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Household Expenditure on Education and Implications for Redefining the Poverty Line in India*

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This short paper is concerned with the following three questions:

1. *Why consider education and expenditure on education, while redefining the official poverty line?*
2. *What is the present level of household expenditure on education and what does a review of estimates on household expenditure on education suggest?*
3. *What can be a reasonable estimate on household expenditure on education that can be used in redefining the official poverty line?*

1. Introduction

Poverty is conventionally defined in terms of income poverty, i.e., number of people below the poverty line and it is measured in different ways, predominantly in terms of inadequacy of income to procure a defined minimum level of calories. In India the minimum level of calories required per person per day is defined as 2400 in rural areas and 2100 in urban areas. The same is converted into financial terms and the poverty line is defined as a minimum level of income or expenditure, which is periodically updated. The latest updated poverty line is Rs.356.30 in rural areas and Rs.538.60 in urban areas in 2004-05 (Planning Commission, 2007). Using the same method, poverty line is also defined for various states and union territories separately for rural and urban areas. All the people, whose monthly expenditure falls below these levels, are considered as poor. It has to be noted that the so-defined poor may be incurring expenditures, not just on food intake to get minimum number of calories, but also on several other food and no-food items.

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Many scholars have highlighted the limitations of this concept of income poverty, which is solely based on calorie intake, 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 of the people. As the World Bank (1994, p. 9) recognised, "Poverty is not only a problem of low incomes; rather, it is a 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. 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).

According to Sen (1999, p. 87), 'real' poverty can be sensitively identified in terms of capability deprivation: deprivations that are intrinsically important, unlike low income, which is only instrumentally significant. Sen distinguishes between income poverty and capability poverty; and argues that the later is obviously more important. Capability poverty refers to deprivation of opportunities, and choices and of entitlements. Education can very significantly influence both income poverty and capability poverty and also the relationship between the two, besides constituting itself a part of capability poverty. In fact, educational deprivation itself is capability poverty and investing in education of the poor itself means reduction of capability poverty.

In short, 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' (Tilak, 2002b). Poverty of education is an integral part of human poverty, and it is widely argued that this should be an important constituent of any

meaningful and comprehensive definition of poverty line. The features of education poverty include wide-spread illiteracy, low levels of education of the population, high rates of non-participation or low rates of participation of children in schooling, high rates of dropout and failures, low rates of continuation in schooling, low rates of achievement and finally exclusion of the poor from education. Accordingly it may be easy to identify and count the number of educationally poor people, as those who are illiterate and who are less educated – educated below a defined level. If one were to define poverty line in terms of income or expenditure, it may, thus become important to estimate a minimum level of income required to obtain a minimum level of education, defined in terms of both quantity and quality.

The scope of this short note is somewhat restricted: it is an attempt to present an idea on the nature and magnitude of the household expenditures on education, essentially based on published reports of the NSS, and to discuss how this expenditure on education has to be incorporated into the official poverty line.

Why Consider Expenditure on Education, while Redefining the Poverty Line?

Education is a merit good, and it is also considered as a public good, producing a huge set of externalities. Internationally education, particularly school and more particularly elementary education is recognised as a basic need. In the framework of Indian development planning, it is considered as one of the important 'minimum needs'. United Nations and UNESCO resolutions also require it to be provided free by the state to all its citizens. The *Constitution of India* has recognised all this and resolved in 1950, as a part of the *Directive Principles*, as follows:

> the State shall endeavor to provide, within a period of ten years from the commencement of this Constitution, for *free* and compulsory education for all children until they complete the age of fourteen years. (*Article 45*) [emphasis added].

Recognising that we have not been sincere to the Directive Principle, an amendment to the *Constitution of India* was made through the 86th amendment in 2002 that has recognised education as a fundamental right, according the status to education which is almost equivalent to basic rights such as the right to live. According to the

human development and human rights perspectives, education forms an essential component of human living and this should be provided universally to everyone without any discrimination, as an entitlement, and as a fundamental right.

Literature on education-development relationships has also highlighted the role of education in reducing income poverty, in the fulfillment of other basic needs, in improving the quality of life etc., (Noor, 1980; Tilak, 1989), in addition to its direct impact on labour productivity and earnings in the labour market (Schultz, 1961; Becker, 1964; Mincer, 1972). Importantly the contribution of education to development in terms of externalities it produces is argued to be immense (see e.g., McMahon, 1999). Educaiton significantly influences positively the health and nutritional status of the population, contributes to reduction in fertility rates and to improvement in population growth, to reduction in crime, etc. It also helps in evening out some of the ills of the society such as child labour, exploitation of children, child marriages, etc., and in socialisation of the children and in their effective functioning in the modern societies. In short, education not only improves efficiency in terms of labour productivity and personal and social development, it is also found to be an effective instrument of reduction of poverty, upward social, occupational and economic mobility, empowerment of people, redistribution of resources and thereby of improvement of equity in the system, besides it itself reducing inequalities in education. Also as it helps in fulfillment of other basic needs, education might reduce, if not obviate, the need for public spending on certain other basic needs.

That (a) education is a merit good and also a public good, (b) its direct contribution and externalities are immense, (c) household expenditures on education would restrict the access of the poor to education, (d) despite growth in private schooling, there exist imperfections in capital markets and asymmetry in information, (e) private markets in education cause and strengthen inequalities, and (f) above all, a large numbers of people are illiterate and do not have any education, many of them being economically poor – all compel us to consider education as an important integral part of development planning, including specifically in any analysis of poverty.

However, the definition and measurement of poverty has been income- or expenditure-centric and it virtually pays no attention to education, which is essential for human beings to 'live with dignity.' Accordingly, the poverty line, it seems, also does not consider any minimum level of individual expenditure required to acquire education. This aspect was not considered important in the early 1970s, when poverty line was first defined, probably because given the Socialistic nature of the State, it was anticipated that education would be provided by the State completely free or nearly completely free to all citizens, as envisaged in the Directive Principles of the Constitution, and that no one would have to incur any expenditure on acquiring education. In fact, for a long time, it was felt that the government meets the whole expenditure on education in India; education at all levels is provided free to all, and household expenditure on education, if any, is negligible. Such a view prevailed until some information was made available on the extent of household expenditures.

Though according to the *Constitution of India,* education is expected to be provided free to every one, students and families are found incurring huge expenditures on acquiring it. Households – even the poorest households -- are found to be feeling the compulsion to spend considerable amounts of their meagre income on education in terms of tuition and other fees, other payments to schools, and other necessary expenditure on textbooks, stationery, uniforms, transport etc. (Tilak, 1996, 2002c). Available research has also shown that the need to spend huge amounts by the households on education, or to incur the household costs on education, has been a very important constraint in the participation of the low income groups in education (see Tilak, 2002a). Though the 86th amendment to the Constitution promises to provide elementary education free to all, given the changing development paradigms, the changing economic reform policies and the over all socio economic conditions, where private education has been expanding at a rapid rate, many feel that the households will have to continue to spend huge amounts on education. Hence the need arises to consider expenditure on education and to have a relook at the official poverty line. This is what attempted in the following sections. Section 2 presents a review of available estimates and research on household expenditure on education and based on the same in Section 3 a minimum desirable estimate is derived for consideration in redefining the official poverty line.

2. Household Expenditure on Education: A Review of Available Estimates

Database

Reasonably reliable and sound database exists in case of public expenditure on education in India. But data on household expenditure are scarce and hence most analyses of expenditure on education are usually confined to the public expenditures only. There are two main types of database on household expenditures on education in India. First, the Central Statistical Organisation (CSO) publishes every year data on household expenditures – 'private final consumption expenditure' -- on education (and other non-food and food items) based on estimates made by the National Sample Survey Organisation (NSSO) in the *National Accounts Statistics* (NAS). But the NAS does not give any details regarding the composition of the expenditure on education by items, the levels of education, etc. NAS, however, enables time-series comparisons, besides being national in coverage.

The second important source is the household surveys of the National Sample Survey (NSS). The several rounds of the NSS on Employment and Unemployment and on Household Consumer Expenditure, regularly collect and provide data on household expenditure on education (and other non-food and food items). These regular rounds also do not provide any additional details on the levels of education or on the components of education expenditure. They are of course available for rural and urban areas separately and also by expenditure (monthly per capita expenditure) classes. More importantly, the NSSO occasionally conducts surveys concentrating on education. One such round was the 42nd round conducted in 1986-87.[1] The survey was repeated in the 52nd round (1995-96).[2] These surveys provide a lot of detailed information that helps in estimation of the rate of participation of people in education, and household expenditures on education, by levels of education, by items of expenditures, by different characteristics of population – caste, region, gender etc., and by household expenditure classes. Another similar survey was conducted in the 64th

[1] Among others, Minhas (1992) and Tilak (1996) have analysed the 42nd round data extensively.

[2] Using the 52nd round data, Tilak (2000, 2002a) has examined several dimensions relating to education.

round in 2007-08 and the results are not yet available.

Another important source of information on household expenditure on education is the surveys conducted by researchers and research organisations. Many such surveys, particularly conducted by individual researchers and organisations, are sample surveys conducted in small regions or on a smaller number of households in the country -- and they were conducted in wider contexts of human development, or in the specific contexts of estimation of household and social costs of education, estimation of rates of return to education, etc. A few important statewide and even nation-wide sample surveys conducted include example, Panchamukhi (1990),[3] NCAER (1994)[4] and UNICEF (2007).[5]

Given the advantages of the national surveys conducted by the NSSO, we confine our attempt here to an analysis of the data available in NAS and the reports of the NSS which are based on household surveys.

Private Final Consumption Expenditure on Education in India

The *National Accounts Statistics* (NAS) presents estimates on 'private final consumption expenditure in the domestic market' on education in current prices and also in constant prices. They are also available as a proportion of the total private final consumption expenditure. The 'private final consumption expenditure' on education is regarded as the household expenditure on education.

According to the latest estimates, household expenditure on education in India is sizeable, Rs.62.7 thousand crore in 2007-08; it increased from Rs. 59 crore in 1950-51 (Table 1). The magnitude of household expenditure may be contrasted with the

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[3] This was a sample survey in Maharashtra, Rajasthan and Karnataka, based upon which estimates were generated on the extent of expenditures on school education made by the private sector -- households and private school management sector -- in various states in India in 1986-87 and 1987-88.

[4] National survey on human development in India (HDI), conducted by the NCAER was confined to rural areas in as many as 16 major states. Among others, Tilak (2002c) used the NCAER data and examined the determinants of household expenditure on education. Tilak and Sudarshan (2001) have also examined the extent of private schooling in India, based on the same database.

[5] It is a survey in eight major states in India aimed at estimating household expenditures on elementary education. See Mehrotra (2005) and Mehrotra et al (2005).

government expenditure on education, which was Rs.159 thousand crore (in 2007-08 budget estimates). In other words, household expenditure constitutes nearly 30 per cent of the total (household plus government) expenditure on education in the country in 2007-08. Household and government expenditures on education are in the ratio of about 1:2.5. The household expenditure on education formed 1.4 per cent of GDP in 2007-08 and 2.6 per cent of the total household expenditure on all items of consumption.

There has been a phenomenal growth in the expenditure of the households on education. It increased in real (1999-2000) prices by 40 times between 1950-51 and 2007-08. In per capita terms, the increase has been by 12.7 times during the same period. As a proportion of the total household expenditure, the share of education increased from 0.6 per cent in 1950-51 to 2.6 per cent in 2007-08. The growth, particularly in terms of percentage of the total expenditure is, however, not smooth over the years. For example, it gradually increased to 1.5 per cent by 1972-73, but during the later period it went up and down, and reached a level of 1.1 in 1985-86; thereafter it registered a steady increase. These fluctuations may be suggestive of the fluctuations in total consumption expenditure and more importantly in relative priorities of the households. However, it is clear that (a) household expenditure on education is sizeable, and (b) it is increasing rapidly over the years. Some view the rapid increase as a rapid increase in 'willingness to pay for education,' while some feel that it reflects the 'compulsion' the households feel to spend on education, as the government expenditure on education is considered inadequate (Tilak, 2003).

Tilak (2000) has analysed the NAS estimates on private final consumption expenditure on education, in comparison with the government expenditure on education for the period referring to1950-51 to 1996-97. It has been also found that the coefficient of elasticity[6] of household expenditure on education to total income (in fact, expenditure) of the households was positive, and greater than 1; it is 1.5. It means that household expenditures on education are more elastic to household income. A one per cent increase in total household income would result in 1.5 per cent increase in household expenditures on education. When the figures are considered in per capita

[6] Coefficient of elasticity is estimated by using double log regression equation.

terms, the coefficient of elasticity was much higher: 2.1. If household income per capita increases by one per cent, expenditure on education per capita increases by 2.1 per cent.[7] This suggests that household expenditures on education are considerably and positively influenced by household income (or expenditure) levels.

Secondly, the coefficients of elasticity also suggested that households respond positively to government expenditure on education. If government expenditure on education increases, households would also be willing to increase their expenditure on education. But the coefficient was less elastic, i.e., the increase in the household expenditures on education (total or per capita) would be less than proportionate to the increase in the government expenditure on education (total or per capita). Nevertheless, it is clear that households supplement public efforts in spending on education.

It was further observed that household expenditure on education to government expenditure on education was more elastic than total household expenditure to total government expenditure on all sectors. This reflects a higher priority of the households for education, compared to other items of expenditure.

The changes in the coefficients of elasticity over time revealed that in terms of the coefficient of elasticity of household expenditures on education per capita to household expenditure levels, 1960s was the best period, with the highest coefficient of elasticity; 1970s was the worst period and 1990s was not much better than the 1970s.

Using the complete data from 1951-52 to 2006-07, the latest year for which data on household and government expenditure on education are available (the later are given in Table 2), the coefficients of elasticity are now estimated again and we find that (a) household expenditure on education per capita is less (less than unity) elastic to change in government expenditures on education and on the other hand,

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[7] The high income elasticity coefficients may mean that education, which is otherwise considered a 'necessity good' is becoming a 'luxury good.' A luxury good is a good for which demand increases more than proportionally as income rises, in contrast to a necessity good, for which demand increases less than proportionally as income rises. In other words, if the income elasticity is less than one, then the concerned good is defined as a necessity good, and if the income elasticity exceeds unity, i.e., greater than one, then it is defined as a luxury good.

government expenditure on education is more elastic to changes in household expenditure. [8]

As already noted, NAS doses not provide any further details on household expenditure on education.

Household Expenditure on Education

Having noted briefly the long term trends in private final consumption expenditure on education, let us now look at the some of the latest rounds of NSS that provide more details on household expenditure on education.

Detailed estimates separately for 12 MPCE classes for the years 2005-06 and 2006-07, based on the 62nd and 63rd rounds of NSS are given in Table 3. They are also presented separately for rural and urban areas. Along with them, to look at over time changes, the same for 1995-96 based on the 52nd round are also given. It is clear that the per capita expenditure on education incurred by the households increases for each expenditure class over the years, and the increase seems to be rapid and high among the middle and high expenditure classes. For example, in 1995-96, the bottom expenditure class in rural areas spent Re.0.90 per capita, which increased to Re.1.88 in 2005-06, which further increased marginally within a year to Re.1.91 in 2006-07. In contrast, the expenditure of the highest expenditure class increased from Rs.27 in 1995-96 to Rs.73 in 2005-06 and further to Rs.95 in 2006-07. We also note a few more consistent trends and patterns: the expenditure on education systematically increases by increasing levels of MPCE, both in rural and urban areas, without any exception at each point of time. Thirdly, the proportion of the total monthly per capita expenditure spent on education also increases systematically without any exception by increasing levels of the expenditure class – the higher economic group spending higher proportions of their total expenditures and low economic groups spending less. Fourthly, the expenditure in urban areas is several times the expenditure in the rural areas. In 2006-07, the per capita monthly expenditure on education ranges between less than Rs.2 among the bottom expenditure class in rural

[8] The respective coefficients, which are statistically significant at one per cent level, are: 0.705 and 1.315.

areas to Rs. 425 in the top expenditure class in urban areas. As a percent of the total monthly per capita expenditure also it ranges widely, between below one per cent and above ten per cent. The consistent pattern of increase in expenditure on education – both in absolute terms and as a percentage of total household expenditure, by increasing economic category of population is striking in all cases.

The 61st round referring to 2004-05 provides some additional important details on education. Data on education were collected from a short additional questionnaire. It provides valuable data on current attendance of children in educational institutions, educational levels of total population and of the unorganized workers, and also the consumption expenditure on education.

Rate of attendance in educational institutions is available by age groups, but not by levels of education, as given in Table 4. One can find some broad correspondence between the age-groups and educational levels: most of the children in 5-14 attend primary and upper primary levels of education; 15-19 attend secondary/higher secondary education and those in the age-group of 20-24 can be expected to be attending higher educational institutions, though there can be differences at the margin. The rate of attendance in elementary education rises systemically by increasing economic class, from 62 per cent among the bottom expenditure class to 96 per cent in the top expenditure group in rural areas (Figure 1). Similar is the pattern in urban areas. The difference between the top and the bottom groups is the highest in case of the age group 20-24, i.e., among those who attend higher education: the attendance rate is 20 times higher in case of the richest group compared to the bottom group in rural areas, and the difference is by 17 times in urban areas.

The inequalities in attendance rates finally get translated into the stocks of educated population, and we find a similar pattern, as shown in Table 5. The educational levels of population can be summed up in terms of mean years of schooling, which is estimated here and given in the last column in Table 5.[9] Further, mean years of schooling of population and household expenditure on education per capita are closely related, both moving in the same direction, i.e., both increase

[9] The mean years of schooling of population is estimated by using years of duration of each level of education as the weights. See Tilak (1999) for earlier estimates.

systematically by increasing classes of monthly per capita expenditure, as shown in Figure 2 a & b.

Sengupta et al (2008) have analysed the expenditure on education and also educational levels of population by expenditure classes, and the changes in the same between 1999-2000 and 2004-05, based on the 55th and the 61st round surveys of the NSS on Employment-Unemployment (Table 6). They classified the population into six categories: 'extremely poor', 'poor', 'marginal', 'vulnerable', 'middle and 'high income' groups. The 'extremely poor' and the 'poor' together constitute the poor according to the conventional definition of the poverty line. Between 1999-2000 and 2004-05, the monthly per capita expenditure on education has increased from Rs.15 to Rs. 33 for all groups of population in the country. Even the expenditure of the poor was nearly doubled from Rs.3.45 to Rs.6.10. In 2004-05 it works out to be nearly two per cent of the total consumption expenditure of the poor, compared to 1.3 per cent in 1999-2000.

We have already noted interesting relationships between household expenditure and government expenditure on education, when we have analysed the coefficients of elasticity, using the time series data on private final consumption expenditure. However, when we use state-wise data on per capita government and household expenditure on education in 2006-07 in 20 states (given in Tables 7 and 8), we find that both are less elastic to each other.[10]

Looking at the coefficients in both cases, i.e., based on time-series data and cross section data, it can be stated, subject to their level of statistical significance, that household expenditure and government expenditure do not substitute each other; they complement each other. Increase in the government expenditure might stimulate households to spend more on education.

Household Expenditure by Level of Education

The above estimates refer to all levels of education as an aggregate. It may be

[10] The coefficients of elasticity of government expenditure to changes in household expenditure on education are as follows: 0.249 (t-value: 2.42) (rural areas); 0.656 (t-value: 2.76) (urban areas); and 0.309 (t-value: 1.87) (rural and urban combined). Household expenditure is marginally more (but less than unity) elastic to changes in government expenditure on education. The respective coefficients are: 0.99 (t-value: 2.49) in rural areas; 0.45 (t-value: 2.76) in urban areas; and 0.53 (t-value: 1.87) (rural and urban combined).

important to examine the expenditure by level of education. But only the special rounds like the 52nd and the 64th rounds of NSS provide data on household expenditure on education by levels. The 52nd round referring to 1995-96 is still the latest one, as the data on the other survey are not yet available. The estimates, based on the special survey of the 52nd round (Report No. 439), which are used here, refer to average household expenditure on education per student per annum in 2004-05. Let us examine the same.

A close examination of the available estimates given in Table 9 reveals several important features, some of which may be underscored here. Households in every quintile incur huge expenditure on education of their children, both in rural and urban areas. It is most generally felt that rich households spend more on education than low income households. This is found to be true at every level of education, and it also holds between every two successive expenditure groups. Average household expenditure of the top expenditure group on education is 6.1 times the expenditure of the bottom quintile. In fact, we notice a smooth upward increasing expenditure curve of the different expenditure quintiles at every level of education. There is also no intersection of curves between levels of education and the quintiles in Figure 3.

Households on average spend an amount of Rs.904 per student on all levels of education on average. While the corresponding figure is Rs. 370 in rural areas, it is nearly three times higher in urban areas. In both rural and urban areas, as noted earlier, the level of household expenditure rises as the educational level rises. It increases from Rs.218 for the bottom quintile in rural areas to Rs.1114 for the top quintile. In urban areas it rises from Rs.480 to Rs.3447 – seven times higher between the bottom and richest quintiles, compared to five times difference in rural areas.

The differences by levels of education are more striking. On average, a household has to spend Rs.501 per child per annum for primary education. If the child goes to middle or upper primary education, it increases to Rs.901; it further increases to Rs.1577 in secondary[11] schools and Rs.2923 in higher education.[12] These figures

[11] Secondary education/schools include senior secondary level as well.

[12] Higher education here refers to what is described as 'above higher secondary level' in the NSSO (1998).

refer to 1995-96. A quick comparison with the earlier set of estimates shows that there has been a steep increase in the levels of household expenditures between 1986-87 and 1995-96. The expenditure on primary education per student in 1986-87 varied between Rs.84 in government schools in rural areas and Rs.569 in private schools in urban areas (Tilak, 1996).[13]

Rural-urban differences in household expenditures are striking. A household in urban areas has to spend nearly four times the expenditure that a rural household spends on the primary education of its child. Interestingly, the differences gradually decline by increasing levels of education. Higher education in urban areas costs 1.4 times the cost of higher education in rural areas.

Interestingly, all types of inequalities in household expenditure on education – by gender, rural-urban, inequalities by household expenditure quintiles, and even by type of education are the highest in primary education and the least in higher education. Does this mean that primary education of the kind and form being offered by several types of schools in the country, tends to accentuate inequalities, and on the other hand, is it higher education that may provide cohesiveness bridging gaps between different groups of population? While this may require more in-depth probing, this seems to at least tentatively true.

Contrary to the widely held belief that primary and upper primary education in government, local body schools and even government aided schools is provided rather 'free' and that households do not have to spend any significant amounts, it has been found that even in government schools, children incur huge expenditures. However, the household expenditure on education in government schools is the lowest, followed by local body schools, which in turn was followed by government aided schools. The corresponding figures are the highest in case of private schools. What is interesting to note in Table 10 is that this is true in case of all levels of education, with no exception at all. The difference between the private schools and the government schools is as high as 5.5 times in primary schools, and the difference comes down gradually to 2.1 in higher education.

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[13] These figures are based on the 42nd round of the National Sample Survey, conducted in 1986-87.

The differences between several types of primary schools are vast, compared to differences in higher levels of education. As a result, rich households spend a much higher level of expenditure in primary education than poor households, but when it comes to higher education, since differences between colleges are marginal, the differences in household expenditures are also marginal; even the rich households do not feel the need to spend significantly higher amounts on their children than what poor households do.

Of the several items of expenditure of the households on education, fees forms the single most important item at any level of education, as shown in Table 11. Fee includes tuition fee, examination fees and "'other' fees and 'other' payments". Though tuition fee is sizeable, other fees are not insignificant. Even in primary education, 20 per cent of the expenditure of the households on education goes in the form of tuition fees, and another ten per cent in the form of other fees. In case of higher education, the tuition fee forms 25 per cent and other fees 16 per cent. On the whole, all types of fees forms 30 per cent of the household expenditure on education in primary education, 23 per cent in middle and secondary education and 41 per cent in higher education. So neither primary education nor any other level of education is even fee-free; it is not even tuition fee-free.

The second most important item, after fees, is books and stationery. One-fourth to nearly 30 per cent of the total is accounted by books and stationery. This is important even in case of primary education, where textbooks and stationery are provided free to children. This may be because the provision by the government could be highly inadequate. In elementary education the third important item is uniforms, which is also said to be provided by the government free to many, if not all children. Private coaching is found to be important only in case of secondary education, and not necessarily in other levels of education, though the phenomenon does exist in case of all levels of education. On average 14 per cent of children in rural areas and 18 per cent in urban areas in all levels of education together, take private coaching. High proportion of students going for private coaching obviously reflects the poor quality of education and of the instructional process offered in schools, whether they are government or private schools.

Figure 4 gives the distribution of expenditure on education by different items

for all levels of education taken together on average. Unfortunately these data are not available in the published reports by type of school, i.e., the available information does not help us to know the extent of say expenditure on fees in government primary schools vis-à-vis other types of schools. Such information is available by type of school and not at the same time by level of education. Considering all levels of education together, it can be noted in Table 12 that it is not only fees, but also expenditure on every item of expenditure is higher in government aided schools than in government and local body schools, and is the highest in the private schools. The exceptions are very few. Expenditure on private coaching, and also on books and stationery is higher in case of children attending government aided schools than the other schools. Further, except transport and to some extent private coaching in rural areas, a majority of the students have to spend on all other items, including fees, books, stationery, uniforms and 'other' expenses, and they have to spend, not insignificant, but considerable amounts.

3. Household Expenditure on Education for Consideration for Re-Estimation of the Poverty Line

What constitutes a minim desirable level of expenditure on education that needs to be considered in redefining the poverty line is a difficult exercise and involves crucial choices. The simple way is to consider the actual expenditure incurred by the poor on education and add it to the present poverty line. But the current level of expenditure incurred by the poor may not constitute a desirable minimum level. It may not be adequate for meaningful education, as the poor may be under-spending – spending less than required, and as a result, this would affect their participation, continuation, and their attainment of a minimum level of learning in schools, and their transition to the next level of education. As the current level may not be adequate for a minimum desirable level of education of acceptable quality, a normative estimate has to be made as a minimum household cost of education for the poor to acquire a given level of education. But estimation of a minimum desirable normative estimate is indeed difficult. It cannot but be arbitrary. In all, there are four alternatives, including the current level of spending of the poor, viz.,

a) Amount of expenditure currently incurred by the poor

b) Maximum level of expenditure incurred by the households, which is generally the one incurred by the top expenditure/income group.

c) Expenditure incurred by the median households, and

d) Expenditure incurred by the average of all the households.

We have already noted that (a) may not be right. While (b) may ensure quality education to the poor, comparable to what the richest get, this is also not proper, as some part of the expenditure the rich incur could be spurious: the rich households spend, simply because they have money, though it is not necessary, and also because we are considering the minimum amount required to obtain a minimum level of education with quality, and not what the richest spend. So of the four alternatives, we are left with (c) and (d). While (c) may be good,[14] (d) may be preferred to (c), as after all, it is an average of all the economic groups, including the richest, an average, that may even out differences between the poor and the rich and may enable the poor to get meaningful and quality education.

With regard to an average estimate, essentially two alternative sets of estimates are available on household expenditure on education. They are estimates

i) based on the 63rd round of NSS (2006-07) (Report No. 527); also those based on the 61st round of NSS (2004-05), and

ii) based on the 52nd round of NSS (1995-96) (Report No. 439)

As already noted, the NSS Report No. 439 provides detailed estimates of household expenditure on education by levels of education, and by household expenditure quintile groups; but they are dated, as they refer to 1995-96. Data based on a similar survey conducted in 2007-08 are not yet available. The several rounds of Consumption Expenditure Surveys of NSS do provide similar data, the latest one being the 63rd round. But the Employment-Unemployment and the Social Consumption Expenditure surveys provide aggregate data on household expenditure on education, not disaggregated by levels, but disaggregated by monthly per capita expenditure groups and they are also available for rural and

[14] Dev and Ravi (2008) suggest the same.

urban regions separately. The 61st round of NSS provides a few more additional details on household expenditure on education, but they refer to 2004-05. All the three available figures are updated to 2007-08 level by using GDP deflators and they are given in Table 13.

Now the important question is expenditure incurred on which level of education has to be considered for the purpose on hand: (a) expenditure incurred on elementary education or (b) expenditure incurred on all levels of education (average)? The Directive Principle in the Constitution of India refers to free education up to the end of elementary level (up to Grade VIII). The Constitutional provision of the fundamental right also refers to the same. Hence there may be some justification to include the expenditure incurred only on elementary education.

But there can be two arguments on why better the expenditure on all levels is considered. It is generally stated that mere elementary education may take people above the (income) poverty line, but only just above the poverty line. There is a continuous danger of the people who are just educated up to elementary level, to fall back into (income) poverty at any time and also to illiteracy. Secondly, we also note that even the poor income groups (the bottom income/expenditure quintile who are below the poverty line), participate in other levels including specifically higher education, though the rates are very small, and also spend on other levels of education, including higher levels. The minimum level cannot be below the current level. Hence it may be right to consider (b), in stead of (a). Practically since we are taking weighted averages, given the relative high weight the elementary education has in the distribution of enrolments, the averages do not show much difference whether we consider just elementary education or all levels of education, as we note in Table 13.

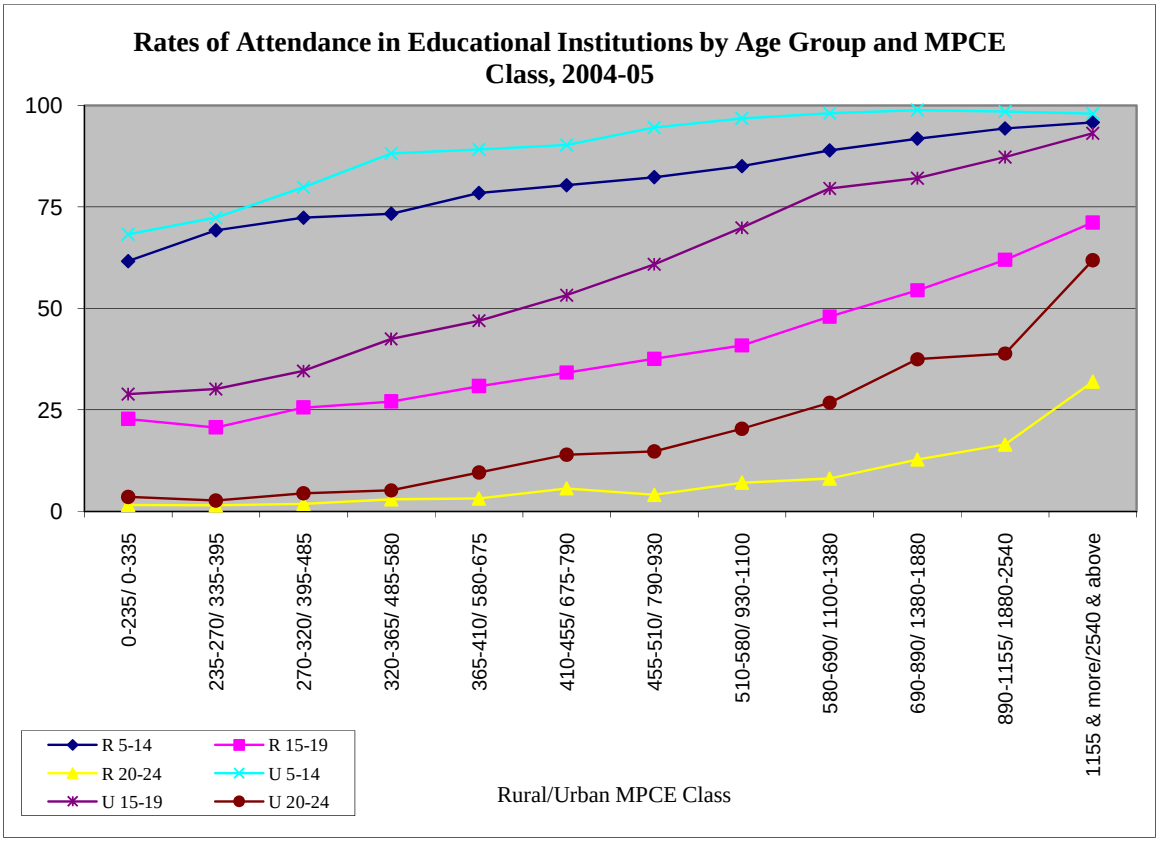
Once, we decide to consider average expenditure of all the households on all levels of education on average, there are two alternative estimates available, one based on the 63rd round of NSS for 2006-07 (alternative 1), and another based on 52nd round special report on education (alternative 2), both updated to 2007-08 level. They are as follows:

Monthly Per Capita Expenditure on Education (Rs.), 2007-08, that may be considered for Redefining the Poverty Line		
	Rural	Urban
Alternative 1	23.24	96.07
Alternative 2	49.33	133.80
Note: Alternative 1 is based on NSSO (2008b) Alternative 2 is based on NSSO (1998b) See the note in Table 13.		

Though, it may be desirable to consider the upper estimate, alternative 1 may be preferred to the other, as it is based on more recent data, updated for one year for price increase. Thus the monthly per capita expenditure on education that needs to be considered in redefining the income/expenditure poverty line, works out to be Rs.23.24 in rural areas and Rs.96.07 in urban areas.

State-wise estimates of monthly per capita expenditure on education based on NSSO (2008b) which can be considered for redefining the state-wise poverty line are given in Table 14. They are actual expenditure figures by all groups of population on education in 2006-07, updated to 2007-08 level using GSDP deflators.

Figure 1



Source: Based on NSSO (2006).

Figure 2a

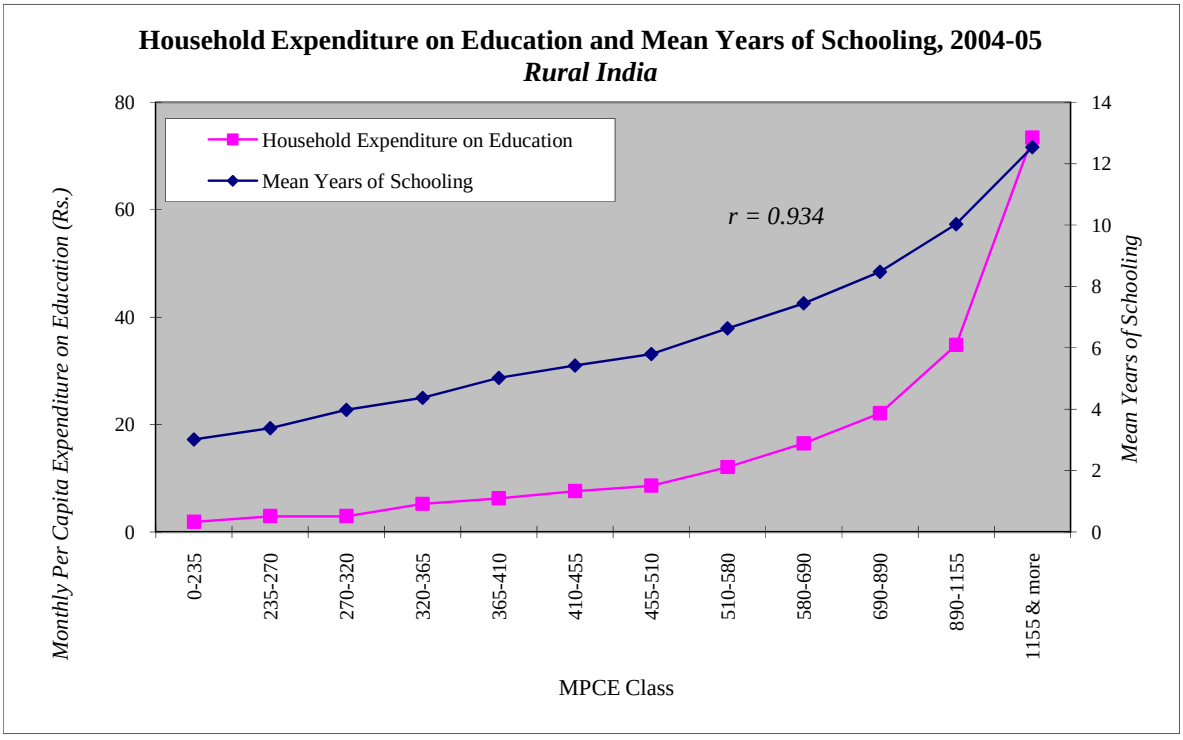
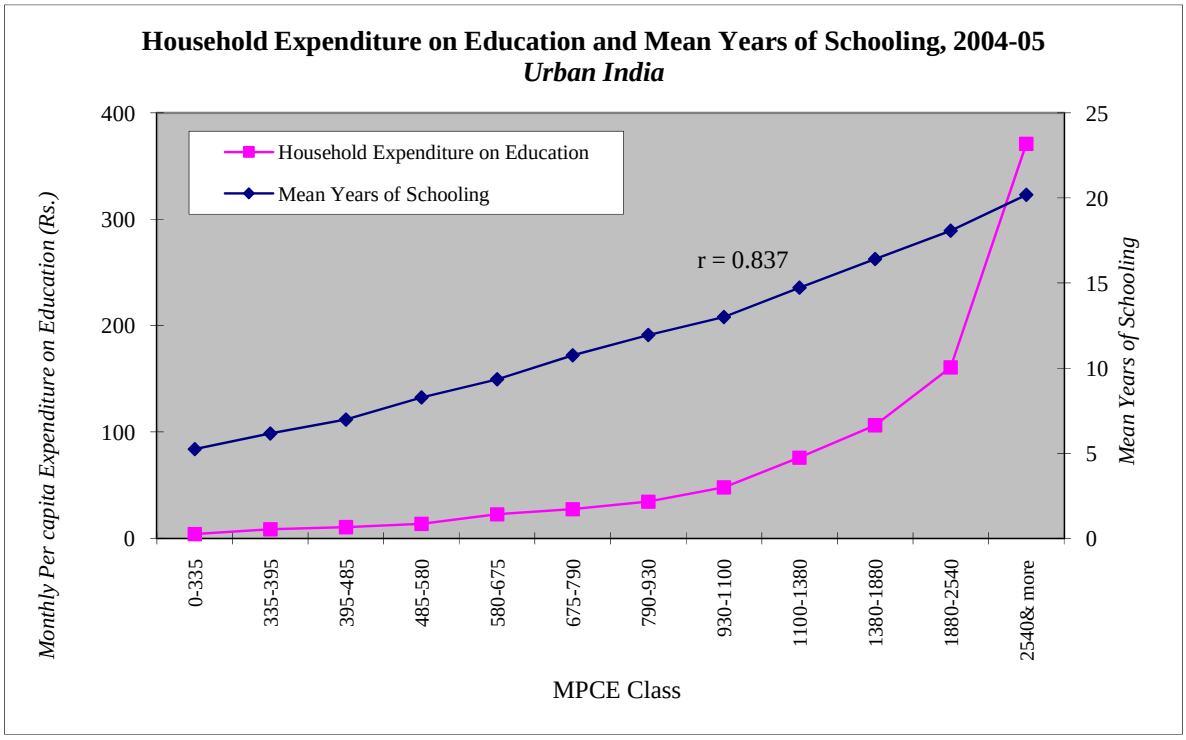
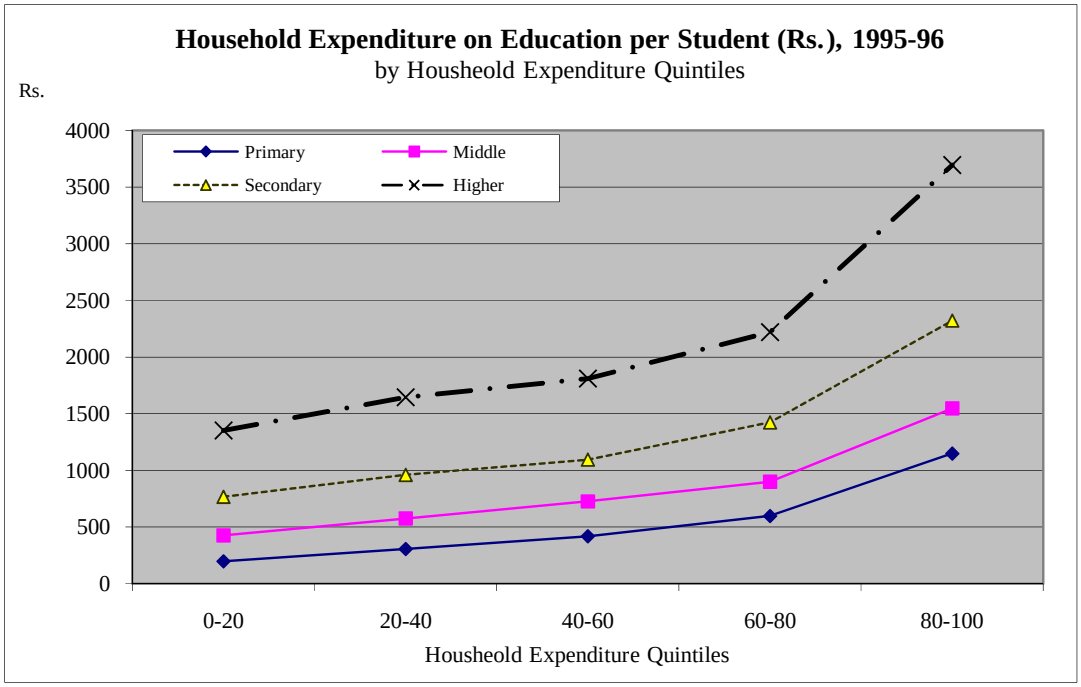


Figure 2b



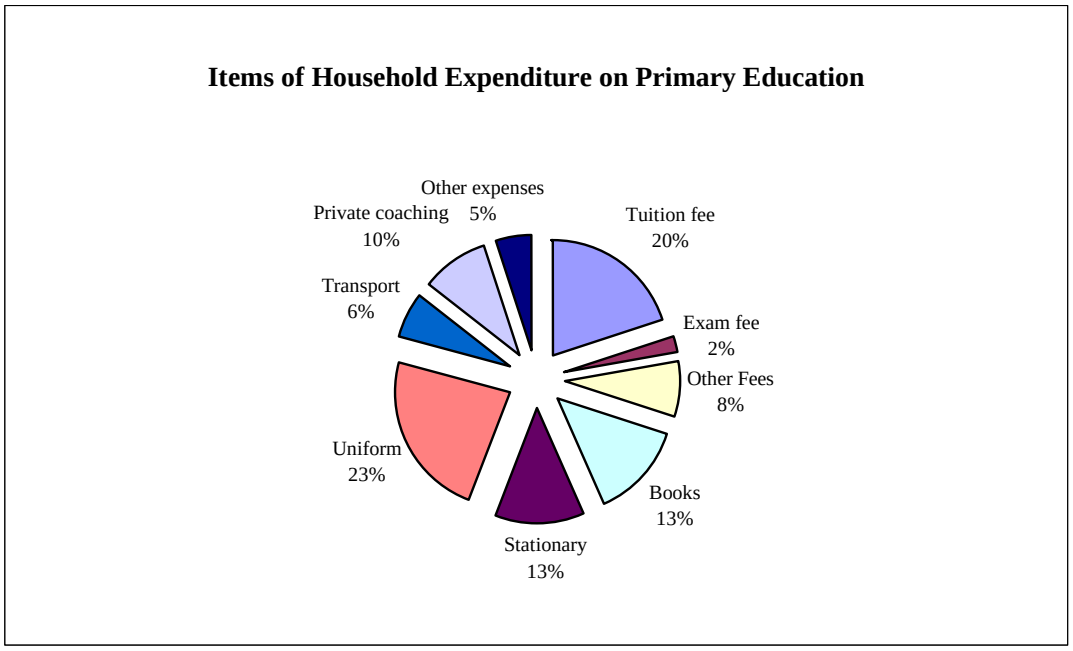
Source: Based on NSSO (2006).

Figure 3



Source: Based on NSSO (1998b).

Figure 4



Source: Based on NSSO (1998b).

Table 1

Private Final Consumption Expenditure on Education (in 1999-2000 prices) Rs per annum								
	Rs crore	% of Total	Rs. per capita			Rs crore	% of Total	Rs. per capita
1950-51	1240	0.60	34.54		1980-81	8196	1.46	120.71
1951-52	1330	0.60	36.44		1981-82	8097	1.39	117.01
1952-53	1406	0.61	37.80		1982-83	8249	1.40	116.51
1953-54	1511	0.62	39.87		1983-84	8196	1.25	113.36
1954-55	1630	0.65	42.23		1984-85	8331	1.28	112.73
1955-56	1758	0.69	44.73		1985-86	7722	1.13	102.28
1956-57	1867	0.70	46.56		1986-87	9394	1.34	121.84
1957-58	1977	0.76	48.34		1987-88	10320	1.43	130.96
1958-59	2133	0.75	51.03		1988-89	10977	1.43	136.36
1959-60	2300	0.80	53.99		1989-90	12378	1.54	150.58
1960-61	2490	0.82	57.37		1990-91	13976	1.66	166.58
1961-62	2732	0.89	61.53		1991-92	13976	1.62	163.27
1962-63	3112	1.00	68.55		1992-93	14071	1.60	161.36
1963-64	3407	1.05	73.43		1993-94	14721	1.60	165.03
1964-65	3654	1.06	77.09		1994-95	14943	1.55	164.21
1965-66	4001	1.16	82.49		1995-96	16193	1.59	174.49
1966-67	4305	1.24	86.97		1996-97	17533	1.60	185.34
1967-68	4609	1.25	91.09		1997-98	19730	1.76	204.67
1968-69	5141	1.36	99.25		1998-99	21304	1.79	216.72
1969-70	5544	1.42	104.80		1999-00	23781	1.89	237.57
1970-71	5706	1.41	105.47		2000-01	26190	2.01	257.02
1971-72	5982	1.45	107.98		2001-02	28632	2.08	275.31
1972-73	6267	1.52	110.53		2202-03	31398	2.22	297.33
1973-74	6314	1.48	108.86		2003-04	34522	2.30	322.03
1974-75	6942	1.63	117.07		2004-05	37939	2.39	348.38
1975-76	7113	1.58	117.18		2005-06	41821	2.47	378.13
1976-77	7193	1.57	116.02		2006-07	45608	2.53	406.49
1977-78	7222	1.46	113.91		2007-08	49733	2.55	437.02
1978-79	7365	1.40	113.66					
1979-80	8020	1.56	120.78					
Source: Based on CSO (2008 and 2009) *[www.mospi.nic.in]*								

Table 2

Government Expenditure on Education per Capita (Rs. in 1999-2000 prices)							
	Rs			Rs			Rs
1951-52	41.30		1970-71	197.24		1989-90	515.67
1952-53	47.37		1971-72	205.95		1990-91	520.61
1953-54	49.90		1972-73	215.83		1991-92	490.14
1954-55	65.06		1973-74	202.19		1992-93	494.35
1955-56	79.21		1974-75	211.38		1993-94	496.72
1956-57	77.58		1975-76	247.29		1994-95	509.57
1957-58	83.79		1976-77	257.84		1995-96	539.02
1958-59	91.21		1977-78	273.48		1996-97	559.10
1959-60	104.23		1978-79	299.14		1997-98	570.55
1960-61	115.89		1979-80	284.56		1998-99	655.93
1961-62	120.54		1980-81	277.30		1999-00	750.75
1962-63	121.24		1981-82	283.43		2000-01	787.46
1963-64	124.44		1982-83	328.82		2001-02	727.25
1964-65	131.25		1983-84	337.53		2202-03	735.36
1965-66	138.09		1984-85	361.42		2003-04	732.41
1966-67	135.63		1985-86	389.97		2004-05	741.21
1967-68	147.44		1986-87	387.75		2005-06	825.34
1968-69	157.60		1987-88	430.23		2006-07	942.23
1969-70	176.53		1988-89	464.30			
Source: Based on MHRD (a and b).							

Table 3

Monthly Per Capita Consumption Expenditure on Education by households, by MPCE class (1995-96, 2005-06, 2006-07						
Rural				Urban		
MPCE Class	Rs.	% of Total Expenditure		MPCE Class	Rs	% of Total Expenditure
1995-96						
0-120	0.90	0.86		0-160	1.33	0.96
120-140	1.11	0.85		160-190	2.41	1.36
140-165	1.38	0.89		190-230	2.99	1.41
165-190	1.09	0.61		230-265	4.27	1.73
190-210	2.35	1.17		265-310	6.46	2.24
210-235	2.94	1.32		310-355	9.30	2.80
235-265	3.16	1.27		355-410	12.25	3.21
265-300	5.01	1.77		410-490	17.36	3.87
300-355	5.75	1.76		490-605	23.52	4.32
355-455	9.90	2.48		605-825	39.53	5.62
455-560	14.38	2.87		825-1055	61.77	6.79
560 & above	26.86	3.10		1055 & above	160.43	8.85
All	7.45	2.16		All	34.48	5.75
2005-06						
0-235	1.88	0.96		0-335	3.95	1.40
235-270	2.95	1.15		335-395	8.59	2.33
270-320	2.94	0.99		395-485	10.52	2.37
320-365	5.23	1.52		485-580	13.56	2.59
365-410	6.26	1.62		580-675	22.58	3.60
410-455	7.63	1.76		675-790	27.39	3.74
455-510	8.62	1.79		790-930	34.46	4.01
510-580	12.09	2.23		930-1100	47.95	4.75
580-690	16.51	2.62		1100-1380	75.87	6.19
690-890	22.11	2.85		1380-1880	106.44	6.66
890-1155	34.83	3.47		1880-2540	160.77	7.46
1155 & more	73.45	4.21		2540& more	370.99	9.41
All	16.98	2.72		All	72.85	6.22
2006-07						
0-235	1.91	0.97		0-335	5.27	1.84
235-270	2.14	0.84		335-395	6.35	1.73
270-320	2.98	1.01		395-485	11.39	2.57
320-365	5.32	1.55		485-580	13.21	2.46
365-410	6.07	1.57		580-675	21.68	3.45
410-455	7.19	1.66		675-790	26.58	3.62
455-510	8.70	1.81		790-930	38.02	4.42
510-580	11.03	2.03		930-1100	48.73	4.82
580-690	15.74	2.49		1100-1380	68.44	5.56
690-890	24.54	3.15		1380-1880	110.25	6.89
890-1155	33.70	3.36		1880-2540	182.02	8.43
1155 & more	95.17	5.41		2540& more	424.68	10.44
All	22.16	3.19		All	91.60	6.98
Source: Based on NSSO (1998a, 2008a, b)						

Table 4

Percentage Rate of Attendance in Educational Institutions, 2004-05							
Rural					Urban		
MPCE Class	Age-Group				MPCE Class	Age-Group		
	5-14	15-19	20-24			5-14	15-19	20-24
0-235	61.7	22.8	1.6		0-335	68.3	28.9	3.6
235-270	69.3	20.7	1.5		335-395	72.4	30.2	2.7
270-320	72.4	25.6	1.9		395-485	79.9	34.6	4.5
320-365	73.4	27.1	3.0		485-580	88.2	42.5	5.2
365-410	78.5	30.9	3.2		580-675	89.2	47.0	9.6
410-455	80.4	34.2	5.7		675-790	90.3	53.3	14.0
455-510	82.4	37.6	4.1		790-930	94.6	60.9	14.8
510-580	85.1	40.9	7.1		930-1100	96.8	69.9	20.4
580-690	89.0	48.0	8.1		1100-1380	98.1	79.6	26.8
690-890	91.9	54.5	12.8		1380-1880	98.9	82.1	37.5
890-1155	94.4	62.0	16.5		1880-2540	98.5	87.3	38.9
1155 & more	95.9	71.2	32.0		2540& more	98.0	93.2	61.9
All	80.3	40.7	7.9		All	88.5	58.3	20.0
Source: Based on NSSO (2006)								

Table 5

Distribution of Population by Educational Level and by MPCE Class, 2004-05									
MPCE Class	Not literate	Literate & Upto Primary	Middle	Secondary	Higher Secondary	Diploma	Graduate & above	Total	Mean Years of Schooling
Rural									
0-235	69.2	18.4	8.5	2.5	0.7	0.1	0.3	100	3.018
235-270	64.8	22.7	9.2	2.3	0.5	0.3	0.3	100	3.386
270-320	60.9	22.8	10.1	3.8	1.7	0.1	0.5	100	3.982
320-365	58.1	22.5	12.4	4.4	1.7	0.1	0.6	100	4.372
365-410	52.7	25.6	13.0	5.4	2.2	0.1	1.0	100	5.022
410-455	50.9	24.3	14.0	6.0	2.9	0.3	1.4	100	5.425
455-510	47.7	25.8	15.2	6.6	3.0	0.3	1.4	100	5.798
510-580	42.9	25.2	16.8	8.6	4.0	0.4	2.0	100	6.635
580-690	38.5	25.0	17.9	10.4	4.9	0.7	2.7	100	7.452
690-890	33.2	23.8	19.1	12.4	6.4	1.1	3.8	100	8.475
890-1155	26.7	22.0	18.9	15.3	8.3	2.4	6.3	100	10.026
1155 & more	17.6	18.9	17.8	16.6	12.3	4.7	12.1	100	12.535
All	45.2	23.8	15.2	8.2	4.1	0.7	2.5	100	6.472
Urban									
0-335	50.5	27.3	12.9	5.5	1.9	0.5	1.3	100	5.246
335-395	44.5	27.1	15.9	7.6	3.0	0.3	1.5	100	6.163
395-485	39.0	28.0	18.1	9.0	3.6	0.6	1.8	100	6.979
485-580	31.4	28.2	19.6	11.7	4.7	0.7	3.6	100	8.286
580-675	26.9	25.6	21.7	13.0	6.4	1.7	4.6	100	9.349
675-790	19.9	25.2	22.4	15.4	8.3	1.9	6.9	100	10.760
790-930	16.6	20.9	22.3	17.9	10.9	2.3	9.1	100	11.956
930-1100	13.4	19.2	21.4	18.4	12.2	2.9	12.5	100	13.007
1100-1380	9.2	14.5	18.9	20.9	15.3	3.7	17.5	100	14.737
1380-1880	6.1	11.7	15.0	19.2	17.7	4.9	25.4	100	16.420
1880-2540	4.3	7.9	11.1	18.8	16.8	4.7	36.4	100	18.083
2540& more	1.8	5.1	6.4	13.6	16.1	5.3	51.6	100	20.191
All	19.6	20.0	18.2	15.3	10.4	2.6	14.0	100	12.130
Source: Based on NSSO (2006).									

Table 6

Monthly Per capita Expenditure on Education (Rs.)				
	1999-2000		2004-05	
	Rs	% of Total Expenditure	Rs.	% of Total Expenditure
Extremely Poor and Poor	3.45	1.3	6.10	1.9
Marginal & Vulnerable	9.78	2.1	17.05	3.1
Poor & Vulnerable (above two)	7.64	1.9	14.07	2.9
Middle & High Income Group	44.73	4.1	97.16	7.0
All	14.95	2.8	32.67	4.7
Source: Based on Sengupta et al (2008), Tables 14 and 17 (Based on NSS 55th and 61st rounds of Employment-Unemployment Surveys)				

Table 7

Monthly Average per Capita Expenditure on Education, 2006-07				
	Rural		Urban	
	Rs	% of Total Expenditure	Rs	% of Total Expenditure
Andhra Pradesh	21.88	3.01	109.04	8.01
Arunachal Pradesh	19.28	2.10	..	..
Assam	30.5	4.23	75.01	5.48
Bihar	11.1	2.05	51.15	5.91
Chhattisgarh	7.62	1.44	80.61	7.69
Delhi	..	..	143.78	7.97
Gujarat	14.91	1.87	74.12	5.21
Haryana	74.67	7.37	146.6	10.97
Himachal Pradesh	43.52	37.04	123.01	7.10
Jammu & Kashmir	48.66	5.00	102.65	7.99
Jharkhand	16.99	3.07	83.47	7.46
Karnataka	18.47	2.96	64.15	5.44
Kerala	50.42	4.03	83.88	4.99
Madhya Pradesh	8.52	1.65	69.21	6.91
Maharashtra	16.09	2.07	121.57	7.26
Mizoram	..	..	74.8	4.78
Manipur	49.73	6.24	..	..
Meghalaya	29.82	3.85	..	..
Orissa	9.3	2.03	65.66	6.12
Punjab	60.52	5.05	135.45	8.42
Rajasthan	21.38	2.79	83.95	7.09
Tamil Nadu	26.74	3.67	75.41	6.14
Tripura	20.6	3.57	78.68	6.72
Uttar Pradesh	22.07	3.38	71.87	7.21
Uttaranchal	..	..	98.82	8.56
West Bengal	22.23	3.53	88.6	6.46
NE States	35.09	4.44	84.21	6.36
Union Territories	38.12	3.41	237.93	12.05
All-India	22.16	3.19	91.6	6.98
Source: Based on NSSO (2008)				

Table 8

Average per capita Expenditure on Education per annum, 2006-07				
	Household Expenditure			Government Expenditure per capita
	Rural	Urban	Wt Av R+U*	2005-06
Andhra Pradesh	262.56	1308.48	675.63	868.66
Assam	366	900.12	480.98	902.99
Bihar	133.2	613.8	316.41	514.75
Chhattisgarh	91.44	967.32	448.59	761.44
Gujarat	178.92	889.44	539.15	893.87
Haryana	896.04	1759.2	1311.12	956.89
Himachal Pradesh	522.24	1476.12	729.61	2005.13
Jammu & Kashmir	583.92	1231.8	939.65	802.86
Jharkhand	203.88	1001.64	582.30	642.01
Karnataka	221.64	769.8	475.05	971.36
Kerala	605.04	1006.56	693.82	1222.3
MP	102.24	830.52	506.24	613.26
Maharashtra	193.08	1458.84	977.01	1248.7
Orissa	111.6	787.92	275.53	670.86
Punjab	726.24	1625.4	1224.44	979.59
Rajasthan	256.56	1007.4	293.94	810.24
Tamil Nadu	320.88	904.92	589.35	912.37
Tripura	247.2	944.16	441.69	1410.82
Uttar Pradesh	264.84	862.44	558.01	567.88
West Bengal	266.76	1063.2	558.14	691.82

* estimated using distribution of sample persons between rural and urban areas as the weights.
Source: Same as Table 7 and MHRD (a, b)

Table 9

Household Expenditure on Education per student per annum 1995-96					
Quintiles	Primary	Middle	Secondary/Hr Secondary	Above Hr Secondary	All Levels
Rural					
00-20	140	337	687	1334	218
20-40	197	435	819	1508	321
40-60	239	526	843	1450	406
60-80	327	624	1045	1915	573
80-100	653	974	1597	2696	1114
All	297	640	1180	2294	570
Urban					
00-20	347	566	868	1364	480
20-40	633	826	1140	1711	816
40-60	1000	1122	1430	1964	1192
60-80	1540	1619	2008	2403	1774
80-100	3060	3291	3919	4370	3647
All	1149	1529	2219	3304	1686
Rural + Urban					
00-20	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	2322	3694	1836
All	501	915	1577	2923	904
Source: NSSO (1998b).					

Table 10

Average Annual Household Expenditure per student of age 5-24 years pursuing general education by level of education and type of institutions					
Level of education	Type of Institution				All
	Govt	Local body	Private aided	Private unaided	
Primary	257	338	1181	1424	501
Middle	622	726	1346	2156	915
Secondary/Higher Secondary	1236	1349	1861	3061	1577
Higher education	2559	2415	3143	5296	2923
All	580	628	1615	1904	904
Source: Tilak (2000), based on NSSO (1998b).					

Table 11

Household Expenditure on Education on various items per student per annum, 1995-96					
	Primary	Middle	Secondary/ Higher Secondary	Above Higher Secondary	All Levels (Average)
Rural					
Tuition Fee	31	36	73	375	47
Exam fee	8	20	61	162	23
Other fee & payments	21	41	79	252	10
Books	50	134	249	429	111
Stationery	52	112	174	251	91
Uniform	82	170	212	101	125
Transport	11	18	87	395	34
Private Coaching	23	71	182	154	64
Other expenses	19	38	64	175	34
Total	297	640	1180	2294	570
Urban					
Tuition Fee	318	316	397	931	389
Exam fee	21	32	73	181	50
Other fee & payments	96	116	150	334	134
Books	122	195	310	552	222
Stationery	101	157	217	313	161
Uniform	231	306	307	74	255
Transport	93	97	114	325	119
Private Coaching	125	245	560	400	284
Other expenses	42	59	91	194	71
Total	1149	1529	2219	3304	1686
Rural + Urban					
Tuition Fee	97	123	220	745	149
Exam fee	11	24	62	171	29
Other fee & payments	38	62	112	333	67
Books	66	152	271	495	137
Stationery	63	128	193	317	110
Uniform	121	227	273	108	171
Transport	30	44	101	353	58
Private Coaching	43	123	313	296	117
Other expenses	24	43	75	177	42
Total	494	933	1619	2995	882
Source: Tilak (2000), based on NSSO (1998b).					

Table 12

Average Annual Expenditure (Rs.) per Student in General Education by Item of Expenditure and by Type of Institution				
Item of Expenditure	Type of institution			
	Govt & Local Body	Govt. Aided	Private	All
Tuition fee	35	303	678	149
Exam fee	24	51	51	31
Other fees & payments	39	137	154	68
Books	114	228	216	145
Stationary	93	166	148	112
Uniform	130	238	274	164
Transport	30	137	134	59
Private coaching	84	284	186	130
Other expenses	37	71	63	45
Total	585	1615	1904	904
Source: Tilak (2000) based on NSSO (1998b).				

Table 13

Monthly Per Capita Expenditure on Education

		Population Group	All Groups of Population
All Levels of Education			
1. NAS (2007-08)			Rs.36.42
2. NSS (61st round) (Sengupta):		'Extremely Poor & Poor'	All
2004-05		Rs. 6.10	Rs.32.67
2007-08*		Rs. 6.99	Rs. 37.44
3. NSS (63rd round)		'Poor'	All
2006-07	Rural	Rs.4.64	Rs.22.16
2007-08*	Rural	Rs. 4.87	Rs.23.24
2006-07	Urban	Rs. 14.47	Rs.91.60
2007-08*	Urban	Rs.15.17	Rs.96.07
4. NSS (1995-96) 52nd round on Education		(Bottom Quintile)	All
a) All levels of education			
2007-08*	Rural	Rs.18.87	Rs.49.33
	Urban	Rs.38.09	Rs.133.80
b) Elementary Education			
2007-08*	Rural	Rs.20.64	Rs.40.55
	Urban	Rs.36.23	Rs.106.26

Note: * estimated based the actual figures adjusted for increase in prices, based on GDP deflators.

1. 'Total private final consumption expenditure on education' in a year (in Rs Crore) given in the NAS is converted into per capita and per month.
2. The 'extremely poor and poor' in Sengupta et al's study refers to the population below the poverty line.
3. The 'poor' in the 63rd round is a close approximation to the population below the poverty line. The poverty line is updated to the 2007-08 level, by considering the GDP deflators.
4. Expenditure on elementary education (1995-96) is a simple average of expenditure incurred on primary and middle levels of education. Further, the original estimates refer to expenditure per student. They are converted into per capita terms, assuming a household size of 4.8 in rural areas and 4.3 in rural areas [base: NSS 63rd round) (with two adults in each house; others going to school).

Table 14

Monthly Average per Capita Expenditure on Education, 2007-08 (Rs)		
	Rural	Urban
Andhra Pradesh	22.96	114.42
Assam	31.77	78.12
Bihar	11.80	54.39
Jharkhand	17.57	86.33
Gujarat*	14.91	74.12
Haryana	79.16	155.41
Himachal Pradesh	45.21	127.78
Jammu & Kashmir	50.14	105.78
Karnataka	19.75	68.61
Kerala	52.05	86.60
Madhya Pradesh*	8.52	69.21
Chhattisgarh	8.16	86.34
Maharashtra*	16.09	121.57
Orissa	9.70	68.48
Punjab	63.25	141.55
Rajasthan	22.43	88.06
Tamil Nadu	28.09	79.22
Tripura*	20.6	78.68
Uttar Pradesh*	22.07	71.87
West Bengal*	22.23	88.6
Source: Based on NSSO (2008b) Figures for 2006-07 are inflated to 2007-08 level by using GSDP deflators * 2006-07		

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