

Deprivation of Education in Urban Areas: A Basic Profile of Slum Children in Delhi, India

著者	Tsujita Yuko
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Yuko Tsujita*

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Abstract

This paper showed the basic educational status of slum children between 5 and 14 years old. The attendance ratio of slum children is much lower than that of children in Delhi as a whole. Parental perception of education and financing education are the major constraints. Even if children are attending schools, the majority of them are over-aged. There are both demand and supply side reasons for discouraging slum children from attending schooling. As opposed to school-based surveys in previous literature, children in slums are more likely to go to government schools rather than low-fee paying private schools. Some policies are suggested.

Keywords: education, slum

JEL classification: I 20, I21

* Research Fellow, South Asian Studies Group, Area Studies Center, IDE (tsujita@ide.go.jp)

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INSTITUTE OF DEVELOPING ECONOMIES (IDE), JETRO
3-2-2, WAKABA, MIHAMA-KU, CHIBA-SHI
CHIBA 261-8545, JAPAN

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Yuko Tsujita

1. Introduction

The recent rapid urban population growth and relative lack of attention to urban poverty, has possibly exacerbated deprivation in urban areas. As the population of urban areas has grown, that of slums accounted for 22.5% of the urban population in the Census of India 2001. There is often reluctance to regularise informal settlements, and provide basic infrastructure and services to such areas because rural to urban migrants are often regarded as temporary urban residents (UN Millennium Project, 2005b). There is difficulty accessing all slum residents. In addition, there is a lack of disaggregated data within urban areas, inadequate definitions of access to basic infrastructures and services and lack of cost adjustment for living in urban areas. Ultimately, urban poverty is relatively under-researched and likely to be underestimated and greater than assumed.

The absolute number of poor and undernourished individuals living in urban areas has increased in the last 15 to 20 years (Haddad et al., 1999). Likewise in India, the National Sample Survey of India showed the urban population below the poverty line increased from 60 million in 1973/74 to 80.8 millions in 2004/05, although the head count ratio of poverty in urban areas declined from 49.0% in 1973/74 to 25.7% in 2004/2005¹. It is further apparent that most of the large states in India had a similar head count ratio pattern for the population below the poverty line, with it being higher in urban areas than in rural areas. Some, though not many, poverty studies of slum households in India indicate urban poverty can be spatially concentrated in slums, although not all slum households fall below the poverty line². A recent survey shows that poverty incident was 50% (Gupta and Mitra, 2002) in notified sample slums in Delhi, which is much larger than the 14.7% (Government of Delhi, 2008) for Delhi as a

¹ The figures in National Sample Survey in 2004/05 are based on uniform recall period consumption in which the consumer expenditure for all the items are collected from 30 days recall period. The head count ratios by mixed recall period, in which consumer expenditure for all the items except for five non-food items from 365 day recall period are, 21.7%, and the population below the poverty line is 68.2 millions in urban India.

² A slum is a compact settlement with a collection of poorly built shelters mostly of a temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions, where at least 20 households live in the location (Government of India, 2003).

whole³.

Poverty, or low incomes, adversely affect the quality and quantity of education at the macro, country, level (See UN Millennium Project, 2005a), the meso, region and school levels (See Govinda, 2002; Michaelowa, 2001; Watkins, 2000) and the micro, household, level (See Harper et al. 2003; Watkins, 2000). The poverty and education nexus is complex, partly attributable to the difficulty in distinguishing the effects of poverty on education from the effects of education on poverty. Moreover, much education research shows that education deprivation is caused not merely by poverty, but also by related factors (See for example, Dyer and Rose, 2006). In the case of India, these factors might be closely related to gender, caste, labour market opportunities, the quality of learning and facilities in schools. Nevertheless, the disparity in the urban area in terms of education is under-researched (Govinda, 2002). There are a few surveys on slum households in India to investigate educational deprivation.

The purpose of this paper is to examine deprivation of education among children aged 5 to 14 in Delhi and to highlight the difference between slum and other children. The structure of the paper is as follows: Section 2 will review the literature. Section 3 will show some characteristics of schools in Delhi. Section 4 will provide the preliminary analysis of schooling among slum children, and Section 5 will summarise the findings and highlight the scope of further comprehensive research.

2. Literature Review

2.1. Education in India

Lack of primary education in India is particularly serious due to insufficient government commitment (Basu, 1995; Drèze and Sen, 1995), low levels of budget allocation (Tan and Mingat, 1992; Drèze and Sen, 1995), the general public's weak monitoring of education and indifference to education in general, and primary education in particular, (Drèze and Gazedar, 1996) and restricted use of fiscal transfers from the central government. Consequently, basic education has been largely ignored by some state governments, especially in the Hindi-speaking northern states⁴. At the same time,

³ A notified slum ("*jhuggi-jhompdi*") is identified by the respective municipalities, corporations, local bodies or development authorities" (Government of India, 2003). Generally, some notified slum dwellers are provided with compensation at time of eviction.

⁴ Until the constitutional amendment of 1976, each state government of India was in charge of primary education. Even today, each state still has a different education system, including schooling age, upper and lower primary schooling years (although unified to 10 years in total education in all states), number of school days per year, examination system etc.

since the 1980s, it has become increasingly clear that the *de facto* privatization of education, reflected in the growing number of private schools, has become prominent in a large number of states, including the educationally backward states.

“Education for All” has intensified since the 1990s, partly due to the World Conference on Education in 1990 and to the implementation of “*Adjustment with a Human Face*” under economic liberalization in 1991. For example, external aid, especially World Bank loans to primary education, significantly increased in the 1990s, decentralisation and community participation in education was encouraged in the 73rd and 74th amendments to the constitution in the early 1990s, and free and compulsory basic education from 6 to 14 years of age as a fundamental right was added to the 86th Constitution of India in 2002. Nevertheless, “Education for All” is still an uncompleted task, since approximately 17% of children aged 5 to 14 are still out of the school, and 36% of the total population of India are illiterate in 2004/05 (Government of India, 2006). This overall picture of education in India implies that educational opportunities and attainment for the urban deprived are much lower than for the affluent sections of the population. The 2001 Census showed the literacy rate in Delhi was 81.7%, while in slum areas in Delhi, it was 55.6%.

2.2. Education in Slums

Despite a large number of studies on education in India, education related to children in urban slum areas has not been adequately researched and attention in education research has not been paid to the high level of disparities within the urban sector (Govinda, 2002). He states,

Surprisingly, successive policy documents on education have made no mention of the problems of education among the urban disadvantaged. Consequently, there is no coherent perspective on tackling the problems of education of such children, and nor is there adequate information on the educational provisions reaching disadvantaged children in urban areas (Govinda, 2002 p.8).

2.2.1. Formal Schooling

The limited numbers of studies of education in slum areas are confined mainly to statistical figures extracted from secondary data and analyses based on small samples of primary data. The National Sample Survey of India showed that all notified slums have a primary school within a distance of 1 kilometre, while only 68% of non-notified slums have a primary school at the same distance in 2002 (Government of India, 2003).

This does not mean that school exists within the slum areas (Aggarwal and Chugh, 2003) and all children in slums are in school (Jha and Jingran, 2005, Rathor, 2003). Moreover, Banerji (2000) has shown that a high drop out ratio exists among primary school children in Mumbai and Delhi slums and they are not engaged in work, either. School availability at a short distance does not explain why quite a large number of slum dwellers are still less educated. Economic problems were one of the main reasons why children cannot attend school from slum studies in Lucknow (Rathor, 2003) and some big cities (Jha and Jhingran, 2005). According to the UNICEF survey of urban areas in seven Indian states, monthly household expenditure on primary education per child as a proportion of per capita monthly consumption expenditure is remarkably high, ranging between 11 to 21 percent (Mehrotra, 2006). This survey does not specifically focus on slum areas, where the burden of education seems to be higher, as households are poorer.

Paradoxically, some studies indicate fee-paying private schooling is prevalent in slum areas. Tooley and Dixon (2007) remark on the growing number of private schools in notified slum areas in Delhi, which serve to educate children from low-income families, although this research does not define low income. If private schooling is the slum dweller's choice, it is necessary to find out under what circumstances children can be consistently sent to school. In fact, an educational study of slum areas in Delhi found that few families could bear the expense of sending children to school, and 10 to 20 percent of them had dropped out by the end of the academic year in private, unrecognized schools due to their inability to pay the fees (Aggarwal and Chugh, 2003).

2.2.2. Non-Formal Education

Certain non-governmental organizations (NGOs) provide basic education for urban disadvantaged children, including children living in slums, child labourers etc. in various innovative ways (See Chakrabarty, 2002; Nambissan, 2003). School attendance and the outcomes of non-formal education run by the government or NGOs in India has not been academically analysed so far, to my knowledge.

2.2.3. Government Programmes in Slums

Various central governmental poverty alleviation programmes, including employment, housing, micro financing, among others, do not target slum dwellers per se but often do target populations below the poverty line. Only the National Slum Development Programme aims to upgrade the basic infrastructure in slum areas. Similarly, slums dwellers are not usually included in education programmes. *Sarva Shiksha Abhiyaan*

(SSA), which has been implemented since 2000/01 to universalize primary educational by 2010, exceptionally mentions urban deprived children as one of the four specially targeted groups. It seems, however, difficult to retain at school the SSA's targeted children, including street children, child labourers, domestic workers and the children of parents who are engaged in professions that make the children's education difficult. The National Literacy Mission targets the most productive and reproductive age group of 15 to 35, which has enlarged to include the age group 9 to 14 years outside formal and non-formal schooling. A variety of basic learning opportunities are at least theoretically available for urban deprived children in slum areas.

2.3. Locating the Analysis of Education in slums within a Macroeconomic Context

Since the 1980s, economic growth has been robust, at more than five percent per annum and seven to eight percent in recent years. Accelerated economic growth has been service-industry based in terms of value added, i.e. over 50% of GDP came from the service sector (Government of India, 2007). However, growth in employment has been sluggish and the share of regular waged workers has declined over the same period. A large majority of the workforce is still engaged in the informal sector with meager earnings and only a handful of the workforce is involved in globally competitive industries and services⁵. The informalisation of employment has possibly further increased the number of poor households and worsened their own and/or their children's access to education. In fact, the number of poor below the poverty line have nearly doubled in Delhi from 1.2 millions in 1999/00 to 2.3 millions in 2004/05 (Government of Delhi, 2008). Furthermore, sluggish growth in the job market and informalisation has possibly heightened the tension between education and labour market outcomes (Harriss-White, 2003). From this contextual background, looking at the information from slum children's educational profile will suggest the inter-generational impact of poverty and employment on children's education among the slum dwellers, and highlight the strengths and weaknesses of the current policy and programmes.

3. Basic Supply-side Analysis based on District Information System for Education

Access, dropout and completion of schooling can be determined not only by demand side factors, but also by supply side factors, such as school related factors. Before analyzing

⁵ As a result of the informalisation of employment, "only 7% of the total workforces were employed in the formal or organized sector (all public sector establishments and all non-agricultural establishments in the private sector with 10 or more workers) in 1999/2000" (<http://dget.nic.in/dex/empscenario.pdf>, p.2) accessed on 3rd February, 2006.

household data, this section will provide a description of the presence, quality and other characteristics of schools in Delhi, using the District Information System for Education. DISE data (2007-08) has 4,742 schools in Delhi (from primary to senior secondary schools), of which 62.8% of the schools are government schools. There are hardly any schools inside the slum areas (Aggarwal and Chugh, 2003), except for private unrecognised residential types of schools. Nevertheless, it is not easy to select schools only attended by slum children, although I obtained a list of schools in the surveyed areas where slum children attend, based on interviews with *Pradhans* (Slums chiefs) and informal leaders. The following major characteristics are found, based on data in Delhi as a whole.

- The density of schools, 27.3 primary schools and 15.4 upper primary schools per 10 sq km, is the highest in the country, and the proportion of primary to upper primary schools (1.8 primary schools to 1 upper primary school) meets the national norms. This does not mean slum children attend schools, as it is going to be discussed in the next section.
- Multiple government schools share the same building in different shifts, due to the growing number of students, especially boys.
- School facilities and pupil-teacher ratios are generally favourable in Delhi schools, particularly for private schools. As is the case throughout India, private recognised schools are generally better equipped and have a better pupil-teacher ratio. Unfortunately, very few children in slums attend private schools in my data, as it will be discussed.
- Teachers whose own caste background is Other Backward Classes, Scheduled Castes and Scheduled Tribes in schools are lower in Delhi (11.9%, 2.1% and 7.9%) respectively, than national average (12.3%, 9.1% and, 32.8% respectively), when the proportion of these caste children is quite high in slums (28.1%). It is pointed out that discrimination against lower caste is ingrained in the consciousness of teachers (and students), reflecting pedagogical exchange in schools (Bhargava, 2003). This is likely to affect children's retention.
- The ratio of over-aged and under-aged children in schools (24.2%) is much higher than the national average (15.7%). There could be a large number of

under-aged children in the affluent section of Delhi, while slum children are more likely to be over-aged.

It is widely acknowledged that educational statistics, based on school surveys, are often over-reported in India. Tilak and Varghese (1983) estimated that government statistics on school enrollment tend to overestimate by around at 25%. At the same time, statistics on private schooling are likely to be underestimated, since unrecognised schools are missed out. Since there are very few surveys on education in slum areas, educational analysis for the urban deprived often depend on government school surveys. The following section will highlight slum children's educational status based on a household survey.

4. Household Survey

4.1. Sampling

In order to get a representative sample to generalize up to urban slum areas in Delhi, the capital city of India, the household survey used random sample techniques. According to the list of "*Jhuggi-Jhompdi*" (notified slums) prepared by the Delhi Development Authority, there were 1,000 slum clusters and 478,175 households as of 1998 in nine revenue districts.

Based on a population of 478,175 household, the 95% confidence level and confidence interval of 5 turned out to be 384 households. I increased my sample size a little to 417 households. In this survey, the sample is confined to a total of 50 slum clusters. Households were selected using stratified random sampling techniques on the following basis.

1. Slum clusters with 200 and more households distributed across 9 revenue districts in Delhi are listed.
2. Given the proportion of the number of clusters in each district C_z ($z=1\dots 9$) to the total number of clusters across all districts, C is taken as the weight to arrive at the distribution of 50 sample clusters across the 9 revenue districts. The number of clusters to be picked for sampling is X_z .
3. Drawing on the X_z number of specific sample from the C_z number of clusters located in each district, all the C_z clusters in each cluster with their detailed addresses are coded and put into a box from which X_z are drawn out. X_{zi} stands for a specific cluster in district Z . The process is repeated for all nine revenue districts.
4. Once clusters from each district have been identified, the distribution of 417

households is made using the proportion of households in each cluster to the total number of households in all 50 clusters, as weight.

5. In each cluster, the investigators prepares a list of households, based on which a lottery system selects the specific households for the detailed interviews to fill in the questionnaires.

The household survey was carried out from November 2007 to March 2008 by the author and two field investigators. Among 417 households, the number of aged 5 to 14 children turned out to be 718. The distribution of age and gender is shown in Table 1. The ratio of SC/ST children is 28.1% and that of Muslim is 25.2%.

Table 1 Total Number of Children in Slums

Age	Total	Male	Female
5	89	55	34
6	61	33	28
7	66	36	30
8	75	41	34
9	62	33	29
10	98	49	49
11	46	30	16
12	93	63	30
13	75	48	27
14	53	29	24
Total	718	417	301

Source: Author's Survey.

4.2. Preliminary Analysis of Schooling among Slum Children

The National Sample Survey in 2004/05 showed that the percentage of children aged 5 to 14 who are currently attending school in Delhi is 89.5% for males and 91.3% for females. Since the national figures are 84.7% for males and 79.2% for females, the attendance ratio in Delhi is higher than India as a whole. Interestingly, the attendance ratio of females is slightly higher than that of males. Table 2 shows the current status of education among slum children. Despite the availability of neighbourhood schools in the school-based survey, the attendance ratio is only 54.5%, which is much lower than the attendance ratio in Delhi as a whole. It shows a similar pattern of attendance ratio across gender that the attendance ratio of girls (55.8%) is slightly higher than that of boys (53.5%) in slums.

The ratio of children who have never attended school to total children is 31.5%. Theoretically, the never-attended ratio is expected to decline by becoming older. However, due to fresh migrants, there are some fluctuations in the age-wise ratio. The

never-attended ratio for females is 32.9%, a little higher than that of males (30.5%). The distribution of reasons for “never attended” is underage (46.5%), followed by financial constraints (28.8%) and parents’ perception of education (10%). Inappropriate parental understanding for age for admission and importance of education and cost of education are the most common reasons in slum areas. The National Sample Survey in 2004/05 showed that the most common reasons for never-attended school among 5 to 14 year-old children are “education is not considered as necessary” and “they have to supplement household income”. It seems there is not much difference in never-attended reasons among slum and other children, perhaps because never-attended children are likely to be concentrated in slum areas.

Table 2 Percentage Share of Educational Status

Age	Currently not attending		Currently Attending	All
	Never Attended	Ever Attended		
5	58.4	21.3	20.2	100
6	44.3	9.8	45.9	100
7	37.9	0.0	62.1	100
8	30.7	2.7	66.7	100
9	29.0	4.8	66.1	100
10	28.6	9.2	62.2	100
11	30.4	4.3	65.2	100
12	18.3	22.6	59.1	100
13	20.0	30.7	49.3	100
14	13.2	30.2	56.6	100
Total	31.5	14.1	54.5	100

Source: Author's Survey.

Dropout rates in Delhi were 2.6 % among standard I to V students, 16.3% among standard I to VIII students and 46.26% among standard I to X students in 2005/06 (Government of India, 2008). Table 3 shows dropout rates of slum children. Although the table is age-wised data, the dropout rate is 20.5% in slums, which seems to be higher than the figure of Delhi, at least up to standard VIII. The Government of Delhi adopted the policy of “No Retention” till standard VIII, under which students of more than 75% attendance in the school are entitled to go to the next higher standard. However, the dropout rates are particularly high at 5 and 12, 13 and 14 years old, i.e. implying children in the lowest and highest standards. It is interesting that dropout ratio of girls (16.8%) is lower than that of boys (23.1%). Particularly, the rate at the age of 5 is much lower for girls (38.5%) than that for boys (58.3%). It seems that once girls start to go to school, they are less likely to drop out. The caste-wise data including both Hindus and Muslims shows that the percentage of out of school children, defined as ever

attended but currently not attending, and dropout children, to the total children, among non-SC/ST children, is higher (48.6%) than that of SC/STs (37.2%). Since non-SC/ST children cannot disaggregate upper caste and other backward caste at the time of writing, these needs to be investigated further.

Table 3 Percentage of Dropout

Age	Total	Male	Female
5	51.4	58.3	38.5
6	17.6	25.0	11.1
7	0.0	0.0	0.0
8	3.8	4.2	3.6
9	6.8	7.7	5.6
10	12.9	8.6	17.1
11	6.3	4.5	10.0
12	27.6	32.1	17.4
13	38.3	39.5	36.4
14	34.8	37.0	31.6
Total	20.5	23.1	16.8

Source: Author's Survey.

Dropout is closely related to over-age. Table 4 shows the percentage of children in each class by age. It is noted that the structure of school education in Delhi is 5-year-primary, 3-year-upper primary and 2-year-secondary within the national framework of 10-year education. Age of admission to standard I is officially 5 years old. The gray-shaded columns are the right standard at right age as per Government of Delhi. For example, 16.4% of children in standard I is 5 years old who are admitted at the “right” age. Any child who is more than 6 years old is regarded as over-aged children. In standard I, 10.4% of students are 6 years old, 37.3% of students are 7 years old, 16.4% of students are 8 years old, and 11.9% of students are 8 years old. That means, 83.6% of students in standard I is over-aged among slum children. They are admitted late for various reasons. Firstly, there are administration-related factors. Most of the children do not have a birth certificate, which is mandatory for admission for any government school. Generally, parents must get an affidavit instead of a birth certificate. Application for school admission date is also sometimes limited to very short period of time. If parents are busy, or have forgotten on that specific day (s), children are less likely to be admitted later due to non-availability of seats. Secondly, there can be school-side problems. There are often not enough seats for all the children in the area. In our interview with *Pradhans* (slum chiefs) and informal leaders in all the slums, there are several primary

schools which slum children attend from the same slums, and children are not necessarily attending the nearest schools. Thirdly, migration in particular seems to affect slum children⁶. For example, migration prevents a family from obtaining a birth certificate or a transfer certificate at the time of admission to school and from continuously attending school due to occasional visits home, and from understanding the language used at school. Table 4 clearly shows the high over-aged-school going children in slum areas. The exception is 13 and 14 years old, when a large number of students seem to have already dropped out. It seems the surviving students are in school at right age. This can also be attributed to a subtle way of discouraging attendance by the supply side, as the grade becomes higher. At the end of standards X and XII, students in Delhi take the Central Board of Secondary Education exam. To raise the pass rate at this exam, children who are less likely to pass, are discouraged from turning up for the exam, or from continuing schooling before taking the exams, based on interviews with some community leaders in slums.

Table 4 Percentage of Children in Each Class by Age (%)

	5	6	7	8	9	10	11	12	13	14	Total
Pre School	28.0	36.0	16.0	8.0	12.0	0.0					100
Standard I	16.4	10.4	37.3	16.4	11.9	4.5	3.0	0.0			100
Standard	0.0	17.4	5.8	33.3	21.7	14.5	2.9	4.3	0.0		100
Standard	0.0		9.1	15.6	20.8	33.8	6.5	9.1	5.2	0.0	100
Standard	0.0			2.3	4.5	38.6	22.7	20.5	9.1	2.3	100
Standard	2.0				0.0	8.0	22.0	48.0	12.0	8.0	100
Standard	0.0					4.8	0.0	38.1	42.9	14.3	100
Standard	4.5						0.0	9.1	50.0	36.4	100
Standard	0.0							18.2	18.2	63.6	100
Standard	0.0								66.7	33.3	100
Standard	0.0										100.0

Source: Author's Survey.

In India, there are several types of educational institutions. Basically schools are classified government- and private-run schools. Private schools are further disaggregated into aided schools and unaided schools. The former is privately managed but regular maintenance fees, mainly teachers' salaries are granted by the government. The latter is completely managed and financed by private parties. The other way of classifying private schools is recognized schools and unrecognized schools. All private schools are expected to be under the recognition, instruction and inspection of the state

⁶ A study of notified slums in Delhi indicated approximately 20% of population had lived in Delhi for less than 10 years (See Mitra and Tsujita, 2006).

government. However, unrecognized schools are said to be mushrooming in recent years (See, for example, Tooley and Dixson, 2007). The All India Educational Survey in 2002 showed that only 52.0% of boys and 57.1% of girls attended government schools at primary level in the urban area. The corresponding figures in Delhi are expected to be much higher than these. Table 5 shows the percentage share of attending school types. 97.2% of children attend government schools, while only a small percentage of children go to private or other (mainly run by NGO) schools. The private-school-going-children among males is 97.6% and the female counterpart is 96.5%. Among non-SC/ST castes, boys (97.5%) are slightly more likely to attend private schooling than girls (95.3%). Some argued that the growth of low-fee paying private schools in notified slums are catering for the need of low income families (see for example, Tooley and Dixson, 2007), however, this households survey in Delhi slums shows that very few slum children attend private schools. The location of schools in and around notified slum areas does not mean that slum children can attend those private schools. It is often found that middle-class particularly government quarters and lower middle-class residential colonies, exist near slums.

Table 5 Age-Wise Percentage Share of Attended School Type (%)

Age	Government school going children	Private School going children	Other type of school going children
5	97.3	2.7	0.0
6	97.1	2.9	0.0
7	100.0	0.0	0.0
8	96.2	1.9	1.9
9	97.7	0.0	2.3
10	100.0	0.0	0.0
11	93.8	3.1	3.1
12	96.1	2.6	1.3
13	93.3	3.3	3.3
14	100.0	0.0	0.0
Total	97.2	1.6	1.2

Source: Author's Survey.

It is widely acknowledged that government education is not free. The NSS educational survey in 1995/96 found that average annual expenditure per student of age 5-24 years pursuing general education by primary school in India is Rs. 257 in government school and Rs. 1,424 in private unaided schools. The expenditure of private unaided schools is approximately 5.5 times more than that of government schools. In

Delhi, the expenditure is much higher at Rs. 2,335 (government and private schools). Table 6 shows annual expenditure on education per government-school-going children. As a child is promoted to upper standards, the expenditure increased, mainly due to two items: 1) private tuition, and 2) stationery, textbooks and books. 17.4% of school-going-children aged 5 to 14 take private tuition. The older age students are more likely to be sent to private tuition, such as 30.9% (12 years old), 35.1% (13 years old) and 60.0% (14 years old). In other words, private tuition is essential to continue schooling among slum children or only those who take private tuition survive till upper standard. The reason why stationery, textbooks and books costs are high can be related to memorising what they learnt at school and tuition. Table 6 shows girls spend more than boys, particularly in the upper standards. The educational expenditure pattern across gender is different in the lower echelon of economy from population as a whole, i.e. average annual expenditure per student age 5 - 24 pursuing general education for males in National Sample Survey is Rs. 919 and that of females is Rs. 882 (Government of India, 1998), although the age group in the NSS is much larger than this household survey. The cost of uniforms and stationery, books and notebooks account for a huge proportion of the total cost. Only girls are awarded some incentives after standard VIII (Table 7). Even if the numbers of incentives for girls are much higher after standard VIII, the total amount of out-of-pocket expenditure for girls is higher, as standard become higher. Some incentive schemes, such as provision of textbooks, free uniforms, etc. might not have reached the girl children.

Table 8 shows the disparity in economic conditions in slum households. As per capita monthly expenditure increases, per child monthly educational expenditure rises (Table 8). Toward the highest per capita monthly expenditure households, it is expected that educational expenditure takes a large share of total expenditure. In particular, private tuition fees are higher in higher monthly per capital expenditure households, which is likely to affect children's retention and learning outcome at school.

Table 6 Average annual expenditure (Rs.) per reporting-government-school-going student by item of expenditure

Item of expenditure	Male			Female			Person		
	Standard I-V	Standard VI-VIII	Standard IX-X	Standard VI-VIII	Standard IX-X	Standard IX-X	Standard I-V	Standard VI-VIII	Standard IX-X
Tuition fee & other required fees	120	211	480	108	217	110	115	214	332
Uniforms & Other clothing	87	305	300	75	372	1000	82	331	580
Stationary, Textbooks, Books	282	825	1067	238	1067	2250	263	919	1540
Meals, transportation & lodging	26	39	200	10	115	500	19	68	320
Coaching, private tuition fees	43	348	1333	41	692	1200	42	482	1280
Parents Association Fees	23	17	40	19	17	0	21	17	24
Others (e.g. school excursions)	6	5	17	10	49	0	8	22	10
Total	645	1698	3437	586	2603	4060	619	2039	3686

Source: Author's Survey.

Table 7 Average annual monetary value of educational incentives estimated by parents of government school-going-students (Rs.)

Standard	Male	Female
1	85.3	90.3
2	85.2	97.4
3	93.6	89.7
4	92.6	87.5
5	48.6	50.0
6	26.7	33.3
7	69.2	44.4
8	0.0	50.0
9	0.0	100.0
10	0.0	100.0
Total	74.0	80.8

Source: Author's Survey.

Table 8 Population - percentiles of monthly per capita expenditure distribuion

	average monthly per capita expenditure (Rs.)	per child (5-14) per month educaional expenditure (Rs.)
10th	254.2	0.0
20th	298.0	8.8
30th	323.3	15.8
40th	356.1	18.3
50th	384.8	23.3
60th	421.4	30.2
70th	476.9	41.7
80th	522.3	58.8
90th	631.9	91.7
100th	812.3	150.0

Source: Author's Survey.

What intergenerational factors affect children's schooling? This basic analysis is confined to children's household's head's employment-related factors. Among the never-enrolled children, children's household head's occupation is distributed as follows: sales and trade workers (27.1%), followed by drivers, loading and unloading and other transport and storage, i.e. cycle and auto-rickshaw drivers (18.2%), manufacturing workers (12.1%) and personal service workers (10.3%). Among the never-enrolled children, 49.0% of their household heads are self-employed (own account workers). Among the dropout children, children's household head's occupation shows the same pattern: sales and trades (26.1%), followed by cycle and auto-rickshaw drivers (20.7%) and manufacturing workers (13.0%). Attendance ratios among the

children whose parental occupation is cycle and auto-rickshaw drivers, mining and construction, sweeper and clearer, personal services and community and social services, are less than half (Table 9-1). In employment category wise, attendance ratios among the children whose household head is casual labour and self-employed, are lower than that of children whose household head is regular/salaried employees.

Table 9-1 Distribution of children's educational status by household head's occupation (%)

	No of Observations	Never Attended	Dropout	Currently Attending	Total
1 Agriculture labour and farmer	2	50.0	0.0	50.0	100
2 Semi-professional	20	5.0	0.0	95.0	100
3 Sales and trade	191	30.4	12.6	57.1	100
4 Manufacturing	94	27.7	12.8	59.6	100
5 Drivers, loading and unloading & other transport & storage	102	38.2	18.6	43.1	100
6 Mining and construction	46	43.5	10.9	45.7	100
7 Mechanic, electricians and repairing	21	19.0	14.3	66.7	100
8 Tailoring	69	29.0	7.2	63.8	100
9 Security	25	12.0	24.0	64.0	100
10 Sweeper and cleaner	30	33.3	23.3	43.3	100
11 Personal services	51	43.1	15.7	41.2	100
12 community and social services	9	44.4	11.1	44.4	100
13 Business services	0	0	0	0	0
14 Daily wage labour	16	37.5	12.5	50.0	100
15 Total	676	31.7	13.6	54.7	100

Source: Author's Survey.

Table 9-2 Distribution of children's educational status by household head's employment category (%)

	No of Observations	Never Attended	Dropout	Currently Attending	Total
1 Regular Wage/Salaried	191	26.7	11.0	62.3	100
2 Casual labour	141	35.5	14.2	50.4	100
3 Self-employed (own-account)	311	33.8	15.8	50.5	100
4 Employer	28	25.0	7.1	67.9	100
5 Home worker	1	100.0	0.0	0.0	100
6 Total	672	31.8	13.7	54.5	100

Source: Author's Survey.

Government jobs are parents' most preferred jobs for children. 34.4% of boys and 37.3% of girls who are currently attending schools are hoped by parents to hold government office in the future. The outsourcing of government jobs, particularly low ranked jobs, such as sweepers, has progressed in recent years. Jeffery et al. (2004) found that scheduled caste households in Uttar Pradesh started to withhold education from their children over the decade, due to limited employment opportunities even after being educated. The labour market beyond schooling might determine how many years children are sent to school, particularly because 42.7% of children in the sample are the first generation of learners, which is defined as none of the parents have ever attended schools.

This basic educational profile of slum children shows that the attendance ratio of slum children is much lower. Even if they attend school, quite a large percentage of children are over-aged. All, except for a few, attend government school, as opposed to some previous school-based surveys. More comprehensive analysis on schooling among

slum children, from a perspective of various factors, such as international, national, community, school, household and individual factors, will be further investigated.

5. Conclusion

This paper showed the basic educational status of slum children between 5 and 14 years old. The attendance ratio of slum children is much lower than that of children in Delhi as a whole. Parental perception of education and financing education are the major constraints. Even if children are attending schools, the majority of them are over-aged. There are both demand and supply side reasons for discouraging slum children from attending schooling. As opposed to school-based surveys in previous literature, children in slums are more likely to go to government schools rather than low-fee paying private schools. The assistance of admission process and issuing of birth certificates, especially for children whose parents have never attended school and migrated from rural areas, can be promoted. Moreover, the existing various government incentive programmes can be improved to reach slum households.

This basic profile is confined to children's educational status. More comprehensive fully-fledged papers on the education of slum children will be written based on this basic analysis.

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References

- Aggarwal, Y. P. and S. Chugh (2003) "Learning Achievement of Slum Children in Delhi", Occasional Paper 34, New Delhi: National Institute of Educational Planning and Administration.
- Banerji, R. (2000) "Poverty and Primary Schooling: Field Studies from Mumbai and Delhi", *Economic and Political Weekly*, 35(10), pp. 795-802.
- Basu, A. (1995) *Public Expenditure Decision Making: The India Experiences*, Thousand Oaks and New Delhi: Sage Publications.
- Bhargava, P. (2003) "The Threshold of Intergenerational Transfer of Poverty", Paper for International Conference on Staying Poor: Chronic Poverty and Development Policy, Manchester: Chronic Poverty Research Centre.

- Chakrabarty, V. (2002) "Education of Urban Disadvantaged Children" in R. Govinda ed. *India Education Report*, New Delhi: Oxford University Press.
- Drèze J. and A. Sen (1995) *India: Economic Development and Social Opportunity*, New Delhi: Oxford University Press.
- Drèze, J. and H. Gazedar (1996) "Uttar Pradesh: The Burden of Inertia", in Drèze J. and A. Sen eds. *Indian Development: Selected Regional Perspectives*, New Delhi: Oxford University Press.
- Dyer, C. and P. Rose (2006) *Chronic Poverty and Education: A Review of Literature*, revised draft, Manchester: Chronic Poverty Research Centre, January 2006.
- Government of Delhi (2008) *Economic Survey 2007/08*. Delhi.
- Government of India, Ministry of Finance, Economic Division (2007) *Economic Survey 2005/06*, New Delhi.
- Government of India, Ministry of Human Resource Development (2008) *Annual Report 2007-08*, New Delhi.
- Government of India, Ministry of Statistics and Program Implementation, National Sample Survey Organisation (1998) *Attending Educational Institutions in India: Its Level, Nature and Cost, NSS 52nd Round (July 1995-June1996)*, New Delhi.
- Government of India, Ministry of Statistics and Program Implementation, National Sample Survey Organisation (2003) *Condition of Urban Slums 2002: Salient Features, NSS 58th Round (July 2002-December 2002)*, New Delhi.
- Government of India, Ministry of Statistics and Program Implementation, National Sample Survey Organisation (2006) *Status of Education and Vocational Training in Japan, NSS 61st Round (July 2004-June 2005)*, New Delhi.
- Govinda, R. ed. (2002) *India Education Report*, New Delhi: Oxford University Press.
- Gupta, I and A. Mitra (2002) "Rural Migrants and Labour Segmentation: Micro-Level Evidence from Delhi Slums", *Economic and Political Weekly*, 37(2), pp. 163-168.
- Haddad, L., M. T. Ruel and J. L. Garrett (1999) "Are Urban Poverty and Undernutrition Growing?: Some Newly Assembled Evidence", *World Development*, 27(11), pp. 1891-1904.
- Harper, C., R. Marcus and K. Moore (2003) "Enduring Poverty and the Conditions of Childhood Lifecourse and Intergenerational Poverty Transmissions", *World Development*, 31(3), pp. 535-554.
- Harriss-White, B. (2003) *India Working: Essays on Society and Economy*, Cambridge: Cambridge University Press.
- Jeffrey, C., R. Jeffery and P. Jeffery (2004) "Degrees without freedom: Accessing the impact of formal education on Dalit young men in North India," *Development and*

- Change*, 25 (5), pp. 963-986.
- Jha, J. and D. Jhingram (2005) *Elementary Education for the Poorest and Other Deprived Groups: Real Challenge of Universalization*, Delhi: Manohar.
- Mehrotra, S. (2006) "What Ails the Educationally Backward States? The Challenge of Public Finance, Private Provision and Household Costs", in Mehrotra, S. ed. *The Economics of Elementary Education in India: The Challenge of Public Finance, Private Provision and Household Costs*, New Delhi: Sage.
- Michaelowa, K. (2001) "Primary Education Quality in Francophone Sub-Saharan Africa: Determinants of Learning Achievement and Efficiency Considerations", *World Development*, 29 (10), pp. 1699-1716.
- Mitra, A. and Y. Tsujita (2006) "Migration and Wellbeing at the Lower Echelons of the Economy: A Study of Delhi Slums", Institute of Developing Economies Discussion Paper No. 51, March 2006.
- Nambissan, G. B. (2003) "Educational Deprivation and Primary School Provision: A Study of Providers in the City of Calcutta", Institute of Development Studies Working Paper 187.
- Rathor, A. (2003) *Slum Dwellers Course on Development*, New Delhi: Sarup and Sons.
- Tan, J. and A. Mingat (1992) *Education in Asia: Comparative Study of Cost and Financing*, Washington D.C.: World Bank.
- Tilak, J.B.G. and N.V.Varghese (1983) "Resources for Education in India", Occasional Paper 2, New Delhi: National Institute of Educational Planning and Administration.
- Tooly, J and P. Dixon (2007) "Private Schooling for low-income families: A Census and Comparative Survey in East Delhi, India," *International Journal of Educational Development*, 27, pp. 205-217.
- UN Millennium Project (2005a) *Toward Universal Primary Education: Investments, Incentives and Institutions*, London: Earthscan.
- UN Millennium Project (2005b) *A Home in the City*, Task Force on Improving the Lives of Slum Dwellers, London: Earthscan.
- Watkins, K. (2000) *Oxfam Education Report*, Oxford: Oxford University Press.