms were never complete[6] and nationalisation of private sector units was full of defects. India also invested less in the human capital of the poor and had stronger bias against labour in industry. As a result, no pronounced trend can be noted in decline in poverty and inequalities in the post-independence period. Still more than one-third of the population lives below poverty line (1993-94) (Planning Commission, 1999).[7]

There are several factors that explain poverty. But some research that decomposed inequality found that education is either the most or the second most important determinant (Fields, 1980a, pp. 116-17), stressing the need to make expansion of education an integral part of future anti-poverty policies. Nowadays education is an important component of a broad spectrum of governments' anti-poverty programmes in India, Pakistan, Bangladesh and Nepal, though it is not on the top of the social, political or economic agenda of the governments, nor could they receive adequate serious attention. Focus, if any, has also been confined to primary education, including non-formal and adult education in the region.

Table 1 presents a poverty profile of South Asian countries.[8] One finds a close correspondence between income poverty and poverty of education. Sri Lanka has the highest rate of literacy of 90 per cent in the region, its primary education is universal, and the enrolment ratio in secondary education is as high as 74 per cent; and the poverty ratio is also

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6 The reforms were very partially implemented in Uttar Pradesh after independence, abolishing only talukdars -- big landlords. Kerala was successful in implementing them first in 1958-59, which were intensified later; and West Bengal could implement the reforms only in the late 1970s. Tripura was serious about it. But no other state has done anything concrete about land reforms.

7 See Tendulkar, Sundrum and Jain (1993) for time series details on poverty in India.

8 Of the seven countries in the region, data on poverty are available only on five countries. Bhutan and Maldives on which data are not available, are very small countries, together comprising of 1.8 million population.

Table 1

Poverty Profile of South Asia, 1995

	Income Poverty (%)	Education Poverty				Enrolment Ratio (%) in			Public Expenditure as % of GNP
		Adult Illiteracy	Out of School Children	Drop-out (%)	Repeaters (%)	Primary (Net)	Secondary (Gross)	Tertiary	
Bangladesh	46	62	26.7	55	7	84	19	4.0	2.3
Nepal	45	72	32.3	48	27	63	36	5.6	2.9
India	35	48	32.1	37	4	87	49	6.0	3.8
Pakistan	29	62	47.8	52	7	31	21	2.6	2.7
Sri Lanka	22	10	..	8	19	100	74	5.0	3.2
Bhutan		58	59.1	27	18	53	5		
Maldives		7	..	7	5	100	49		8.1
South Asia*	35	51	33.3	41	3.5	79	43	5.4	3.5

Note: Income Poverty: % of population below poverty line; Illiteracy: Adult illiteracy rate;
Out of School Children: % children out of primary schools; Dropout and repetition rates refer to primary education; * Weighted average;
Source: Haq and Haq (1998).

the least in the region -- 22 per cent. On the other hand, Bangladesh has the highest incidence of poverty -- 46 per cent and more than two thirds of its adult population is illiterate. It is also important to note that very few children drop out of schools and also very few repeat in Sri Lanka, compared to other countries, which reflects to some extent, on the quality of education imparted. In contrast, more than half the children in primary education in Bangladesh drop out and about one-fourth of the eligible age group children are outside the school system. South Asia has also the highest pupil-teacher ratio, reflecting the poor quality of education, which is also related to poverty.

Beyond this, no highly systematic pattern could be derived from this small set of data. While it may not be statistically very meaningful to examine the relationship between literacy and poverty, as we have data on poverty on only five countries in the region, nevertheless, we find strong correlation between poverty and education. The coefficients of correlation are, as one can expect, negative and are also reasonably high, except in case of primary education.[9] To the extent theses coefficients indicate, it is adult literacy and secondary education that are found to be very important in influencing poverty. Primary education has a very small and rather insignificant effect.[10] That the threshold level of education for influencing poverty and levels of living, increase with the expansion of primary education was noted in the earlier research as well (Raza and Ramachandran, 1990).

Analysis of household level data further confirms the strong relationship between poverty and educational attainment in South Asian countries. Filmer and Pritchett (1999a) have documented that in all the South Asian countries on which such data are available, viz., India, Pakistan, Bangladesh, and Nepal there has been a consistent pattern: the rates of

9 The estimated coefficients of correlation are as given below:

Coefficients of Correlation (r) between Poverty and	
Adult Literacy	-0.7949
Net Enrolment Ratio in Primary Education	-0.0701
Gross Enrolment Ratio in Secondary Education	-0.6404
Public Expenditure on Education as % of GNP	-0.4074

10 That secondary education has a higher effect than primary education was found to be true in larger studies as well (McMahon, 1999; also Tilak, 1986).

educational attainment (at each grade/level of education) are consistently at the bottom among the poorest 40 per cent of the population, and at the top among the richest 20 per cent of the population (Table 2). Correspondingly, it was shown that the deficit in reaching the goal of universal attainment of basic education is the highest in case of the poor and the lowest in case of the rich. The wealth-gap in completion rates (rate of the rich *minus* rate of the poor) is the highest in Pakistan, followed by India, Bangladesh and Nepal. Enrolment rates are low, dropout rates are high and correspondingly completion rates are the lowest among the poor income groups compared to middle income and high income groups. In this sense, the effects of poverty on education in South Asian countries seem to be very strong and systematic.

Table 2

Proportion who have completed School Education in South Asia

		Primary (Grade V)			Some Secondary (Grade IX)		
		Bottom 40%	Middle 40%	Top 20%	Bottom 40%	Middle 40%	Top 20%
Bangladesh	1993-94	0.274	0.464	0.794	0.063	0.148	0.447
Bangladesh	1996-97	0.356	0.550	0.788	0.080	0.174	0.487
India	1992-93	0.376	0.684	0.932	0.139	0.363	0.730
Nepal	1996	0.406	0.414	0.743	0.116	0.139	0.430
Pakistan	190-91	0.250	0.522	0.852	0.065	0.209	0.552

Source: Filmer and Pritchett (1999a).

3 Education and Poverty in India

As Minhas (1992, p. 82) observed, differences in access to and participation in schooling by different groups of people are related, in a very complex manner, to the variations in incidence of poverty and other social and cultural factors in the Indian society. Research that exactly focused on education-poverty relationship in India is not abundant. But a few scholars did focus on levels of educational attainments by broad income groups. Such research includes Minhas (1992), Visaria, Gumber and Visaria (1993), Majumdar and Vaidyanathan (1994), Majumdar (1999), and Tilak (1996b). Most of them used the NSSO's

1986-87 (NSSO, 1991, 1993) data.[11] Lanjouvw and Ravallion (1999) analysed the 50th round data of the NSSO 1993-94 (1997). Another recent data set was generated by National Family and Health Survey (NFHS) (IIPS, 1993), which formed the basis for analysis by Filmer and Pritchett (1999b).[12] Further, all the above studies concentrated on enrolment/dropout rates. The research has shown a clear pattern of low levels of educational attainment among poor sections of the population and higher levels among the rich.

The present study using the most recent database that relates to 1995-96 is an addition to this limited literature. It has a few additional contributions, compared to the earlier studies: The evidence on India is largely drawn from one of the most recent household surveys, conducted in 1995-96 across the nation (NSSO, 1998) and a school survey that refers to 1993 (NCERT, 1997-98). We refer in this paper to educational levels of adult population also, in addition to enrolment and dropouts by household economic levels. The distribution of public subsidies and the pattern of household expenditures by household economic levels are also briefly examined here. Since the NSSO (1998) focuses specifically on education, it is also expected to provide more reliable and meaningful results, compared to, say, analysis based on NFHS survey. Though this is not within the scope of this paper, the present study would facilitate comparisons with earlier studies based on NSSO surveys and also on NFHS and draw trends during the last decade.

The NSSO (1998) covered 73 thousand households in 12,650 villages and urban blocks in the country. Several household characteristics are available in this survey by 'fractile' groups -- household expenditure[13] groups categorised into five quintiles -- the bottom 20 per cent, the next 20 per cent, the middle 20 per cent, the fourth 20 per cent and the top (richest) 20 per cent. The bottom group can be treated as the poorest group, and the bottom along with the second quintile can be termed as poor; the third and the fourth quintiles can be called middle income groups and the top quintile refers to the rich. Most of the analysis here is attempted in this framework of household expenditure quintiles. It is well known that caste also is an important factor in explaining educational deprivation in India, the scheduled castes

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11 See Bhatty (1998) for a survey of some of these studies.

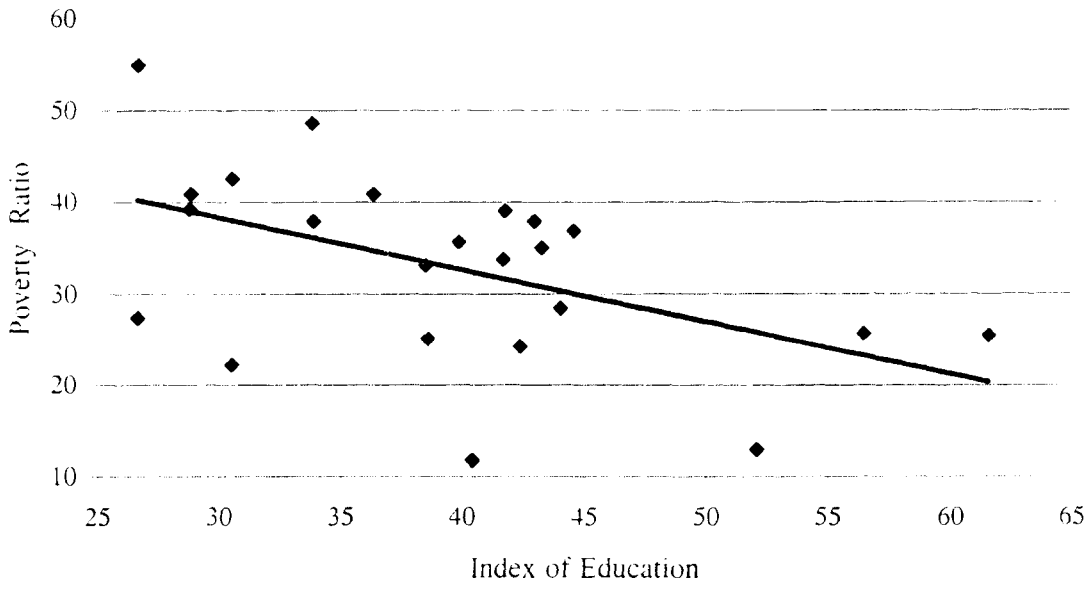
12 The principal focus of the NFHS was health and family welfare of the population.

13 Household expenditure is taken as a close proxy for household income. Ideally the economic levels of households could be measured in terms of ownership of physical assets. An 'asset index' can be expected to provide more meaningful results, though it is found to be yielding similar results in terms of distribution by quintiles (see, e.g., Filmer and Pritchett, 1999a).

and scheduled tribes being the most severely deprived groups both economically and educationally. It is important to note in this context that scheduled caste and scheduled tribe people are also economically backward. But the available data of the NSSO (1998) does not enable us to look into this aspect in depth, though the original data tapes might be containing it.[14]

Before the household survey data are examined, we may briefly look at the macro level relationships between education and poverty in India.

Figure 1: **Poverty and Index of Education in Indian States**
(with a Trend Line)



According to the Planning Commission's (1999) estimates, 36 per cent of the population in India in 1993-94 was poor.[15] Among the 24 states on which such data are available, there

14 The published Report (no. 439) of NSSO (1998) does not provide details on several other aspects, that the earlier Reports (*Sarvekshana*) has provided on the 42nd Round. Tables cross classified by, say e.g., state-wise attendance rates by levels of education and by expenditure quintiles, are not presented. Access to tapes of the 52nd Round may be essential for detailed analysis.

15 More recent data are now available, which shows that poverty has increased in India to 43 per cent (Gupta, 1999). These data are not used here.

seems to be a strong correlation between poverty and education.[16] [FIGURE 1]

Table 3
Education and Poverty in India

		Poverty Ratio	
		Low	High
Index of Education	High	Punjab, Goa, Gujarat, Haryana, Kerala, Mizoram, Himachal Pradesh, Karnataka, Manipur, Tamil Nadu, West Bengal	Maharashtra, Nagaland, Tripura
	Low	Andhra Pradesh Rajasthan	Meghalaya, Arunachal Pradesh, Uttar Pradesh, Assam, Madhya Pradesh, Orissa, Bihar

Note: High and low are defined as above and below on national averages
Source: Based on Tilak (1999b) and Planning Commission (1999).

There are 11 educationally advanced states, which are also the states where poverty ratio is small (less than national average). Conversely, there are seven states where poverty ratio is high (higher than national average) and educational index is low (lower than national average) (Table 3).

Exceptions to this phenomenon are only five states. At state level, income may be high, yet because of its unequal distribution, poverty could be high. Accordingly, for example in Maharashtra poverty ratio is high and also is the index of education. In Andhra Pradesh and Rajasthan poverty is low and the index of education is also low. But for these exceptions, all this indicates a close relationship between poverty and education in Indian states. The coefficient of correlation, -0.4975, though not high, is negative in value and statistically

16 Data are given in Table A.1 in the Appendix. In case of education, an index of education (Tilak, 1999b) that is based on literacy (1991) and mean years of schooling (1992-93) has been used (see Table A.2 in the Appendix). Data on poverty ratio (1993-94), i.e., proportion of population living below poverty line, are taken from the Planning Commission (1999).

significant. The trend line fitted here suggests that an increase in the education index from 25 to 60 would reduce the poverty ratio from 40 per cent to 20 per cent. Even though correlations do not necessarily imply causal relationships of this kind, it is widely held that "the role of education in removing poverty is decisive" (Haq and Haq, 1998, p. 29). It is widely held that that poverty cannot be eradicated without education, even though at the same time, it can be said that education alone may not solve the problem of poverty. Nevertheless, expansion of education, particularly primary education, is found to be at least as effective as the best of the current anti-poverty programmes such as public distribution system (food rationing), public works Programme, and credit schemes in countries like India (Lanjouw and Ravallion, 1999).

4 Educational Deprivation

Household level data provide more systematic evidence on the positive relationship between education and economic levels. The evidence provided by the NSSO (1998) here clearly shows that educational levels of the population are closely related to the income levels of the population (expenditure levels being taken to represent income levels. As shown in Table 4, the mean years of schooling of population[17] systematically increases by increasing levels of household income levels.[18] The mean years of schooling increases from 2.3 for the poorest group to 6.4 for the richest group of population. This systematic positive relationship between mean years of schooling and economic levels of households holds true in case of any sub group of population as well -- rural male, rural female, and urban male, and urban female. [FIGURE 2] However, the variations between males and females are very high. The poorest

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17 Mean years of schooling of population is estimated, by assigning different weights to different levels of education (higher weights to higher levels of education). Mean years of schooling of population is regarded as a more valuable summary statistic of stock of human capital in a society and is being extensively used (e.g., UNDP, 1992). This is estimated as a weighted sum of population with different levels of education. Algebraically,

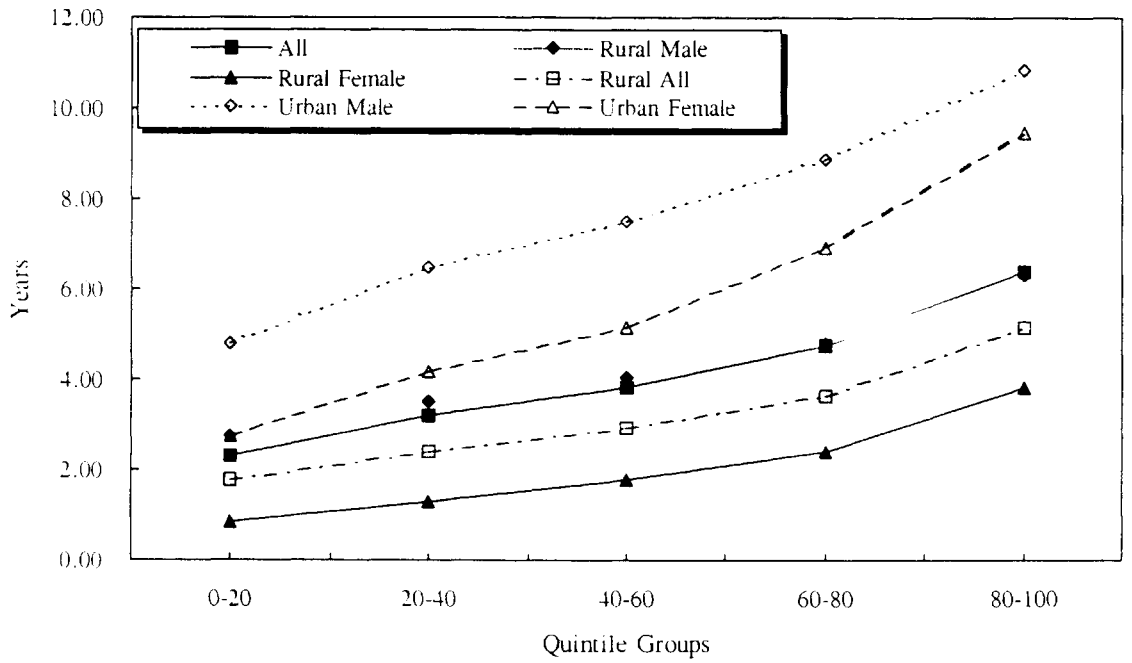
$$SCH_i = \left(\sum_j POP_{ij} * YRS_{ij} \right) / 100$$

where SCH_i refers to mean years of schooling of the population of i-th quintile, POP_{ij} refers to proportion of population with j-th level of education in the i-th quintile, and YRS_{ij} to duration (years) of j-th level of education in the i-th quintile. See Psacharopoulos and Arriagada (1986) and Tilak (1999b) for more details.

18 Household income levels in this table and other tables are measured in terms of household expenditure quintiles, as defined by the NSSO (1998).

among the rural females have a mean years of schooling of as low as 0.9, while the mean for the top quintile among the urban males is as high as 10.8 -- a difference by 12 times! Poverty is a crippling handicap to acquire higher levels of education attainment and low levels of education attainment in turn is a critical handicap to come out of poverty.

Figure 2: 'Mean Years of Schooling of Popualtion (15+) in India by Household Expenditure Quintiles, 1995-96



The mean years of schooling discussed above refers to the stock of educational development. But what about the pattern of enrolments in schools? Despite massive expansion of the system of education and corresponding quantitative explosion in numbers, particularly in terms of enrolments, during the last half a century (see Tilak, 1996a), a large number of poor are still outside the formal school system. According to the available reliable statistics (Table 5), only 69 per cent of the children of age-group 6-10, and 72 per cent of the children of the age-group 11-13 attend schools. The corresponding rates are less among higher age-groups.[19]

19 These age-specific attendance rates refer to the number of children of the relevant age-group currently attending (any) education institution, as a proportion of the same age-group (NSSO, 1998, p. 7). This can be considered superior to *gross* and *net* attendance rates.

Rural-urban differences are very high, the difference being about 20 per cent points in favour urban areas.

Table 4

Mean Years of Schooling of Population (15+), 1995-96 (%)

Household Expenditure Quintiles	All	Rural			Urban		
		Male	Female	All	Male	Female	All
0-20	2.30	2.75	0.86	1.79	4.78	2.75	3.77
20-40	3.19	3.49	1.31	2.40	6.47	4.19	5.37
40-60	3.81	4.04	1.76	2.92	7.51	5.14	6.39
60-80	4.77	4.82	2.41	3.65	8.91	6.92	7.96
80-100	6.42	6.31	3.84	5.14	10.84	9.47	10.21
All	4.26	4.43	2.13	3.29	7.98	5.85	6.97

Source: Based on NSSO (1998)

Table 5

Age-Specific Attendance Rate in School Education in India, 1995-96 (%)

Age-Group		6-10	11-13	14-17	18-24
Rural					
	Male	71	75	54	15
	Female	58	57	33	4
	All	65	67	45	10
Urban					
	Male	84	87	66	26
	Female	82	83	63	20
	All	83	85	65	23
All		69	72	50	14

Source: NSSO (1998).

There are vast spatial variations in attendance rates between rural and urban areas, and

between states. Variations also exist between districts, and even villages and households.[20] The variations in attendance rates between several states are quite marked (Table 6). The age specific attendance rate among the younger children (age-group: 6-10) varies between 43 per cent in Bihar and 97 per cent in Kerala. The BiMaRU states along with Orissa are the most deprived states, with very unsatisfactory levels of school attendance. They are also the states with a high concentration of the poor.[21] Importantly, the gap in attendance rates between males and females[22] is also the maximum in these states, Rajasthan having a gap of 46 per cent points among the younger children. Further, the male-female gap widens among older age groups (11-13). For example, the gap increases from 46 per cent points in 6-10 age group to 52 points among the 11-13 aged children in Rajasthan. That social prejudices that lead to the deprivation of schooling for women are strong are somewhat strong in such states is well known. Thus spatial variations and variations by gender are indeed alarming in some states.

Table 7 provides estimates on enrolment rates by household income groups in major states in India. The estimates are based on another survey (NCAER, 1999) in rural India conducted in 1993-94.[23] These rates show that the enrolment rates increase by increasing levels of household income, consistently in all states. There are only two minor exceptions to the consistent pattern: the rates among the two bottom income groups in Kerala and the second and third income groups in Gujarat. In Kerala the difference is negligible, but in case of

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20 A series of studies conducted under the Research Project on Strategies and Financing of Human Development sponsored by the UNDP and the Ministry of Finance, Government of India (see Vaidyanathan, ed., 2000), have highlighted intra-state -- between districts, taluks, villages and households -- variations in literacy and education development.

21 While the case of BiMaRU states is typical -- high poverty and low education levels, Kerala is an exception to this. It has a low level of state income (but of course low levels of poverty) and a high level of education development. The high level of education development is attributed to its long tradition of high investments in education and 'political activism' in the direction of educational expansion for the lower classes/castes, which in turn reduced poverty to a significant extent (Drèze and Sen, 1997, p. 16). See also Ramachandran (1997), Kannan (1999).

22 To know the maximum gap, we considered in Table 6 the attendance rates among the urban male and rural female children, as they represent the two extreme groups, the least and the most deprived.

23 NCAER survey concentrates on household incomes, while NSSO surveys focus on household expenditures. Generally, household income estimates are regarded unreliable, compared to estimates on expenditures. Yet the NCAER survey provides some meaningful results.

Gujarat it is rather high. Secondly, the enrolment rates among the richest income group in backward states like Madhya Pradesh, Rajasthan, and Uttar Pradesh are less than the enrolment rates of the bottom income group in educationally advanced states like Kerala and Himachal Pradesh.

Table 6

Age-Specific Attendance Rates in School Education, 1995-96

		Age-Group: 6-10				Age-Group: 11-13			
		All	Rural Female	Urban Male	Gap	All	Rural Female	Urban Male	Gap
1	Andhra Pradesh	75	68	90	22	60	46	80	34
2	Arunachal Pradesh	65	71	89	18	82	81	85	4
3	Assam	73	73	86	13	80	82	93	11
4	Bihar	43	32	66	34	58	40	85	45
5	Goa	99	99	97	-2	89	85	83	-2
6	Gujarat	80	73	86	13	77	65	91	26
7	Haryana	83	77	92	15	87	80	95	15
8	Himachal Pradesh	91	90	96	6	94	90	95	5
9	Jammu & Kashmir	69	53	76	23	82	73	94	21
10	Karnataka	75	65	86	21	70	53	90	37
11	Kerala	97	97	98	1	97	98	97	-1
12	Madhya Pradesh	64	54	82	28	67	52	88	36
13	Maharashtra	88	83	91	8	85	74	94	20
14	Manipur	69	61	78	17	87	85	92	7
15	Meghalaya	69	72	88	16	94	90	97	7
16	Mizoram	71	64	97	33	88	76	97	21
17	Nagaland	71	69	81	12	85	86	88	2
18	Orissa	63	54	80	26	66	54	81	27
19	Punjab	85	80	92	12	86	81	89	8
20	Rajasthan	58	37	83	46	64	36	88	52
21	Sikkim	77	80	79	-1	90	87	86	-1
22	Tamil Nadu	91	85	92	7	74	64	82	18
23	Tripura	81	77	91	14	84	74	97	23
24	Uttar Pradesh	61	49	73	24	66	46	80	34
25	West Bengal	67	61	79	18	74	67	83	16

Note: Gap: Urban male minus rural female.
Source: NSSO (1998)

Table 7
Enrolment Rate (%) of the Children (Age-Group: 6-14) in Rural India, by Household Income Groups, 1993-94

	Household Income (Annual/Rs.) Groups					Wealth Gap*
	<20,000	20,001-40,000	40,001-62,000	>62,000	All	
Kerala	96.9	96.5	96.6	98.9	96.9	1.02
Himachal Pradesh	88.0	94.4	94.7	90.1	90.8	1.02
Punjab	77.8	81.5	84.1	93.2	82.1	1.20
Maharashtra	75.9	79.5	85.3	87.8	79.2	1.16
North-Eastern Region	75.6	76.5	79.6	79.8	78.6	1.06
Tamil Nadu	75.4	79.2	87.0	94.7	78.1	1.26
Haryana	65.0	76.1	83.2	83.0	74.8	1.28
Gujarat	67.6	83.0	78.7	88.1	74.4	1.30
Karnataka	68.8	73.9	77.8	78.0	71.7	1.13
Andhra Pradesh	68.2	72.1	80.0	96.1	71.6	1.41
Orissa	58.9	77.8	80.2	90.7	65.5	1.54
West Bengal	56.1	71.7	76.8	90.5	62.0	1.61
Uttar Pradesh	52.3	64.4	73.2	82.6	61.5	1.58
Rajasthan	51.6	57.8	73.3	78.5	58.7	1.52
Madhya Pradesh	49.2	62.8	68.0	76.2	57.6	1.55
Bihar	48.1	64.2	68.3	83.2	56.9	1.73
Rural India	60.6	70.8	77.4	84.4	67.1	1.39
Coef. of Variation	21.0	14.0	10.4	8.0	16.2	

Note: * Highest Income Group/Lowest Income Group
Source: NCAER (1999).

Thirdly, the coefficient of variation in the enrolment rates of the bottom income group between various states is much higher than the variation in case of top income groups. Lastly, the enrolment rates by income groups in the better off states fall on a flat curve, while the curve is a steeply increasing one in case of backward states. In other words, the wealth gap, i.e., the gaps in the enrolment rates between the top and the bottom income groups is negligible in case of educationally advanced states of Kerala and Himachal Pradesh and is the highest in the backward states. In other words, the average level of educational development in the backward states is not only low, but also the educational inequalities between the rich and the poor are also the maximum. The egalitarian ethos in public policy, including specifically in education, in Kerala and Himachal Pradesh and the lack of the same in other states like the BiMaRU states explains to a great extent these differences in states.

Table 8
Percentage of Children (Age-Group 5-24) Attending and Non-Attending Schools by Household Expenditure Quintiles, 1995-96

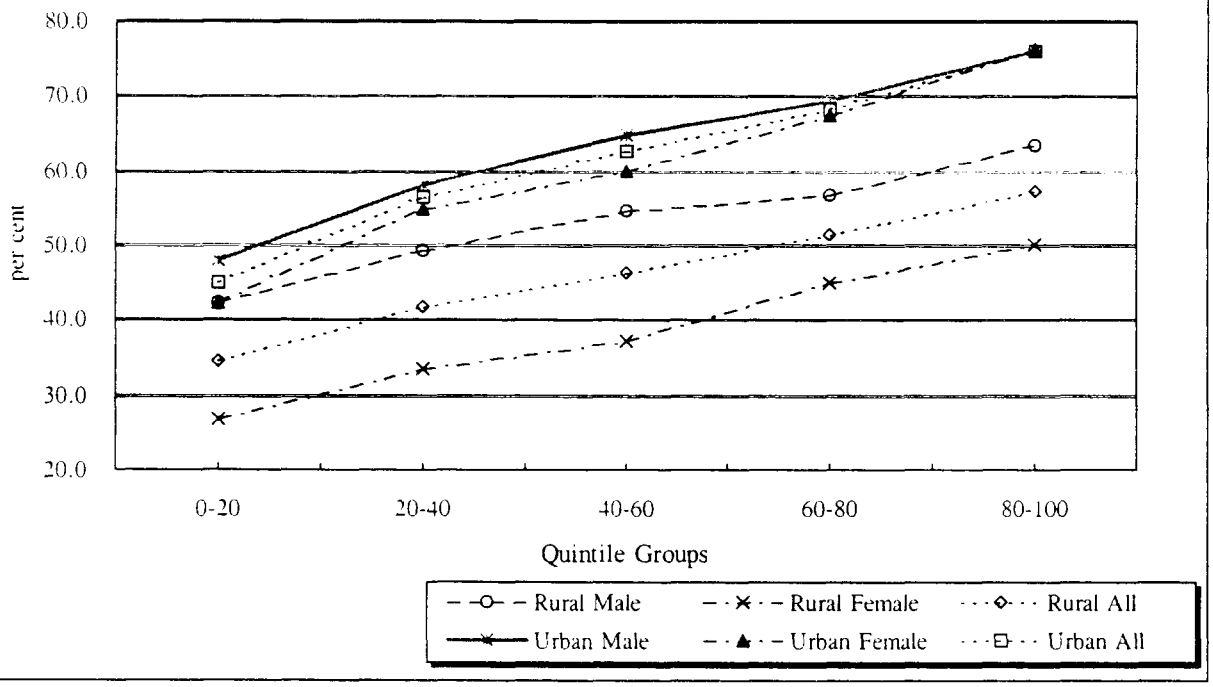
		Household Expenditure Quintiles					
		Poor		Middle Income			
		Poorest	Second	Third	Fourth	Richest	All
Rate of Attendance							
Rural							
	Male	42.1	49.1	54.6	56.8	63.4	53.3
	Female	26.6	33.3	37.1	45.0	50.0	38.1
	All	34.5	41.6	46.3	51.4	57.3	46.1
Urban							
	Male	47.8	58.0	64.7	69.2	75.9	62.9
	Female	42.2	54.7	60.0	67.3	76.2	59.1
	All	45.0	56.4	62.5	68.3	76.0	61.1
ALL		37.2	45.2	50.3	55.4	61.7	49.8
Rate of Non-Attendance							
Rural							
	Male	57.9	50.9	45.4	43.2	36.6	46.7
	Female	73.4	66.7	62.9	55.0	50.0	61.9
	All	65.5	58.4	53.7	48.6	42.7	53.9
Urban							
	Male	52.2	42.0	35.3	30.8	24.1	37.1
	Female	57.8	45.3	40.0	32.7	23.8	40.9
	All	55.0	43.6	37.5	31.7	24.0	38.9
ALL		62.8	54.8	49.7	44.6	38.3	50.2

Source: NSSO (1998)

Enrolment rates by household expenditure quintile groups based on NSSO (1998) survey in Table 8 also clearly show that in all cases, i.e., among rural males, rural females, urban males, and urban females, enrolment rates increase as one moves to higher economic groups. As one moves from the bottom quintile to the next quintile, the probability of enrolment in schools would increase by 8 per cent points from 37 per cent to 45 per cent, which would further increase by another 5 points if one moves from second quintile to the third quintile (lower half of the middle income group). In all, only 37 per cent of the children in the bottom quintile could go to schools, while more than 60 per cent of the richest quintile do so; in urban areas the latter ratio increases to above 75 per cent. In every economic group, the enrolment rate of rural population is less than that of urban population; and in every economic group and also in rural and urban areas, the enrolment rate of girls is less than that

of boys.[24] In all cases, the enrolment rate of the poor is less than that of the middle income groups and the rich. In short, enrolment rates or rate of participation in education is a function of increasing income (or expenditure) levels of households -- in case of total population and also in case of sub groups, viz., rural male, rural female, urban male and urban female. As the lines in Figure 3 depict, there is no intersection of any two lines: the trends are all parallel. The hierarchical relationships are clear cut: the rates of participation of the poor are the lowest -- both in rural and urban areas and among both males and females. The hierarchical order in terms of increase in educational deprivation is: urban males, urban females, rural males and rural females.

Figure 3: % of Children (Age-Group 5-24) Attending Schools in India, by Household Expenditure Quintiles, 1995-96



The poor have a disadvantage whether they are in rural or urban areas, or whether they are boys or girls. The degree of disadvantage of the poor in enrolment of schools (measured as enrolment rate of the richest quintile *minus* the enrolment rate of the bottom quintile) is to

24 The exception is only the top quintile in urban areas, where females are slightly at a better position.

the extent of 23.5 per cent points. Not very surprisingly such a disadvantage is higher in urban areas (31 per cent points) than in rural areas (23.2 per cent points), and the highest disadvantage is among women in urban areas (34 per cent points). This may be because, given the relatively high cost of living in general and high cost of schooling in particular, in urban areas, the poor in urban areas may indeed be more deprived than their counterparts in rural areas.

The non-attendance rates in Table 8 highlight more explicitly the extent of disadvantage of the poor in education. As high as 63 per cent of the children of the age-group 5-24[25] of the lowest household expenditure quintile, i.e., bottom 20 per cent of the population, were currently not attending schools in 1995-96. In fact, nearly half the children of the bottom income group were 'never enrolled' in any formal school and most of them live in rural areas (Table 9). Non-attendance or never enrolment rates[26] systematically decline by increasing household economic levels. That is, while 45 per cent of the children of the bottom quintile were never enrolled, it is only 11.3 per cent among the rich group of population who belong to this category. Rural female children constitute the most important deprived group. Thus in a sense, there has been educational deprivation of the poor and also the rich. But the poor are subject to severe deprivation. One may understand the existence of deprivation of some (poor people) in rich states, but not among rich households in poor states. But we note here that even richer households are deprived of education, due to several reasons, some of which are examined here.

In all, the overall rate of attendance is 69 per cent among the children of the 6-10 age group and 72 per cent among the children of the age-group 11-13. Conversely, 31 per cent of the children of the lower age-group and 38 per cent of the children of the age-group 11-13 do not attend schools.

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25 The age-group covered in the NSSO (1998) refers to 5-24 only. It would be more appropriate to disaggregate it into different age groups, viz., 6-11 11-14, 14-17 and 17-24 that refer to different levels of education. But most of the information is not available by disaggregated age-groups.

26 NSSO does not make clear distinction between attendance and enrolment, even though in the 52nd round, some attempt was made to distinguish between the two terms. 'Never enrolment' is a different but a clear category referring to those who have never enrolled in any school.

Table 9

Per cent of Never Enrolled Children (Age-Group: 5-24) by Household Expenditure Quintiles, 1995-96

Quintiles	Rural			Rural + Urban		
	Male	Female	All	Male	Female	All
0-20	40.0	61.0	50.3	35.8	53.7	44.6
20-40	29.5	49.3	39.0	25.0	41.5	32.9
40-60	22.0	40.0	30.5	18.2	33.1	25.2
60-80	17.0	30.2	23.1	13.8	24.0	18.5
80-100	9.9	19.2	14.1	8.0	15.3	11.3
All	23.5	40.6	31.5	20.1	34.2	26.8

Source: NSSO (1998)

Taking these ratios, it can be estimated that as high as 90 million children of the age-group 6-14 are currently outside the formal school system (Table 10). They are never enrolled in or currently not attending the schools. Most of these out of school children are obviously poor. Corresponding estimate was about 70-75 million a decade ago, 1986-87 (Minhas, 1992). Assuming that the age-distribution of population not to have changed dramatically, an increase in population by 20 per cent approximately over the decade reflects that proportionately there is no improvement in the number of children going to school during the decade. This reflects sadly on the much-hyped focus on education in the post-National Policy on Education (1986) period. The increase in the number of out of school children is indeed a matter of serious concern for all those involved in universalisation of elementary education. Assuming that this growth (of number of out of school children) has continued, which is most likely, it means that India plans to enter the 'knowledge based society' of the 21st century with about 100 million children who perhaps have never been to any school (Tilak, 1999a).

Unfortunately, the deprivation in education does not end with enrolment in schools. The poor are more likely to drop out of the system, relapsing often into illiteracy and ignorance. According to the latest available statistics, out of every 100 children enrolled in Grade I, about 40 children drop out before completing primary education, and 54 before completing the elementary level of education (Grade VIII), and 70 children before completing secondary level (Grade X) (MHRD, 1999b).

Table 10

Out of school Children in India, 1995-96

Age-Group	Population 1996 (Million)	Age-Specific Attendance Rate (%)	Children in Schools (Million)	Out of School Children (Million)
6-11	144.59	69	79.07	65.52
11-14	86.16	72	62.04	24.12
6-14	230.75	61	141.11	89.64

Note: Age specific attendance refers to children of the given age group enrolled in any level of education.
Source: NSSO (1998) for attendance rate; and Registrar General of India (1996) for population.

It is not only the enrolments in schools, but also the rate of dropout from schools that is closely related to the economic levels of the population. Rates of dropout are the highest among the poorest households and the least in the richest households (Table 11). As Naik (1975, p. 39) observed, "a large proportion of children from poorer segments of the society do drop into the system, no doubt, but they also drop out .." Rates of dropout systematically decline, as one moves up the economic ladder. When one examines a more detailed data by monthly per capita expenditure classes, it is clear that both attendance rates and dropout rates by expenditure classes fall into a very systematic pattern both in rural and urban areas (Table 12). Only 5.9 per cent of the children of the age-group 5-14 of the highest expenditure category (Rs. 1055 and above) dropped out of the schools, while the rate is about 8 times higher -- 56.8 per cent in the lowest category in rural areas. Thus, both attendance rates and rates of dropout by expenditure groups fall into a very systematic pattern. As a result, as Dasgupta (1993) observed, the benefits of government investment in education, even in primary education are disproportionately captured largely by the upper income groups and also by the higher castes, to the extent the income is correlated with caste hierarchy.

Reasons for Non-enrolment and Dropout

Why do children not go to schools and why do they drop out after enrolling in schools? Generally it is felt that poverty in developing countries in South Asia, like India, prevents families from sending their children to school. It has already been noted that non-enrolment rates and also rates of dropout are higher among the poorer sections of population than among the middle income and the rich. Such explanations need further probing.

Table 11

Rates of Dropout in School Education in India, 1995-96, by Household Expenditure Quintiles (per cent)
(Cumulative by Levels of Education)

Quintiles	Primary	Middle	Secondary
0-20	44.0	70.2	89.3
20-40	36.2	62.1	89.0
40-60	30.3	57.4	85.6
60-80	26.1	52.5	84.1
80-100	17.4	42.8	79.0
All	30.4	56.6	85.3

Source: NSSO (1998).

Earlier analyses of determinants of participation (or non-participation) in schooling have revealed that participation in schooling is influenced by three sets of factors: (a) household economic factors, (b) school environment, including quality of physical and human infrastructure and quality of instruction, and (c) social and cultural/traditional factors. It would be interesting and useful to examine the response of the parents on why their children do not go to schools or drop out from schools. Is there any pattern in the responses of the poor and the rich? The survey (NSSO, 1998) has identified a set of dozen factors, though some of them cannot be described as mutually independent. The factors are grouped into three categories in Table 13. They are: lack of interest, direct school related factors, and direct economic factors. The most important reason for non (more correctly never) enrolment of children in schools reported is lack of interest on the part of the children[27] and more importantly of their parents. Nearly 50 per cent of the children were never enrolled in schools mainly because they or their parents have no interest in studies.

27 Since children are not interviewed, the citing of 'lack of interest on the part of the children' as a reason for the non-enrolment in or dropping out of schools, indicates a tendency on the part of the parents to shift the responsibility from their shoulders to children's.

Table 12

Percentage Distribution of Children of the Age-Group 5-14 by Status of Attendance for each MPCE (Rs.) Class, 1993-94

Rural				Urban			
MPCE* (Rs.) Class	Status of School Attendance			MPCE (Rs.) Class	Status of School Attendance		
	Currently Attending	Dropped Out	Never Attended		Currently Attending	Dropped Out	Never Attended
<120	39.9	56.8	3.3	<160	56.4	39.9	3.7
120-140	64.1	50.3	3.6	160-190	65.5	30.6	3.9
140-165	52.5	43.2	4.0	190-230	71.9	24.8	3.3
165-190	55.1	40.9	4.1	230-265	77.5	19.5	3.0
190-210	59.7	36.5	3.8	265-310	82.4	14.7	2.8
210-235	63.7	33.1	3.2	310-355	86.4	11.5	2.1
235-265	67.4	29.0	3.6	355-410	88.7	9.2	2.1
265-300	72.1	24.5	3.4	410-490	90.4	7.9	1.7
300-355	74.6	22.3	3.1	490-605	91.7	5.9	2.4
355-455	77.5	19.7	2.8	605-825	94.9	3.5	1.7
455-560	80.2	17.3	2.5	825-1055	95.1	2.6	2.4
>559	80.6	15.8	3.6	>1054	90.8	5.9	3.2
All Classes	63.3	33.1	3.5	All Classes	82.4	15.0	2.6

Note: * Monthly per capita expenditure
Source: NSSO (1997).

This is very surprisingly more or less true in case of all income groups -- poor and the rich and also in case of girls and boys, though there are some marginal variations.[28] It would be useful to probe into the aspects relating to lack of interest in education on the part of the children and/or parents. For example, 'lack of interest in schooling' when probed further in other investigations (e.g., Krishnaji, 1996, PROBE, 1999), the following responses were received from the parents: 'What is the use of schooling?' 'A child can earn some income if he does not go to school.' 'A child can do some "useful" work at home.' Other common responses are: 'Teacher does not come to school or does not teach.' 'No textbooks are available.' 'School costs are high and we can't afford it.'

28 Because of the pronounced effects of gender and rural-urban differences on enrolment (e.g., Majumdar, 1999; Filmer and Pritchett, 1999a), as a category of special interest, factors responsible for non-enrolment of rural girls are also listed in the same table.

Table 13

Why are Children 'Never Enrolled' in Schools? 1995-96

Percentage of Children (age Group: 5-24) by reason for Non-Enrolment

	Reason for 'Never Enrolment'	Household Expenditure Quintiles					
		Bottom	2nd	3rd	4th	Top	All
All Children							
1	No Tradition in Family	3.9	3.5	4.0	4.3	3.7	3.9
2	Child not interested in Studies	17.4	16.6	20.6	15.9	13.9	17.3
3	Parents not interested in studies	31.2	31.9	31.4	31.9	34.8	31.8
2+3	Lack of Interest in Studies	48.6	48.5	52.0	47.8	48.7	49.1
4	Education not considered useful	2.7	2.3	2.3	3.3	3.4	2.7
5	Schooling/Higher education facilities not available conveniently	2.0	1.6	2.0	1.6	3.6	2.0
4+5	Direct School Related Factors	4.7	3.9	4.3	4.9	7.0	4.7
6	Has to work for wage/salary	1.1	1.6	1.4	2.0	1.1	1.4
7	Has to participate in other Economic Activities	3.8	3.1	3.3	3.8	3.2	3.5
8	Has to look after younger siblings	1.7	1.3	1.0	1.2	0.2	1.3
9	Has to attend other domestic activities	2.7	2.5	2.6	2.4	3.0	2.6
10	Financial constraints	17.9	16.8	13.7	11.6	8.5	15.2
6-10	Direct Economic Factors	27.2	25.3	22.0	21.0	16.0	24.0
11	Other	15.5	18.9	17.5	22.1	24.7	18.4
Rural Girls							
1	No Tradition in Family	4.9	5.2	5.8	6.7	5.4	5.4
2	Child not interested in Studies	15.5	13.9	18.7	14.2	11.0	15.1
3	Parents not interested in studies	34.3	35.8	35.2	34.6	43.0	35.6
2+3	Lack of Interest in Studies	49.8	49.7	53.9	48.8	54.0	50.7
4	Education not considered useful	3.3	2.6	2.1	3.6	2.8	2.9
5	Schooling/Higher education facilities not available conveniently	2.5	1.9	2.2	1.5	4.2	2.3
4+5	Direct School Related Factors	5.8	4.5	4.3	5.1	7.0	5.2
6	Has to work for wage/salary	0.5	1.3	1.0	0.9	1.1	0.9
7	Has to participate in other economic activities	2.7	3.0	3.1	3.1	3.0	3.0
8	Has to look after younger siblings	1.9	1.7	1.6	1.9	0.3	1.6
9	Has to attend other domestic activities	4.4	3.6	3.9	3.5	4.4	4.0
10	Financial constraints	16.5	15.0	11.8	11.2	6.8	13.6
6-10	Direct Economic Factors	26.0	24.6	21.4	20.6	15.6	23.1
11	Other	13.4	16.0	14.4	18.8	17.9	15.5

Source: NSSO (1998)

Thus lack of interest could be due to poverty among the poor, or absence of knowledge of potential benefits of education among the poor or the rich, or due to absence of good facilities for schooling, or absence of a tradition of going to school, or economic difficulties, or due to

certain other factors.[29] Such an argument assumes further credibility, as parents' attitude to education is otherwise found to be highly positive. For example, according to PROBE (1999, p. 14), 98 per cent of the parents surveyed in rural North Indian states felt that education was important for their boys, and 89 per cent felt that it was important for their girls too. Even the illiterate parents and backward castes also highly value education. Parents were also found to be aware of social, economic and cultural gains of their children's education. So it would indeed be useful to examine in depth the 'lack of interest' factor. But information to decompose the 'lack of interest' factor is not available from the NSSO (1998) survey. But it may be plausible to argue that 'lack of interest' could be attributed to a substantial extent to (a) the poor quality and quantity of physical and human infrastructure, and (b) poor quality of instruction, including the alienness and irrelevance of the curriculum on the one side, and (c) economic and other social factors from the side of the families on the other.

Subject to this important limitation, one might say, keeping aside this factor of lack of interest in studies for a moment, on the basis of Table 13, that financial constraints form the most important factor that keeps children away from schools.[30] This is found true, rather surprisingly, not only for the poor, but also for the rich, though there is some difference in numbers between the rich and the poor, in the sense that, for the poor financial constraints and other economic factors are more important than for the rich. 18 per cent of the bottom quintile report never enrolment due to financial constraints, while the corresponding proportion is about half -- 9 per cent for the richest quintile.

Secondly, very often it is stated that children of the poor have higher opportunity costs of schooling and hence they are not enrolled in schools. But wage work or participation in 'other' economic activities[31] has not been cited as major reasons for the non-enrolment or dropout of the children. However, participation in 'other' economic activities, and in domestic work are cited as more important than participation in wage work -- though the three factors, viz., wage work, domestic work and other economic activities, together do get a score of 7-8 per cent only. Further, the responses of the households here do not show any difference

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29 Many of these factors are independently listed in the questionnaire used for the survey (NSSO, 1998). But it does not mean that the lack of interest could be treated as an independent factor.

30 It may be noted that financial constrains are listed in the NSSO (1998) separately from other economic factors including opportunity costs.

31 While no details are available on 'other economic activities', they may refer to non-wage/salary work.

between the poor, the middle income and the rich households in the participation of their children in wage work, in other economic activities, and in other domestic activities (except looking after younger siblings). It appears thus as if there is no conclusive evidence on the role of opportunity costs of schooling of the children on their participation in education. It may be noted that these factors -- opportunity costs -- are treated by NSSO, as shown in Table 13, separately from the financial constraints, discussed in the above paragraph. All the economic factors can be listed as follows: (a) financial constraints, (b) opportunity costs: wage work, participation in 'other' economic activities, looking after younger siblings, and other domestic activities. On the whole, economic factors, including financial constraints and opportunity costs together, are an important reason for the non-enrolment of the children from poor families in schooling. These factors together account for more than one-fourth of the responses in case of the poor. After all, children, particularly older children in poor households work and supplement family incomes directly or indirectly.

There are also children who were attending schools and also at the same time were working. The work load (out of school) has serious effects on the studies of the children. Many rural boys and girls who do both, miss school often -- some of them rather regularly. They were found to be unable to do homework, and some of them were found to be unable to prepare for school tests/examinations (Table 14). These children may eventually drop out of school or stagnate in the same grade for more than one year.

Table 14

Percentage of Children Who were Attending School and also were Working, by Effect on Studies, 1993-94

Effect on Studies	Rural		Urban	
	Boys	Girls	Boys	Girls
Misses School				
intermittently	27.9	15.5	8.8	4.1
regularly	8.0	6.8	1.6	1.0
Studies affected				
Unable to do home work	18.2	15.1	4.2	3.0
Unable to prepare for tests/exams.	6.9	4.9	3.6	7.3

Source: NSSO (1997).

Thirdly, school related factors -- availability of schooling facilities, or perceptions

about the value of schooling -- no more figure as an important reason for their never enrolment. Only 4-7 per cent of the parents found it relevant. Further, there is a difference of 2 per cent points between the responses of the bottom and the rich quintiles on the role of school related factors, the rich feeling more that education is not useful, and that there are not adequate schooling facilities.

In case of never enrolment of girls in rural areas, the differences in the relative roles of various factors vary widely between the rich and the poor. A larger number of girls belonging to the poor and middle income groups are not interested in studies than the rich. On the other hand, it is the parents in the richer households who are less interested in their girls' schooling than the parents of the poor. Girl children of the rich and the poor are to participate alike in economic activities other than wage work. This may be necessitated more by social custom than by economic needs. Girls have to participate in domestic work more than boys. The choice between schooling and economic activity may be real and tough for many households. Financial constraints are more important in case of poorer households in being not able to send their girls to schools than of course in case of the richest quintile.

Now the second related question is: Why do children drop out of schools? The factors identified for the phenomenon of dropout are same as the factors responsible for never enrolment of children in schools, though the relative emphasis of various factors varies, as shown in Table 15. Lack of interest is the most important reason for the poor; for the rich, it is also important, but it is only the second most important factor. Lack of interest on the part of the children is more important than lack of interest of the parents for the children dropping out of schools, while it is the lack of interest of parents that is more responsible for the non-enrolment of children. This is where the school environment matters. 20 per cent of the children of the bottom quintile and 32 per cent of the top quintile drop out due to school related factors that can be referred to as unattractive school environment. Hence the phenomenon is to be regarded not as dropout but as 'push-out.' Economic factors form the second most important set of factors for the poor for not being able to continue their studies. Among the poorest quintile, 33 per cent children drop out due to economic reasons, while at the same time the corresponding proportion is also high for the rich -- 28 per cent. Surprisingly, inability to cope with studies in the schools is a more important factor for the rich than for the poor.

The pattern is more or less the same in case of reasons for the dropout of girls in rural areas. One particular point is clear: in case of girls, a larger number of parents report lack of interest in studies on the part of the parents and also of the girl children as responsible for the dropout (or withdrawal) of girls from schools than in case of boys (rather all boys and girls

combined).

Table 15
Why Do Children Drop out from School?
(Per cent of Children Dropped out of School by reason), 1995-96

		Household Expenditure Quintiles					
		Bottom	2nd	3rd	4th	Top	All
All Children							
1	No Tradition in Family	0.2	0.4	0.8	0.6	0.6	0.5
2	Child not interested in Studies	30.7	25.3	23.7	24.0	19.5	24.4
3	Parents not interested in studies	9.3	9.2	11.3	7.0	9.9	9.4
2+3	Lack of Interest in Studies	40.0	34.5	35.0	31.0	29.4	33.8
4	Inability to cope with/failure in studies	16.6	21.5	20.7	25.9	27.2	22.5
5	Unfriendly atmosphere at school	0.4	0.3	0.5	0.4	0.6	0.4
6	Education not considered useful	2.5	1.8	1.5	0.9	2.1	1.7
7	Schooling/Higher education facilities not available conveniently	0.8	1.5	1.6	2.1	2.3	1.7
4-7	Direct School Related Factors	20.3	25.1	24.3	29.3	32.2	26.3
8	Has to work for wage/salary	4.9	4.4	5.5	5.4	3.9	4.8
9	Has to participate in other economic activities	7.2	8.5	7.3	7.5	8.3	7.8
10	Has to look after younger siblings	1.8	1.3	1.7	0.9	0.9	1.3
11	Has to attend other domestic activities	4.8	5.3	4.3	4.8	3.7	4.6
12	Financial constraints	14.4	13.1	13.0	10.4	11.5	12.4
8-12	Direct Economic Factors	33.1	32.6	31.8	29.0	28.3	30.9
13	Other	4.5	5.6	5.9	7.4	7.2	6.2
Rural Girls							
1	No Tradition in Family	0.4	0.1	1.7	1.5	1.2	1.1
2	Child not interested in Studies	26.3	22.1	21.4	20.9	16.8	21.0
3	Parents not interested in studies	20.0	13.1	17.7	12.2	18.7	16.3
2+3	Lack of Interest in Studies)	46.3	35.2	39.1	33.1	35.5	37.3
4	Inability to cope with/failure in studies	9.3	19.6	15.9	18.4	23.5	18.0
5	Unfriendly atmosphere at school	0.3	0.2	1.0	0.1	1.0	0.6
6	Education not considered useful	3.0	3.1	2.6	0.7	2.1	2.2
7	Schooling/Higher education facilities not available conveniently	1.0	3.3	3.4	4.0	5.0	3.5
4-7	Direct School Related Factors	13.6	26.2	22.9	23.2	31.6	24.3
8	Has to work for wage/salary	2.0	1.3	1.0	3.0	0.4	1.4
9	Has to participate in other economic activities	1.8	6.5	4.3	3.0	3.7	3.9
10	Has to look after younger siblings	4.0	2.7	3.6	1.4	1.5	2.5
11	Has to attend other domestic activities	11.7	10.4	8.4	9.7	7.3	9.2
12	Financial constraints	12.9	9.9	10.4	11.7	7.4	10.2
8-12	Direct Economic Factors	32.4	30.8	27.7	28.8	20.3	27.2
13	Other	6.0	7.2	7.6	11.2	9.5	8.5

Source: NSSO (1998)

Girls are also withdrawn from schools in larger numbers as they have to attend to domestic activities including looking after younger siblings, than boys; and boys (or all on average) are withdrawn more for wage work and for participation in other economic activities. What is interesting to note is that there is not much difference between the five quintile groups in their response relating to their children's participation in wage and other economic activities. In sum, it appears that in the literature and popular perceptions (e.g., Weiner, 1991), exaggerated emphasis has been placed on opportunity costs of schooling (or simply child labour) as a major factor of the non or never enrolment of poor children in schools.

Cultural prejudices and traditional factors -- having a tradition to send children to schools -- is also yet another factor that is important in this context. Though small in number, on the whole, 4 per cent of never-enrolment of the children is accounted by this factor. This is above 5 per cent among the girls. Interestingly there is not much difference between the rich and the poor. However, once children are put in the schools, they do not drop out due to this factor of having or not having a tradition to go to school. That is, this factor becomes redundant once the children are enrolled in schools. There is no going back.

The implications of the long array of figures on factors responsible for non-enrolment in and dropout of children from schools, can be summed up as follows: To attract children into schools, it is necessary that interest is created in the minds of the children and more particularly their parents in education. To create interest in and change the perceptions of the people about schooling, it is necessary that the school environment be improved. Many researchers have identified school related factors as crucially important. The shortcomings of the school system are found to be a more important hindrance to the participation of urban slum dwelling children in schools than even economic factors (Banerji, 2000). The second most important thing to do is to make efforts to mitigate the financial constraints of the households. Besides providing truly free education, financial incentives may have to be offered to the poor.[32] In addition, to see that the children who are already enrolled in schools do not drop out also, it is important to improve the schooling environment. The phenomenon of dropout of children from school could be seen as reflective of the failure of the school system to retain them in the school until the completion of the given level of education. Mere provision of a school facility is not adequate. A school with reasonably good physical infrastructure and committed teachers providing an attractive learning environment is

32 Incentives such as mid-day meals in Tamil Nadu, and the more recent food for education programme in Bangladesh are found to be quite effective.

necessary. As mentioned earlier, all these factors are interrelated. For instance interest in education can be created by providing a good schooling facility and/or by enabling the children or parents to demand education by improving their economic conditions and by reducing the need for household expenditures on schooling, etc.

5 Imperative of Educational Improvement

That education reduces poverty is well recognised in India and accordingly, education, specifically elementary education (that includes primary and middle or upper primary levels -- in all, eight years of schooling) is regarded as a minimum need and is made a part of national minimum needs programme in the Five Year Plans in India. One of the important components of the 'National Human Development Initiative' announced in the Union Budget 1999-2000 is education. Education is also recognised as an important item of 'basic human development needs' and is one of the items of the Prime Minister's Special Action Plan. But all this has not effected any specific priority of the government to education (see Tilak 1999a).

But realising that education is having direct effect on poverty, government, non-governmental organisations working in the area of development and also quite a few external aid organisations began to feel imperative to pay serious attention to education, concentrating more specifically on primary education in particular. A brief description of some of the recent initiatives is given below. The aim is not to present a critique of these several initiatives, but give a brief idea about certain major programmes, initiatives and interventions.

5.1 State Efforts: Recent Experiments, Programmes and Projects

While the initiatives taken by the government in universalising elementary education are many, a few recent measures need a special mention. Government policies and recent efforts in India aim more clearly at the later two sides of the problem: (a) reducing the household costs of schooling, and (b) improvement of school environment. How far are they successful?

Efforts to Reduce Household Costs

'Free' Elementary Education

To reduce the households' direct costs of schooling of children, India, like many other countries had resolved long ago to provide elementary education free -- specifically tuition fee free. While official claims reiterate that it is being provided free, the available evidence shows the other way. Based on the 42nd round of the NSSO, Minhas (1992, p. 90) have shown that only 85 per cent of the children attending schools in rural areas and 51 per cent in urban India

receive free primary education.[33] Similarly the evidence based on the NSSO (1998) given in Table 16 shows that only about 75 per cent of the children receive free primary and upper primary education. The remaining children pay tuition fees.[34] Most children pay various other types of fees.[35]

Table 16
How Many Children Get 'Free' Education in India? 1995-96
(per cent)

	Primary	Middle	Secy*	Higher
by Type of Schools				
Government	92.3	87.2	70.5	22.8
Local Body	86.7	83.6	73.2	24.9
Private Aided	45.7	60.6	59.6	15.0
Private Unaided	5.8	6.4	11.2	4.3
Others	93.4		78.6	89.1
All	76.5	74.4	62.7	19.7
by Household Expenditure Quintiles				
0-20	85.1	82.2	77.9	25.4
20-40	81.3	79.5	71.4	24.4
40-60	77.8	77.8	67.8	21.8
60-80	73.2	74.2	62.8	21.4
80-100	60.9	64.6	53.8	17.6
All	76.5	74.4	62.7	19.7

Note: Free means tuition fee free only; Number of students fully exempted from tuition fee is also included; Others refer to 'not recorded'; * includes Higher Secondary
Source: NSSO (1998)

Though a large majority of the children in government schools receive tuition fee free education, 8 per cent of the children in the government primary schools and 13 per cent in government upper primary schools pay some fees or other. Schools run by local bodies of administration such as *Zilla Parishads, Panchayats,* and *Mandals* receive grants in aid from the state governments to meet their full expenditure and are governed by most of the rules of

33 See also Tilak (1996b) for similar details.

34 The corresponding proportions of fee-paying children are higher in secondary and higher education levels.

35 See Table A.3 in the Appendix for details on various types of fees charged in public primary schools in various states.

the government in providing free education. Yet about 15 per cent of the children in schools run by local bodies have to pay fees for elementary education. Similarly private schools, called 'private aided schools' receive aid from government to meet nearly their full recurring expenditures and are expected to provide free education. But nearly half the children in private aided schools are charged fees. Private schools that do not receive any State aid are however free to charge fees, and most of the children in these schools pay fees, rather hefty amounts of fees.

The children who do not receive free primary education are not confined to the high income families. They are distributed in all income groups. While 40 per cent of the children belonging to rich families do not receive free education, the corresponding proportions are 15 and 20 per cent in the bottom income quintiles. In all, 25 per cent of the children attending school do not receive free primary or upper primary education. Thus despite the acceptance of the rationale and the need to provide free elementary education, the universally accepted and the Constitutionally guaranteed principle is not being strictly adhered to in India.[36]

It is not only fees that the students have to pay to schools, but they also have to incur expenditure on other important items related to schooling such as purchase of books, stationery, uniforms, transport, private coaching.

Table 17

Household Expenditure on Education in India, by Household Expenditure Quintiles, Rs per Student, 1995-96

	Primary	Middle	Secondary*	Higher	All Levels
0-20	197	426	768	1353	300
20-40	306	575	961	1645	472
40-60	419	726	1096	1810	647
60-80	598	900	1424	2220	923
80-100	1150	1547	2220	3694	1836
All	501	915	923	2923	904

Note: * includes Senior Secondary
Source: NSSO (1998)

36 See also Minhas (1992) and Tilak (1996b) for more details based on an earlier survey of NSSO (1986-87).

The need for such expenditure is high as public expenditure on the same is very small. On average, households have to spend Rs. 500 per student in primary education and Rs. 915 in upper primary education (Table 17). At such a level of household costs, a sizeable proportion of families may find it beyond their means to send their children to school and keep them there for the few years to acquire even literacy and a basic level of education. Household expenditure on education increases for higher economic levels of the households. While the poorest households spend Rs. 197 per child in primary education, it increases by six times among the richest quintile. In a sense, primary education which is expected to be available free, also tends to become a 'luxury good' for poor.

Provision of Incentives

To reduce the household costs of schooling, government also provides scholarships to poor children, free textbooks and stationery to children, and in the recent past, a noon meals programme was also launched which enables all children in primary schools to have free meals in schools. Except monetary scholarships all the other programmes are by design, universal in coverage, while scholarships are only for target groups of population, i.e., socially and economically weaker sections. But the programmes that are meant for universal coverage are also restricted.

Table 18

How Many Students Receive Indirect Subsidies in Education, 1995-96
All Levels of Education (per cent)

by Quintile Group	*0-20*	*20-40*	*40-60*	*60-80*	*80-100*	*All*
Scholarships	7.0	7.4	7.1	7.1	5.7	6.8
Free/Subsidised Textbooks	35.2	32.1	28.6	23.7	13.7	25.6
Free/Subsidised Stationery	67.0	4.0	4.1	3.8	2.2	3.9
Noon Meals	24.3	21.5	19.0	16.4	11.5	17.9
Concession in Transport	8.0	39.2	50.3	47.4	58.5	53.1
by Type of School	*Govt*	*Local Body*	*Private Aided*	*Private Unaided*	*All*	
Scholarships	8.2	6.2	5.5	1.4	6.8	
Free/Subsidised Textbooks	33.6	29.7	9.9	1.6	25.6	
Free/Subsidised Stationery	5.0	4.5	1.9	0.8	3.9	
Noon Meals	23.0	22.9	7.5	1.8	17.9	

Source: NSSO (1998)

Only 35 per cent of the children in primary schools receive free/subsidised textbooks, five per cent receive free/subsidised stationery and 27 per cent of the children receive free noon meals. The corresponding proportions are much less in other levels of education (Table 18). Particularly, the impact of noon meals on the enrolment, retention and even performance of the poor children in schools is believed to be very significant (Rajan and Jayakumar, 1992). But the programme has not received serious attention. While compared to private schools, government schools fare better in the provision of these facilities, yet these facilities are severely restricted to a small fraction of students, necessitating substantial household expenditures even by poor households.

The *Programme of Action* (Government of India, 1986b) stressed the need for some more incentives like establishment of day-care centres for pre-school children and infants, so that girl children can go to schools. The Government of India has also recommended in the *Programme of Action* expansion of the existing schemes more intensively to the target population groups. For example, it suggested provision of two sets of free uniforms, free text books and stationery and attendance incentives to the girls of all families below poverty line, and provision of free transport in state roadways buses to children attending elementary schools, etc.[37] In fact, the Government of India has promised in the *Programme of Action* that "a comprehensive system of incentives and support services will be provided for girls and children of the economically weaker sections of society." Alas, this is yet to be developed.

Efforts to Improve School Environment

Much has been done in independent India through planned efforts to expand schooling facilities, but the quantum and quality of facilities are highly inadequate. Some important initiatives taken in the recent past may be briefly noted.

Operation Blackboard

To improve the infrastructure facilities, and quality of primary education, the Government of India has initiated the 'operation black board' programme, suggested by the *National Policy on Education 1986* (Government of India, 1986a). The scheme started in

37 However, as the Working Group on Elementary Education (Department of Education 1989) rightly felt, it may not be proper to treat items like textbooks, stationery and learning material as incentives, as they are essential prerequisites for learning. See also MHRD (1997; and 1999a). Keeping in view the spirit of "free" education, it is necessary that these requisites be provided free to all children going to schools.

1987-88 aims at substantial improvement in basic facilities in all primary schools run by government and local bodies. It consists of three different components: (i) a building comprising at least two reasonably large all-weather rooms with a deep verandah and separate toilet facilities for boys and girls, (ii) at least two teachers in every school, as far as possible one of them a woman, and (iii) essential teaching learning material including blackboards, maps, charts, toys and equipment for work experience. The third category includes provision of a variety of minimum level of facilities and material, including teachers' material (e.g., text books, modules, and syllabi), class-room material (e.g., maps, globes, charts), play material (blocks, strips, tiles, puzzles, games and toys), games equipment (skipping rope, balls, rings), primary science kit, mini tool kit, mathematics kit, books for library, musical instruments, class-room equipment (chairs, tables, mats, blackboards, chalks, dusters) and miscellaneous facilities (water facilities), etc.

The Revised *National Policy on Education* (1992) suggested expansion of the scope of operation backboard to provide three reasonably large rooms and three teachers in every primary school, and to extend the scheme to upper primary level. Accordingly in the Eighth Five Year Plan, provision was made for (a) continuation of the scheme to cover the remaining schools identified in the seventh Plan, (b) provision of three teachers and three class rooms to primary rooms where enrolment exceeds 80, and (c) extension of the scheme to the upper primary level. This scheme is hoped to improve the quality of education significantly.

But in 1993, when the last All-India Educational Survey (NCERT 1997-98) was conducted, more than 20 thousand primary schools in rural India, i.e., 17.1 per cent of the schools, were still found to be running in open space, nearly 2 thousand in tents, 16 thousand in thatched huts and another 48 thousand in *katcha* buildings (Table 19). This is despite a clear resolve that a building with at least two pucca rooms usable in all-weather would be provided to each primary school, according to the *National Policy*. There were a few schools without any rooms of any kind, though it is a small number: 5.3 per cent. Teaching takes place, if at all it does, in these schools under a tree or in a verandah or so. As a result, most of these schools have to be practically closed during rainy days and even during severe winter and summer days. Realising the problem of inadequate building facilities, quite a few states have adopted the practice of running of schools in double shift.[38]

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38 For example, in West Bengal, in one or two districts existing school buildings have been used for a second shift of teaching in the evening and this practice was reported to be successful in attracting many pupils, who are otherwise busy during the day.

Table 19

Number of Schools in Rural India by Type of Buildings

	Primary		Upper Primary	
	1986	1993	1986	1993
Pucca	54.5	64.2	66.4	65.7
Partly Pucca	16.2	18.7	19.7	22.5
Katcha	14.8	9.5	9.2	7.9
Thatched Huts	5.9	3.2	2.0	1.7
Tents	0.5	0.4	0.2	0.1
Open Space	8.0	4.0	2.5	2.1
Total	100.0	100.0	100.0	100.0

Source: NCERT (1992, 1997-98)

With respect to provision of ancillary facilities, the improvement is modest and the overall situation is still very unsatisfactory. More than 60 per cent of the primary schools and 40 per cent of the upper primary schools did not have even drinking water facilities. The situation worsened between 1986 and 1993, the latest two points of time for which data are available (Table 20). Toilet facilities are available only in a rather negligible proportion of schools.

Table 20

Percentage of Schools in Rural India, having Ancillary Facilities

Ancillary Facility	Primary		Upper Primary	
	1986	1993	1986	1993
Drinking Water	44.5	41.4	63.4	58.34
Urinals	11.1	14.0	34.8	40.58
Separate Urinals for Girls	3.0	5.5	16.6	24.51
Lavatories	3.2	6.4	12.8	19.97
Separate Lavatories for Girls	1.0	2.4	5.9	9.26

Source: NCERT (1992, 1997-98).

Access to Schools

Several research studies (e.g., Tilak, 1996b) have found that proximity to schools, particularly at primary and upper primary level matters a lot for the participation of children in schooling. Accordingly, it is viewed that provision of a complete primary school or at least some sections of a school within the habitation would considerably enhance the enrolment of children in schools. Also in a major introspective critique of its own educational policies and plans, the Government of India (1985) had noted that lack of school facilities for children was a major constraint on universalisation of elementary education. Ever since, improvement in access of the weaker sections to primary schools has been an explicitly stated goal of the government. The growth in the number of schools is indeed impressive. A large number of schools are being opened. The efforts were said to have been intensified after the *National Policy on Education 1986* was formulated. However, quite surprisingly, the percentage proportion of habitations having schools or sections (not a complete school, i.e., an 'incomplete primary school' within the habitation itself) declined between 1986 and 1993 (Table 21). A little less than 50 per cent of the habitations have a primary school/section within the habitation in 1993, while in 1986 a little above 51 per cent had the same. Out of the nearly 10.6 lakh rural habitations in the country nearly 35 per cent, i.e., 3.73 lakh habitations did not have a primary school within their own habitations or within a distance of 0.5 km. Young children of the age below 11 are expected to reach a school walking to a nearby habitation located at a distance of more than half a kilometre. Similarly there is a nearly three per cent point decline in the population covered by schools located in the habitations themselves, i.e., 77.8 per cent of the population have access to a primary school within the habitation in 1993, while the corresponding proportion was 80.4 per cent in 1986. The access of the scheduled castes and tribes also did not improve significantly during this period (see Tilak, 1999c). It was found that the scheduled tribes are at a more disadvantageous position that the scheduled caste population (Rao and Kulkarni, 1998). For every one general population habitation not having a primary school within its jurisdiction, there were 1.71 scheduled tribe habitations without a school within their jurisdiction.

Table 21

Provision of Schools/Sections in Rural India, 1986 and 1993

	All Areas				Predominantly Scheduled Caste Populated Areas				Predominantly Scheduled Tribe Populated Areas			
	% of Habitations Having Schools/Sections		% of Population Covered		% of Habitations Having Schools/Sections		% of Population Covered		% of Habitations Having Schools/Sections		% of Population Covered	
	1986	1993	1986	1993	1986	1993	1986	1993	1986	1993	1986	1993
Primary Schools/Sections												
Within Habitation	51.16	49.79	80.38	77.81	37.67	37.03	66.31	64.27	45.43	45.96	72.19	71.43
< 0.5 km	14.82	15.01	6.74	7.69	21.65	22.74	12.78	14.52	12.28	10.38	6.95	6.30
0.6 - 1.0 km	17.86	18.56	7.33	8.27	22.27	22.53	12.05	12.53	16.75	19.97	9.21	10.80
1.1 - 2.0 km	10.81	10.72	4.06	4.24	12.97	12.19	6.58	6.21	13.14	12.81	6.65	6.64
> 2 km	5.35	5.92	1.49	2.00	5.44	5.51	2.28	2.46	12.40	10.89	5.00	4.81
Total	100	100	100	100	100	100	100	100	100	100	100	100
Upper Primary Schools/Sections												
Within Habitation	13.13	13.87	36.85	37.02	5.57	6.51	15.42	18.5	6.55	7.85	18.71	21.56
< 1.0 km	19.06	25.46	14.95	19.89	23.65	32.04	21.56	28.95	12.13	18.20	11.65	16.17
1.1 - 2.0 km	23.34	21.38	18.43	16.37	25.68	22.91	24.58	20.92	17.41	18.38	17.68	17.01
2.1 - 3.0 km	18.48	15.43	13.75	11.72	19.53	16.18	17.81	14.16	16.91	15.53	15.81	14.22
3.1 - 4.0 km	9.51	8.05	6.55	5.52	10.31	8.22	8.74	6.55	11.48	9.78	9.82	8.35
4.1 - 5.0 km	6.32	6.09	4.22	4.18	6.68	5.91	5.66	4.97	9.50	8.73	8.13	7.39
> 5.0 km	10.16	9.72	5.26	5.30	8.58	8.22	6.22	5.94	26.03	21.52	18.2	15.31
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: NCERT (1992, 1997-98). See also Tilak (1999c).

It is generally argued that the habitations that do not have a school or a schooling facility within their own jurisdiction are those where opening up of a school is considered to be an 'unviable' proposition, since the size of the population of the habitation may be very small and that too scattered. The official norm has been to provide a schooling facility in every habitation having a population of not less than 300. But the available evidence suggests that many habitations that satisfy the population norm also do not have primary schools (Table 22). Only 73 per cent of the all (rural and urban) habitations having a population of 300 or more were served by a primary school or primary sections in 1993, i.e., 27 per cent of the habitations with a population size of above 300 were deprived of having a primary school

Table 22
% of Deprived Habitations (Qualified by Population Size but not Served by Schools, 1993

Habitations	Within Habitation	Within 1 Km
Primary Schools/Sections (Size of Habitation > 299)		
All	26.76	6.97
Scheduled Castes*	38.33	8.81
Scheduled Tribes*	21.53	7.97
Upper Primary Schools/Sections (Size of Habitation > 499)		
All	69.67	16.27
Scheduled Castes*	83.17	17.58
Scheduled Tribes*	73.22	26.69

Note: * predominant population of the habitation
Source: NCERT (1992, 1997-98). See also Tilak (1999c).

within their own jurisdiction.[39] In case of scheduled tribes the situation is somewhat better, but in case of scheduled castes, the corresponding deprivation rate is 38 per cent. On the whole, a school facility was totally absent for some children and was available at a distance for some.

Education Guarantee Scheme

A novel scheme called Education Guarantee Scheme is viewed as an effective answer to this problem. This is a major important initiative that the government proposed at the national level in the Union Budget 1999-2000. Aimed at "providing an opportunity to the rural poor,

39 See Tilak (1999c) for more details on the 'progress' made between 1986 and 1993. See also Tilak (1996a).

especially those belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes to secure education for their children", drawing from the experience of Education Guarantee Scheme of the government of Madhya Pradesh (see Gopalakrishnan and Sharma, 1998) a national programme of EGS was launched. The scheme is meant for those areas where no school currently exists within a radius of 1 km. So these areas could be the areas where the poorest of the poor live. By adopting distance norms, norms regarding size of population of the habitation etc., in educational planning until now, the educational needs of the population in these areas were neglected, stating that it is 'unviable' to open a school in such areas. So payment of attention to these areas now is important. But the EGS has a major internal contradiction. The EGS envisages the poor local community to (a) come forward, expressing demand for a school, (b) specifically provide the premises required for a school, (c) provide for a local part-time teacher, and (d) maintain the school at least for two years with the Gram Panchayat mobilising contributions in cash and kind from the local community (Tilak, 1999a).[40] The scheme presumes that a full formal school with all the required basic facilities is not necessary and so dispensable is a qualified and trained teacher. Secondly and more importantly, the notion that a community must demand a school facility rather than receive it as an 'entitlement' or right from the government, implies shifting of responsibility of opening schools from the shoulders of the government to those of the people themselves. However, claims are being made on the grand success of the scheme. It is reported that the EGS in Madhya Pradesh has made significant progress in opening new schools for the poor.[41]

Provision of Teachers

A school without teacher is not a school; and schools with insufficient number of teachers cannot meaningfully serve the purpose. They reflect the poor quality of education. Unfortunately there is a sizeable number of schools in rural India with inadequate number of teachers. One can obviously expect that the teaching-learning process in these schools gets severely affected, resulting in non-enrolment and dropping out of children from schools.

Government plans to provide an adequate number of teachers to all schools have not progressed well. The Indian education system is identified with the singular feature of zero-

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40 See also Rahul (1999) and Khera (1999) for a critique of EGS in Madhya Pradesh; and Gopalakrishnan and Sharma (1999) and also Vyasulu (1999) for a rejoinder.

41 A similar scheme is being planned in Madhya Pradesh to open adult literacy centres: the illiterates are supposed to comet together to form a little literacy council, and select a local teacher for themselves... (Krishna Kumar, 2000).

teacher and single teacher schools. Though there was a decline in the total number of single teacher schools between 1986 and 1993, still such schools formed a sizeable number in 1993: 1.12 lakhs, constituting 22 per cent of the total number of schools. If a single teacher school is a stigma, the phenomenon of teacher-less schools. i.e., schools without teachers is a worse phenomenon. More than four thousand primary schools in rural areas were without teachers in 1993. The number was nearly doubled from 2.2 thousand in 1986 to 4.1 thousand in 1993.

Table 23

Rural Primary Schools without Any and with Only One Teacher

	Schools With no Teachers				Schools With One Teacher			
	1986		1993		1986		1993	
	No.	%	No.	%	No.	%	No.	%
Government	1183	0.58	2123	0.90	67546	33.17	60447	25.62
Local Body	1027	0.40	1888	0.76	79597	31.19	49582	19.99
Private Aided	7	0.06	29	0.20	1405	11.67	1313	9.07
Private Unaided	4	0.08	65	0.71	1000	20.84	684	7.46
Total	2221	0.47	4105	0.81	149548	31.43	112026	22.07

Note: % : percentage of total number of schools in each category.
Source: NCERT (19-92, 1997-98).

Many have expected that with the launching of operation blackboard programme there would be no more single teacher schools in the country. But the phenomenon continues (Table 23). Perhaps all the single teacher and zero teacher primary schools existing in 1987 when the programme was launched, were converted into two teacher schools. But unfortunately the practice of establishment of new schools with no teachers and/or with just one teacher seems to have continued unabated.

Further, increase in the number of teachers has not kept pace with increase in student numbers. As a result, the pupil-teacher ratio in primary schools in India increased according to official statistics of the MHRD, from 41 in 1986-87 to 50 in 1993-94 and later it declined to 42 in 1998-99. The pupil-teacher ratio in upper primary schools also increased from 35 to 37 during the same period (Table 24).

Table 24

Number of Pupils per Teacher in Elementary Schools

	Primary	Upper Primary
1986-87	41	35
1990-91	43	37
1991-92	44	38
1992-93	43	38
1993-94	50	38
1995-96	47	38
1996-97	45	38
1997-98	42	37
1998-99	42	37

Source: MHRD (2000) and earlier years.

An equally important aspect refers to the quality of teachers. While there are several indicators of teachers' quality, training is an important one. Trained teachers are expected to perform better than untrained teachers. Accordingly teacher education and training have been emphasised in India for a long time and generally only formally trained teachers are recruited in schools. But in recent years many untrained teachers and part time teachers including *para* teachers are being recruited, though not in very large numbers. This may be partly due to serious budgetary constraints on the one hand, and partly to avoid problems relating to teacher management on the other. In some cases this is also felt necessary as enough fully qualified trained teachers are not available for recruitment on a full time basis and as many unemployed and untrained youth are available. The proportion of trained teachers marginally declined between 1986-87 and 1992-93 both in primary and upper primary levels. Secondly, part time teachers in rural primary schools increased at a rate of growth of 27.8 per cent per annum between 1986 and 1993 and the growth rate is alarmingly high, 155.3 per cent in government primary schools. There were only nine part time teachers in upper primary schools run by local bodies in 1986 and the number has increased by more than 70 times in seven years (Table 25). Thirdly, the phenomenon of voluntary/contractual teachers is a new one. Probably there were no teachers of this kind in 1986.[42] As many as 25 thousand teachers in primary schools

42 The *Fifth All India Educational Survey* (NCERT, 1992) does not report any details on such a category of teachers.

and another 10 thousand teachers in upper primary schools in rural areas in 1993 belonged to such a category of teachers (Table 26). All this will necessarily have serious adverse impact on the quality of instruction. But the idea of not having full time qualified and trained teachers, and rather having para-, contractual and part-time teachers has gathered some fashion, and is based on the belief that job insecurity brings greater efficiency. This is also broadly in conformity with the new economic policies, adopted by the government from the beginning of the 1990s that favour down-sizing of the public system and its privatisation.

Table 25

Growth in Part Time Teachers in Rural Primary and Upper Primary Schools

	Primary Schools			Upper Primary Schools		
	1986	1993	Growth*	1986	1993	Growth*
Government	149	1769	155.3	713	1043	6.6
Local Body	496	949	13.0	9	669	1047.6
Private Aided	565	352	-5.4	826	781	-0.8
Private Unaided	134	891	80.7	116	794	83.5
Total	1344	3961	27.8	1664	3287	13.9

Note: * Growth: Rate of growth per annum
Source: NCERT (1992, 1997-98).

Among the other important initiatives being taken by the government include decentralisation of administration of schools, mobilisation of community support, and encouragement to private schools. With respect to private schools, the present tendencies indicate that government favours in the name of 'building partnerships' the growth of private schools -- private schools financially supported by the State and self-financing private schools. With dwindling public budgetary support for education, the government's preference in the recent years is more in favour of the latter. This is also in consonance with the economic reform policies that emphasise privatisation. Available research (e.g., Tilak, 1994c) has shown that private schools in India cause serious adverse effects on equity, besides effects on other dimensions of education and society. Particularly the poor would be at a serious

Table 26

Voluntary/Contractual and 'Other' Teachers in Rural Primary and Upper Primary Schools in Rural India, 1993

	Primary Schools		Upper Primary Schools	
	No.	As % of Full-Time Teachers	No.	As % of Full-Time Teachers
Government	16129	3.04	4464	1.18
Local Body	5590	0.87	2825	0.99
Private Aided	1761	2.87	2121	2.59
Private Unaided	1465	3.38	1135	2.62
Total	24945	1.96	10545	1.33

Source: NCERT (1992, 1997-98).

disadvantage with the growth of private schools. The self-financing private schools do not cater to the needs of the poor. The fee policies of these schools exclude the poor altogether. With the growth of private schools, the government might not feel the need for opening new government schools and as a result, the access of the poor to schools would be seriously affected. Growth in private aided schools (i.e., financially supported by the State) is found to lead to distortions in the allocation of public resources causing enriching of the private sector and pauperisation of the public schools. Lastly, that private schools promote dualism in education -- an expensive system for the rich and a poor quality one for the poor -- is well known and such forces get accentuated in the context of economic reform policies. Yet, a steady growth in private schools with all their ill effects is not only allowed but also now encouraged by the government (Table 27).

5.2 Externally Aided Projects in Education

From the mid-1980s on wards, when the World Bank explicitly recognised the critical role of education in reducing poverty (e.g., see Jones, 1996; World Bank, 1990), many international aid organisations began targeting their development aid efforts towards education - particularly primary education (Tilak, 1988, 1999d). One of the most important

Table 27

Share of Private (Unaided) Schools in Enrolment in Schools in India (per cent)

	1978	1986	1993
Primary	3.0	5.1	8.6
Upper Primary	5.4	8.5	11.0
Secondary	3.1	6.5	8.7

Source: NCERT (1992, 1997-98).

developments in primary education in India in the 1990s is flow of international assistance for primary education. Starting with the World Bank assistance for primary education in ten districts in Uttar Pradesh and that of UNICEF in Bihar, a plethora of international -- both multilateral and bilateral -- aid organisations are currently in operation in India working for the improvement of the primary education system. Let us briefly note a few such projects.[43]

The first major externally financed project in primary education was a project launched by the ODA of the United Kingdom which started as a pilot project in 1983 covering 328 schools in 11 districts in Andhra Pradesh, and later extended to all schools in the state. The project focused on the classroom in the primary schools as a whole and social environment, which influenced the demand for education. It is largely concentrated on pedagogical dimensions, and improvement in teacher effectiveness has been the main objective of the project. Though primarily the project is said to have benefited only the children in schools, by improving the school environment and influencing the demand for education, many children who were outside the school system also came into the system.

Shiksha Karmi Project started in 1987 in Rajasthan is another major externally aided project in primary education in India. The main strategy of the project is to provide a local educated unemployed youth as a teacher, as a para teacher (Shiksha Karmi or educational worker). An important aspect of the project is that it concentrated on rural areas in the state, that too remote rural areas. It also emphasised on women teachers -- Mahila Shiksha Karmis, and gave considerable attention to the empowerment of women, by promoting not only Mahila Shiksha Karmis, but also Mahila Prashikshan Kendras, Mahila Sahyogins and Women groups

43 See Varghese (1998) for an elaborate description on some of these projects.

and their representation and active role in the village education committees.

Another major project that emphasised women empowerment is the Mahila Samakhya Project financed by the Dutch and is in operation in Uttar Pradesh, Karnataka, Gujarat and Andhra Pradesh. The project acknowledged the centrality of education in the empowerment of women.

Bihar education project in Bihar, financed by UNICEF and the Basic Education project in Uttar Pradesh financed by World Bank, are in a sense first of its kind projects that took a comprehensive view of primary education. The projects targeted educationally backward districts in the respective states.

Lok Jumbish is an important innovative project launched in 1992 in Rajasthan for the universalisation of primary education. It was financed by the SIDA. It aimed at providing access to education to all children through formal and non-formal schools, ensuring that all children regularly attend classes and improve their performance levels. The project is run by the state government with community participation an with international assistance. The high level of community participation in the project misleads many to treat this as an project of the non-governmental organisation (NGO).

The District Primary Education Programme (DPEP) is a major project of external assistance for primary education in India. The external funds flow from a variety of sources, primarily World Bank, but also include ODA, European Union etc. The project aims at universal enrolment, reduction in dropout rates to less than ten per cent, improvement in learner achievement at least by 25 percentage points, and reduction in inequities of all types to less than five per cent. Enhancement of teacher quality through in-service training is a major component of the DPEP. Besides provision of infrastructure facilities, improvement in teacher quality -- training, and development of textbooks have been important components of the DPEP. The project also promotes local initiatives, including local area planning, school mapping and micro planning, and assigns an important role to village education committees and similar other bodies.

Most of the projects aim at improvement of primary education -- improvement in access to formal and informal education, improvement in retention or reduction in rates of dropout, and improvement in students' achievement levels. All projects emphasised local area planning. For example, block is the unit of planning in Lok Jumbish, while district has been the unit for planning in most other projects, including specifically the DPEP. The DPEP is launched in selected districts in a good number of states. The districts chosen are educationally backward in terms of enrolment ratio and female literacy. An important aspect of these projects is their

recognition of the role of local community in planning and management of schools, in improving the enrolments in schools, in improving teacher attendance and their performance and on the whole in the efficient functioning of the schools. Mobilisation of local communities -- people, physical and financial resources -- has been an important dimension of these several projects. For example, much of the school mapping exercises were carried out by the villagers in the Lok Jumbish project. District plans are prepared in most other projects by the district machinery. In all projects, village education committees were constituted and they took active interest in all activities of the projects. "Decentralisation in these projects meant developing, controlling, supervising and inspection systems from below with accountability largely on the community" (Varghese, 1998, p. 24).

While there are several positive and also severe adverse effects of the foreign aided projects on the development of primary education in India[44], it should be noted that the interventions in terms of these externally aided projects have major potential implications for reduction in poverty. As Varghese (1998) has identified, the approaches and activities of these projects that have direct implications for poverty reduction are as follows: (a) many of these externally aided projects in primary education aimed at targeting deprived regions -- educationally backward districts and blocks in the country, including educationally backward districts in otherwise developed states in the country; (b) the projects also focus on the government and the government funded (familiarly known as private schools, aided by the State), which in general attend to the needs of the poor, while private schools cater to the demand of the rich; (c) all the projects also focus on decentralised planning; taking the district as the unit of planning, poorer blocks and mandals receive greater attention; Lok Jumbish, of course considered block as the unit of planning; (d) using school mapping as an essential step in educational planning in these projects the most deprived villages and school-less habitations receive priority in the establishment of schools and provision of other school related infrastructure; (e) by aiming at effective participation of the communities, the available resources could be somewhat efficiently spent taking into account the actual needs of the schools and in the process poorer communities benefited more than the others; and (f) special focus has been laid on deprived sections of the population -- women and girls and tribal population in particular.

Since many of the projects have been just begun, it is too early to speak about their effectiveness. However, it is important not to ignore problems relating to sustainability of the

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44 See Tilak (1999d) for a critique of the impact of these projects.

projects, likely dwindling of efforts to mobilise domestic resources, the costs of exclusive concentration on primary education, the debt burden, emergence of pockets of prosperity amidst poverty prevalent in a large number of primary schools, and the overall impact of external aid organisations on the Indian education scene (see Tilak, 1994d). Nevertheless an important strength of the projects is their concentration on backward districts and the education problems of girl children, which may have substantial positive effects on education poverty.

5.3 Role of NGOs in Education in India

Relationships between governments and NGOs in education were often fraught. During the recent years, the relationships between the two underwent a significant change. NGOs have now emerged as important agents in developing countries since the beginning of the 1980s. They have become accepted by governments and also by people. With their meteoric rise as a "new developmental force," it is widely felt by governments, aid organisations and others that development would considerably benefit from increased collaboration between the government and NGOs (Sen, 1999). India is not an exception. There are several thousand NGOs and many more NGOs have been born regularly in the recent past. NGOs cover a wide spectrum -- from a small group of like minded people forming a group, and small loosely knit local organisations to nation-wide organisations and international networks. They may also include people's organisations. Some of the NGOs might have grown out of such people's organisations. Economic reform policies including specifically liberalisation would further add to the growth of NGOs, as the role of the State undergoes a significant change.

Government favours the emergence and growth of NGOs, as governments feel relieved that NGOs will take over their responsibility, substituting (and sometimes complementing) public efforts. Where governments do not perform their jobs well, NGOs have great opportunities. Otherwise they supplement public efforts. It may not be necessarily true that all NGOs are favoured by the government. Government may favour or be hostile to some NGOs. They may be disliked if there is political discontent, or if they are engaged in religious activities, or in activities not favoured by government, or in profit making activities (even while claiming to be non-profit organisations), or sometimes even duplicate public efforts. While government may support NGOs, the latter's excessive reliance on the State can not also be regarded as a plus point.

NGOs have not only grown in terms of numbers, but also in terms of the diversification of their activities. Earlier most NGOs used to be engaged in the direct delivery of certain services; and then there was a phase when they concentrated on development of capacities of

the people to better meet their own needs. Later they got involved in 'sustainable systems of development' in a larger institutional and policy context. Of late, NGOs have begun to be involved in social and political advocacy, supporting people's movement, and in promoting a broader social vision.[45] In fact, NGOs of all these types can be found operating in the education scene in India.

Today there is a great degree of heterogeneity and variety among NGOs in India working for the improvement of education. Many work in the area of rural development in general that include often literacy and primary education including non-formal education and adult education. Some do focus exclusively on primary education. While some organisations focus on primary education directly, some others aim at promoting education indirectly by focusing on elimination of child labour. While many confine their work to rural areas, some are also operating in urban areas, particularly urban slums.

Another important feature of NGOs in India is: quite a few, if not many, of them depend upon State or external support for finances. The number of NGOs that rely on funds from international sources has been rapidly increasing of late, and poses difficult and different kind of questions. In general, NGOs are non-profit institutions. But the ethos is not common. Some may be really commercial; indeed, they may even be commercial companies in disguise. Several NGOs in India have set themselves up as consultancies working for a fee with the voluntary sector (UNDP, 1993, p. 88).

According to the latest available statistics, there are more than 772 NGOs or voluntary organisations working on various aspects of education in India.[46] These are the organisations that received grant-in-aid from the Ministry of Human Resource Development, Government of India in 1997-98. A large number of them, more than 550, work in the area of non-formal education, and 61 in the area of adult education. The others operate in various other areas of education. There may be several other NGOs or voluntary organisations working, but not receiving any aid from the government.[47] On the whole, there is a large number, and a wide

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45 See Korten (1987) for such a classification of NGOs into four generations of NGOs. See also Atack (1999).

46 *Annual Report 1998-99*, Department of Education, Ministry of Human Resource Development, Government of India, New Delhi, 1999.

47 Additionally there is a list of 300 organisations in the *Annul Report* from whom audited accounts are awaited. Some names in this list do not necessarily figure in the list of organisations that received the aid in 1997-98.

variety of NGOs operating in India. It is just impossible even to list all the NGOs working in India in this area. It is also difficult to judge how effective they have been. There has been very little systematic analysis of the impact of the NGOs by the NGOs themselves or by others, except for some case studies. Based upon the limited documentation available, we may briefly note here about a few major NGOs, some of which have made remarkable progress.[48]

The M Venkatarangayya Foundation (Hyderabad) focuses on elimination of child labour and putting the children back in schools. The Foundation feels that all children must attend full time formal schools. Every child out of school is considered a child labour, according to the charter of the Foundation. Further, it is assumed that all child work is hazardous and harms the overall growth of the children. The Foundation works in about 400 villages in rural Rangareddy district in Andhra Pradesh and is said to have pulled out 50,000 children from work and are put into schools in the last couple of years. Campaigns are held against child labour and on the need for sending the children to schools; bridge courses are offered to children for the children aged group 11-14 for 18 months and they are prepared for formal schooling. By helping in small way the parents of younger children 5-8, the Foundation feels that these children could be easily brought into the schools. Viewing local youth as a valuable resource, they are relied upon to bring the children to schools, to run camps and offer bridge courses.

An important strength of the M.V. Foundation is its strong belief that there is no alternative to government schools for universalisation of education. The overall impact of the work of the Foundation was found to be very important on schooling, economic structure of the village economy and on social habits: there has been improvement in the schooling facilities; villages began to compete with each other to achieve maximum enrolment and retention of the children. In as many as 100 villages 99 per cent of the children were in schools and in another 400 villages 95 per cent of the children were in schools. In terms of economic structure, wages for adults have improved with the withdrawal of children from labour market; there has been a shift in cropping pattern so that agriculture could be managed without child labour; and adults became more organised in their work. An important development has been increase in the age of marriage of girls (and also of boys) and

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48 The descriptions of NGOs here are drawn from several sources, such as Saxena (1998), Mehendale (1998), PROBE (1999), UNICEF (1999), UNDP (1993), OXFAM (1998) and publications of some NGOs including specifically the ACTIONAID. The discussions with several officials of the ACTIONAID, Bangalore are also gratefully acknowledged in this context, of course along with usual disclaimers.

improvement in their nutritional levels.

Kishore Bharati, a voluntary organisation in Madhya Pradesh started in 1972 was engaged in education and rural development. Its interventions in school system developed into the famous Hoshangabad Science Teaching Programme. Kishore Bharati also launched a Total Education programme for school dropouts and left-outs. The Total Education programme however, ended in 1977, having started in 1975. The Hoshangabad Science teaching programme was later entrusted to Ekalavya.

Ekalavya, an NGO involved in primary education for more than two decades aimed at improving the classroom processes. Grown out of science teaching programme in Hoshangabad in Madhya Pradesh, Ekalavya developed a package of teaching learning material for primary school children, which are contextualised reflecting the situation in rural areas where the children are located. The aim is to crate a situation in which children can be more active, intellectually stimulated and creative. Ekalavya now covers 75,000 children in 500 government middle schools through its science teaching programme and 15,000 children in 150 primary schools through primary education programme. In collaboration with DPEP, it is likely to spread across 75,000 primary schools in the state. Ekalavya also involves subsidiary activities outside the school system in order toc5ate a suitable social and intellectual environment in which innovations can flourish.

The SWRC, Tilonia (Rajasthan) represents another innovative educational programme meant for street children and working children. The Tilonia programme started in 1975, attempts to reach the vulnerable children through night schools. Children are encouraged to stage street plays on various issues and thus the programme ensures community participation. This may be one of the experiments, in which village education committees were constituted to look after the routine work of the schools. Teachers are recruited from local community. The experiment now extends beyond the state; in fact, it has organisations in as many as eight states. It receives support from the government and also in recent years from external sources.

The Bodh Shiksha Samiti is another NGO that works for 'appropriate' education for urban deprived children. The programme is in operation in Jaipur and covers about 3000 children in 17 schools. Bodh works for an 'integrated school' environment where the child, the teacher, and the community participate in building creative relationships. The aim of the Bodh is foster cognitive abilities, democratic attitudes, human sensitivity and outlook.

There are also some NGOs that focus on pre-primary education, but view it as an essential pre-requisite for universalisation of primary and elementary education. Pratham is one such NGO working in Mumbai with financial support from ICICI. Pratham started with

opening up of 100 Balwadis, later expanded to 450, in the slum communities in Mumbai and plans to provide access to balwadis to all pre-school children in all the 23 wards of Mumbai Municipal Corporation by the end of 1999. The balwadis are run by women, and girl children are given a priority. One important aspect of the Pratham is the involvement of corporate sector not as a donor, but as a partner in the development of education.

Another important NGO working in India is ACTIONAID. It is an NGO with international support, involved in a diverse kind of activities. In addition to its direct intervention in school improvement, it also helps other NGOs in their work. Its main objective is to facilitate the empowerment of the poor in the process of social development. Working since 1971, it supports a wide range of approaches to education and is involved both at micro and macro level in education development -- literacy, adult education, pre-school and elementary education. Apart from funding, and also running 'supplementary schools',[49] it has been extending training and other technical support to local NGOs in the field of education. More than 80 NGOs are long term partners of ACTIONAID and there are more than 150 NGOs with whom short term relations are built up. For example, ACTIONAID lent support to the establishment of satellite schools by the Rishi Valley Foundation. It supports a project by Urmul Trust that runs marushalas (desert schools) in the deserts of Bikaner district of Rajasthan. Children attend Marushalas and also are able to contribute as family labour. The teaching-learning plans in Marushalas are prepared and modified by the children and teachers together.

The role of NGOs in advocacy and thereby in exerting pressures for social action is also important. In fact, advocacy may clearly be the NGOs' major strength. For example, ACTIONAID has initiated a citizen's campaign for improvement in primary education (e.g., ACTIONAID, 1997). ACTIONAID also took initiative in forming Citizen's Initiative for Elementary Education at national level and corresponding chapters at state level, with the help of a large number of NGOs in various states. While this is at a macro level, many NGOs do take such initiatives at regional and micro levels. To cite a few, Bal Adhikar Manch in Rajasthan has been able to get 275 villages to resolve that education should be made available to all the children in their area; the M.V. Foundation has been able to mobilise around 40 organisations in the coastal belt of Andhra on right to education; Pratham in Maharashtra has

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49 Looking at some such schools, sometimes NGOs are seen as a viable low cost alternatives to government schools. But that may not be right, given the relatively small size of their operation.

initiated activities towards mainstream children in formal schools in slums and villages of the state; the West Bengal Education network, a group of 30 organisations, has been actively pursuing the cause of education in West Bengal; Gram Sabha resolutions in Orissa have been passed for universalising education for children with the efforts of the Forum Against Child Exploitation; Jeevika in Karnataka has initiated a campaign in 16 taluks of the Bangalore urban district to ensure every child below 14 years is in school; and so on.[50] Thus NGOs have certainly increased their outreach in recent years, in term of providing financial and other material help to the poor, in term of number of people reached, area covered, and in creating awareness and advocacy. But mostly the NGOs concentrated on non-formal education, and as OXFAM (1999, p. 205) noted, an important lesion that emerges from a broad array of NGO experiences is that "non-formal education does not, except in rare cases, offer a genuine alternative to state action."

On the whole, the role of NGOs in education is important, but nevertheless it is somewhat limited. First, the NGO community in India is diverse and widely spread. They are engaged in a variety of educational activities, including action and action research. Despite large number of NGOs, they are not everywhere. For example, the PROBE (1999) noted that only in six out of 188 villages in six north Indian states, covered by the PROBE, NGOs were found working particularly in education. Further, there is a large number of NGOs, but many of them could be located only on paper. There are, however, quite a few important NGOs doing commendable work. Secondly, there is very little coordination among the NGOs themselves; at the same time, they do not compete with each other in any formal sense. Thirdly, some NGOs may like increased state control and give in to the government for monetary and non-monetary gains. Fourthly and more importantly, many projects run by NGOs could be seen as experiments on a small scale, concentrated in small areas. It is important to realise that NGOs cannot operate on scales necessary to universalise education in the country as a whole. So it is important to acknowledge that NGOs actually play a relatively minor role in size in the development of education in the country, as a whole, but quite importantly, they could produce significant demonstration effects. They could also influence development policies and programmes of other NGOs, and even those of the government.[51] In

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50 *Communicator*, no.1, vol. 1 (August 1999) (National Alliance for Fundamental Right to Education).

51 For instance, the Lok Sampark Abhiyan, which was originally conceived by Ekalavya in Madhya Pradesh, has become an integral part of the Education Guarantee Scheme of the Government of Madhya Pradesh.

this sense, as the UNDP (1993, p. 92) noted, the indirect impact of the NGOs is often much wider than their direct contribution. Fifthly, there are problems of sustainability of programmes and projects of NGOs, as the funding of NGOs is subject to whims of private donors or the government.

Some of these experiments provide a few important insights into the problem. For example, it is clearly shown that people are increasingly aware of the importance of education and accordingly there exists a huge demand for education; and also that people are ready to make enormous sacrifices for good quality education. They demonstrate that there is considerable scope for involving the village communities in improving education of the poor. The main focus of many NGOs is development; and education is only one of the several components, sometimes it is an important component. When education is properly integrated with other development activities, probably the improvement is faster. Further, when NGOs work in close collaboration with the Government, the impact could be significant (e.g., M V Foundation), though it can produce a different kind of problems, including the possibility that the government might abdicate its own responsibilities in favour of NGOs. The danger could be "crowding out" the government by NGOs.[52] Some people rightly fear that this could be disastrous, because the reach of the NGOs by nature should remain limited; and should not aim at taking away the responsibility of the State onto themselves. But the need for collaboration and partnerships amongst the NGOs and also with the corporate sector and with the local bodies is widely felt (Cordeiro, 2000).[53]

Success of NGOs depends upon the individuals within NGOs and their interest and commitment. NGOs that are motivated by values to serve people would of course be able to contribute to development. The strength of the NGOs lies in their ability to break bureaucratic hurdles and in breaking vested local power relations. There may be danger that they may also play into the hands of the powerful at the local levels. Such a danger has to be avoided. Secondly, NGOs should realize that they could play a limited, but an important role -- in creating good practices, agenda-setting, networking, and assisting social movements. As Wazir (200, p. 264) observed, a certain degree of modesty is required about what NGOs can

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52 For example, it is widely felt that in Bangladesh, the Bangladesh Rural Advancement Committee (BRAC) has taken over the responsibility of primary (non-formal) education to such an extent that the government's role seems to have been minimized.

53 For instance, many NGOs came together and formed the National Alliance for the Fundamental Right to Education to press for the 83rd amendment of the Constitution. Such alliances may prove to be quite effective.

realistically achieve.

6. Summary and Conclusions

While the relationship between education and poverty is a complex one with a multitude of interactions between several factors, it is also increasingly clear that lack of access to education and correspondingly low levels of participation in education is the single most important long term factor responsible for poverty of the masses. Education can be a life empowering experience for all and what the poor need most is empowerment. Education empowers the poor by attacking ignorance, building skills, and by changing the outdated attitudes and values (Unesco-PROAP, 1998). In the human capital framework, by imparting skills, education enhances the productivity of the people in the labour marker and thereby enhances their earnings, taking the poor above the poverty line. In the wider human development framework (Sen, 1997), it enhances the very quality of life -- much more of the poor than the rich. Despite the awareness of the contribution of education empowering the poor, there has been a criminal neglect of education in India and in other South Asian countries for the last several decades. The educational challenge has now become quite formidable because of earlier neglect. This neglect has been conspicuous. This could be due to the conservative upper class notion that education is not important for the poor and/or due to the belief that it would indeed be against the interests of the rich and the powerful, as education empowers the poor against the rich (see Drèze and Sen, 1995, p. 111).

This paper presented a brief account of the general macro level relationship between education and poverty in India and a detailed examination of several facets of educational deprivation. The long array of tables and figures expose the most disturbing feature of the Indian education system, i.e., utter lack of equity in access to education over different economic classes of people. The evidence on Indian states and also the evidence by household expenditure (income) groups confirm significant, strong and inverse correlation between levels of educational attainment and levels of poverty. Poverty blocks the educational opportunities of the poor children -- opportunities to enroll in schools, opportunities to continue in schools and opportunities to acquire literacy and basic skills. Educational opportunities provided by the society to the poor are also inadequate -- in terms of access to schools, and access to quality education in the form of schools with good infrastructure, teachers and attractive learning environment. Low levels of educational attainments in turn, block access of the poor to economic opportunities that would allow them to come out of the poverty trap. Though many of the findings here are not new, the fresh empirical evidence discussed here does provides new insights into some of the commonly and widely held perceptions on the extent

and causes of educational deprivation of the poor. Some puzzling associations such as the rich also feeling the financial constraint in sending their children to schools or withdrawing of girls for domestic work by the rich parents etc., need more elaborate probing.

Participation in education is a consistently increasing function of household economic levels and the conformity of such a systematic pattern in case of all groups of population -- rural and urban, male and female, rather with no exception at all -- is rather appalling. On the whole, the results suggest that a child in the richest quintile is about 25 per cent points more likely to be enrolled in school than a child from the poorest quintile. Further, once enrolled in schools, the former is also 27 per cent points more likely to complete elementary education than the one in the poorest quintile. Thus poverty effects seem to be very important in participation in schooling. Economic factors are important for enrolment of children in schools; and these factors are more important for the retention of those who are already enrolled.

Even though the paper largely concentrated on economic classes of population, the limited evidence reviewed by gender, rural-urban regions etc., make it clear that inequalities in education by gender, income and social groups are rather high; and economic class, social and gender relationships reinforce each other in perpetuating education deprivation of the weaker sections, viz., the poor, low castes and women, and in increasing their vulnerability.

One of the most widely held beliefs regarding educational status of the poor in developing countries relates to lack of awareness of the value of education and motivation on the part of the parents and other members of households and correspondingly their lack of demand for education. Recent studies (e.g., PROBE, 1999; also Bhatty, 1998) have shown that there has been a tremendous increase in the awareness among the people on the value of education and that huge demand for education exists. According to the PROBE (1999), more than 80 per cent of the parents in poor states in India feel that education of boys and also of girls is important. Yet, people, particularly parents are not interested in sending their children to schools. What could be the reason? As argued earlier, 'lack of interest' could be essentially due to a variety of factors, including poverty conditions of households, costs of schooling, and the poor quality of schooling facilities available -- with dilapidated buildings, absentee teachers, etc. A reasonably good quality school -- with good quality infrastructure facilities, and trained and skilful teachers, may be able to attract most of the children into schools. As 'inability to cope with studies and/or failure' is also found to be a very important reason for the children dropping out -- more surprisingly for higher income groups also -- it is also necessary that reforms in the quantum and quality of curriculum, the methodology of instruction, and the

other pedagogic aspects are paid serious attention (see, e.g., MHRD, 1993). It is important to note that improvement in school environment benefits not only those who are already in schools, mitigating the 'push out' role of the schools, but also helps in attracting the non (and never) enrolled children into schools.

While child labour and wage work are not an important factor, financial factors are an important constraint for the households in sending the children to schools and in retaining them there. This requires public programmes that can ease the financial constraints of the poor. The effect of economic factors can be mitigated by (a) providing truly free education -- with no fees of any kind at all, free provision of textbooks, stationery, transport etc., (b) providing financial scholarships, noon-meals, uniforms, etc., and (c) over all improvement of economic conditions of the households through increasing employment opportunities for the adults, facilities for health care, improvement in public distribution system etc. Since economic factors are found to be important for all economic groups -- poor and the rich (a) and (b) above may have to be provided to all, rather than following an approach of targeting them. In fact, a programme like noon meals could be made compulsory for all children, as it produces huge social benefits. The important and usually unnoticed factor of 'levelling' or 'equalising' involved in it, as all children, high caste and rich as well as scheduled caste and scheduled tribe and poor children sitting down together to eat the same meal, is a major externality.

The paper also briefly reviewed recent efforts of the government, international aid organisations and non-government organisations towards improvement of education in India. The discussion of these efforts is neither exhaustive nor thorough. The choice of issues has been highly selective. For example, recent efforts towards decentralisation, mobilisation of community support, and the efforts towards making elementary education a fundamental right with an amendment to the Constitution, or the programmes such as total literacy campaigns, are not discussed here. The intention here is to briefly note a few major initiatives with a focus on poverty. Some of these efforts are regarded as "incremental and partly successful in the short run" (Srivastava, 1999). Their sustained and long term effects are yet to be observed. There has been an increase in the provision of schooling facilities. But provision of schooling facilities is only a provision of first level of educational opportunities. The second level refers to provision of educational opportunities to continue in the school, and the third level of opportunities are those that enable the children to acquire a minimum level of learning and skills. On the whole, the recent initiatives of government are found to be highly inadequate to improve (a) the access of the poor to education through opening of good formal schools everywhere, (b) the school environment through provision of needed infrastructure and

other facilities, and (c) enrolment and retention of the children in schools through provision of economic and educational incentives to children. With respect to certain dimensions of the problem, such as provision of schooling facilities within habitation, provision of teachers, and trained teachers in particular, the situation might be worsening.

External assistance began to flow into education in India recently, and it is found to have eased the financial constraint to some extent, but it is not free from evils, some of which are inherently associated with international aid mechanism, including substitution of domestic resources with external resources. One of the major outcomes of the external assistance programme in India has been the spread of a belief that nothing is possible in Indian education without foreign aid. This belief has spread in no time horizontally and vertically across all levels of administration and even among others in and outside the government. This results in a high degree of dependency on aid. Apart from other problems, this engenders a sense of complacency, and weakens the national resolve to give priority to this important part of government's sacred responsibility.

The role of the non-government organisations seems to be important in this context. Though limited in coverage, NGOs could produce significant demonstration effects, influence public action and polices of the government and also of other NGOs. But given the size of the problem -- say in terms of 90 million out of school children -- the contribution of the NGOs is quite small, and cannot but be so. There is thus the distinct possibility that this may induce a tendency on the part of the government to shift the responsibilities to the NGOs. This is certainly not desirable.

The recent efforts of the government, the aid organisations and the NGOs clearly highlight the importance of decentralisation and the role of local communities in improving educational status of the poor. This is despite the fact that micro level studies and the experience of NGOs have shown that the local elite has no great interest in improving the educational status of the poor. In this context, the efforts of the government towards strengthening decentralised planning and administrative institutions such as Panchayat Raj institutions may be viewed with considerable hope towards the empowerment of the poor. It is, however, absolutely necessary to see that efforts towards decentralisation do not lead to abdication of responsibilities by the union and state governments. The recent efforts of the government on decentralisation focused not only decentralised methods to improve the efficiency in delivery of education, but also decentralised mechanisms of resource mobilisation -- mobilisation of resources by the communities and local level bodies. Creation of School Education Fund, Village Education Fund, Panchayat Education Fund, etc., with a view to

mobilise resources at local levels is a point in this direction. But this is against a cardinal maxim of public finance that while the delivery of services is best undertaken locally, at a decentralised level, the collection of revenues is best taken up centrally.

Political commitment to education is important. It is unfortunate that political activism is completely lacking in favour of education. As Drèze and Sen (1997, p. 15) lamented, even 'left-wing' political parties are least interested in combating inequalities in education; they treat them as 'given' and not particularly worth battling against. All parties and the government should realise the importance of education in reducing poverty and human deprivation and in enhancing economic growth, and accord high priority to education. The magnitude of education deprivation of the masses reflect, as Rao (2000, p. 528) rightly stated, "mainly the neglect of the Constitutional directives regarding education and social justice and lack of long-term vision of human development on the part of the central and state governments." For example, the Government of India has repeatedly promised to allocate six per cent of GNP to education, but still the current allocation is below four per cent. While this in itself may not ensure education for all, this may have to be viewed as an essential step, as the education system is found to be severely starved of financial resources. As Minhas (1992, p. 90) observed, the inadequacy of public expenditures in relation to the numbers of 6-14 year olds in India is "a matter of crying shame for the nation." It is imperative that adequate allocations are made and that all schools are equipped with good infrastructure and human resource facilities so that reasonably good quality of education is imparted to all. Second, the provision of instructional material and other incentives such as textbooks, uniforms, noon meals etc., may have to be made on a universal basis rather than attempting at targeting them. Universal provision of facilities promotes equity on the one hand, and the participation of the non-poor in the same would ensure quality of this material, as well as creating a feeling of equality among all children, rich and poor. Third, in stead of relying on semi-skilled/trained and less educated teachers and para teachers, it is important that teacher training facilities are strengthened. After all, one of the important quality-enhancing inputs relates to teacher training (World Bank, 1997). Fourth, the role of the private schools and also non-governmental organisations, however important they are, should be viewed at best as peripheral, and the responsibility of the government should not be diluted.

Lastly, the poor need to be guaranteed education. This may be ensured by making education a fundamental right in the Constitution of India, and making it compulsory -- compulsory on the part of the parents to send their children to schools and on the part of the government to provide access to good quality schooling to all. The union and state

governments have to assume full responsibility for organising, managing, providing and financing free and compulsory elementary education of acceptable quality to all, including the provision of the necessary economic, education, and financial incentives to the poor. The major role of the NGOs, the community and the local level bodies could be to help in brining children back to school, and monitor the functioning of the school on the one hand, and to build social pressures on the government and the political leadership towards making the Constitutional amendment of free and compulsory elementary education. This, as Rao (2000, 540) rightly opines, is a desirable model of 'participatory growth and authentic human development.

APENDIX

Table A.1

Education and Poverty in India

	Index of Education, 1981		Index of Education, 1991/92-93		Poverty, 1993-94	
	Index	Rank	Index	Rank	Ratio	Rank
Punjab	27.43	17	40.41	12	11.77	1
Goa	45.01	4	52.09	4	12.92	2
Andhra Pradesh	24.43	18	30.52	20	22.19	3
Gujarat	35.78	7	42.40	9	24.21	4
Haryana	30.06	14	38.59	14	25.05	5
Kerala	55.76	1	61.57	1	25.43	6
Mizoram	50.51	2	56.46	2	25.66	7
Rajasthan	20.60	22	26.64	24	27.41	8
Himachal Pradesh	35.03	8	44.04	6	28.44	9
Karnataka	31.61	13	38.49	15	33.16	10
Manipur	34.05	11	41.68	11	33.76	11
Tamil Nadu	37.27	6	43.26	7	35.03	12
West Bengal	33.05	12	39.85	13	35.66	13
Maharashtra	38.21	5	44.58	5	36.86	14
Meghalaya	28.80	15	33.89	17	37.92	15
Nagaland	34.42	9	42.99	8	37.92	16
Tripura	34.25	10	41.76	10	39.01	17
Arunachal Pradesh	17.46	23	28.77	22	39.25	18
Uttar Pradesh	23.07	20	28.83	21	40.85	19
Assam			36.34	16	40.86	20
Madhya Pradesh	23.44	19	30.54	19	42.52	21
Orissa	28.00	16	33.83	18	48.56	22
Bihar	21.97	21	26.68	23	54.96	23
All-India	29.91		36.06			

Source: Index of Education: Tilak (1999b); Poverty: Planning Commission (1999).

Table A.2

Index of Education, 1981 and 1991/1992-93

		1981			1991/1992-93		
		LIT	SCH	IOE	LIT	SCH	IOE
1	Kerala	81.6	4.07	55.76	89.81	5.115	61.57
2	Mizoram	74.3	2.95	50.51	82.27	4.859	56.46
3	Goa	65.7	3.54	45.01	75.51	5.279	52.09
4	Delhi	71.9	5.07	49.67	75.29	6.302	52.29
5	Maharashtra	55.8	2.92	38.21	64.87	4.027	44.58
6	Himachal Pradesh	51.2	2.69	35.03	63.86	4.427	44.04
7	Tamil Nadu	54.4	2.98	37.27	62.66	4.469	43.26
8	Nagaland	50.3	2.64	34.42	61.65	5.683	42.99
9	Gujarat	52.2	2.87	35.78	61.29	4.621	42.40
10	Tripura	50.1	2.47	34.25	60.44	4.405	41.76
11	Manipur	49.7	2.78	34.05	59.89	5.283	41.68
12	Punjab	39.7	2.84	27.43	58.51	4.209	40.41
13	West Bengal	48.7	1.81	33.05	57.70	4.153	39.85
14	Karnataka	46.2	2.37	31.61	56.04	3.411	38.49
15	Haryana	43.9	2.38	30.06	55.85	4.091	38.59
16	Assam				52.89	3.236	36.34
17	Meghalaya	42.1	2.25	28.80	49.10	3.483	33.89
18	Orissa	41.0	2.02	28.00	49.09	3.314	33.83
19	Madhya Pradesh	34.2	1.82	23.44	44.20	3.215	30.54
20	Andhra Pradesh	35.7	1.95	24.43	44.09	3.379	30.52
21	Uttar Pradesh	33.4	2.47	23.07	41.60	3.301	28.83
22	Arunachal Pradesh	25.6	1.27	17.46	41.59	3.153	28.77
23	Rajasthan	30.1	1.56	20.60	38.55	2.826	26.64
24	Bihar	32.1	1.77	21.97	38.48	3.081	26.68
	All-India	43.7	2.35	29.91	52.21	3.767	36.06

Note: LIT: Literacy; SCH: Mean years of schooling; IOE: Index of education
Source: Tilak (1999b)

Table A.3

Fees in Public Primary Schools in India, 1993 (Rs per Annum)

State	Type of Fees	Fees	Total Fees
Arunachal Pradesh	Pupil Fund	60	60
Assam	Development Fee	10	10
Jammu & Kashmir	School Improvement Fund	10	35
	Red Cross Fund	5	
	Poor Fund	5	
	Games Fund	12	
	News Fund	3	
Karnataka	Spl Sports Fund	1	1
Madhya Pradesh	Games Fee	2	3
	Scout & Guide	1	
Manipur	Admission Fee	4-10	10-22
	Development Fee	6-12	
Meghalaya	Tuition Fee (Classes III-V)	24	24
Mizoram	Pupil Fund	1	1
Punjab	Building Fund	3	10
	Games Fee	3	
	Others	4	
Rajasthan	?(Classes III-V)	20	20
Tripura	Examination Fee	10	13-16
	Sports Fee	1.50-3	
	Library Fee	1.50-3	
Uttar Pradesh	Games Fee	2	12
	Others	10	
A & N Islands	Games Fees	20	20
	Aided Schools		390-735

	Admission Fees	100	
	Development Fees	300-600	
	Sports & Exam Fee	35-50	
Chandigarh	Stationary Fund	2	28
	Building Fund	2	
	Red cross Fund	6	
	Amalgamated Fund	12	
	Child Welfare	6	
	Model Schools		504
	Admission Fee	2	
	Building Deprecation Fund	20	
	Excursion	20	
	Magazine	20	
	Tuition Fee (for boys)	120	
	Amalgamated Fund	120	
	Red Cross	36	
	Child Welfare	36	
	Health	30	
	Stationery	96	
	Audio Visual	18	
Delhi	Scouts/Guide	1.20	1.20

Source: Unpublished Results of the *Sixth All-India Educational Survey* (1993) New Delhi: NCERT (Unpublished)

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