



Consortium for Research on  
Educational Access,  
Transitions and Equity

## Access to and Exclusion from Primary Education in Slums of Dhaka, Bangladesh

Stuart Cameron

CREATE PATHWAYS TO ACCESS  
Research Monograph No. 45

September 2010



University of Sussex  
Centre for International Education

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Consortium for Research on  
Educational Access, Transitions & Equity

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## **List of Acronyms**

BANBEIS	Bangladesh Bureau
BRAC	(formerly) Bangladesh Rural Advancement Committee
ComSS	Community and Schools Survey
CREATE	Consortium for Research on Education Access, Transitions and Equity
CUS	Centre for Urban Studies
EFA	Education for All
FIVDB	Friends in Village Development, Bangladesh
GPS	Government Primary School
HIES	Household Income and Expenditure Survey
LGED	Local Government Engineering Department
MICS	Multiple Indicator Cluster Survey
MOPME	Ministry of Primary and Mass Education
NGO	Non-Government Organisation
PEDP	Primary Education Development Plan
RNGPS	Registered Non-Government Primary School
Tk.	Taka (Bangladeshi currency)
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Social and Cultural Organisation
UNICEF	United Nations Children's Fund

## **Exchange rate**

Official exchange rate (2008): 100 Bangladeshi Taka = US\$1.46

Purchasing power parity conversion rate (2008): 100 Bangladeshi Taka had the same purchasing power as US\$3.92

(Source: [databank.worldbank.org](http://databank.worldbank.org))

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## Preface

This research monograph by Stuart Cameron's explores access to education in the slums of Dhaka in Bangladesh. It provides original insights into an under researched and under represented group in Bangladeshi society. Slum dwellers are poor and powerless and their voices are rarely heard. Using the CREATE model of 'zones of exclusion' this monograph analyses the factors that are involved in gaining and losing access. It compares the experience of slum households with those from a large rural sample of children surveyed as part of CREATE's main data set in Bangladesh.

The findings show that urban slum dwellers in Bangladesh are at least as marginalised as the rural poor. While the Government of Bangladesh as well as national and international NGOs have made concerted and innovative policy efforts to include the rural poor in education through alternative education, stipend schemes and school building programmes, these interventions have not been extended on the same scale to the growing numbers of the urban poor.

The problems of access to education faced by slum dwellers are fundamental. There are substantial areas lacking access to any government school and which are too poor for even the lowest cost private provider. Urban migration is exacerbating the problem. The proportion of children who never enrol in school in the urban sample (15%) is double that of the rural sample. One in ten pupils who are enrolled drop out before reaching Grade 5. A large proportion of children are 'silently excluded' from education, meaning that they attend infrequently, repeat years of schooling and have poor achievement. Upon completion of primary education, very few children from these slums make the transition to secondary schooling.

Slum dwellers problems are not limited to access to education. Their precarious work and living conditions make them a particularly vulnerable group. Paradoxically some in authority appear to avoid extending services to the slums for fear of encouraging more migration into the cities, though this is hardly the main driver. Slums are characterised by (often politically motivated) crime and violence and instability. However, as this paper makes clear, slums are a long-standing and significant part of Dhaka that will not simply disappear. Moreover, slum dwellers and their children play an increasingly important part in Bangladesh's growing economy and should be invested in rather than ignored.

This monograph highlights issues surrounding urbanisation, the urban poor and the conditions of slum dwellers in Bangladesh that have repercussions beyond the realm of education. Through this analysis of deprivation and exclusion, the monograph makes a powerful case for government and other actors to deliver on promises of universalising access to basic education.

Keith Lewin  
Director of CREATE  
Centre for International Education  
University of Sussex

## **Summary**

Bangladesh's urban population is rising fast. In the capital, Dhaka, some four million people live in slums. They are lacking in wealth, power and social connections; probably under-counted in national surveys; and under-served by both government and non-government organisations, many of whom still see poverty as a rural issue or see the urban poor as less deserving of help. This paper draws on primary research conducted by a team at BRAC University Institute of Educational Development in 2008 as part of the CREATE programme. Focusing on four slums in Dhaka, it examines what school options were available and what the barriers are. Using the CREATE zones of exclusion framework and survey data from the four slums, it looks at how many children were never enrolled in school, how many dropped out from primary, how many were 'virtually excluded' (attending school but not learning), and how many finished primary but were not able to make the transition to secondary. Using statistical analysis and other information from interviews it also assesses what household and individual factors are associated with each type of exclusion. Finally, it emphasises the need for a greater focus on education for the urban poor and considers some policies that could improve the situation.



# **Access to and Exclusion from Primary Education in Slums of Dhaka, Bangladesh**

## **1. Introduction**

Bangladesh is still a predominantly rural country, but its urban population is rising fast. Some 12 million people live in the capital, Dhaka<sup>1</sup>, a number that is projected to grow to 22 million by 2015 (World Bank, 2007:101). An estimated one-third of the city's population live in slums (CUS et al., 2006). The people who live in slums are lacking in wealth, power and social connections; probably under-counted in national surveys; and under-served by both government and non-government organisations, whose focus has traditionally been on rural development.

This paper tries to assess what access to primary schools children living in slums in Dhaka have, and who are excluded. The second part reviews the scant research literature on Dhaka's slums and some of the wider literature on education in Bangladesh to consider what access to education people in slums have, and what the barriers are.

The rest of the paper draws on primary research conducted by a team at BRAC University Institute of Educational Development in 2008. This involved a survey of around 1,600 households in four slums, based on the household questionnaire also used in rural areas as part of the CREATE Community and School Survey. An additional survey of 400 of these households focused on how educational decisions were made and some in-depth interviews were done with about 30 households. Through informal group interviews we also created rough maps of what schools were used by children in the slums.

The third part of the paper uses this data to assess what schools were available to children in the four study areas and who went to them. The fourth part uses 'zones of exclusion' to analyse which children are excluded from school, relating this to what schools were on offer. In a final part the paper draws implications for government, NGOs and donor agencies.

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<sup>1</sup> Dhaka is the name of a division (Bangladesh's top-level administrative region, of which there are seven), of a district within Dhaka Division, and of the capital city which occupies about a fifth of Dhaka Division. Unless stated otherwise I am referring to the city in this paper. To add to the confusion, though, there are several quite different definitions of the city borders. The area under the jurisdiction of the city government, Dhaka City Corporation is 276 km<sup>2</sup> and had a population of 7 million in 2008 (BBS, 2009). The much bigger Dhaka Statistical Metropolitan Area consists of the city corporation and the peri-urban areas beyond it, and stretches beyond Dhaka District into neighbouring districts, with an area of 1353 km<sup>2</sup> and a population of some 12-13 million in 2008 (BBS, 2009). The primary research that this paper is based on was conducted entirely within the City Corporation. With secondary sources it is not always clear what definition of the city is being used but I have tried to be precise where possible.

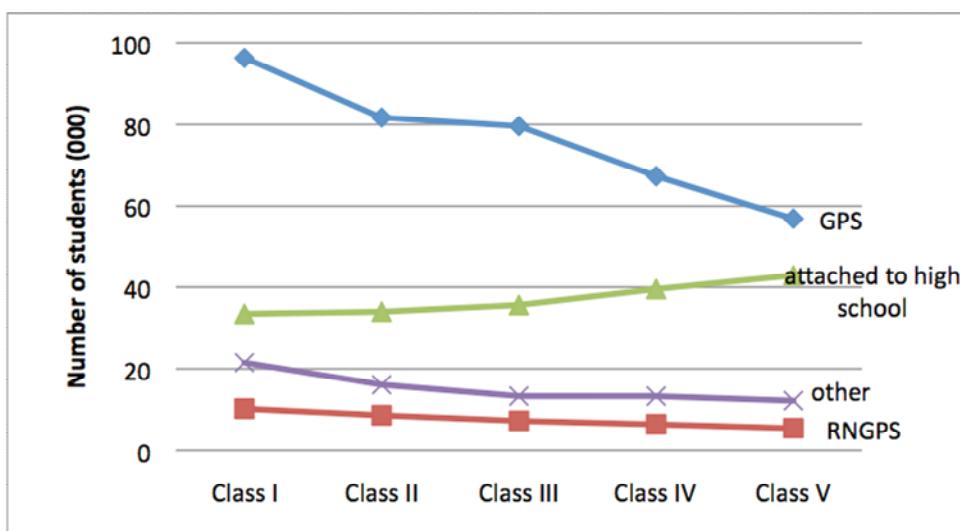
## 2. What Schools are Available (and Accessible) for the Urban Poor in Bangladesh? A Literature Review

### 2.1 The School System in Bangladesh

There are many types of primary school in Bangladesh. Most common are government primary schools (GPS), which accounted for around 55% of enrolments in 2005 (BANBEIS, n.d.). Registered non-government primary schools (RNGPS) are privately operated but largely government funded. A large number of NGOs, most famously BRAC, engage in education provision, running an estimated 30,000 classrooms. Primary grades may be attached to government or private secondary schools, usually without government support (Ahmed et al., 2005). Fully private fee-charging primary schools are usually known as kindergartens. There are also a number of types of madrasa, some of which receive government funding, and small numbers of community, experimental and satellite schools.

Data from 2004 (Figure 1) suggest substantial drop out from GPS nationally: there were only 60% as many students in grade 5 as in grade 1. Other types of school had similar drops in enrolments, except those attached to high schools, which showed the reverse pattern. There are more students in higher grades of primary schools attached to high schools than in the lower grades, perhaps because parents hope to improve their child's prospects of entering into the high school by entering him or her for the attached primary school first. This compensates to a small extent for the drop-off in enrolments from low to high grades in all other types of school. Overall there are 72% as many students in grade 5 as in grade 1.

**Figure 1: Number of students by grade and school type**



Source: (MOPME, n.d.), data from 2004.

The picture of who provides education is not complete without mentioning private tuition, which has 'become a norm' in Bangladesh: in one survey from 2003 43% of children had private tutors, paying an average of Tk. 152 per month (Ahmed et al., 2005:xxxii). According to that survey, first generation learners, the group likely to benefit most from private tuition, were least able to afford it. More boys than girls took private tuition and the likelihood (and cost) of tuition increased with grade: in grade V 60% of boys and 50% of girls had private tutors. Children from better off families and those whose parents were better-educated were also more likely to have tutors.

Another survey (FMRP, 2006) finds that 31% of government primary school students in the lowest household expenditure quintile, and 56% in the richest quintile, had private tuition. Nath (2008) presents evidence that learning achievement was greater among children aged 11-12 years who had private tutors, and increased with the amount spent on tuition. In urban areas, only 47% of students without tutors aged 11-12 years completed tests to a standard that satisfied ‘basic education’ criteria; amongst those with tutors, this rose to 64%. But given that wealthier families and those in certain types of school such as kindergartens, more often employ tutors, it is possible that this difference reflects wealth and teaching within the school, rather than a causal effect of tuition.

According to data from the Ministry of Primary and Mass Education, there are 756 government primary schools in Dhaka District and 295 in Dhaka City Corporation (MOPME, n.d.). Within the City Corporation, the schools have around nine rooms on average and 75% use a double shift system. They could therefore be expected to serve around 200,000 children. Adding RNGPS does not add much to this figure, since there are only 43 such schools in the City Corporation. This is roughly one government or registered non-government class per 150 primary school-aged children<sup>2</sup>, or more if higher population estimates are believed. Even if there were 50 children in each class, two-thirds of the children would still be either out-of-school or using some other type of school – NGO, private for-profit, or madrasa.

Analysis of the 2005 Household Income and Expenditure Survey reveals that, though adults in the urban parts of Dhaka District are much more likely to be able to read and write and have per capita consumption expenditure almost twice as high as the national average, net primary enrolments are actually around the same as the national average, at 68% (my analysis). The 2009 Multiple Indicator Cluster Survey (MICS) (UNICEF, 2010) reports that the primary net attendance rate in slums in Bangladesh’s city corporations averaged only 65%, compared to 81% nationally. Secondary attendance was much lower still: 18% in slums, compared to 49% nationally. The survey also reveals drop-out rates from primary school below 2% for both rural and urban areas, but much higher rates for urban slums – 7.1% for boys and 8.6% for girls. Similar results obtained at secondary level. Repetition rates were also much higher in urban slums than the average for rural or urban areas.

Data on from Education Watch 2005 (Ahmed et al., 2006) paint a similar picture. Children aged 11-15 in metropolitan cities were more likely to be out-of-school, but also more likely to be in secondary school, compared to children in rural areas. Those in rural areas were more likely to be enrolled (over-age) in primary schools. Net enrolment in secondary schools, whilst higher in urban (54%) than rural (44%) areas, is lowest of all in slums in large urban cities (18%).

Studies in Bangladesh, as in other South Asian countries, have suggested that as enrolments have risen without a corresponding increase in the number of schools, the number of students per school has risen and quality has declined (Rahman and Otobe, 2005); Ahmed et al. (2007) note that although the country’s EFA objective was to increase enrolment and promote quality of education, in practice the focus has been more on achieving enrolment targets, measured as gross enrolments with no mention of age-specific enrolments, or equity (apart from gender equity). Nath and Chowdhury (2002) suggest this has particularly been the case

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<sup>2</sup> A rough calculation which assumes the City Corporation’s population is 8,000,000 and 10% are of primary school age, drawing on World Population Prospects (2008) for demographic data and BBS (2009) for Dhaka population data.

in urban areas due partly to large increases in urban populations, and their results show significant declines in achievement tests in reading and mathematics (though not in writing) in urban areas between 1993 and 1998. Despite this, urban 11-12 year olds were more likely to pass a test of basic education. 48% of urban and 27% of rural students passed all of the tests, which covered questions measuring ‘life skills’ as well as reading, mathematics and writing. The gap was smaller if life skills were left out (58 vs. 40%). Primary teachers given simple tests in Bangla and mathematics have also achieved surprisingly low scores (FMRP, 2006).

One factor underlying quality trends may be the widespread use of double-shifting, whereby classes 1 and 2 are generally taught in the morning and 3, 4, and 5 in the afternoon. 87% of government and all registered non-government primary schools use this system. A key target in the government’s second Primary Education Development Plan (PEDP II) is to reduce the number of double shift schools – although this would likely harm quality if the numbers of teachers are not increased dramatically at the same time (FMRP, 2006).

## **2.2 Slums in Bangladesh**

Slums are areas of housing built on government or private land characterised by low-quality housing, overcrowding, poverty, poor environmental conditions, and limited access to services. In one study of four Dhaka slums in 2002-04, most dwellings consisted of a single room and on average were around 90 square feet in size. Over 90% had access to electricity although in most cases this was through an illegal connection. Around 40% had gas connections, with the rest using other fuel sources with potential for health hazards. Around half used Dhaka Water Supply Authority water while the other half used tube wells as a source of drinking water (Aparajeyo, 2005). Rashid (2004) documents conditions in one slum including long queues for water, residents being forced to vote for the party with which local *mastaans* (‘strong men’ or gang leaders) are connected, a culture of ‘gang wars and violence’ (*ibid*, p. 66) in which young men are particularly likely to get involved, and police persecution.

In a 2005 survey (CUS et al., 2006), 61% of slums in Dhaka had problems with flooding, a few had no electricity, 80% had very poor housing, nearly all had very high population density, and 9% lacked security of tenure. In a third of cases there were more than 10 households per tap or tube well, and for 11% there were more than 10 households per latrine. Median and mode household income was in the range Tk. 3001-4000 per month (around US\$30-40).

Many people living in slums are migrants from rural areas. For instance in the Aparajeyo study, 42% were recent migrants and their children would possibly have attended primary school in rural areas. The generalisation that connects slums to rural-urban migration can be misleading, however. In many cases the migration occurred one or two generations ago. The same study found that around 25% had migrated in or before 1980, and a further 34% during 1981-1990 (Aparajeyo, 2005:41).

**What services are there in slums?** According to data from the Local Government Engineering Department (LGED), 26% of slums have a government school; 27% had an NGO operated school (Baker, 2007:xiv). According to the Centre for Urban Studies survey (CUS et al., 2006), 11% of Dhaka slums received services from one NGO, and 59% from more than one – although the survey did not ask how many of these are education NGOs.

Many Bangladeshi NGOs have traditionally had a strong rural focus and have only relatively recently started considering how to expand their provision to the growing population of poor urban people. Nevertheless there are already a large number who are in some way involved. Thirty NGOs were reported to work in Dhaka in 2003; the Coalition for the Urban Poor, an umbrella organisation of urban NGOs, has 44 members (Baker, 2007:54). These numbers are likely to underestimate the number of small NGOs, often running schools from single rooms. Some of the larger operations include:

- **BRAC**, which has traditionally had a strong rural focus but in 2009 was due to set up 1,400 more schools in urban areas.
- The **Dhaka Ahsania Mission** has 200 Basic Education Centres for Hard-to-Reach children serving around 5,000 working children aged 10-14 in Dhaka, one drop-in centre for street children serving 150 children, and nine Urban Community Learning Centres in two parts of Dhaka. These centres use a mixture of non-formal and formal learning, using some government materials.
- The Spanish-based international NGO **Intervida** has seventeen conventional primary schools, serving 3,900 children in ‘marginal urban areas’ and five three-year basic education schools for child labourers (Intervida, n.d.).
- A **UNICEF**-supported programme, Basic Education for Hard-to-Reach Urban Working Children, began in 1997 and provides informal education to working children living in urban slums (UNICEF, n.d.; UNICEF, 2004). It uses a shortened (two and a half hours) school day so that children can continue to work and targets children aged 10 to 14 who are not attending any other school and work at least seven hours per week. The education includes basic literacy and numeracy, life skills, health care, and issues relevant to their situation such as their rights and hazardous work. The course runs for 40 months and children are supposed to achieve competency in Bengali, mathematics, life skills, and English. It enrolled 346,000 children in total across six cities during its first phase, 1997-2004, and has opened around 6,000 learning centres under its second phase, which is due to continue until 2011 and enrols some 166,000 children at a time (UNICEF, n.d.). The running of the centres was sub-contracted to NGOs selected by a committee that included staff of the Ministry of Primary and Mass Education (Rahman et al., 2010). In Dhaka there were 6,765 centres as part of the first phase, catering for around 200,000 learners.
- **Friends in Village Development, Bangladesh** was one of the sub-contracted NGOs for the Hard-to-Reach programme. In 2007 it was operating 100 such centres in urban slums for working children, and a further 200 learning centres under another UNICEF-supported programme that began in 2004. The latter, called the Urban Slum Children Education Programme, catered to 30 children in each centre and covered 22 of the city’s wards. It used its own curriculum and teaching (Manzoor Ahmed et al., 2007).

**Barriers to providing services in slums.** Slums present a number of geographical barriers to services. Many are built in low-lying areas and are prone to flooding; most do not have sufficient drainage to avoid water-logging during the rainy season flooding (CUS et al., 2006; Baker, 2007). Environmental conditions reported by a majority of respondents in the

Aparajeyo survey (Aparajeyo, 2005) included damp, water lodging, over-population, and narrow or muddy roads. Houses are usually made of flimsy materials, and are vulnerable to fire and to monsoonal rains. In the CUS survey (CUS et al., 2006), very high population density, very poor environmental services and very low socioeconomic status were nearly ubiquitous characteristics. Poor drainage, flooding and very poor housing also affected most slums. Lack of electricity, cooking gas, tap water, garbage collection and NGO services each affected a minority of slums, as did insecure tenure, threat of eviction, and a need to share water sources and latrines with large numbers of other households.

A survey (Rashid and Hossain, 2005) of NGOs and donors about delivering services in slums in Bangladesh found a host of obstacles. Donor agencies such as UNICEF identified as a problem an inability to serve enough of the slum population. NGO interviewees identified lack of appropriate infrastructure as a key constraint to education service provision in slums. The number of schools was reported to be far too low compared to the number of children, and that government schools typically have no scheme to accommodate the volume of urban slums students in their areas, who may face particular problems such as the need to work. Physical access to NGO education centres was also reportedly made more difficult by drainage and flooding problems during the monsoon season; fear of gang violence was another obstacle to attendance.

The interviewees in Rashid and Hossain's study identified three major constraints: lack of a policy providing specifically for the urban poor; eviction of slum residents; and the role of *mastaans*. The government is generally unwilling to take account of households who are residing in an area illegally; but the insecurity of land tenure in slums and constant possibility of eviction also creates problems for NGOs, who stand to lose their investment if they set up permanent structures such as schools. Teachers employed locally may also have to move in the event of an eviction. Slums are controlled by a hierarchy of leaders known as *mastaans*, who vary from relatively benevolent figures to mafia-like criminal gang leaders, and usually have close links with political parties and local police. *Mastaans* usually also control the provision of amenities such as latrines, tube-wells, water and electricity. NGOs wishing to set up services in the slum also have to gain the permission of the *mastaans*.

Slums in peri-urban areas may be particularly neglected in terms of service delivery as they fit into neither the rural nor urban programmes of government, agencies or NGOs (according to interviewees in Rashid & Hossain, 2005).

As noted above, the numbers of schools in Dhaka does not seem up to the number of students. Overcrowding in urban government schools commonly comes up in conversation, but there is little systematic research to confirm whether it is a problem or how widespread it is. The CREATE Country Access Review (Manzoor Ahmed et al., 2007) notes, nationally, that refusal to admit a child was a frequent reason for never enrolment, especially in schools that had earned a good reputation or were in densely inhabited locations. Within the school, some parents felt that teachers had a bias in favour of children of the well-off; discouragement and undermining children's self-esteem were seen as a common problem.

**Poverty, child labour, child marriage, and the costs of school.** Added to these barriers in provision are those on the 'demand side' resulting from the poverty of most households in slums. Under the law, children aged over 14 are allowed to work, provided that the working conditions meet certain criteria and they are not employed more than 42 hours per week (UNICEF, n.d.; USDOL, 2009). Sources such as Delap (2000) suggest that child work, even

at young ages, is common in urban Bangladesh, meaning that the opportunity cost of attending school is likely to be high. Delap (2000) finds that for both male and female children, participation in income generating work increases with age, with boys participating in income generating work from an earlier age than girls, while girls were more likely to be engaged in housework. Amongst her sample of ten households in a slum in Dhaka, all of the boys aged 13-15 were in income-generating work, while the girls of the same age were involved in a mixture of household and income-generating work. More recent data (UNICEF, 2010) suggests that 6.5% of children in slums in Bangladesh's cities are working, and confirms that the rate is higher for older children.

Especially for female adolescents, many find themselves working in the city's garment industry. Garment factories tend to employ young single women, and the decision to enter into employment is often made by the parents (Baker, 2007:19).

Girls are also withdrawn from school to marry early. Amongst Rashid's (2004) survey of 153 married adolescent women in a slum in Dhaka, the average age at which they had married was 13.5 years. Rashid notes that 'the combined effects of poverty and the crime-ridden environment of gang violence and sexual harassment were important incentives for early marriage' (p. 119) as well as tradition, control of sexuality, and the fact that dowries were smaller for younger brides.

According to Household Income and Expenditure Survey data from 2000 reported in Baker (2007), households in the poorest quintile in Dhaka spend the bulk of their income on food, and only 3.2% of total income on health and education. Since total expenditure is also very low amongst this quintile (Tk. 639 / US\$9.30 per household member per month), health and education expenditure amounts to only around Tk. 20 (US\$0.29) per household member per month. This expenditure is also spread over a larger number of children, since the proportion of children is higher in the poorest quintile.

Aware that families often face costs in sending children to school, the government offers primary stipends of up to Tk. 100 per pupil per month to around 5.5 million rural students (UNICEF, 2009a). It had little effect on educational inequalities (Al-Samarrai, 2009) and an assessment of the impact of the programme during 2000 to 2006 suggests that it had negligible impacts on school enrolments or on household expenditures (Baulch, 2010). Baulch proposes that the most plausible reasons for its failure to have a stronger impact were the lack of geographical targeting and limited coverage, and the small and declining real value of the stipend.

It is not clear whether households can look forward to financial returns to an education which would offset some of the opportunity and financial costs. Returns to education in the country as a whole appear quite high. For instance, Shafiq (2007) finds rates of return to primary school of around 14%. Asadullah (2006) suggests a lower rate, of around 7%, but finds higher rates for urban than rural areas. But both money, for instance in the form of bribes or paying for training, and social links, seem to play a large role in finding jobs – possibly outweighing school education (Hossain, 2005; Opel, 2000). Households living in slums lack these resources, especially recently migrated ones.

### 3. What Schools do Children go to in the Study Areas?

#### 3.1 Background on the Study Areas

The study areas were four slums in central Dhaka, chosen for a range of characteristics and because they were large enough to conduct a large survey in each. Around 400 households in each slum – 1,599 in total, yielding 1,806 school-aged children – were interviewed using a variant of the CREATE Community and School Survey household instrument. Some 30 of these households were then interviewed in more depth about their education decisions. In each slum, we also asked a few community members to tell us what schools were located in the slum, and what schools (inside or outside the slum) were used by children who lived there. Through these informal group interviews we gathered basic information (school type, costs, location), and drew sketch maps.

A rough breakdown by *thana* (area), comparing with census data from 2001, reveals wide variation in government school availability. There is about one GPS class per 100 households in Lalbag, per 50 households in Gulshan, and per 370 households in Tejgaon (where the Begunbari slum was located)<sup>3</sup>.

Table 1 presents some background information on the four study areas, alongside the average from the CREATE rural study areas<sup>4</sup> for comparison. Households in the slums were typically richer (in nominal terms), and more likely to have electricity and a mobile phone than their rural counterparts. But they were still in absolute terms extremely poor, with incomes equivalent to just US\$0.75 per person per day at official exchange rates, or around US\$2 in terms of purchasing power. Between a third and a half of adults could read and write – a lower proportion than in rural areas. A third of children were having health problems at the time of the survey, pointing towards the poor environmental conditions in the slums. More than half of the houses surveyed flooded at least occasionally.

There was quite a lot of variation between the four study areas, and for this reason results are disaggregated throughout this paper. The study area in Lalbag, established in colonial times as a ‘sweeper colony’ for government-employed street cleaners, was markedly better off than the other three areas, which had much higher proportions of recent migrants and worse living conditions. People living in the slum in Begunbari suffered some of the worst and most dangerous living conditions, with large numbers of families occupying single rooms of flimsy but large multi-storey buildings with rudimentary shared facilities. On the other hand, their location in an industrial zone meant they were able to command relatively high incomes, though they also paid correspondingly high rents. The Cholontika study area was a large slum in the suburbs and close to a number of garment factories, but average incomes and adult literacy were lowest here. Korail is a huge slum thought to have a population of more than 100,000, in the centre of Dhaka’s prosperous Gulshan area, but isolated on a kind of peninsula formed by a loop in the river. Residents tend to come and go by boat, and it is extremely prone to flooding.

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<sup>3</sup> These figures take account of double shifting, i.e. a school with 6 classes that uses double shifting is counted as 12 classes.

<sup>4</sup> Other resources on the CREATE rural study, are available from [www.create-rpc.org](http://www.create-rpc.org).

**Table 1: Basic statistics for the four study areas, with rural average for comparison**

Study area	Cholontika	Korail	Lalbag	Begunbari	Average (slums)	Average (rural)
Self-reported monthly income (Tk.) (per household member)	5,105 1,312	5,278 1,400	7,760 1,655	6,605 1,831	6,179 1,547	5,326 1,199
Household monthly income after paying rent*	4,971	4,547	6,807	5,711	5,649	n/a
Has electricity (%)	92	82	91	97	91	36
Has a mobile phone (%)	30	27	65	51	43	24
Poor ventilation (%)	36	22	12	19	22	17
Female-headed (%)	15	9	18	5	11	8
Child is in ‘good’ or ‘very good’ health (%)	61	58	70	74	66	61
Adult (16+) literacy (%)	33	36	50	48	42	50

\* due to the survey design, data on rent was only collected from households with children aged 11-15

### 3.2 Schools in the Study Areas

The available roster of schools varied a lot between the study areas:

**Cholontika.** Three NGOs operate within the slum operating several classrooms – Catalyst, Surovi and BRAC. Outside of the slum there are two private primary schools, one government and two private secondary schools, and one RNGPS attached to a private secondary school.

**Korail.** Within the slum there are at least three NGOs, two of which are quite large. One NGO, Intervida, operates two primary schools (total around 500 students) following the government curriculum, and a ‘working children’s school’ with no set grade system. Two kindergartens, one of which is a single classroom and the other has three classes. Several private madrasas. Near the slum there are two RNGPS, a private primary school attached to a secondary school; a GPS; and three other private primary schools.

**Lalbag.** Within the slum there is a GPS with around 500 children, and on one corner is a large NGO school operating grades 1-8 compressed into 4 years. The latter has around 900 children enrolled in three shifts of three hours each, and offers a mixture of ‘academic’ and ‘vocational and technical’ education in the upper grades. Near the slum were three kindergartens, a government secondary school, an RNGPS. These were all within around one kilometre of the slum, but did involve crossing a busy main road to reach them.

**Begunbari.** There are no schools within the slum area. Around 500 metres away is an RNGPS; within one kilometre there are also a GPS and secondary school, and a second RNGPS. There is also at least one private non-formal madrasa in the area.

Overall, around 42% of children attending primary school were in GPS (Table 2), 33% in NGOs, and 12% in private schools (kindergartens or the primary divisions of private secondary schools). The remaining 13% were in registered non-government schools, madrasas or other kinds of school. Thus much higher proportions of children were relying on

NGOs than the figures of around 10% given for Bangladesh as a whole; there were also more children in kindergartens than reported in the *Education Watch* survey (us-Sabur and Ahmed, 2010).

Table 3 shows children aged 6-11, including those out of school. More than a third were out of school in Korail and Begunbari. Comparing the two charts makes it clear that in Lalbag, which had its own GPS, more children were attending a GPS than the other slums, where they had to go outside of the slum to find a government school.

**Table 2: School type by study area (schoolgoing children in grades 1-5)**

	Cholontika	Korail	Lalbag	Begunbari	Overall
GPS	5%	36%	62%	71%	42%
RNGPS	8%	1%	4%	0%	4%
NGO	66%	54%	8%	2%	33%
madrasa	3%	3%	2%	8%	3%
kindergarten	4%	6%	16%	0%	8%
private secondary	7%	0%	3%	8%	4%
other	7%	0%	6%	10%	6%
<i>Total</i>	100%	100%	100%	100%	100%

**Table 3: School type by study area (children aged 6-11)**

	Cholontika	Korail	Lalbag	Begunbari	overall
GPS	4%	18%	52%	42%	29%
RNGPS	6%	0%	3%	0%	3%
NGO	51%	32%	5%	1%	23%
madrasa	2%	2%	1%	3%	2%
kindergarten	3%	4%	15%	0%	6%
private secondary	3%	0%	1%	5%	2%
pre-school	6%	7%	9%	3%	6%
other	6%	3%	7%	8%	6%
out-of-school	19%	33%	6%	38%	23%
<i>Total</i>	100%	100%	100%	100%	100%

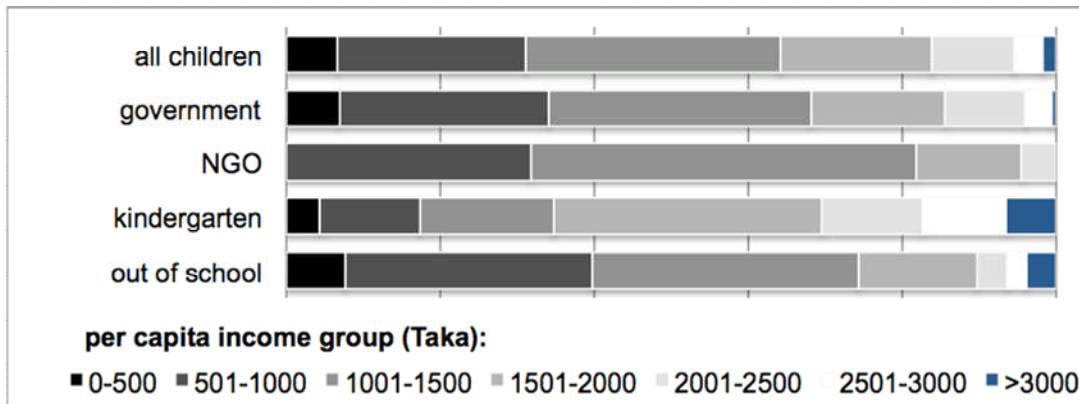
Note. ‘other’ includes community schools, primary grades of secondary schools where it wasn’t clear whether they were public or private, and a few children in secondary grades.

### 3.3 Brief Profiles of Three Schools

**Government school in Lalbag.** The slum in Lalbag, which had been established for much longer than the other slums, was unique in having a large government school with around 500 students, within its boundaries. Residents reported that it was good but not the best school in the area, was small for the number of children, and had no playground. Children reported that teachers had a good attitude and treated all of the students equally. 62% of the children

attending primary school were in the government school, and the distribution of income groups within the government school was similar to that for the slum as a whole (Figure 2).

**Figure 2: Distribution of income groups within selected school types in Lalbag**



**Intervida (NGO) school in Korail.** Intervida runs two ‘*pathshalas*’ or formal primary schools, and one ‘working children’s school’ in Korail, catering to a total of nearly 600 children. They are fee-free, and provide books, materials and school uniforms. The *pathshalas* follow the government primary curriculum. The working children’s schools follow a non-formal curriculum devised by Intervida but connected to the national curriculum, and try to accommodate the children’s working hours. Upon completing the curriculum, some children move from the working children’s school into the formal system. A few make the transition from the *pathshalas* to government secondary school, but this depends on winning a government scholarship<sup>5</sup>. The school was highly rated by children and parents in our informal group interviews, though it was mentioned that children who went there also took private tuition and that it was not able to admit all of the students who wanted to go there.

**Kindergarten in Korail.** Unlike any of the other study areas, there were two small kindergartens in Korail. The larger was a hut divided into three sections, with perhaps 20 students in each, while the smaller was a single room with space for about 30. Only a few of our sampled students (6% of those in primary school) were attending kindergartens (including these two and possibly others outside the slum). The larger school’s three divisions were supposed to offer one grade of pre-school and the first two grades of primary education. Children as old as 10 attended. Fees were said to be around Tk. 500 for registration, Tk. 150 per month for tuition, and Tk. 100-200 for examinations. These would represent around 2-3% of an average household’s yearly income. The teachers, who were university graduates but not trained as teachers, said that their salaries were Tk. 1,000 per month.

<sup>5</sup> Information from personal communication with Intervida.

#### 4. Who Goes to School, and who is Excluded, in the Study Areas?

Net enrolment rates in the slums were around 70% if any type of school was included. But government statistics tend to ignore enrolment in unrecognised NGOs and kindergartens. If we do the same, then the comparable figure is only 40% (Table 4). This compares to national figures of between 66.5% and 85%.<sup>6</sup>

**Table 4: Net enrolment rates in the slum sample**

	Boys	Girls
NER including all school types (%)	65	73
NER excluding NGOs and kindergartens (%)	39	40

*Note: NER is the number of children in primary grades and aged 6-11, as a percentage of the total number of children aged 6-11 in the sample.*

Figure 3 shows a profile of the children in each school type in terms of which slum they lived in and what per-capita income group their households were in. Linking this to the information provided in group interviews about what schools were available, helps understand how accessibility of schools, income and enrolment interacted.

In kindergartens, there were children from all income groups, but predominantly the higher ones, and predominantly from the Lalbag study area. In NGO schools and RNGPS there was a heavy concentration of children from the lower income groups and the Cholontika study area. For NGOs it is particularly striking that most of the children attending these schools are from the second poorest income group (Tk. 501-1,000) and in Cholontika or Korail.

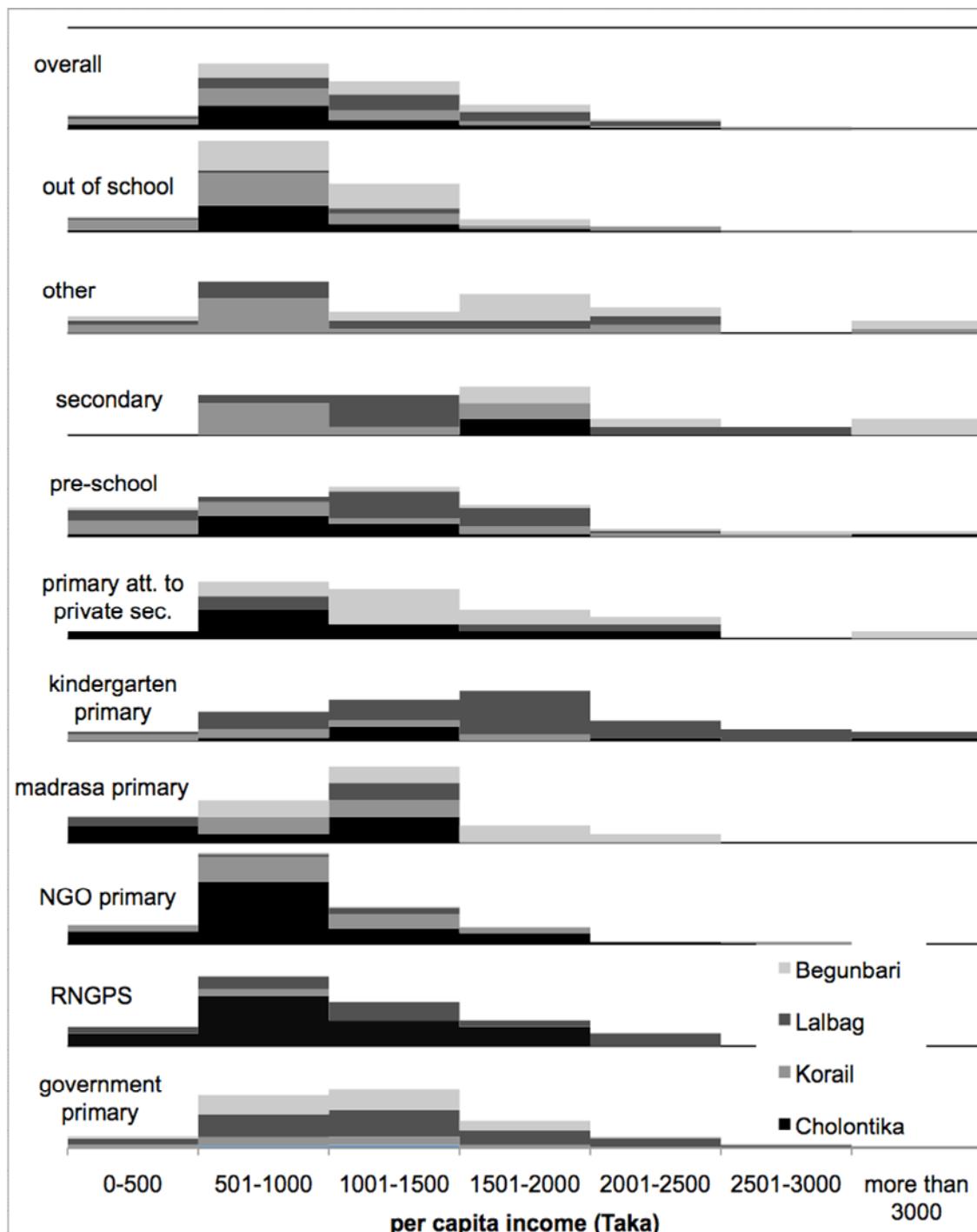
There were apparently no NGO schools in or near Begunbari, and accordingly very few children from Begunbari reported attending an NGO school. Neither did children in Begunbari have particularly good access to government schools, and they are heavily over-represented amongst the out-of-school.

In Cholontika there was a single government primary school some way outside the slum, and very few children reported attending it. NGOs and RNGPSs seem either to have stepped in to fill a gap – or possibly are more attractive to the residents of Cholontika for reasons such as costs.

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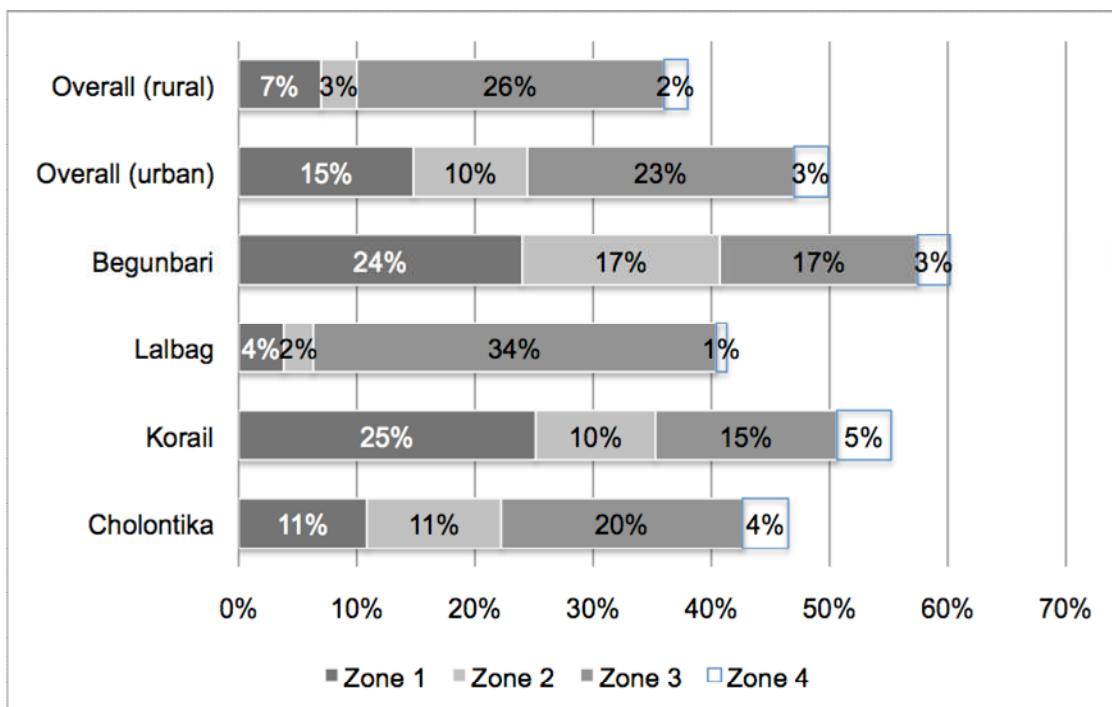
<sup>6</sup> The first figure is from the 2005 Household Income and Expenditure Survey and cited in a World Bank report (World Bank, 2008) while the second is 2008 administrative data collected by the UNESCO Institute for Statistics (UIS, n.d.).

**Figure 3: Distribution by per-capita income and study area of children in each school category (age 6-11)**

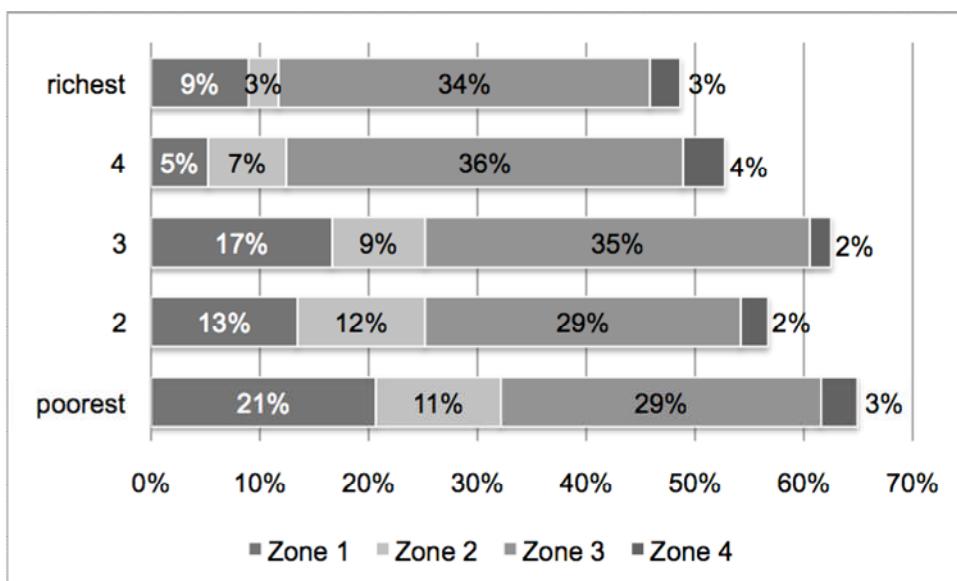


The CREATE zones of exclusion (Lewin, 2007) can also be used to examine the patterns of school-going in the study areas. This also allows some comparison between the urban slum study and the earlier CREATE study on six rural areas (Hossain et al., 2009). Figure 4 shows that the proportions in zone 1 (never enrolled), zone 2 (drop out from primary) and zone 4 (fail to make the transition from primary to secondary) were all larger in the urban samples than in the rural. Only zone 3 (virtual exclusion) was larger in rural areas. The average for the slums was similar to the worst-off of the six rural areas.

**Figure 4: Zones of exclusion by study area**



**Figure 5: Zones of exclusion by household per-capita income quintile**



#### 4.1 Zone 1: Never Enrolled

Children in zone 1 came from households that were markedly poorer, more likely to have poor food security, more likely to have a head working as a day labourer, and less likely to own a study table, radio, television or mobile phone (Table 5). For older children (age 9-15), they were significantly more likely to be from female-headed households. Parents' educational levels, especially mothers' were low across the board, but lower for children who had not enrolled. Only 6% of the children in zone 1 had mothers who had completed primary, compared to 21% of other children.

Many of the never enrolled children were 6 or 7 year olds, and many parents considered children at this age to be still ‘too small’ to go to school. Ill health was rarely given as a reason for not enrolling, yet never enrolled children were significantly more likely to be in ill health or disabled than other children. 89% of the never-enrolled children were, according to their parents, ‘doing nothing’ now. Around 3% worked in the house or helping their parents and another 3% were working in garments factories.

**Table 5: Socioeconomic, health, and parental education characteristics of children in zone 1**

Indicator	Never-enrolled children aged 6-15	Other children aged 6-15	
<b>Monthly income per person (Taka)</b>	1,091	1,295	*
% staple food security status is ‘always in need’	21%	12%	*
<b>Proportion where household head works as a day labourer</b>	15%	10%	**
<b>Owns at least one study table</b>	4%	19%	*
<b>Has electricity</b>	89%	92%	n.s.
<b>Poor ventilation</b>	32%	36%	n.s.
<b>Has a radio</b>	6%	11%	**
<b>Has a television</b>	32%	57%	*
<b>Has a mobile phone</b>	22%	48%	*
<b>Female-headed household</b>	14%	12%	n.s.
<b>Female-headed household (9-15 year olds only)</b>	24%	11%	*
<b>Sick in the last 30 days</b>	31%	22%	*
<b>Disabled</b>	6%	1%	*
<b>Father never went to school</b>	59%	40%	*
<b>Mother never went to school</b>	63%	49%	*
<b>Father didn’t complete primary</b>	84%	68%	*
<b>Mother didn’t complete primary</b>	94%	79%	*

Significance: \* p<0.01; \*\* p<0.05; ‘n.s.’ indicates not significant at p<0.1 (two-sided test)

To test independent effects of these background variables, logistic regressions were carried out. In zone 1 there are two conceptually distinct groups: young children who will be enrolled later in school, and those who will never be enrolled. In an effort to distinguish these, the regression was done separately for 6-8 year olds and 9-15 year olds, the rationale being that non-enrolled 9-15 year olds are likely never to enrol.

**For those aged 6-8** (see Estimation 1 in the appendix), boys were about 50% more likely than girls to be never-enrolled. Seven- and eight-year olds were less likely to be non-enrolled than six-year olds. Those in good health were 60% less likely to be never-enrolled, suggesting a possible interaction where young children in poor health, and perhaps physically smaller due to poorer nutrition, are held back from school until a later age.

Those whose mothers had at least primary education were 70% less likely to be never-enrolled. Adding one child to the average family was associated with a 40% increase in the

likelihood of each child being never-enrolled. Per-capita income was only weakly significant ( $p<0.1$ ) once all these other variables had been taken into account, but higher income appeared to reduce the likelihood of being never-enrolled. Those in Cholontika and Lalbag study areas were 80-90% less likely to be never-enrolled than those in Begunbari, controlling for income and other characteristics. Korail was not significantly different from Begunbari.

**For 9-15 year olds** (Estimation 2), boys were again about 50% more likely than girls to be never-enrolled. Age did not have a significant impact, suggesting that children not enrolled at age 9 currently have little chance of enrolling at later ages. Children from female-headed households were almost three times as likely to be never-enrolled. As before, adding one child to an average sized family meant an increase in 40% in the odds of being never-enrolled. Mother being educated to primary level decreased the chances of being never-enrolled by 90%; father being educated to primary was also separately significant and decreased the odds by 70%. Surprisingly, per-capita income had no significant effect, although whether the family owned a mobile phone did have an effect – reducing the odds of being in zone 1 by about 50%. This suggests a link between economic status and non-enrolment that may not be adequately captured by per capita income. (Food security status and other indicators such as whether the family owned a television were also not significant. This needs more exploration, but a hypothesis would be that families with mobile phones are both wealthier and have social connections that they can draw on in case their incomes fluctuate.) As for the younger age group, children in Cholontika and Lalbag were less likely to be never-enrolled than those in Begunbari, by 60-80%, whereas Korail did not differ significantly from Begunbari.

## **4.2 Zone 2: Drop Out from Primary**

Overall 13% of boys and 10% of girls who enrolled in school, dropped out before completing grade 5. These figures are substantially higher than those found in the rural survey (4.2 and 1.6% for boys and girls, respectively). The main reason parents gave for a child dropping out was that they were unable to afford school costs – this was given for 47% of boys and 65% of girls. Other reasons given for boys were that he ‘does not value his studies’ or ‘finds school too difficult’. The main other reason for girls was that she ‘has to work outside [the home] for income’. Girls who dropped out had on average spent several months more<sup>7</sup> than boys in school.

34% of boys and 13% of girls who dropped out from primary were said to have attended irregularly prior to dropping out. By contrast, for school-going children, around 15% (for both boys and girls) were said either to have been absent during the week, or to have been absent more during particular times of the year. The pattern among boys of irregular attendance followed by drop out may reflect what parents say about boys not valuing their studies or finding school difficult, as well as boys’ greater effective freedom – although it could also be that parents were more reluctant to admit to disobedient or independent behaviour on the part of girls.

Compared to their peers who were still in school, children who had dropped out from primary came from poorer households, were more likely to be disabled, and to have parents with lower levels of education (Table 6).

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<sup>7</sup> A significant difference ( $p<0.01$ ). On average girls had spent 11 months more, although using a 95% confidence interval we can only say that the difference lies somewhere between 5 and 17 months.

**Table 6: Socioeconomic, health, and parental education characteristics of children in zone 2**

Indicator	Zone 2: children (6-15) who dropped out from primary	Children (6-15) still going to primary school or finished primary	
<b>Monthly income per person (Taka)</b>	1,077	1,323	*
% staple food security status is ‘always in need’	17%	12%	***
<b>Proportion where household head works as a day labourer</b>	20%	9%	*
<b>Owns at least one study table</b>	6%	21%	*
<b>Has electricity</b>	93%	92%	n.s.
<b>Poor ventilation</b>	48%	38%	***
<b>Has a radio</b>	7%	12%	***
<b>Has a television</b>	34%	60%	*
<b>Has a mobile phone</b>	27%	51%	*
<b>Female-headed household</b>	10%	12%	n.s.
<b>Sick in the last 30 days</b>	18%	23%	n.s.
<b>Disabled</b>	2.1%	0.4%	*
<b>Father never went to school</b>	57%	38%	*
<b>Mother never went to school</b>	60%	47%	*
<b>Father didn’t complete primary</b>	84%	66%	*
<b>Mother didn’t complete primary</b>	92%	78%	*

Significance: \* p<0.01; \*\* p<0.05; \*\*\* p<0.1; ‘n.s.’ indicates not significant at p<0.1 (two-sided test)

Compared to children who were still in primary school, children in zone 2 were more likely to have been in government schools, and less likely to have been in NGO or kindergarten (Table 7).

**Table 7: School type of zone 2 vs. school-going children**

School type	Zone 2	Children going to primary school or finished primary	
GPS	69%	42%	*
RNGPS	4%	4%	n.s.
NGO	21%	33%	*
kindergarten	1%	8%	*
Madrasa	1%	3%	n.s.
primary attached to private secondary	1%	4%	***

Significance: \* p<0.01; \*\* p<0.05; \*\*\* p<0.1; ‘n.s.’ indicates not significant at p<0.1 (two-sided test)

A logistic regression (Estimation 3) suggests that there are independent effects of income and other markers of wealth. A Tk. 500 increase in per capita income is associated with 20% lower odds of dropping out. Children with households with a mobile phone or television were

also substantially less likely to drop out. Parental education was also significant, particularly, it seems, father's education.

There were further effects for location: children in Cholontika and Korail were about half as likely, and children in Lalbag 90% less likely, to drop out than those in Begunbari. The occupation of the head of household did not appear to have any impact that could be separated from these effects of income, wealth, location and parental education. The regression confirms that boys and older children were much more likely to drop out than girls and younger children.

#### **4.3 Zone 3: 'Virtual Exclusion'**

Virtual exclusion refers to children who are in school, but for whatever reason, not learning. It is the hardest of the zones to measure and the household survey does not have direct indicators of it. Three proxies were used:

- 3a: Child was absent more than one day in the past week – 7% of the children were in this category
- 3b: Child is thought by parents to be in the bottom 25% of the class – 14%
- 3c: Child has repeated a year one or more times – 14%

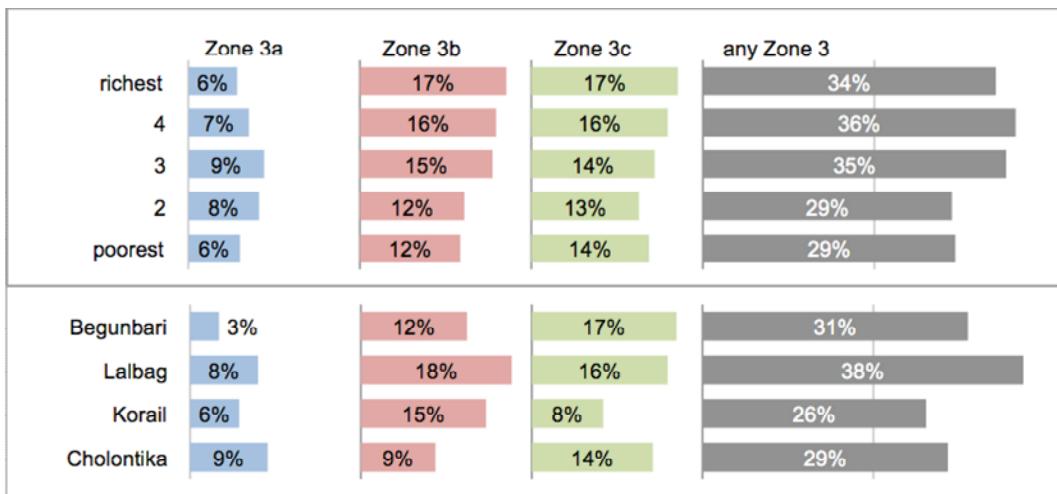
There was very little overlap between these three criteria (Table 8) which raises some doubt about how reliable it is to use them jointly as indicators of virtual exclusion. Nevertheless, if a child has repeated a year, or is considered by parents not to be doing well, these have face validity as indicators that children are not learning very much in school. But there are some further caveats: it may be that parents' impressions of how children are doing in school are not very accurate, and their position in school is a relative indicator, comparing his or her perceived performance to the typical standard at that school, rather than an absolute indicator of the child's own performance. Being absent in the past week is also a rough indicator, since many children will be absent for reasons such as illness which do not necessarily have a serious impact on their education as a whole. Grade repetition seems a good indicator, but there may be some children who are not learning well, but for whom this has not yet led to having to repeat a grade, though it may later lead them to repeat or drop out. In short, these are proxies for virtual exclusion rather than direct measures of it.

**Table 8: Overlap between criteria for zone 3**

	% of school-going children
Absent and bottom 25%	0.7
Absent and repeated	1.4
Bottom 25% and repeated	1.2
All three criteria	0.1 (only one child)

Perhaps surprisingly, the richer income quintiles, and the better off slums, had more children (as a proportion of school-going children) in zone 3, although this did depend on which indicator was used (Figure 6). It may be that richer children, who were in better schools or in schools that mainly served non-slum residents, do less well relative to their classmates. Whether this means they are really not learning, or just that they are not learning as easily as others in the same school, is a question that needs more research.

**Figure 6: Proportion of school-going children in zone 3, by wealth quintile and study area**



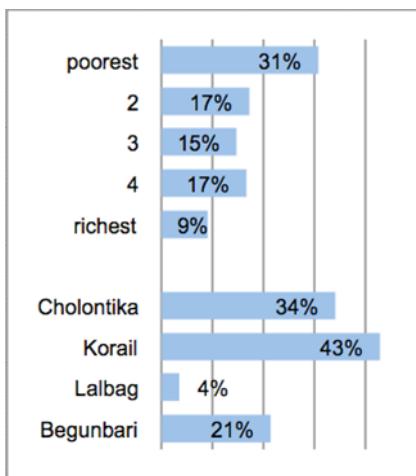
In most respects children in zone 3 had household social and economic characteristics not significantly different from other school-going children. Children whose parents thought they were in the bottom 25% of their class were *more likely* to be from households with mobile phones, radios and televisions. This makes it seem likely that social comparisons are being made here, perhaps with better-off parents in the slums comparing their own children unfavourably to the middle class children they are at school with, rather than to other children living in the slums.

Children in zone 3 were less likely than other school-going children to be in NGOs, and more likely to be in government schools. Children in government schools repeat years more often and are more likely to be seen by their parents as in the bottom 25%, compared to children in NGOs and other types of school.

#### 4.4 Zone 4: Not Making the Transition to Secondary

Of the children who complete primary, 16% of boys and 19% of girls failed to make the transition to secondary. Those in the poorest quintile and in Cholontika and Korail study areas seemed to have particular difficulty making the transition to secondary (Figure 7).

**Figure 7: How many children do not make the transition to secondary, as a % of those who finish primary, by study area and per capita income quintile**



Children in zone 4 were from significantly poorer households and had parents with lower levels of education, than those who managed to continue into secondary (Table 9). Nevertheless, they were on average from better off households than those who dropped out of primary or never enrolled at all.

**Table 9: Socioeconomic, health, and parental education characteristics of children in zone 4**

Indicator	Zone 4	Children who continue to secondary	
Monthly income per person (Taka)	1,221	1,586	**
% staple food security status is ‘always in need’	5%	12%	n.s.
Proportion where household head works as a day labourer	21%	3%	*
Owns at least one study table	7%	34%	*
Has electricity	88%	94%	n.s.
Poor ventilation	60%	20%	*
Has a radio	5%	11%	n.s.
Has a television	35%	78%	*
Has a mobile phone	26%	68%	*
Female-headed household	19%	14%	n.s.
Sick in the last 30 days	21%	18%	n.s.
Disabled	0%	0%	n.s.
Father never went to school	43%	26%	**
Mother never went to school	56%	40%	***
Father didn’t complete primary	69%	52%	**
Mother didn’t complete primary	93%	70%	*

Significance: \* p<0.01; \*\* p<0.05; \*\*\* p<0.1; ‘n.s.’ indicates not significant at p<0.1 (two-sided test)

In a logistic regression (Estimation 4) on whether or not a child who has completed primary makes the transition to secondary, income was not significant when dummies for the different study areas were included. This suggests that location – and availability of schools – may be more important than income in determining whether a child is able to make the transition to secondary or not. However wealth indicators such as owning a mobile phone or television were significant: in the chosen regression, owning either of these was associated with a halving of the odds of being in zone 4. Having a household head who worked in unskilled labour was associated with almost a doubling of the odds. Data from more in-depth interviews with parents also highlighted the opportunity and financial costs of secondary school as the main factor determining non-transition, rather than the absence of nearby secondary schools.

When the poverty increased in our family my son finished studying in BRAC School. You need money to enrol into high school. Do we buy food or enrol our child in school? We didn't have education in our mind only the thought of where to send him to work so that he can earn money. Time passed like this and the chance to enrol in 6<sup>th</sup> grade ... This is how his studying stopped. (Mother of boy, 14, who dropped out after studying in an NGO school, Cholontika).

Older children were more likely not to make the transition, suggesting a link that over-age enrolment and grade repetition, both of which would mean a child finishing primary at an older age, probably play a role in whether the child drops out or continues on into secondary. The sex of the child was not significant.

Children from Korail who finished primary were some 2 or 3 times less likely to make the transition compared to Cholontika or Begunbari, while those in Lalbag were around 10 times more likely.

#### **4.5 Summary and Discussion**

Table 10 summarises the results for zones 1, 2 and 4. For reasons that are not clear, boys were more likely than girls to be excluded from primary. Although stipends are available for girls to attend secondary, these were only available in rural areas and so not very likely to have influenced primary enrolment in urban areas. Boys may be expected or allowed to exercise more agency, meaning they are more likely to drop out if they are bored, abused, or unable to keep up with lessons at school. Some more evidence of this came up in in-depth interviews, where boys were said in some cases to have stopped going to school of their own accord. When girls were never-enrolled or dropped out from primary school, parents claimed it was they, the parents, who had made the decision, either because they needed the girl to work at home or in a garment factory, or because they decided that she should marry. It may also be that a relative abundance of uneducated work opportunities or apprenticeships for teenage boys feeds down into decisions at the primary level.

Households that were female-headed or had more children per working-age adult were more likely to keep children out of school altogether. This may reflect absolute time constraints: doing the basic work of maintaining the household, in addition to earning a living, may take so much time for these households that parents are forced to take children out of school to help around the house, or are unable to spend the time needed to ensure their children enrol and stay in school. At the time of the survey, sharp rises in food prices meant that many poor families spent long hours queuing in army-run subsidised food outlets. Slum households also

spend a lot of time waiting to use shared cooking and cleaning facilities, and getting to and from the slum areas – particularly difficult in Begunbari, which was surrounded by busy roads with no crossings, and in Korail, surrounded by a river.

Before we had more problems but now since my three daughters work at the garments factory I have some comfort ... I drive a rickshaw ... I work 8 to 10 hours a day. My daughter studies for 5 or 6 hours a day and the rest of the time she does the entire house work. She works 5 or 6 hours a day, cooking, house work, getting water, and so on. (Father of girl, 14, with three older sisters but no mother, studying at an NGO school, in Cholontika)

Children of more educated parents were more likely to be enrolled at around the right age and less likely to drop out. Children of wealthier families, as indicated by owning a mobile phone or television, were also more likely to be in school. The absence of clear income effects after controlling for other factors probably reflects the inadequacy of current monthly income as an indicator of a family's medium-term economic status, as well as multicollinearity between income, wealth, slum, and parental education variables. Many of the slum residents were self-employed or daily contract workers, facing extreme variability and unpredictability in their incomes.

Finally, there were clear differences between the slums even after attempting to control for some of the dimensions along which they vary, such as income or wealth. The relatively good roster of schools available to households in the Lalbag study area seems to have resulted in higher levels of enrolment and lower levels of drop-out. Begunbari, separated by a busy road from the nearest schools and with little NGO provision either, had the worst education outcomes despite having relatively high-earning households.

**Table 10: Summary of factors that increase the risk of being in zones 1, 2 and 4**

Zone 1 – never enrolled (6-8 year olds)	Boy; younger; poor health; mother with less than primary education; larger family; live in Korail or Begunbari
Zone 1 – never enrolled (9-15 year olds)	Boy; female-headed household; larger family; mother with less than primary education; father with less than primary education; family does not own a mobile phone; live in Korail or Begunbari
Zone 2 – drop out from primary	Boy; older; lower income; no mobile phone or television; father with less than primary education; living in Begunbari (particularly), Cholontika or Korail
Zone 4 – non-transition to secondary	Older; no mobile phone or television; household head works in unskilled labour; living in Begunbari or Cholontika (particularly), or Korail

## **5. Conclusions: Implications for Policy Makers and NGOs**

The results of this survey suggest that the education situation in slums of Dhaka is as bad as for some of the poorest rural areas of Bangladesh. 23% of children aged 6-11 were out of school. There are something like 300,000 primary-school aged children living in slums in central Dhaka. If the situation in the slums in this study is typical, then tens of thousands of these children must be out of school – perhaps enough to fill a hundred new schools.

Bangladesh's second primary education development plan (PEDP II) included a large programme of building new classrooms – between 2004 and 2008, some 19,000 classrooms had been added (UNICEF, 2009b). The present study shows that in some areas, lack of physical access to government schools is still the key factor stopping children from enrolling. Some of this need – far from all of it – might be fulfilled by shifting the few remaining single shift schools to double shifts. But this would further reduce the amount of learning time in a context where learning time and learning outcomes are already low compared to international standards (UNICEF, 2009b).

In official data, Bangladesh has achieved impressively high enrolment rates while spending only 2.4% of its GDP (which is annually around US\$1,200 per capita) on education – very little even by South Asian standards (World Bank, n.d.). Arguably, though, it is over-reliant on NGOs to reach disadvantaged groups (Ardt et al., 2005). In this study, a full third of the school-going children were in NGO schools. Quality of education appears often to be higher in NGO schools (World Bank, 2006), but children who complete a basic education in an NGO school currently face difficulty in entering the formal system to get a secondary education and formal qualifications.

Neither government nor NGOs address the needs of the urban poor as fully as they should. Poverty is still seen as a rural issue and the rural poor may also be seen as more deserving than the urban poor. Fear of rural-urban migration has also led to the withdrawal of safety net programmes in urban areas in the past (Hossain, 2007). Major NGOs acknowledged that urban poverty is important – but were still struggling to work out what to do in response.

Meanwhile there is still a tendency for research to examine education and poverty through a rural/urban lens, usually finding that urban residents are better off in every way, and obscuring the huge urban poverty issue that lies behind the averages. A recent UNICEF study on child poverty and disparities in Bangladesh (UNICEF, 2009a), while noting that child poverty is actually by some measures higher in urban than rural areas<sup>8</sup>, barely mentions the issue of urban poverty or slums elsewhere.

A key constraint to providing for children in slums must be a lack of reliable data on their numbers and educational status. Surveys such as the Demographic and Health Surveys – which in 2007 included only 137 slum households in a sample of over 10,000 – and the Household Income and Expenditure Survey do not seem to be adequately covering slums. This is not surprising given the logistical difficulties: households move frequently; slums are demolished; new ones appear; and people who are not legal tenants are reluctant to talk to official surveyors.

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<sup>8</sup> Using the Direct Calorie Intake (DCI) approach, child poverty levels were higher in urban than rural areas, whereas using the Cost of Basic Needs approach, the reverse was true.

Nevertheless, slum indicators are included in UNICEF's Multiple Indicator Cluster Surveys, and both Bangladeshi institutions like the Centre for Urban Studies, and agencies like SIDA (SIDA Bangladesh, 2010), have built experience in surveying the needs of people living in slums and making the results publicly accessible. These need to be used to highlight the conditions in which people are living in slums, and to inform policy and planning in the absence of reliable administrative data.

Some slums, through their longevity, origins, or through landlords' political connections, have gained either official or de facto recognition and safety from eviction. In this study, the slum in Lalbag seemed to be in that category, having been officially established during the colonial era. With a government school right inside the slum, relatively high enrolment rates, and higher incomes than the other slums, it suggests that slums need not be hopeless places or geographical poverty traps.

The analysis using zones of exclusion confirms, unsurprisingly, that children from less wealthy households and with less educated parents, were more likely never to enrol in school, more likely to drop out before finishing primary, and more likely to drop out in between primary and secondary. Costs of schooling, even for government schools, were substantial for some households, especially when private tuition was included (Cameron, forthcoming). Reducing these costs is likely to be an effective intervention, especially for stopping children from dropping out after their families run into financial difficulties.

Extending the rural stipend scheme to urban areas would be an important step towards offsetting these costs. Doubts have been raised about the effectiveness of the current stipend scheme in rural areas (Al-Samarrai, 2009; Baulch, 2010). It can be questioned whether, when education spending is already low compared to international or South Asian averages, such a large part of the primary education budget should be dedicated towards giving small stipends. Nevertheless, there are other examples of social protection programmes in Bangladesh that have been much more successful in targeting the poor (Al-Samarrai, 2009). For the households sampled in the present study, those in the bottom two income quintiles, earning less than US\$0.50 per person per day, are the ones who would particularly benefit from even a small stipend.

Private tuition was widely seen as necessary for advancing through the school system (Cameron, forthcoming). Arguably, schools need to shift towards curricula and teaching methodologies that do not incur the need for private tuition. This would mean changes to the exam system, teacher training and curriculum, and in general to attitudes towards the relationship between schools and their students. In the mean time, NGOs could help children whose families cannot afford tuition to progress through the system by providing after-school assistance. This could come, for instance, in the form of 'homework clubs' where older children help the younger ones.

Girls are attending primary school in greater numbers than boys. Boys and girls who had finished primary were equally likely to fail to make the transition to secondary. But because more girls finished primary, there were still more girls than boys going to secondary school. This may not be seen as a problem, given that girls face discrimination and pressure to drop out further up the system, especially when they reach an age where they are expected to marry, as well as discrimination in jobs markets. But it does suggest that any new stipend schemes could usefully be extended to boys as well as girls.

The tenuous legal status of people living in slums, and their vulnerability to politicised violence, makes it difficult for authorities to engage with them. As well as wishing to deter rural-urban migration, the government may be reluctant to take any action that would be seen as giving legitimacy to the rights of slum dwellers to live in slums that were often built illegally, particularly because land prices in Dhaka are very high.

Nevertheless, the government has to attend to the right to education of children living in slums, as an end in itself, and additionally because it will not attain national goals such as universal primary education otherwise. The political case for a greater focus on the urban poor needs to be set out. There has always been poverty in urban areas, and slums have existed in Dhaka at least since colonial times. Most urban poor people are not about to ‘return’ to rural areas that their families may have left a generation or more ago, and where they own no land and face worsening environmental pressures. Often portrayed as parasites on the urban economy, they are in fact vital to it, and vital to Bangladesh’s economic development prospects – through the transport, construction, and other services they provide, and most obviously, through their role in the export garment industry. The competitiveness of the country’s export industries depends on continuing to improve the productivity of this work force. Thus there is a strong economic growth argument, as well as a social justice argument and a human rights argument, not to neglect education for the urban poor.

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## Appendix 1: logistic regression estimations

### Estimation 1: Probability of being in zone 1 (never enrolled), for children aged 6-8

The chosen specification included per capita income, slum dummies (with Begunbari as the baseline), whether the child's mother had primary education or above, whether the child was in 'good' or 'very good' health (as compared to 'mediocre', 'sometimes sick', or 'always sick'), the child's sex and age, and the child dependency ratio of the family (defined as the proportion of children aged 0-15 to adults aged 16-64).

	Odds Ratio	Standard error	z	P>z	95% confidence interval	
Per capita income	0.99965	0.000166	-2.1	0.035	0.999324	0.999976
Cholontika	0.198642	0.064915	-4.95	0	0.104689	0.376911
Korail	0.785124	0.227547	-0.83	0.404	0.444878	1.385594
Lalbag	0.111022	0.044608	-5.47	0	0.050513	0.244014
Mother has primary education	0.330704	0.117754	-3.11	0.002	0.16457	0.664551
Good health	0.360809	0.085807	-4.29	0	0.226384	0.575054
Sex	0.514003	0.120298	-2.84	0.004	0.3249	0.813171
Child dependency	5.889787	5.344012	1.95	0.051	0.994888	34.86782
Age	0.420554	0.062355	-5.84	0	0.314496	0.562379

### Estimation 2: Probability of being in zone 1 (never enrolled), for children aged 9-15

The chosen specification included per capita income, slum dummies (with Begunbari as the baseline), the child's sex, whether the household was female-headed, whether the child's mother and father had primary education or above, whether the household owned a mobile phone, and the child dependency ratio.

	Odds ratio	Standard error	z	P>z	95% confidence interval	
Per capita income	0.999993	0.000184	-0.04	0.971	0.999633	1.000354
Cholontika	0.356248	0.123025	-2.99	0.003	0.181052	0.700973
Korail	0.834693	0.262562	-0.57	0.566	0.45058	1.546258
Lalbag	0.165804	0.074954	-3.97	0	0.068359	0.402155
Sex	0.521027	0.132403	-2.57	0.01	0.316631	0.857365
Female-headed household	2.570551	0.820358	2.96	0.003	1.375234	4.804808

Mother has primary education	0.109383	0.111945	-2.16	0.031	0.014717	0.812996
Father has primary education	0.252677	0.121857	-2.85	0.004	0.098188	0.650235
Mobile phone	0.512248	0.156851	-2.18	0.029	0.281088	0.93351
Child dependency	5.949881	5.359472	1.98	0.048	1.018056	34.77321

### **Estimation 3: Probability of being in zone 2 (drop out)**

The chosen specification included the child's age and sex, the household per capita income, slum dummies (with Begunbari as the baseline), whether the child's father had primary education or above, whether the household owned a television or a mobile phone, and whether the child was disabled.

	Odds ratio	Standard error	z	P>z	95% confidence interval	
sex	0.628302	0.127749	-2.29	0.022	0.421792	0.935919
age	1.548413	0.07096	9.54	0	1.415398	1.693928
Per capita income	0.999609	0.000189	-2.07	0.039	0.9992382	0.999998
Cholontika	0.467455	0.120684	-2.95	0.003	0.2818269	0.775349
Korail	0.474764	0.13317	-2.66	0.008	0.2739796	0.822692
Lalbag	0.104167	0.03839	-6.14	0	0.0505851	0.214504
Father has primary education	0.541417	0.143713	-2.31	0.021	0.3218029	0.910907
Television	0.58772	0.136722	-2.28	0.022	0.3725242	0.927229
Mobile phone	0.531398	0.130239	-2.58	0.01	0.3287014	0.859091
Child is disabled	3.847477	3.629928	1.43	0.153	0.6054861	24.44826

**Estimation 4: Probability of being in zone 4 (non-transition to secondary)**

The chosen specification included the child's age, slum dummies (with Begunbari as the baseline), whether the child's mother had primary education or above, whether the household owned a mobile phone or a television, and whether the household head was working in unskilled labour.

	Odds ratio	Standard error	z	P>z	95% confidence interval	
age	1.545773	0.292924	2.3	0.022	1.06621	2.241034
Cholontika	1.098314	0.611228	0.17	0.866	0.368995	3.269135
Korail	3.612795	2.25163	2.06	0.039	1.064982	12.25587
Lalbag	0.104885	0.075639	-3.13	0.002	0.025519	0.431085
Mother has primary education	0.223772	0.151939	-2.2	0.027	0.059136	0.846766
Mobile phone	0.447194	0.211094	-1.7	0.088	0.177294	1.127974
Television	0.358556	0.171648	-2.14	0.032	0.140304	0.916313
Unskilled	2.827658	1.346386	2.18	0.029	1.11206	7.189945



### **Report summary:**

Bangladesh's urban population is rising fast. In the capital, Dhaka, some 4 million people live in slums. They are lacking in wealth, power and social connections; probably under-counted in national surveys; and under-served by both government and non-government organisations, many of whom still see poverty as a rural issue or see the urban poor as less deserving of help. Drawing on CREATE research from 2008, this paper highlights the extent of educational exclusion in Dhaka's slums. The results suggest that the number of children not enrolled and drop-out rates are as bad in slums as in some of the poorest rural areas of Bangladesh. Neither government nor NGOs are addressing the needs of the urban poor as fully as they should.

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