Structural Adjustment, Education and Poor Households in India: Analysis of a Sample Survey*

by

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and
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Abstract: ***Rapid globalisation and fast paced technological progress across the globe present new challenges for India with gradual opening up of its economy to international competition. The amount and the quality of education and skills that India possess are becoming critical factors in taking advantage of the rapid technological transformation and the transition to a more open economy. This also reiterates the role of education and skill development in mitigating social and economic vulnerability. This paper, reports some new evidence from an all-India household survey on demand and supply issues in schooling. In India, most studies attribute poor educational performance to poverty. Though this factor is important, the recent survey evidence shows that just lack of interest in schooling is the major factor explaining low enrolment and high dropout rates in India. This is because of the lack of expected future earnings. This paper argues that the solution to this problem lies in reorienting the educational sector to demand lead supply transformation towards skill enhancement by privatising the educational sector. The role of the state should be reduced to support only the basic education at the primary level.***

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I. Introduction

Education has its own intrinsic value in terms of social and cultural ethos. Besides, it improves household health status by influencing nutritional and health care practices, reduces fertility, infant and child mortalility and improves child's schooling performance. The economic outcomes of education determine qualitative human capital which translates itself into higher incomes. Better income, in turn, provides better opportunities for achievements in health and education. This is important, specially for the poor for their most important asset is labour. Education for the poor offers the greatest opportunity for employment and economic returns and so reduces poverty. Thus, the importance of education goes beyond expected horizons.

The ILO Report, 1999 says that investment in education and skill development is the prime element for a country to be competitive in a changing macro economic environment with liberalisation and "opening up" of the economies to trade in international markets. This report also points out that, to be necessarily competitive in relation to exports, improved labour productivity due to education and training can also offset the need for other forms of adjustment that may otherwise be necessary. There

is increasing evidence to show that investment in and accumulation of human capital is the main engine of growth and is also the main difference in living standards, as indeed pointed out by the new growth theorists (Lucas, 1993).

In a globalised scenario, for India to be successful in attracting, absorbing and benefiting from foreign direct investment will depend to a large extent on the local supply of needed skills and technical knowledge. India should develop and enhance its pool of skilled labour and build up its own ability both to use and to improve upon technology. The necessary condition under such initiative is the reorientation and restructuring of educational system towards more skill enhancement. This will raise both the demand for education and also make the economy more competitive.

Countries lacking sufficient resource (natural) base, such as Japan, Korea, Taiwan, Singapore, etc., have managed to achieve high growth rates by means of orienting towards supply of market based skills. This links educational system with the labour market by developing more flexible paths between education/learning and employment. What is missing in the Indian economy is the open economy framework which is more likely to bridge the damand-supply gap for skills by catering to the needs based on market signals. Primary education should be the domain of the state while higher education and technical education should be relegated to the market for efficient allocation and to bridge the gap between demand and supply of skills. The orientation will further enhance the demand for primary education in prospects of future earnings and increased employment opportunities. This virtuous circle will

sustain the accelerated growth in technical skills, education, productivity, employment and ultimately, the rate of growth. The reforms in the Indian economy neither addresses nor makes any mention of these issues.

The benefits of primary education extends beyond individuals who receive schooling directly. Other members of the society also gain through externalities. The resulting improvement in economic efficiency provides continuing justification for governments' involvement in "literacy for all" and universalisation of primary education.

Despite much initiatives through universalisation of primary education, the number of illiterate persons aged seven and above increased from 350 million in 1981 to 371 million in 1991. According to the MIMAP survey (NCAER, 1998) for the year 1994-95, 49.3 per cent and 16.8 per cent in rural and urban areas, respectively are unable to read and write. One-third of the children aged 6-14 years were out of school.

Some obvious explanation for poor enrolment rate and high dropout rate in the literature is attributed to poverty, and child labour supplementing family income is considered to be the cause for such maladies. Given the inadequate gains made in lieu of the government efforts on the supply side via schools, teachers, curriculum, text book and the like, the demand side explanation have been taken for granted, specifically among the Indian policy-makers. However, such supply side evidence is misleading without demand factors being considered. In this sense, the literature often fails to examine the demand side in detail; the questions such as: do everyone,

specially the poor, demand to become literate or educated? Hence, only supply side considerations fail to enumerate the dominant causes (solutions) for poor enrolment rates and high dropout rates in schools.

There are also evidences such as the 50th round of the National Sample Survey, 1993-94 which suggest that a very large fraction of the non-enrolled children aged between 5 and 14 are not economically active.[1] So economic compulsion keeping the child away from school cannot be the only reason for non-attendance and high dropout rates. This is also reiterated by Srinivasan (1998) while pointing out the differences in enrolment and dropout rates across states and income groups - both Tamilnadu and Himachal Pradesh have high poverty rates than Andhra Pradesh but the latter fares much worse than the other two in educational attainment. Hence, state poverty alone does not explain low enrolment and high dropout rates. This provides sufficient reason to look for further explanations as to why children stay away from school. Nevertheless, both demand factors such as household characteristics and behaviour, as well as supply factors affect the outcomes.

Despite massive government efforts, the state of elementary education in India is improving slowly. Though literacy rates are increasing, the absolute number of illiterate persons are also steadily rising year after year (PROBE team, 1999). In this paper, we report some new evidence from an all-India sample survey which sheds light on both demand and supply factors. The focus of this paper is to examine if poverty is the only cause for low educational achievement. Hence, the analysis is confined to only poverty groups in both rural and urban India.

[1] Based on a national sample of households; the survey indicates that of the 185

The first requirement for any comprehensive evaluation of the impact of some of the social policies on poor is a detailed educational profile of these vulnerable groups. Hence, the objective of this paper is to first provide a baseline profile of educational achievements of rural and urban poor. The other major objective of this paper, which follows from the previous discussion, is to enumerate the crucial factors responsible for low educational achievements among poor households.

The plan of the rest of the paper is as follows. In the second section, we present the definitions and the data sources. In the third section, we describe the nature and incidence of poverty in rural and urban India. The fourth section presents a profile of educational attainments of the poor in both rural and urban India in terms of various indicators. In the fifth section, we discuss some of the supply-related issues. The household responses on the preference for schooling in rural and urban India are recorded in the sixth section. The last section concludes the paper.

II. Definition and Data Sources

The main source of data for this paper is the recently completed all-India sample survey conducted during 1996. This paper draws, from the survey data, a variety of educational indicators which characterise the poor and asses the implications for the design and targeting of future social programs in India. The details of the design and implementation of the survey are provided in MIMAP Survey Report (NCAER, 1998). The survey was undertaken for 3364 rural and 1492 urban households in a stratified random sample designed to be nationally

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million children, almost 58 million are not in school for the year 1993-94.

representative.

The questionnaire administered to the selected households consist of two parts, (a) socio-economic, education and health status, and (b) household economic survey. The first part is on the human resource aspect of the surveyed households and the second part on income, expenditure and savings in all their forms.

The first part of the questionnaire provides information on educational attainment of the rural and urban households in terms of literacy, enrolment and dropout rates. This part also includes questions on the nature of educational institutions in which currently studying? If studying in private what are the advantages over the Government institution? If dropped out, what are the reasons? If never enrolled, what are the reasons? Why the households show lackluster preference (demand) for educational facility reflected by high non-enrolment and dropout rates.

The informations on both demand and supply aspects of the provision of educational facility is collected from the sample households. The demand factors are bifurcated into constrained and unconstrained demand factors. This bifurcation is to facilitate the identification of factors which are constrained by poverty conditions, participation in household economic activity, etc. and factors having no constraint but simply lack of willingness. Information on the constraints faced by households such as financial constraints, attention to domestic chores and participation in household economic activities are grouped under constrained demand.

Constrained demand explains that households do not demand these services for reasons

previously mentioned. Unconstrained demand include factors where households do not demand these services for reasons of pure lack of interest. The supply factors are categorised as quality and quantity of educational facility available to a household.

The identification of poor in this paper is based on consumption expenditure which is collected under the second part of the questionnaire. The incidence of poverty varies considerably across rural and urban regions in India.[2] To isolate these variations, we will disaggregate the analysis into rural and urban. Hence, all the sample (poor) households in rural and urban India are classified accordingly.

The analysis here is conducted for poor households at the level of six socio-economic, mutually exclusive and exhaustive groups based on the principal source of income. This includes (a) self-employed poor in farm, and (b) self-employed poor in non-farm, (c) salary earners, and (d) wage earners in agriculture, and (e) wage earners in non-agriculture. The rest are included in (f) 'others'.

The MIMAP survey contains detailed information on income and consumption expenditure (food and non-food) based on purchases from markets and home produced. Generally, consumption expenditure is taken to be a better indicator of living standard than income.[3] Hence, we use the definition of poverty using consumption expenditure as recommended by the expert committee report on poverty (Govt. of India, 1993).

[2] The number of surveyed households are not enough to permit a state-wise poverty profiling. We, therefore, bifurcate the all-India analysis only into rural and urban.

[3] See Lipton and Ravallion (1995) for reasons why consumption expenditure is often

Having chosen consumption expenditure as our basic indicator of welfare, we now have to decide on the poverty line. The conceptual difficulty in drawing such a line has been discussed extensively.[4] At the operational level, we need a line which is reasonable and not too difficult to implement. Therefore, we follow the report of the expert committee on the estimation of proportion and number of poor which defines the poverty line as Rs. 131.8 per capita per month for rural and Rs. 152.1 per capita per month for urban at 1987-88 prices. These figures were updated with the respective consumer price indices (CPI) for the year 1994-95. The CPI for agricultural labourers is used to update the poverty line in rural areas and, for urban, an average of the CPI for industrial workers and for urban non-manual employee's are taken to adjust the line. Thus updated, the poverty lines per capita per month for rural and urban areas are Rs. 228 and Rs. 305, respectively for the year 1994-95.

III. Poverty Incidence in India: An Overview

The incidence of poverty across occupational and regional (rural-urban) categories is reported in Table 1. This table shows that 37 per cent of the households at all India level are poor - 40 per cent in rural and 28 per cent in urban areas. The estimated poverty incidence from the National Sample Survey (NSSO) is also presented (Table 2). The poorest occupational categories in rural areas are households whose main source of income is from agricultural and non-agricultural wages and, in urban, it includes self-employed non-farm as well. Self-employed non-farm and non-agricultural wage categories in urban areas have higher incidence than the rural areas.

Table 1: Incidence of poverty in Rural and Urban areas by Occupational Categories

Occupational Categories	Rural	Urban	Total
Self-employed Farm	36.99	64.68*	37.47

preferred to income.

[4] See Govt. of India (1993).

Self-employed Non-Farm	15.70	38.70	26.92
Salary	18.47	14.24	16.07
Agricultural Wage	55.42	83.39*	56.19
Non-agricultural Wage	53.60	61.02	55.71
Others	29.45	21.35	26.37
All	39.69	28.48	36.84

Note: * These figures are based on a few observations. These two occupational categories constitute only 3% of total households in urban areas and do not have much relevance statistically. Hence, rest of this paper excludes these occupational categories from any serious analysis.

Table 2: Incidence of Poverty in Rural and Urban India: Some Comparative Estimates

Data Source	Year	Rural	Urban	Total
(a) MIMAP	1994-95	39.69	28.48	36.84
(b) NSSO	1993-94			
Official Norm		40.99	31.84	38.72
Expert Group		33.26	33.75	33.38

Source: (a) Authors own calculation based on expert group norm.
(b) Dubey & Gangopadhyay (1998).

The distribution of poor population across occupations and regions are presented in table 3. This table reflects a very clear confirmation of pattern that are known to exist and to have existed in the past - poverty is primarily a rural phenomenon. Over 80 per cent of the total poor live in rural areas while the rest in the urban areas. In rural areas, agricultural wage category has the largest number of poor. The other occupational category which has substantial number of poor is self-employed farm in rural areas. Among urban poor, the highest concentration of poor is in self-employed non-farm category (32 per cent).

Table 3: Percentage Distribution of Poor Population by

Occupational Categories in Rural and Urban India

Occupational Categories	Rural	Urban	Total
Self-employed Farm	30.74	3.83	25.44
	(97.04)	(2.96)	(100.00)
Self-employed Non-Farm	3.36	32.20	9.03
	(29.87)	(70.13)	(100.00)
Salary	6.67	27.46	10.76
	(49.82)	(50.18)	(100.00)
Agricultural Wage	43.53	7.58	36.45
	(95.91)	(4.09)	(100.00)
Non-agricultural Wage	13.42	24.79	15.65
	(68.87)	(31.13)	(100.00)
Others	2.28	4.14	2.65
	(69.24)	(30.76)	(100.00)
All	100.00	100.00	100.00
	(80.33)	(19.66)	(100.00)

Note: Figures in parentheses are percentage distribution of poor across rural and urban India.

Here, in table 4, we present a slightly different look at the incidence of poverty - the most vulnerable groups in both rural and urban regions. The identification is based on occupational distribution of households with consumption expenditure less than Rs.152 and Rs.203 per capita per month[5] in rural and urban areas, respectively. One fact which is worth noting is that 10.85 per cent of the total population in both rural and urban areas are identified as the most vulnerable segment requiring immediate attention. Looking at the occupational categories, non-agricultural wage has the highest incidence i.e. 21.2 per cent. The incidence of poorest of the poor are very high in self-employed farm and agricultural and non-agricultural wage earners in India (seen in the last column of Table 4).

The occupational category having the highest incidence of poverty among the most vulnerable segment of rural population is in non-agricultural and agricultural wage earners with 22.2 per cent and 16.5 per cent, respectively. Self- employed farm category also has a incidence higher

than the rural-India average of 12.4 per cent. In urban areas, the highest incidence is on the non-agricultural wage category.

Table 4: Incidence of Poverty Among the Most Vulnerable by Occupational Categories in Rural and Urban India

Occupational Categories	Rural	Urban	Total
Self-employed Farm	13.46	29.47	13.74
Self-employed Non-Farm	3.11	6.51	4.77
Salary	1.16	2.06	1.67
Agricultural Wage	16.46	25.75	16.72
Non-agricultural Wage	22.22	18.64	21.20
Others	6.59	4.65	5.85
All	12.41	6.25	10.85

Notes: Most Vulnerable is defined as the percentage of poor having expenditure less than Rs. 152 per capita per month in rural and Rs. 203 per capita per month in urban.

In brief, these tables support the conclusion that a larger percentage of poor, well over 80 per cent, in rural areas live in households whose principal source of income is from wages and self-employed farm. In urban areas, it is from self-employed non-farm and non-agricultural wages.

IV. An Educational Profile of the Poor

This section briefly sketches the educational profile of the poor at the begining of 1996 and also provides a comprehensive evaluation of the impact of some of the social policies on the poverty groups at the micro level. The reduction and switching of social expenditure during adjustment has important distributional consequences by increasing unemployment and reducing real wages in the short run.

[5] Which is two-third of the respective poverty lines for rural and urban.

Structural adjustment programs often advocate transfer of public resources from higher levels of education to primary education. Institutional user fees in public educational facility and opening up of education to private sector are also common adjustment policies. The effects of these proposals on the poor will depend on the extent of gains made and the targets yet to be achieved. This section reports from the survey the extent and nature of achievements made in the arena of education.

Education is an important aspect of the basic needs fulfillment which empowers the poor for a higher claim or share of income in the labour market. Education contributes to production, growth and poverty reduction through several channels. A number of cross-country studies have highlighted the significant impact of education, more so in the case of primary education, on economic growth (Barro, 1991 and Lau et al., 1993). World Development Report (1998) emphasises that increasing enrolment in primary education and later in secondary education has been significant in explaining sustained high levels of growth in eight East Asian countries. Growth in these countries was accompanied by equitable distribution of its benefits, and thus poverty declined drastically. Levels of educational development influence poverty reduction as well as economic growth. A recent study by Dutta and Ravallion (1995) on the Indian economy pointed out that better endowed states in terms of infrastructure and literacy levels had significantly higher long-term rates of both consumption growth and poverty reduction.[6]

[6] Also see Pradhan and Sahoo (1998). They show that growth in agriculture, education and health sectors have a larger poverty reducing effect than any other

The literacy rates across occupational categories by different age groups are reported in Table 5. The literacy rate among the poor in the rural areas is lower (42 per cent) than the urban areas (67 per cent). Across occupational categories for rural areas, the lowest is for agricultural wage (37 per cent) and non-agricultural wage (39 per cent) and self-employed farm (44 per cent). The number of poor in these three occupational categories are the highest (Table I). In urban areas, the literacy rates are the lowest for agricultural wage (36 per cent), self-employed farm (42 per cent) and non-agricultural wage (51 per cent) categories.

Table 5: Literacy Rates by Age Among Rural and Urban Poor

	>60		18-60		6-17		Total (>5)		Total
	Male	Female	Male	Female	Male	Female	Male	Female	>5
Self-employed Farm	8.73	NA	53.82	22.02	59.04	54.81	52.79	33.31	43.66
	(-)	(-)	(64.01)	(18.21)	(100.00)	(34.27)	(77.49)	(27.22)	(42.27)
Self-employed Non-Farm	34.48	25.12	57.07	13.59	91.20	66.40	65.91	32.33	49.79
	(5.67)	NA	(92.99)	(59.84)	(77.68)	(70.97)	(81.11)	(62.05)	(72.53)
Salary	35.29	7.89	80.16	45.10	70.88	63.61	72.28	46.47	60.36
	(45.58)	NA	(94.17)	(73.42)	(90.09)	(88.30)	(91.10)	(77.79)	(85.19)
Agricultural Wage	17.18	2.18	42.31	12.99	63.65	46.35	49.06	25.21	37.47
	NA	NA	(27.87)	(29.27)	(69.86)	(27.18)	(44.00)	(27.77)	(35.57)
Non-agricultural Wage	6.50	NA	44.33	12.34	68.64	38.23	53.27	21.40	38.65
	NA	NA	(63.68)	(27.38)	(59.68)	(55.03)	(61.57)	(38.09)	(50.83)
Others	23.31	2.40	68.90	33.38	90.86	84.92	61.88	53.60	56.72
	(100.00)	NA	(71.17)	(60.81)	(66.67)	(94.65)	(77.94)	(62.15)	(68.03)
All Occupational	16.90	4.07	49.90	18.46	64.52	50.67	53.17	29.62	41.91
	(33.47)	NA	(80.18)	(52.24)	(76.14)	(64.95)	(76.41)	(55.71)	(66.63)

Notes: (a) Figures in parentheses are for urban areas.
(b) NA - Not Applicable

The evidence from previous studies show that education plays a major part in fostering economic development and reducing poverty in India (Pradhan and Sahoo, 1998). The impact is further enhanced by increasing levels of female literacy rate.

Substantial efforts have been made by the Indian government to achieve 100 per cent literacy. Despite these efforts, India has a long way to go to achieve full benefits of

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sector in the Indian economy.

education on poverty and growth. One aspect of basic needs fulfillment is that individuals should atleast be literate. The extent to which this need is fulfilled is analysed for poor individuals at different age categories. Concentrating on the age groups, Table 5 demonstrates that the literacy rates are the highest in 6-17 age group followed by 18-60. On an average, 65 per cent of the males in the age group 6-17 are literate while the corresponding figure for females is 51 per cent. The literacy rates are lower for both males and females in the 18-60 age category. As expected, education has been somewhat more successful in the urban areas. One revealing fact in this region is that the relatively higher literacy rates are for the occupational categories which has larger number of poor.

The results reported from the survey in Table 6 to 8 reflects whether adequate gains have been made in the realm of education in terms of enrolment rates and dropout rates. The distribution of students by type of institution is provided in Table 9. Table 6 presents the enrolment rates in the age group 6-14 among rural and urban poor are presented in Table 6. Enrolment rates are higher in urban areas among both males and females and gender disparity is high in rural areas. Across occupational categories, urban areas seems to be better than rural in both enrolment rates as well as gender disparity. For the occupational categories which accommodates a larger number of poor, the enrolment rates are lower than the average in both regions. In terms of gender disparity, households dependent on self employed farm perform better.

Table 6: Enrolment Rates in 6-14 age group among Rural and Urban Poor

Occupational Categories	Males	Females	Total	F/M Ratio
Self-employed Farm	65.20	60.30	62.80	0.92
	(100.00)	(41.30)	(49.90)	(0.41)
Self-employed Non-farm	70.50	62.70	67.00	0.89
	(75.50)	(76.00)	(75.70)	(1.01)
Salary	89.10	62.20	77.40	0.70
	(94.70)	(90.20)	(92.50)	(0.95)
Agricultural Wage	70.10	53.70	62.30	0.77
	(93.80)	(26.60)	(56.00)	(0.28)
Non-agricultural Wage	70.40	48.80	61.20	0.69
	(59.50)	(44.20)	(53.10)	(0.74)
Others	97.20	84.50	87.30	0.87
	(100.00)	(100.00)	(100.00)	(1.00)
All Occupation	70.10	56.90	63.80	0.81
	(78.10)	(66.20)	(72.40)	(0.85)

Notes: Figures in parenthesis are for urban areas.

The dropout rates for population between 6-14 age group among rural poor are presented in Table 7. This shows that across all categories (occupational) these rates are the highest among females. Self-employed farm has the highest dropout rates for both males and females. The salary earners and self-employed non-farm also tend to have high dropout rates compared to the non-agricultural wage. This is also true with females where both "others" and self-employed farm seem to have the highest dropout rate.

Table 7: Dropout Rates for Males and Females Among Rural Poor

	Males	Females	Total	F/M
Self-employed Farm	4.30	5.80	5.00	1.35
Self-employed Non-farm	3.20	0.00	1.90	-
Salary	3.70	4.10	3.80	1.11
Agricultural Wage	3.70	5.60	4.50	1.51
Non-agricultural Wage	2.90	5.50	3.70	1.90
Others	0.00	5.80	4.40	-
All Occupation	3.70	5.40	4.40	1.46

Notes: Dropout rates include children between the age 6-14 and had

withdrawn from school before completing V standard.

Table 8: Literacy Rates, Enrollment Rates and Discontinuation rates Among Rural Poor: An Alternative Source, for 1994

Poverty Groups	Literacy Rates (aged 7 & above)			Ever Enrolment Rates (aged 6-14)			Discontinuation Rates (aged 6-14)		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Lower Segment	55.5	31.1	43.5	69.1	52.6	61.1	5.5	6.9	6.1
Upper segment	57.8	33.1	45.9	70.5	57.2	64.3	5.8	9.0	7.2

Notes: (a) The population below the poverty line is divided into Lower and Upper segment based on the mean income of this group.

(b) Ever Enrolment Rate is defined as the proportion of children aged 6-14 years ever enrolled in school, at any level at the time of the survey.

(c) Discontinuation Rate estimated as the percentage of ever enrolled children discontinued studies before completing V standard at any time in age-group 6-14.

(d) Here, poverty incidence is calculated by imposing consumption based definition of poverty on income distribution.

Source: NCAER/HDI survey, 1997.

The cut in public spending on education affecting the poor depends on the extent of use of these public services by the poor. The distribution of students by type of institution is presented in Table 9 for both rural and urban areas. Apart from government-run and private schools, there are also schools run by non-governmental organisations, private voluntary organisations, local associations, and religious trusts

that receive grants from the government. These have been classified as government-aided schools.

This table shows that 85 per cent of the poor students in rural areas depend on government schools for education while only 8 per cent prefer private schools. In urban India, 56 per cent of the poor are dependent on government schools and a substantial number of poor are dependent on the private schools. Generally speaking, when poor people prefer to go to school they choose public schools.

One important conclusion which follows from this observation is that the cut in public expenditure on school education will affect the rural poor more than it affects the urban poor. However, there are large number of welfare programs in the realm of education. Some of the specific welfare programs could be studied to identify the percentage of households benefitted from such welfare programs. The questionnaire, however, includes only six specific welfare programs[7] from which the households benefitted. In case of almost all programs, less than 20% of the households benefitted. The choice of school depends on the relative (poverty) status of households.

Table 9: Distribution of Students in 5-34 Age Group By Type of Institution Among Rural and Urban Poor

	Government Schools	Government Aided	Private School	Total
Self-employed Farm	81.30	4.20	14.30	100.00
	(0.00)	(0.00)	(100.00)	(100.00)
Self-employed Non-farm	75.60	17.70	6.70	100.00
	(65.70)	(8.50)	(25.70)	(100.00)
Salary	88.50	8.70	2.80	100.00
	(51.20)	(25.90)	(22.90)	(100.00)
Agricultural Wage	90.00	5.50	3.80	100.00
	(75.40)	(0.00)	(24.60)	(100.00)
Non-agricultural Wage	78.80	10.20	9.30	100.00

[7] For details see Table 9.

	(54.40)	(7.80)	(37.40)	(100.00)
Others	95.40	0.80	3.80	100.00
	(27.60)	(12.30)	(60.20)	(100.00)
All Occupation	85.30	6.40	7.80	100.00
	(55.90)	(14.10)	(29.90)	(100.00)

Notes: Figures in parentheses are for urban areas.

In short, the extent of education, primary, secondary and tertiary, affected by adjustment policy can be from both demand and supply side factors. The supply factors of education include changing expenditure on public schools and training and increase in user charges at secondary and higher levels. The policy that is likely to affect the demand side includes changes in the prices that households face and its impact on household incomes. The survey results show that a large percentage of poor households go to government schools. Hence, these policy changes will have profound effects on the educational achievements of the poor households. The role of the state under such context is to provide complete support at the primary level and adequate scholarships and assistance only to the poor and vulnerable at the higher education by introducing privatisation in this sector.

Elsewhere, we mentioned that approximately 3 per cent of the total expenditure in the household's budget of the poor is spent on education in rural and 5 per cent in urban areas. The increase in the prices of food and non-food (in the post-trade liberalisation in agriculture) is more likely to lower the household allocation of expenditure on education.[8] This income effect (adjustment policy in the short run reduce demand for education through reducing income) though indirect, may have profound long run effects on growth and distribution.

[8] See Section III in Pradhan, Roy and Subramanian (1999).

V. Welfare Programs: Some Demand Inducing Issues

One of the most straight forward implication of the stabilisation and structural adjustment program on poverty is by redefining the role of the state and the efforts to stabilise the economy that lead to changes in the level and composition of government expenditure. If a fiscal contraction is translated with expenditure reduction on services such as health and education, poverty will tend to rise if poor are the main beneficiary. And quite a large number of poor households are supposedly dependent on these welfare programs. The reasons of non-beneficiaries of these programs could be inclusion of non-poor or lack of takers of these services.

Another element in the social policies of adjustment packages is the elimination of universal subsidies, sometimes replacing them by targeted subsidies. The overriding objective of these welfare programs are to transfer incomes only to poor households through subsidies.

The MIMAP survey results on some specific (public) welfare programs are presented in Table 10. The MIMAP questionnaire asks whether or not the household or any member of the household benefitted from these programs preceding one year the survey. The welfare programs on education includes scholarship at primary level, free books & stationary, free school uniforms, mid-day meal in schools, adult literacy schools, medical check-ups in schools and also accounts for other educational programs.

Table 10 reports the percentage of poor households benefitted from these welfare programs across different occupational categories. The first column in this table reports the overall picture of the education based welfare programs - combined. This includes households benefitted from either one or from all the programs. This table also reports the percentage of households benefitted based on each of the education based welfare programs.

Table 10: Percentage of Poor Households Benefitting from Education Based Welfare Programs in Rural and Urban India

	Overall	Scholarship at Primary Level	Free Books & Stationary	Free Uniform	Free School In School	Mid-day Meal Night School	Adult Literacy/ Medical Check-ups In schools
Self-employed Farm	15.3	2.2	8.6	1.5	5.9	1.6	3.9
	(44.0)	(0.0)	(44.0)	(0.0)	(44.0)	(0.0)	(0.0)
Self-employed Non-Farm	14.6	1.9	7.0	0.0	2.5	1.9	3.2
	(5.5)	(0.0)	(3.1)	(0.0)	(0.6)	(0.0)	(1.8)
Salary	11.5	3.2	9.4	2.7	6.1	1.0	2.3
	(2.7)	(1.3)	(0.9)	(0.0)	(0.0)	(0.0)	(1.3)
Agricultural Wage	20.2	5.6	12.4	4.1	7.8	1.7	6.6
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Non-agricultural Wage	12.7	7.0	6.6	2.9	3.6	1.7	1.5
	(10.0)	(0.0)	(6.6)	(5.2)	(8.6)	(0.0)	(0.0)
Others	16.0	1.2	3.8	2.6	12.7	2.1	1.5
	(21.2)	(0.0)	(17.1)	(0.0)	(21.2)	0.0	(21.2)
All Occupation	16.9	4.4	9.9	2.9	6.5	1.6	4.6
	(7.2)	(0.4)	(4.9)	(1.3)	(4.5)	(0.0)	(2.0)

Notes: Figures in parentheses are for urban areas.

In rural areas, only 16.9 per cent of the poor households benefitted from the education based welfare programs. The beneficiaries from the welfare programs in urban areas are also low, around 7.2 per cent. Even among occupational categories, categories such as "others" have higher beneficiaries compared to non-agricultural wage and self-employed farm. This is also true in urban areas where "others" have a larger number of beneficiaries from these public programs. The welfare programs meant to transfer incomes to poor households by providing subsidised educational facility have not achieved the pre-supposed objective. There could be two reasons, one due to the inefficient mechanism of providing welfare programs which invariably covers the non-

poor as well or lack of takers of these welfare programs. The non-poor beneficiaries of these welfare programs are substantial, around 12 per cent in rural areas and 6.1 per cent in urban areas.[9] The focus of these welfare programs is either not targeted or targeted with high leakages.

Even across occupational categories, the categories which has a smaller number of poor, such as 'others' have benefitted from these welfare programs compared to a much lower beneficiaries in the non-agricultural wage category. This is also true in urban areas where this category has the largest number of beneficiaries for education based welfare programs.

We next focus on each of the welfare programs separately. Increasing the level of literacy across rural and urban areas is the major objective of the welfare programs in education. Literacy has been a priority in the national agenda as a tool of information and knowledge and as an instrument of social change. It is now well established in the literature that literacy increases productivity as well. The initial target of National Literacy Mission (NLM) was to make 80 million persons in the age group of 15-35 years functionally literate and to cover 345 districts of the country by the end of the year 1995 (Govt. of India, 1997).

Universalisation of elementary education has been accepted as a national goal since 1950. In order to achieve this goal, concerted efforts have been made and as a result the elementary education system in the country has become one of the largest in the world (World Bank, 1997). The major initiatives are in the form of programs like Operation Black Board, National Program for Nutritional Support to Primary Education (mid-day meal scheme), Teachers Education and

[9] See NCAER(1998).

adaptation of minimum levels of learning have continued to be accorded priority. With a view to cushion the impact of rising cost of text books and exercise books, the government has exempted writing and printing papers from excise duties. Apart from these specific programs listed in the questionnaire we also included "other education programs" as well. The response recorded on this item was very few, therefore, we excluded this item from reporting.

The educational programs reported in Table 10 are clustered in six specific programs. The least achieved educational program in terms of households benefitted is the adult literacy/night schools program. Only 1.6 per cent of the poor households in rural and none among the surveyed urban households seems to have benefitted. This is followed by programs on the free school uniforms in rural areas and scholarships at primary levels in urban areas. The most acclaimed mid-day meals scheme with demand inducing effect is expected to increase the enrolment rate and reduce dropout rates. These programs benefitted only 6.5 per cent of the total poor households surveyed in rural areas and 4.5 per cent of poor households in urban areas.

However, for the first time this program was expanded from 1995-96 in a phased manner, to cover in 1997-98, all students of primary classes (I to V) in all-Government, local body and Government aided schools in the country. During 1997-98 this program has benefited 896 lakh children (Govt. of India, 1998).

This demand-inducing incentive scheme has short run payoffs in breaking the vicious circle of poverty - low income - low educational achivements - poverty. This program should be strengthened for effective implementation to provide the much needed initial boost to the poor households.

The district primary education program is the most intensive effort by the Central Government

to increase enrolment, retention and quality in primary education. It emphasises investment in the quality of primary instruction, particularly inservice teacher's training, improved teaching and learning materials and improved school facilities. The program has also enhanced the state's educational support programs, including textbook development and publication, planning and management and research evaluation. The government of India made commitments to enhance the quality of education and committed itself in ensuring that the necessary resources are available indicating an increase in the allocation to education from less than 4 per cent of gross national product to 6 per cent. Though allocations have increased to some extent but what remains to be drastically restructured is the efficiency in the use of these resources. The beneficiaries from these welfare programs are very meagre which show that the welfare programs have committed both the errors - omission of poor and inclusion of non-poor. Therefore, an efficient program directed towards the poorest of the poor needs nullification of these two types of errors while targeting the vulnerable.

VI. Why are Children out of School? Household Response

The public provision of welfare programs does not exclude the poor or non-poor from having access to these provisions. Despite implementation of several innovative schemes for educational development, the results have never been significant and quick to follow. The lower percentage of beneficiaries from these programs can be for various reasons. (a) Insufficient supply so as to include each poor in the provision of these facility, school dysfunctional, etc. (b) poor themselves lack demand for reasons of high opportunity cost of educating the children, etc..

The share of household expenditure on education presented in Table 11 reflects the demand for education to the same degree among different occupational categories. Though the demand for

education exists among households, they spent as low as 2.87 per cent in rural and as high as 5.04 in urban areas of their total household expenditure. This difference in expenditure also shows up in the literacy rates with urban areas showing a higher figures. The occupational category which has larger number of poor, such as the wage earners, seems to have, on an average, a lower share of expenditure on education and hence reflects lower demand for education in rural areas. In urban areas, non-agricultural wage category has the lowest share of expenditure on education.

Table 11: Percentage Share of Household Expenditure on Education in Total Household Expenditure

Occupational Categories	Rural	Urban
MIMAP- only Poor		
Self-employed Farm	3.71	3.50
Self-employed non-Farm	1.47	5.73
Salary	3.97	5.58
Agricultural Wage	2.31	3.59
Non-agricultural Wage	2.47	3.51
Others	3.13	7.99
All	2.87	5.04
NSSO*		
Poor	0.79	1.66
Total (poor & non-poor)	1.60	4.00

Notes: * Excludes boarding and lodging costs for education and also transport cost.

Source: NSSO (1998).

In this section, we summarise some of the reasons for low enrolment and dropout rates based on the survey. The information on the reasons for high non-enrolment and dropout rates were classified into five factors.

Table 12: Reasons for Non-enrolment in 6-14 Age Group Among Rural and Urban Poor

	Supply Factors	Constrained Demand	Unconstrained Demand Factor	Customs & Social Taboos	Health Problems
Self-employed Farm	2.00	42.70	67.90	4.20	4.70
	(6.20)	(6.20)	(93.80)	(58.60)	(0.00)
Self-employed Non-farm	0.00	62.30	49.90	0.00	1.70
	(0.00)	(86.70)	(36.10)	(0.00)	(0.00)
Salary	0.00	80.00	71.30	0.00	0.00
	(13.50)	(100.00)	(13.50)	(0.00)	(0.00)
Agricultural Wage	1.20	50.00	68.20	2.80	4.70
	(3.10)	(93.90)	(13.90)	(3.10)	(0.00)
Non-agricultural Wage	2.90	51.70	57.70	4.20	5.10
	(23.80)	(56.00)	(17.90)	(2.60)	(8.10)
Others	0.00	19.50	80.50	0.00	14.20
	(-)	(-)	(-)	(-)	(-)
All Occupation	1.70	49.20	66.10	3.30	4.60
	(11.80)	(69.40)	(28.30)	(6.30)	(3.40)

Notes:(a) Constrained Demand - financial constraint, attention to domestic chores, participation in household economic activities; Supply factors - school too far, school dysfunctional, teachers attitude discouraging. Unconstrained Demand - parents didn't feel it was important, child unwilling; Customs and Social Taboos - married off, parents not in favour, social discrimination; Health problems related to child.
(b) Percentage of respondents who cited alternative reasons. These responses are not mutually exclusive.
(c) Figures in parentheses are for urban areas.

The reasons attributed for such poor overall enrolment rates across both regions - rural and urban, are different. In rural areas, the major factors as revealed from the survey are unconstrained and constrained demand factors (see Table 12). Around 66 per cent of the persons responded to this question attributing to unconstrained demand while 49 per cent attributed to constrained demand factors in rural areas. This is also true for all the occupational categories except self-employed farm and salary earners. A larger percentage of poor in these two categories attribute to constrained demand factors. But, in general, unconstrained demand factor stands out as the major reason for non-enrolment in rural areas. This evidence negates the popular perception that poverty or financial constraint is the major factor for poor enrolment and high dropout rates, though, it is important. Even for the occupational category which has a larger number of poor, this reason does not seem to be appealing. Surprisingly, both categories - self-employed farm and salary attribute constrained demand as the major reason for poor enrolment rates. However, it is highly possible that the other two reasons - attention to domestic chores and participation in household economic activities may be quite important.

In urban areas, the picture is slightly different. A larger percentage of persons, around 69 per cent attribute to constrained demand factors while 28 per cent to unconstrained demand factors. This is true irrespective of the occupational categories the households belong to except self-employed farm (we ignore this category because of small sample size).

Table 13: Reasons for Dropout Before Completing Primary School in 6-14 Age Group Among Rural Poor

	Supply Factors	Constrained Demand	Unconstrained Demand Factor	Customs & Social Taboos	Health Problems
Self-employed Farm	0.00	23.70	78.30	22.90	0.00
Self-employed Non-farm	0.00	0.00	100.00	0.00	0.00
Salary	0.00	24.10	75.90	0.00	0.00
Agricultural Wage	0.00	46.10	86.60	0.00	2.60
Non-agricultural Wage	9.70	20.60	69.70	36.30	25.80
Others	0.00	0.00	100.00	0.00	0.00
All Occupation	1.10	32.30	81.90	11.90	4.20

The reasons reported for dropout in rural areas are presented in Table 13. This table shows that the major reasons attributed to high dropout rates are unconstrained and constrained demand factors irrespective of the occupational category. Around 82 per cent and 32 per cent responded to the first and second, respectively in this region. Here too, economic factors are secondary. In urban regions, the response recorded for dropout rates were too few, hence, no statistics are presented here.

Another sample survey by the PROBE[10] team which provides a blow by blow account of

[10] This is a story about the basic education in villages from five Indian states based on various encounters with parents and students. This probe covers 40 per cent of India's

the entire episode presents an useful starting point for the discussion underlying this issue. This study provides some useful insights, and it is a sub-sample of the random sample of villages studied in 1994 by the NCAER. The general reasons attributed to universal primary education is high parental motivation and interest apart from state initiative. The instance of high parental motivation is exhibited when the PROBE team received the following reply, ".. if needed they would sell land to educate his children". High parental motivation for education does not necessarily lead to regular school attendance or even school enrolment. Parents may be convinced of the value of education but may not be convinced of the schooling system or the kind of education they are looking for. The PROBE report also mentions that even if parents are keen to send their children to school, they may be unable to do so for reasons such as inadequate facilities, irresponsible teachers, etc.. Though these supply side reasons are important but the factor that stands out from the MIMAP data is parental and children interest in schooling in rural areas, which habitats eighty per cent of the total poor. Though parents might be highly motivated but may lack interest in schooling for reasons mentioned in the PROBE report. The PROBE team points out that education is not a mirage but a realistic hope of future earnings. The expected earnings is the major motivating factor for the parents to forgo the present cost for future earnings.

In the MIMAP survey, this reason is categorised under the nomenclature unconstrained demand. In addition to this, interest of the child as an important factor which is lacking among households is also pointed out in the MIMAP survey. This seems to be the most important

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population and more than half of all out-of-school children and does not claim to be representative of the entire country. However, MIMAP-survey provides data which is representative of the entire country and the reasons what so ever are systematically

factor for non-enrolment and dropout rates among persons above the poverty line in both rural and urban areas.[11]

During the last seven years Himachal Pradash has achieved remarkable progress bringing the state very close to universal primary education. The evidence from Himachal Pradesh as a role model can be compared with the rest of the country. Himachal Pradesh does seem to have highly motivated children. One instance with the PROBE team is the response from a little girl when she said that she wants to become a doctor, a far reaching statement about the position of woman in society. It is the future earnings at the cost of present that seems to be the motivating factor. Another instance of this is the success story of the total literacy campaign in Pudukotti district in Tamilnadu, reveals an impressive instance of woman empowerment where basic educational skills, special training on decision making and management are linked to livelihood. Besides, MIMAP survey, points out that constrained demand factors such as financial constraint, attention to domestic chores and participation in household economic activities are also important in rural areas and are prime factors in urban areas.

The solution to this problem lies in the reorientation of the educational system towards market oriented supply of skills to activate the demand for education and schooling. Presently, the Indian educational system is supply led primarily through government financing of academic based education.

Moreover, the objective of educational system in India should be much more than literacy by

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categorised in to various factors.

addressing the increasing demand for skill as a fallout of the structural adjustment. The essence of attracting foreign capital for industrial investment is to provide the needed skill base on which it could be launched. Most East Asian countries while experiencing high rates of growth during the last two decades had adopted their education and training system to respond rapidly to the change in the demand for skills. In these economies, the respective government played a key role in skill development prior to the growth of particular industry to attract foreign capital. The basic thrust of these economies were reforms in educational system to link structural adjustment in the industry and the skill needs of the labour market conditions to match the speed of transformation in the economic system. Though many factors explain the high growth rates in these countries but the most vital reason is the high level of market oriented supply of skills, which give them a comparative advantage in manufactured goods exported.

The educational reforms in India should focus on these issues and respond to the demand lead supply transformation from 'literacy for all' to skill development through the market mechanism. This is not to say that literacy is not important but in addition to this the focus should also be on skill enhancement. Hence, the role of the state should be redefined to provide basic education at the primary level (through supply, and demand inducing incentive schemes) which also takes care of the second factor, namely, the constrained demand while higher education should be left to market signals to allocate and promote skill enhancement, establishing increased future prospectus. Both openness of the economy and privatisation of education at higher and tertiary will accelerate the process by itself. This will possibly provide the incentives for learning at the primary level and will also enhance the skill development process to suit the changed needs of

[11] See MIMAP Survey, 1994-95 (NCAER, 1998).

the industrial sector. This reforms in the educational system will play a vital role in raising productivity, employment and income and so reducing poverty.

VII. Concluding Remarks

This paper addresses an issue of great concern - despite massive Government efforts, the state of education in India is improving slowly. The literacy rates among poor households are low and across occupational categories, the lowest is among Agricultural and Non-agricultural Wage and Self-employed Farm in rural. The Non-agricultural Wage earners in the urban areas also have very low literacy rate. Both dropout and non-enrollment rates are also high in either regions. Many studies in the literature attribute such poor performance in the educational sector to poverty, and child labour supplementing family income is considered to be the main cause for such maladies.

However, the MIMAP survey (NCAER, 1998) shows that the major reasons for such poor performance of the educational sector are both unconstrained and constrained demand. Unconstrained demand refers to factors having no constraint but simply lack of willingness and constrained demand factors are constrained by poverty conditions, participation in household economic activity, etc.. In general, unconstrained demand factors stand out as the major reason in rural areas while in urban a larger percentage of poor attribute to constrained demand factors.

Therefore educational reforms in India should basically focus on the demand lead supply transformation towards skill enhancement. This seems to be missing in the government-owned and operated educational sector. In this context, the role of the state should be reduced to

provide the basic education. The higher education should be left to the market. However, the government has proposed to move in this direction.

The restructuring of the educational sector will have both short run and long run effects. In the short run, this will not only strip the undue burden which the state carries in terms of high budget deficits but also can provide adequate resources for the fulfillment of the basic objective line 'literacy for all' or mass education, etc. Apart from this, open economy framework in the educational sector is likely to allocate resources efficiently and bridge the gap between demand and supply of skills.

In the long run, the opportunities for employment and income will increase the demand for education not only for secondary and higher education but also for primary education in lieu of future prospects.

However, the privatisation of education most often exclude the poor from drawing benefits of education at secondary and higher levels. Here too, the role of the state is important apart from providing free primary education. The state should provide adequate scholarships and assistanceships for the vulnerable, which infact, requires much less government resources than the government owned institutions of higher learning.

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