



**Consortium for Research on  
Educational Access,  
Transitions and Equity**

**School choice for the poor?  
The limits of marketisation of primary education  
in rural India**

**Joanna Härmä**

**CREATE PATHWAYS TO ACCESS  
Research Monograph No. 23**

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**University of Sussex  
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Educational Access, Transitions & Equity  
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## **List of Acronyms**

BTC	Basic Training Certificate
CREATE	Consortium for Research on Educational Access, Transitions and Equity
EFA	Education for All
FGD	Focus Group Discussions
LFP	Low Fee Private
NGO	Non-Governmental Organisation
PA	Private Aided
PUA	Private Unaided
SSA	Sarva Shiksha Abhiyan
UNESCO	United Nations Educational, Educational, Scientific and Cultural Organisation

## Preface

This important research monograph uses data from Uttar Pradesh in India to explore how marketisation has affected the provision of primary education and progress towards universal access. In several of the larger Northern States in India it remains the case that more than 50% of children fail to complete grade 8 successfully. In Uttar Pradesh, as in many other States, private primary schools have been growing in number and enrolling an increasing proportion of children. These schools are beginning to appear in rural areas and are no longer an exclusively urban phenomenon. Sarva Shiksha Abhiyan (SSA), the national programme to universalise access to basic education, is largely silent on the role of non-government providers of educational services in extending access, whether such providers are for profit or not for profit. It remains unclear how much low cost private providers can contribute to improved access, especially amongst the poorest.

This research uses detailed case study data to explore patterns of school choice, participation and costs in an area with a range of Low Fee Private (LFP) schools. It seeks to establish to what extent these schools meet the educational needs of children from households in different quintiles of wealth. The conclusions are powerful and support the general observations made in other literature that households below the second quintile of income are unlikely to be able to afford even the low costs of LFP schools. There are several reasons. Despite paying teachers much less than government teachers, schools have to recover enough money from fees to pay salaries and this sets a lower limit on fees. Poorer households tend to have larger numbers of children and thus face a greater challenge to afford school fees. Costs in LFP schools are such that 20% or more of family income is needed to participate for households in the lower three quintiles.

This study is a timely reminder that marketisation and LFP schools provide no simple solution to the problems of extending access to basic education to the poor and ultra poor. LFP schools are unaffordable to the poorest households. More often than not they appear in response to State failure to provide public schools of quality. Demand for LFP schools may be strong, but effective demand is constrained by disposable income. Also this study shows that there is little crossover between public and LFP schools and the latter do not act to create competition of a kind that might improve standards in public schools. Increasingly the population is stratified between those using LFP schools and those not able to afford to participate. The clear message is that the State must remain the provider of last resort, and that efforts must be redoubled to improve the quality and effectiveness of public schools reaching out to the poorest.

Professor Keith M. Lewin  
University of Sussex, Brighton  
CREATE Director



## Summary

In recent years India has seen an explosion in low-fee private (LFP) schooling aimed at the poorer strata of society. This marketisation of primary education, around which there is much contentious debate, is a reflexive reaction to the well-documented failings of the government system. LFP schooling, initially an urban phenomenon, has over the past decade experienced considerable growth in rural areas, and it is the rural setting, home to the majority of Indians, which is the least researched. It is argued by some that an effective policy response would be to rely increasingly on market-based competition involving LFPs, as these schools are purported to be affordable and accessible to the poor. Based primarily on a thirteen-village survey of 250 households and visits to 26 private and government schools in one rural district of Uttar Pradesh, India, this paper explores whether LFPs are in fact affordable to the rural poor and marginalised by examining the key factors in parental decision making and ultimately discovering whether equity considerations are served. Based on a detailed conceptual analysis of different poverty indicators, the paper adopts multivariate analysis to determine whether poverty is a major deciding factor in school choice, once other possible determinants associated with child and family characteristics are taken into account. The interpretation of the quantitative evidence was supported and triangulated by the qualitative evidence from focus group discussions.



# **School choice for the poor?**

## **The limits of marketisation of primary education in rural India**

### **1. Introduction**

Private primary schooling in developing countries is no longer the preserve of the middle and upper classes. Indeed a new private sector is emerging which attempts to achieve costs low enough for even the poor to access it. These low-fee private (LFP) schools (Srivastava, 2006) have been hailed by some as the solution to the problem facing the poor regarding meaningful access to quality education (Tooley, 2001; Andrabi et al, 2008), this change being a response to the well-documented failings of the government education system in India (PROBE Team, 1999; Govinda, 2002; Dreze & Gazdar, 1996; Kingdon, 1996a & b). Evidence of a spontaneous mushrooming of LFP primary schools has been seen particularly in urban centres, and has resulted in contentious debates regarding the desirability or otherwise of this trend.

Research into this area began over 15 years ago (Kingdon, 1994; Dreze & Gazdar, 1996), however it is still a relatively new area of enquiry. It is argued by some that where government schools are failing, if private providers are able and willing to enter the 'market' then this should be seen as a positive development helping to further Education for All (EFA) goals. This notion has already been explored to some extent; however past studies have been mostly urban in focus (Tooley & Dixon, 2006 & 2007; Kingdon, 1996a & b). This study makes a timely contribution by exploring the accessibility and affordability of LFP schools to a rural farming community in Uttar Pradesh (U.P.), India. U.P. is one of the most educationally backward states in India (Srivastava, 2007; Government of India, 2007), and the rural setting is still home to a considerable majority of India's population.

This paper is part of the CREATE<sup>1</sup> Pathways to Access series, and contributes to CREATE by looking at access from a wider perspective (see Appendix 1), taking access to entail *meaningful access* which results in *real learning*, and which is equitable to the poor (Lewin, 2007). The choices that parents in the study area make between sending their children to LFP or government primary schools are examined, to determine what the main factors are in this school choice, and to discover whether LFP schools are accessible and equitable to the poor. The unit of interest is therefore the family, which determined that a household survey method was used with a combination of closed and open-ended questions, also including the recording of information regarding the household's physical make-up and assets. As the paper is concerned with the poor, understanding poverty, and who are the poor are of great importance. The existing literature on LFP schooling deals very briefly with defining poverty, whereas the study that this paper draws on sought to examine this in more depth. The information recorded during the survey is utilised in multivariate analysis of school choice, investigating what role poverty plays in the opportunity to choose, while controlling for other family, parent and child-specific characteristics which could be expected to have a bearing on school choice. Finally, the complete, direct costs to families of LFP and government schools are presented in the context of family size and socioeconomic status, illustrating the insupportably large burden that educating all children at LFP schools would entail for poor families.

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<sup>1</sup> See: [www.create-rpc.org](http://www.create-rpc.org) for further information.

The paper begins by reviewing the literature on private schooling, choice, and poverty. It then moves on to discuss the context and methodology, before presenting the study's findings regarding the accessibility of private schooling to the poor. Section 5 presents the comparative evidence on school costs, while the sixth and final section concludes.

## **2. Choice and affordability of low-fee private schooling for the poor: concepts and theory**

Integral to the private schooling debate is the concept of choice, which is often promoted as having *merit in itself* (Levin, 1991). Choice is argued to result in higher quality and lower cost through market competition, but bound up in this idea are concepts of affordability and social equity where fees are charged. This section begins by defining private schools in the Indian context before moving on to key concepts such as school choice, affordability and quality, and lastly defining poverty.

### **2.1 Definition of private schooling & school types in India**

Defining private schooling is difficult, but one can start with the UNESCO definition that a private school is that which ‘is controlled and managed by a non-government organisation (e.g. religious group, association, enterprise)’ (UNESCO, 2005, cited in Rose, 2007: 2). Private or non-state provision of education may be conducted by a wide variety of actors, which may include ‘NGOs, faith-based organisations, communities and commercially-oriented private entrepreneurs (‘edupreneurs’), each with different motives for their involvement in education’ (Rose, 2007: 2). The type of private school that is currently mushrooming in India is the small school that is started, owned and run by a private individual, or ‘edupreneur’, and funded solely out of parental fee payments. These schools are often run at the lowest possible fee level in order to appeal to as wide a market as possible, therefore being referred to as low-fee private schools.

These fully-private, un-aided schools have complete autonomy in terms of management, hiring and pedagogy (De et al, 2002). It is illegal in India to operate schools for profit (Unnikrishnan vs the State of Andhra Pradesh, Supreme Court of India, 1993), however this does not stop many people from doing so, and cloaking their activities in the ‘rhetoric of social service’ (Srivastava, 2007: 172). The private un-aided sector in India is now highly heterogeneous and varies significantly in scope and quality (De et al, 2002), encompassing the expensive and elite to the cheapest LFP schools targeting the children of manual labourers.

Additionally there are two other categories of schools in India. The first is the government school owned, funded, run and managed by the government, with no autonomy at the school level. The other type is the ‘private aided’ schools category which are essentially quasi-government, having started out privately managed and funded but now receiving government grants-in-aid, losing most of their autonomy as a result (De et al, 2002). These two categories are necessarily government-recognised, however private un-aided schools can be disaggregated by recognition status (Mehrotra & Panchamukhi, 2007). Recognition of all schools is legally required, and is important to enable students to receive government stipends and to allow schools to issue transfer certificates (Nair, 2005). ‘Government ‘recognition’ is an official stamp of approval... though hardly any private schools that get ‘recognition’ actually fulfil all the conditions of recognition’ (Kingdon, 2007: 183). Unrecognised schools are not counted in official statistics and so accurate numbers of schools and pupils are not known (ibid.), and Muralidharan and Kremer (2006) found in an extensive survey of 20 states that in rural areas 51 percent of private schools were unrecognised.

## **2.2 Choice and private schooling for the poor**

In most cases, private provision of education does not tend to serve areas and people that government provision has been unable to reach (Lewin, 2007). The advent of private schools usually means choice between schools; often between a government school and a private school, and also between competing private schools. Choice, or a market of suppliers is purported to lead to better service provision and at lower levels of cost, as competing suppliers vie for potential clients (Levin, 1991). The World Development Report 2004 states that choice is not only important to individuals, but ‘increasing poor clients’ choice and participation in service delivery will help them monitor and discipline providers’ (World Bank, 2003: 1).

This ‘ideal market’ in education is where fully informed customers (parents) make a choice from a range of available schooling options with no provider having a monopoly. This scenario is supposed to have beneficial effects on all providers (including government schools), through increased responsiveness, accountability, effectiveness, efficiency and quality resulting from competition (Lauglo, 1995; Kitaev, 2007). Where customers are dissatisfied, ‘there are two main types of activist reactions... either to *voice* one’s complaints... in the hope of improving matters; or to *exit* from the organization, to take one’s business elsewhere’ (Hirschman, 1978: 90). To exercise voice is possible in any system, but where there is choice, it is often found that all those who can, will tend to exercise the ability to exit instead. In a market, there is the assumption that providers will struggle to raise standards in order not to lose clients (*ibid.*). However in reality there are many different circumstances under which markets fail, for example in the present scenario where villages do not have the population base necessary to support competition between providers (Lauglo, 1995). There are serious equity concerns where basic services are to be delivered through the market, ‘because of differences in income and wealth, the ability to vote with one’s feet is unequally distributed in modern societies’ (Hirschman, 1978: 96), and inequality in access to the option to exit can have ‘appalling consequences’, such as ‘ghettoisation’ in the conditions for those left behind (*ibid.*).

In terms of the Indian context, government schools are cited as failing on the grounds of efficiency and equity, infrastructure and instruction (PROBE Team, 1999). As a response there has been an unprecedented rise over the last 15 or more years in LFP school numbers (Kingdon, 1994; Tooley & Dixon, 2006; Srivastava, 2006 & 2008). Kingdon (2007: 183) postulates that:

poorly resourced public schools which suffer from high rates of teacher absenteeism may have encouraged the rapid growth of private (unaided) schooling in India, particularly in urban areas

Some hail this development as ‘the poor’s best chance’ (Tooley, 2004b), through LFP schools being affordable, of better quality and physically accessible (Andrabi et al, 2008<sup>2</sup>).

Tooley (2001 & 2004a) and Dixon (2004) assert that private schools have great potential and are currently serving the needs of the poor. Their work was undertaken in urban areas of several countries, including India (Tooley & Dixon, 2006). Considerable data was collected, which involved combing the back streets of poor sections of Hyderabad in order to find all of

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<sup>2</sup> This article considers the case of Pakistan, under similar prevailing conditions.

the many LFP schools; these were found in great density and were visited by researchers; teachers, pupils and parents were interviewed. The researchers found (possibly) all LFP schools irrespective of recognition status, and attainment tests were administered which revealed a private school advantage, similarly to other studies (Govinda & Varghese, 1993; Muralidharan & Kremer, 2006; Kingdon, 1994 & 1996b).

The higher standards and greater classroom activity often found in LFP schools are generally attributed to the direct line of accountability of the school to the fee-paying 'consumer' (Tooley, 2001: 171; also highlighted by PROBE Team, 1999). Tooley and Dixon (2006) argue that the LFP schooling developments taking place in India are pro-poor (through schools offering concessionary and scholarship places), despite the fact that 'without exception, all of the schools were run on commercial business principles' (Tooley, 2001: 173).

There is literature refuting the main thrust of Tooley's argument however. Firstly, it can be argued that competition and choice may apply to urban Indian settings where LFP schools can be found almost everywhere, while Kingdon (2007) points out that in rural areas their incidence is nowhere near as high, meaning that the practical effects of competition in rural areas may be considerably less.

Other researchers have attacked LFP schools on their quality of provision. One study undertaken using multi-level or hierarchical modeling as opposed to straight-forward regression resulted in an unclear picture of LFP school quality, calling into question the private school advantage (Bashir, 1997, cited in Mehrotra & Panchamukhi, 2007). Another study found that in the new private schools 'the quality of education remains largely ignored' (Singh, 2002: 478). Similarly Srivastava (2007) found that head teachers or managers/owners were often neglectful of quality matters, expressing disdain for the views and suggestions of their own teachers and clients alike. Dreze and Gazdar found that 'private school teachers are poorly... trained' (1996: 72); and while Tooley (2001) highlights teachers' education, he makes no mention of training for the job. The PROBE Team (1999) found that 80 percent of private school teachers were untrained, and LFP school teachers are still found to be absent, although less often than government school teachers (Kingdon, 2007).

Vasavi (2003) argues that the rise of private schooling has had a negative effect on government schools, which:

have mostly become schools for children of the most poor and the low-ranked caste groups, resulting in a ghettoisation of schooling... such school differentiation also compounds the gender and class differences among a community and in the society at large (Vasavi 2003: 76).

De et al (2002) state that:

the quality of government schooling will also suffer if the more prosperous are encouraged to leave the system. At the same time, their exit from the system is unlikely to generate a healthy, efficiency-enhancing competition between private and government schools (De et al, 2002: 148).

Tooley, and Milton Friedman (1962) before him, would suggest a voucher system could solve this problem, however research on voucher schemes have found that they may not be effective

in terms of equity<sup>3</sup>. Fischel (2002) believes that the voucher argument may apply well within urban areas, but that in rural areas the same conditions do not apply. Levin (2000) has found that there are costly and complicated administrative and regulatory requirements involved in effectively running a voucher scheme which would include record-keeping, school accreditation, transportation, information and adjudication of disputes. The demands of administering such a system may prove no less difficult than improving the government system, therefore it may be questioned why the government would not choose to do the latter rather than institute a major reform in favour of supporting private schools (Lewin, 2007).

### **2.3 Affordability and desirability of private schools for the poor**

Despite potential weaknesses, the evidence suggests that LFPs are perceived to be of higher quality, as parents are willing to pay the fees. Indeed the fee-paying aspect of these schools seems to be key both to the higher quality, through direct accountability to clients (Tooley, 2001); but also to problems of accessibility for the poor. Tooley's reports in terms of LFP affordability should be treated with caution; there is no other literature suggesting that LFP schools offer considerable concessions and scholarship places for the poor. Srivastava (2007) states that financial constraint is the largest determining factor in what schools families in U.P. can access. Tooley (2001) and Tooley and Dixon (2006) do concede that private schooling is not accessible to all, while Mehrotra and Panchamukhi (2007: 133) report that government schools have only those 'drawn from the poorest households likely to be first-generation learners.' Affordability is integral to the school choice debate as it determines whether choice can truly be said to exist between competing schools. What is meant by affordability is that a family should be able to pay for the education of their children, and ideally all of their children to the same standard and at the same type of school, without having to excessively restrict spending in other essential areas such as food, medicine or shelter. Schooling is not considered affordable where families must cut severely from these essential areas, or where loans at punitive levels of interest are taken to pay for it (Chronic Poverty Research Centre, 2005). Psacharopoulos and Woodhall (1985) highlight that even free education has opportunity costs for poor families, and that these families also tend to have more children, and it is in the context of the families' entire circumstances that affordability of schooling should be assessed. Many parents do choose to sacrifice greatly in other areas of essential spending to educate their children, often coping with deprivation as a result (De et al, 2002).

### **2.4 Who are 'the poor'?**

Having discussed issues surrounding school choice, the discussion naturally turns to the conceptualisation and measurement of poverty itself. While it is clear that poverty exists, it is intangible and difficult to define; and authors on LFP schooling therefore tend to define poverty in simplistic terms. Tooley and Dixon (2006 & 2007), for example, focus on 'designated 'poor' areas only'; they 'selected three (out of 35) of the poorest zones' (2006: 447), based on government information from 1991.

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<sup>3</sup> It should be noted here that voucher scheme experiments are currently underway in Delhi, which may help to clarify how reasonable a solution these may be; although it appears that these trials are currently looking at urban areas only (see [www.ccs.in](http://www.ccs.in)).



There are many ways of measuring poverty, with no consensus on which is best. Sen (1999) argues for viewing poverty in terms of human capabilities and functionings, indicating that financial assets may only be a partial means to an end, while recent work by the Chronic Poverty Research Centre (2005) indicates that asset as well as income wealth may provide a more stable representation of a family's economic situation. Dreze and Kingdon (2001) use an asset index in examining schooling participation in rural India, and Hulme (2003) argues that asset wealth provides a more temporally stable picture of family wealth<sup>4</sup>. Härmä (2009) uses an asset index in a similar manner, and this work will be drawn upon in the analysis below.

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<sup>4</sup> For a full discussion of various methods of measuring poverty, see Härmä 2008).

### **3. The Context and the Methodology**

This section describes the setting in which the study was carried out, including the place, the people and their social make-up, their livelihoods, and the schools that are available for their children. Section 3.5 explains the methodology employed for discovering the determinants of parental school choice.

#### **3.1 Farming on the plains and enduring social patterns**

Information in this section draws on the available literature, and observations from personal experience dating from November 2002. Many of these observations, particularly regarding village and household facilities, were systematically recorded as part of the survey data collection for this study during winter 2005-2006.

The study area comprises most of one administrative block of District J.P. Nagar, in western U.P., approximately 125 kilometres east of the national capital, Delhi. U.P. is a state with a predominantly agrarian way of life, whose population of over 190 million is approximately 80 percent rural (Lerche & Jeffery, 2003; Dreze & Gazdar, 1996). The study area is made up of flat farming land owned predominantly by small-holders farming sugar cane, rice, wheat, pulses and some vegetables and potatoes (Lerche & Jeffery, 2003). Larger farms (of only up to 15 acres) tend to concentrate on cash crops such as sugar cane. In the post-independence period land reforms were carried out in western U.P. 'owing to the relative strength of the peasantry' and these 'succeeded in eliminating landlords more efficiently than elsewhere in the state' (Lerche & Jeffery, 2003; 34). The mean land-holding in the sample is only 0.83 of an acre, while 48 percent of sampled families own no land at all.

In terms of infrastructure and amenities, the roads are mostly rutted dirt tracks with deep holes, which become muddy swamps during the rains; the closest paved road is a very long walk away. Road conditions mean that the area is a long 'frictional distance' (Chronic Poverty Research Centre, 2005) from any urban centre, and the area is served by no public transportation. There is infrastructure for mains electricity, however active supply is rare and extremely erratic. Access to safe, clean drinking water is unproblematic as most houses have their own tube wells (observation schedule, household survey, 2005-06), however no sampled households had indoor plumbing. The sampled villages had no other infrastructure such as a post-office, medical clinic, or general stores; indeed the only public presence in each village was the government school and the *panchayat*, or village council<sup>5</sup>. The only local medical care available was from several private 'doctors' who are entirely unqualified (as in Dreze and Gazdar, 1996).

#### **3.2 Family life and social customs: enduring life patterns and the beginnings of change**

Patrilineal practices form the foundations for traditional family life in U.P. (Dreze & Sen, 2002). This means that property passes from father to son, while the daughter's share is

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<sup>5</sup> The *panchayat* is the local government presence, like a village council with an elected head, the *pradhan*. Certain government functions have been decentralised to the *panchayat* level.

provided in the form of a dowry given to her in-laws at the time of her marriage (Anderson, 2007). Patrilocal residence is practiced, whereby a woman moves to her husband's family home and becomes part of his family (Dreze & Sen, 2002 & 1995a; Dreze & Gazdar, 1996), usually living in a 'joint family' with his parents and siblings, although where space allows, married couples may build their own very small house within the family compound. Property is left to all male heirs in equal shares, meaning that within two or three generations a quantity of land can be cut down to very small shares, meaning increasing poverty. This is the reason for the high numbers of small landholdings in the sample (Hulme, 2003).

In terms of gender relations, males are extremely dominant and there is a strong son preference (Jeffery & Jeffery, 1996; Dreze & Gazdar, 1996) due to the dowry system and because sons do not leave the family as married daughters do. Patrilocal patterns of residence can serve to devalue the education of girls in the family, because the benefits of educating a girl are seen as accruing ultimately to the family into which she eventually marries (PROBE Team, 1999; Dreze & Sen, 2002 & 1995a).

However much her parents love her, she [a daughter] is seen as a drain on their resources: parents should not allow her to work outside any family enterprise before her marriage, nor should they ever receive economic support from her afterwards (Jeffery & Jeffery 1997: 119).

However the status of females has been improving gradually (Jeffery & Jeffery, 1996), indeed there has been an increase in demand for educated brides.

### **3.3 Earning a living in rural Uttar Pradesh**

Virtually all livelihoods are based on agriculture (Dreze & Gazdar, 1996), and approximately 32 percent of sampled families had sufficient land to rely solely on farming for their livelihoods. Skilled workers in either private 'service' or employment, or self-employed, account for 8 percent of sample families, while the remaining 60 percent relied on unskilled wage work. While the majority of the sample is drawn from the less-privileged sections of society, the general lifestyle of the area is fairly good relative to the conditions in which the urban poor live, as the air is clean, there is negligible pollution, ready access to clean groundwater and there is generally a feeling of space and freedom (personal observation, 2002-2009).

The socioeconomic status of the majority in the study area is quite low. Caste continues to be a source of discrimination in Indian society (Dreze & Gazdar, 1996; Dreze & Sen, 2002; Lerche & Jeffery, 2003; Lieten, 2003). The majority of sampled families are low-caste or minority religion (Muslim or Christian), with only 12 percent being intermediate to upper-caste Hindu. Lerche and Jeffery (2003: 30-31) report that 'across the plains the most numerous single caste are the... Jatavs... and that they form about 15 per cent of the population of U.P. as a whole'; this is reflected in the sample being 20 percent Jatav. The study area does not have as pronounced a problem of caste or religious discrimination as other areas of India (Subrahmanian, 2005; Dreze & Gazdar, 1996), and there was not found to be overt discrimination against lower caste children in sampled schools: all children sat, played and ate together (as found by Dreze & Gazdar in U.P. in 1996). Despite this, U.P. in general has 'made comparatively little progress in eradicating traditional inequalities, particularly those of caste and gender' (Dreze & Sen, 2002: 144, and echoed by Jeffery et al, 2005).

In terms of religion, Muslims make up 36 percent of the sample, while Christians account for 3 percent, and the balance of 61 percent are Hindu. There is a long history of communal violence in U.P., rioting and mistrust between Muslims and Hindus (Jeffery & Jeffery, 1997; survey interview data, 2005-06). Tensions have flared less frequently in recent years, however villages were observed to be roughly segregated into Muslim and Hindu areas. Notably, in this remote, more ‘backward’ rural area, there was no assertion of religious identity on the part of Muslims in the form of distinctive dress for men and women and facial hair for men, in marked contrast to the situation in the closest towns, only some 5-8 kilometres away.

### **3.4 Seeking education in the villages of Uttar Pradesh**

U.P. is classified as ‘one of the most ‘educationally backward’ states in India, with a literacy rate of 57.4%, ranking it 31<sup>st</sup> of 35 states and territories’ (Government of India, 2001, cited in Srivastava, 2007: 154; see also Government of India, 2007). The Government of India (2008) states that the gross enrolment ratio at primary level in U.P. was 107.54 percent in the year 2004-05, while the attendance rate for the same year was only 57 percent (Government of India 2007: 4). This study focuses on education at the primary level, and for the purposes of this study and throughout the rest of this paper ‘primary school children’ or ‘primary school-aged children’ will refer to all children that are either of primary school age (ages 6-11), or who are out of this age range but are nevertheless enrolled in a primary school class (classes 1-5).

#### **3.4.1 The schooling infrastructure<sup>6</sup>**

The sample villages are mostly one to two kilometres apart, and most villages and even hamlets have government schools, established a mean of 41 years prior to the fieldwork. Ten of the thirteen sample villages have both government and private schools; the mean age of recognised and unrecognised LFP schools was 15 and 6 years respectively. Tables 1 and 2 highlight the broad trends in school building types. The Tables indicate that in terms of proper construction, government schools are best, followed by government-recognised LFP schools, while with regard to the absolute number of all-weather rooms, government schools fall behind recognised and also un-recognised LFP schools.

**Table 1: School infrastructure by school management type**

Type of building	Government	LFP recognised	LFP unrecognised	All schools
Purpose built, good construction	9	4	1	14
Purpose built, poor construction	1	3	2	6
House space, semi-good construction	n/a	1	5	6
Total schools by management type	10	8	8	26

<sup>6</sup> The descriptions of the schools is based on field observations and head teacher interview data, 2005-06.

**Table 2: Distribution of schools by number of all-weather rooms and school management type**

	Government	LFP recognised	LFP unrecognised	All schools
1 all-weather room		2	2	4
2 all-weather rooms	9	2	2	13
3 all-weather rooms	1	1	3	5
4 all-weather rooms			1	1
5 all-weather rooms		3		3
Mean number of rooms per school type <sup>7</sup>	2.1	3	2.4	2.5
Total schools by management type	10	8	8	26

The government school buildings were generally far superior to the bulk of LFP schools', as they were built according to government regulations, whereas LFP school buildings were built by private operators out of their own funds, meaning an incentive to cut corners. The 'standard' government school is robustly built of rendered brick with a concrete roof and floor, and is painted white, with green and yellow detailing. There are proper doors and windows with bars and shutters, and all buildings appear finished. They usually have an office, two large, regulation-sized classrooms and a covered verandah area as well as considerable outside space. The government regulations state that classrooms should be 20 by 25 feet (personal communication with District Education Officer, 2003), which was virtually never met by LFP schools (where rooms were mostly in the region of 10 by 15 feet).

By contrast LFP schools appear very different, especially when compared to government schools, as also found in Srivastava's study (2007). LFP school buildings fall into three trends with the best, oldest and most established (and usually recognised) schools having proper buildings, generally constructed of rendered and painted brick, having openings for doors and windows (despite the details and finish being uniformly poorer than those at government schools). They have properly constructed roofs made of brick cemented together, which is preferable in terms of heat and noise during rains, to corrugated iron sheets (Blum & Diwan, 2007). Only half of government recognised schools, which make up the majority of these better-constructed buildings, had secure boundary walls.

The schools referred to in Table 1 as being purpose-built but of poor construction were often extremely poor in appearance, resembling cattle sheds rather than school buildings. Most buildings had vented sections in the un-rendered brickwork and large openings instead of doorways, with no other source of light, while some also had openings for windows. The back portions of these rooms were invariably extremely dark, and children were often observed having to do their work crowded right to the back of these rooms. These rooms often had corrugated iron roofs while the floors were mostly dirt, but sometimes made of brick.

The third trend of LFP buildings is the use of converted house space. In some cases entirely un-altered houses were used, while in others some additional room construction had been added for the purposes of running the school. In these cases the construction was often of a higher standard than in the second trend of buildings described above, however these latter

<sup>7</sup> N.B. many schools, including virtually all government schools, also have verandah areas, however these do not count as all-weather rooms.

schools were very cramped indoors and out. It was often the case that there was no play area whatsoever, and barely enough space to sit outside during the cold winter months, when virtually all schools conduct classes outdoors in the warming sun. Unrecognised LFP schools lead the way in terms of boundary walls, with 75 percent of these schools having one.

In terms of the condition and state of maintenance of the schooling facilities, government schools lead the way, with 60 percent of buildings being in a good state of repair, and only 20 percent being in bad condition. Only half of both recognised and unrecognised LFP schools appeared in good condition, with 25 percent of recognised and 38 percent of unrecognised LFP school buildings being in a very poor condition. Virtually all schools were uniformly filthy. Over half of recognised LFP schools had toilets, the majority of which were separate for girls and boys. Less than one third of government schools had toilets, and only one fifth had a functional toilet. Unrecognised LFP schools are more likely than recognised LFP schools to have no toilet facilities. Most schools could provide constant drinking water from a hand pump on the premises.

**Table 3: Distribution of facilities within schools by school management types**

	Government		LFP recognised		LFP unrecognised	
	Yes	No	Yes	No	Yes	No
Sufficient indoor space	9	1	4	4	3	5
Sufficient outdoor space	10	0	6	2	1	7
Complete boundary wall	1	9	4	4	6	2
Schools having toilets	3	7	5	3	3	5
<i>of which separate for girls</i>	3	0	3	2	1	2
<i>of which functional</i>	2	1	5	0	3	0
Drinking water facility	8	2	8	0	7	1
Desks and seats	0	10	0	8	0	8
Floor mats for sitting	10	0	8	0	8	0
Teaching materials other than standard text books	0	10	0	8	0	8
One blackboard per teaching group	8	2	8	0	7	1
Total schools	10		8		8	

No schools had seats or desks, rather children sat on mats on the floor, and uniformly the only furniture in evidence was a table and chair for the head teacher, and single chairs for all additional teachers. All schools also lacked teaching materials, while most had one blackboard per teaching group (Table 3); the teaching group being made up of more than one primary class in the majority of cases. There were no additional facilities of any kind (consistent with findings of PROBE Team, 1999).

### **3.4.2 Imparting education: the teaching staff**

The school types have very different levels of staffing, and also different levels of teachers' qualifications. On average LFP schools employ more teachers than government schools, with recognised LFP schools employing a mean of 4 teachers, while unrecognised LFP and government schools have means of 2.6 and 2.1 teachers per school respectively (Table 4). Government school teachers are the only trained teachers, receiving both pre-service and in-service training, with 57 percent having a Basic Training Certificate (BTC). However many of these teachers were nearing the end of their careers, and so had become teachers when it

was possible to study for the BTC without a university degree. The Table below indicates that unrecognised LFP schools have the most highly educated teachers, and also the most experienced teachers amongst private schools (twelve years of education denotes secondary school completion only, while 15 years of schooling denotes a bachelor's degree and 17 years a master's degree). However, the mean experience of government school teachers is nearly three times that of LFP school teachers. The Table also shows that unrecognised schools have the lowest pupil-teacher ratios by far, at 29 students per teacher; these schools also have the smallest mean, minimum and maximum enrolments.

**Table 4: Staffing of schools by management type**

	Government			LFP recognized			LFP unrecognised		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Teachers' years of education	12.8*	12*	17*	14.7	12	17	15.8	12	17
Teachers' years of experience	16.7	0	38	5	0	15	5.7	0.5	17
Teachers' salaries p.a. (Rupees)	100,383	27,000	165,600	10,860	6,000	18,000	8,952	4,200	18,000
Number of teachers per school	2.1	1	4	4	3	5	2.6	1	4
Enrolments by school type	89	23	264	164	87	289	74	14	110
Mean pupil-teacher ratio by type	42:1			41:1			29:1		

\*57 percent of government school teachers had a Basic Training Certificate (BTC) on top of these qualifications.

Five of the 21 sampled government teachers were designated as assistant or para-teachers meaning that they are given an abbreviated training and are paid only a fraction of what permanent government teachers are paid. They are hired on one-year contracts, with renewal being, at least in theory, dependent on performance (Govinda & Josephine, 2004). LFP school teachers essentially have no contract and their employment continues for as long as the teacher is seen to be contributing to the school; they can be let go at any time if their performance is unsatisfactory, meaning direct accountability for their work.

Government regulations state that all schools must be recognised, and employ only trained and qualified teachers (Srivastava, 2007; Kingdon, 2007). The only training received by LFP teachers is some basic instruction and sometimes on-going advice and support from their head teacher, but this sort of training was described by teachers as negligible. Indeed many of the LFP teachers interviewed stated that they received no training whatsoever, in contrast to the claims of head teachers. This is consistent with Srivastava's (2007) study, where she found that most LFP teachers were entirely untrained.

Most of the schools (of all management types) dealt with in this research are small schools and therefore through necessity are multi-grade schools (Little, 2008; Blum & Diwan, 2007; Akyeampong, 2006). In all sample schools, both government and private, multi-grade teaching is practiced out of necessity, not pedagogic choice: 'many teachers in multi-grade environments are either untrained or trained in mono-grade pedagogy; have few if any

teaching/learning resources...’ (Little, 2001, cited in Little, 2006a: 8). Some purposefully multi-grade models of teaching achieve positive results (Akyeampong, 2006; Little, 2001), however this is not the case in the sample schools, where teachers struggle on with a mono-grade curriculum and techniques, in a multi-grade setting. The issue is virtually ignored by the Government of India (2007); the stated priority is to eradicate the necessity for multigrade teaching; at odds with the government’s other stated aim, to bring primary schools to even the smallest villages, where it is uneconomical to hire 5 teachers.

School visits provided some information on how these schools operate. What was observed to be taking place at the school both upon arrival and throughout the visit was recorded. The entire atmosphere and appearance of the two sectors were polar opposites, and there was a difference between school sectors consistently across the individual school examples; there was a private-government sector split, rather than also differing according to recognition status. The government schools had virtually no teaching activity. One para-teacher at one school was found to be teaching, while in another school an older child was instructing while the teachers (two were present) sat idly by. In the rest of the government schools there was an air of chaos and neglect, as the teachers simply read the newspaper or chatted with friends, while the children came and went, played and fought in front of them. Parents reported teachers encouraging children to fight each other, or one child to corporally punish another child.

By way of contrast, at the LFP schools there was always an air of seriousness and discipline, with children sitting in orderly rows. As only half of the LFP schools had more than three teachers, it was common practice to group together at least two classes. Where there were three teachers it was usual for the pre-primary class and class 1 to be grouped together, and similarly for classes 2 and 3, and classes 4 and 5. Where there were more teachers, preference was given to higher classes first. It was extremely common to observe children working diligently on their own in their copybooks and then bringing these to the teacher to be checked, while the teachers sat and waited to be approached. Only in very few cases were teachers actively engaged in teaching upon the research team’s arrival. There was an overall discipline enforced at the LFP schools that was found to be absent at government schools and it was this and the fact that children learn basic material that parents seized on in their comparisons of the school types.

The argument in favour of competition and the market appears to be correct in at least one sense: LFP school head teachers and owners perceive the need to keep standards relatively high in order that parents will see some benefit in paying fees. Direct accountability to the parent leads to greater teaching activity at LFP schools, and despite low salaries these standards are maintained through the promise of instant dismissal of teachers if standards drop. This was clear from all respondents in the study, and echoed by Srivastava (2007), who found that:

school owners claimed that since parents procured educational services through a fee, LFP schools felt a sense of contractual obligation to provide a reasonable standard of schooling which would lead to building a solid reputation in the local market, and attracting and maintaining clients (Srivastava, 2007: 164).

This does not mean that the quality of schooling is objectively high, rather the standard may be just high enough to justify the fees.



In contrast, government school teachers are extremely well-paid, permanent government employees with no accountability for the work they (fail to) do. From observation and parental reporting it appeared that these teachers have no motivation to teach well even small numbers of children. For example, two sample schools had enrolments in the twenties, a manageable number for a motivated teacher to handle. Nineteen percent of teachers were found to be absent, but no schools were found to be closed, although parents reported serious irregularity in the hours kept by teachers. The most profound problem is teacher inactivity at government schools during official class time. These school visits did not provide the necessary grounds on which definitively to judge school quality, however they helped to illuminate the perceptions reported by often highly dissatisfied parents. From this background, it is appropriate to move on to a discussion of the methodology for discussing parental school choice making.

### **3.5 The methodology for exploring parental school choice**

The broad aim of the paper is to determine whether LFP schooling can be considered an alternative to the failing government system, and therefore to what extent they can be considered accessible to the poor. In order to answer these questions, defining poverty is necessary in order to locate the poor and examine their school choices, and previous work by the author is drawn on in this area (Härmä, 2008 & 2009).

The study utilises a mixed-methods approach, in which qualitative focus group and interview data supplements and fleshes out the main messages that emerge from the quantitative data. The main data collection consisted of a household survey carried out in 250 families, with an area of 13 villages covered. These villages were adjacent to one another, meaning that it would be a physical possibility that schools would be in competition with each other at least to some extent. The fieldwork took place over five months starting in October 2005, with an initial ‘mapping’ exercise carried out in advance by a researcher, recording basic information on all households in the sample villages, which record served as the sampling frame for the study. The eligible population for the study was defined as those currently with primary school aged children, and from the eligible families households were selected randomly for interview. Where selected families were unavailable, another family was substituted. Interviews were carried out by the author with the aid of an interpreter, and interviews were always carried out in the family home in order for an observation schedule to be completed, recording information on the house, its state of repair and assets owned to aid in determining the socioeconomic status of the family. Focus group discussions (FGDs) were carried out in six of the 13 fieldwork villages with a mean of 10 participants each, selected through a combination of convenience, volunteer and snowball sampling. Participants included a mix of government and LFP school children’s parents.

In terms of schools, all schools were visited in the sample villages where LFP schools were present. Visits included interviews with head teachers, two primary school teachers (where applicable), and an observation schedule completed by the researcher. All visits were unannounced (with permission sought from the head teacher or school owner as the first priority) as it was desired to achieve as realistic a view of the school as possible. The three government schools in the small villages where there were no LFP schools were not visited as they did not have direct competition within the village. Ten villages contained at least one LFP school, with five villages having more than one, and one of these five villages having three, meaning that 16 LFP schools were visited in total.

All research instruments were piloted appropriately with modifications being made to the instruments according to issues that arose. The methods of data analysis are described below in the appropriate sections, but briefly factor analysis is used to derive indices of poverty, while these indices and other control variables are used in logit regression modeling of parental school choice. In terms of ethics, all interviews and visits took place after informed consent was given (verbally, as a large proportion of respondents were illiterate), and it was made clear that respondents were free to decline. In addition, it was made clear to respondents that they were under no obligation to answer questions with which they were uncomfortable, with the most sensitive subject covered in this research having to do with income. This study is too small to draw generalisations from, but what is sought from this research is the possibility of identifying patterns with regard to parental perceptions and priorities, and with regard to the affordability of fee-paying schools for the poor, from which policy-relevant lessons can be learned.

## **4. Are the poor accessing LFP schools?**

Poverty is surmised to be the most important determining factor in the school choice of the parent in the study area, and so 4.1 discusses how poverty is defined for the purposes of the study. Section 4.2 describes the other factors taken into account in the subsequent analysis which have to do with a broader, capabilities-type approach to poverty. Section 4.3 then moves on to use the chosen definition of poverty and these other factors in a multivariate analysis of school choice.

### **4.1 Defining ‘the poor’**

Defining poverty in order to precisely identify ‘the poor’ is fraught with difficulty. Poverty is contributed to by direct causes and also by factors that can, but do not necessarily, lead to poverty. Extremely low income is an example of a direct indicator of poverty, while low caste status does not necessarily result in poverty, but often goes hand in hand with it.

The approach of this paper is to assess the socio-economic status of the sampled families according to scores on two different indices of poverty, and also according to the cash income of the family, as schooling must be paid for out of cash. The indices are derived through factor analysis which is explained in more detail in Härmä (2009). To summarise, the:

indices of poverty were derived from observations recorded within the respondents’ homes with regard to their land and other asset holdings. These indices are considered to provide a temporally stable and reliable picture of a family’s wealth (Hulme, 2003)... (Härmä, 2009: 158).

This method is used by Dreze and Kingdon (2001) in their examination of schooling participation in rural India. It is acknowledged that assets may have been purchased in an earlier time and may not be an accurate reflection of a family’s current income, or may have come into a family through dowry, however they do provide a buffer from sudden shocks such as illness or loss of work (Chronic Poverty Research Centre, 2005). Therefore the following analysis of school choice, which builds on the work in Härmä (2009), utilises information on family income as well as families’ asset index scores.

A full description of the factor analysis method utilised in this research can be found elsewhere (Härmä, 2009: 158-159), while Table 5 shows the poverty indicators used in the analysis of poverty, and how they are distributed across the resulting indices. The first two indices are used in the school choice analysis to follow, while the third is not used due to endogeneity issues. ‘The factor analysis results in scores for individual households on each poverty index, from which quintile scores were then calculated’ (Härmä, 2009: 159), and it is these scores that are used as the main explanatory variable in two of the following model sets.

**Table 5: Distribution of variables within the three indices**

	Asset Index	Standard of Living Index	School affordability index
Landholding (number of acres)	✓		
Savings (yes/no)	✓		✓
Loans (yes/no)	✓		✓
Payment in kind (yes/no)	✓		
Animals (number of livestock)	✓	✓	
House size (small, medium, large)	✓		
Toilet	✓	✓	
Bath cubicle	✓	✓	
Economic appearance of the household	✓	✓	
Furniture (number of items)	✓	✓	
Grass cutter	✓	✓	
Engine	✓		
Radio	✓	✓	
Gas hob	✓	✓	
Windows		✓	
Doors		✓	
Electricity		✓	
Cleanliness of the household		✓	
State of repair of the household		✓	
Family clothing (condition)		✓	
Necessary to save for school?			✓
Difficult to afford schooling?			✓
Ever missed fee payment?			✓

Source: Härmä (2009: 159) household observation schedule

## 4.2 Examining the effect of poverty on school choice

Sections 4.2 and 4.3 explore the paper's central hypothesis, that *poverty is the key factor in school choice* at the primary level for families in rural U.P. A multivariate approach is used to control for family, parent- and child-specific characteristics, and the poverty measures identified above are used to test whether results differ when addressing the identification of poverty differently. Firstly it is recorded that LFPs are the preferred school choice of the majority (94 percent) of sampled parents under current conditions, with cost (or poverty) being the greatest obstacle to access (parents reported this during interviews). The following sub-sections discuss the variables used to control for various attributes of the family in the analysis, helping to take into account the great multidimensionality of poverty as conceptualised by Sen (1999), while Section 4.3 presents the modelling and discusses the results.

### 4.2.1 The characteristics of families

#### Family size

The number of children in a family has direct consequences for how much can be spent on the education of each child. Lieten (2003) found during fieldwork in U.P. that family size was extremely important to the extent and cost of education that could be managed, while Kingdon (1996b) uses the number of children in the family as a control variable in looking at

educational outcomes in U.P., which she found to be highly (negatively) significant. Srivastava (2006: 506) found that parents asserted that ‘the ability to prioritise education for all their children’ was ‘partially attributable to decreased family size.’

**Table 6: Percentage distribution of sample children by school type and total number of children in a family**

	Government	LFP	Total Children
1 Child	20.0	80.0	5
2 Children	32.6	67.4	43
3 Children	36.9	63.1	84
4 Children	54.7	45.3	128
5 Children	74.3	25.7	113
6 Children	69.0	31.0	58
7 Children	84.0	16.0	25
8 Children	100.0	0.0	12
Total Children	273	195	468

Table 6 shows a steadily decreasing percentage of children in LFP schools as the number of children in the family increases. The number of adults in the family will also be considered as a separate variable, however there is far less variability as compared with the number of children. The number of children and adults in the family are used as continuous variables in the analysis.

#### Caste and religion

These are defining characteristics that have long been grounds for discrimination resulting in disadvantage (Subrahmanian, 2005; Mehrotra & Panchamukhi, 2007). It is necessary to discuss caste and religion jointly (Jeffery et al, 2005), as only Hindus have a caste, meaning that Muslims must be treated as a separate socially underprivileged group. Dreze and Kingdon (2001: 4) group caste and religion together in their examination of school participation, and find that participation of the disadvantaged is particularly low. Kingdon (1996b) also uses caste and religion as important control variables in her examination of schooling outcomes by sector in U.P., finding an association between government schooling and low status. De et al (2002) and Srivastava (2006) expected low-caste to be influential in school choice. Schagen and Shamsan (2007) use religion as a control variable in examining educational outcomes, and find that being Muslim is negatively related with children’s performance.

The sample comprises 61 percent Hindus, 36 percent Muslims and only 3 percent Christians. Table 7 indicates that less than 30 percent of scheduled caste and Muslim or Christian families access LFP schools. Srivastava (2007) found that such differences were not due to discrimination by LFP schools as they must compete for all possible ‘clients’ (echoed by Dreze and Kingdon, 2001), indicating that it is the ability of these groups to afford private schools that is the issue. In the modelling process caste and religion are represented using dummy variables as in Dreze and Kingdon (2001) and in Kingdon (1994 & 1996b). The caste dummy represents scheduled castes, with the reference category including all others. The religion dummy represents minority religious groups Muslims and Christians<sup>8</sup>, with the reference category representing Hindus.

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<sup>8</sup> Christians are pooled with Muslims as in Kingdon (1994) due to the low number of observations for Christians.

**Table 7: Percentage distribution of children by school type and caste and religion**

School type	SC/ST Hindu	Muslim or Christian	Medium & high caste Hindu	Total Children
Government	76.7	69.3	32.5	273
LFP	23.3	30.7	67.5	195
Total Children	116	189	163	468

#### Occupation

A family's main occupation is part of the socioeconomic status of the family (Srivastava, 2006) and is often linked with class or caste (Jeffery et al, 2001). Jeffery et al (2001) argue that, for example, the dominant Jats in western U.P. are increasingly able to take advantage of off-farm opportunities while those open to the Scheduled Castes have not changed drastically, due to the influence and funds (for bribery) required to secure highly coveted government jobs. This situation therefore reinforces the disadvantage of the disadvantaged (Lieten, 2003).

**Table 8: Percentage distribution of children by school type and family occupation type**

	Farmer	Skilled	Unskilled	Total Children
Government	44.8	22.6	68.8	273
LFP	55.2	77.4	31.2	195
Total Children	145	31	292	468

Better forms of family occupation are found in several studies to have a positive effect on LFP school uptake (Schagen & Shamsan, 2007; Dreze and Kingdon, 2001). Table 8 shows that less than one third of unskilled workers send their children to LFP schools, while over three quarters of skilled workers do so. Main occupation is represented in the models using dummy variables, with a reference category representing all unskilled manual work. The first dummy represents skilled workers and employees while the second dummy represents farmers.

#### **4.2.2 The characteristics of parents**

##### Parents' age

The ages of the child's parents are variables that are not explored in other studies of school choice. However parental age could be expected to be influential in that older parents could be resistant to change, as found by Srivastava (2006). Table 9 shows a potential relationship between school choice and the age of parents, as there is a steady drop in proportions of children enrolled in LFP schools as the father's age rises. Dummy variables are used for father's age, the first representing fathers aged 30 and under, and the second representing fathers aged 31 to 40 years, with a reference category of those aged over 40 years. As mother's age reflects highly similar information to father's age, only the latter is included in the analysis<sup>9</sup>.

<sup>9</sup> There is a very strong (0.978) and significant (at 1% level) correlation between mother's and father's age.

**Table 9: Percentage distribution of children by school type and fathers' age categories**

	Fathers aged up to 30	Fathers aged 31-40	Fathers aged over 40	Total Children
Government	47.8	59.4	66.3	273
LFP	52.2	40.6	33.7	195
Total Children	90	298	80	468

Parents' education

Parental education is frequently cited as being of great significance to children's educational outcomes. Muralidharan and Kremer (2006) in their examination of public and private schools in rural India found that parents of private school children were more educated than their government school counterparts. Dreze and Kingdon (2001) and Schagen and Shamsan (2007) both found that higher parental education was positively significant. Table 10 indicates that in the sample there is a pattern of increasing uptake of LFP schooling as the father's education level rises, with an especially large proportion, over two thirds, of secondary or higher educated fathers sending their children to LFP schools.

**Table 10: Percentage distribution of children by school type and father's qualification categories**

	Uneducated	Primary part or complete	Upper primary part or complete	Secondary + part or complete	Total Children
Government	72.5	64.9	62.1	31.5	273
Private	27.5	35.1	37.9	68.5	195
Total Children	138	74	145	111	468

While the mother's education is often regarded as being highly influential, there is very little variability in the educational attainment of mothers in this sample (Table 11), as over 82 percent are uneducated; the small number of observations for mothers with above primary education meant that it was more sensible to divide simply between uneducated and educated or part-educated mothers.

**Table 11: Percentage distribution of children by school type and mother's education**

	Uneducated	Some education	Total Children
Government	61.6	43.4	273
Private	38.4	56.6	195
Total Children	385	83	468

Dummy variables are again utilised; the reference category represents those who are entirely uneducated. For fathers there are three dummies, the first representing those with partial or complete primary education, the second represents partial or complete upper-primary schooling and the last dummy represents those with incomplete secondary schooling through to university degrees or further technical training. For mothers only one dummy is used representing mothers with any level of education.

### 4.2.3 The characteristics of the child

#### Birth rank

Child-level variables are used to capture whether or not parents are making school choices based on individual attributes of the child. Birth rank may be relevant in that parents may start out by sending the eldest to LFP school, but may not be able to afford subsequent children in private education. Indeed Srivastava (2006) expected to find that parents chose one child to send to LFP schools according to child rank or gender. Schagen and Shamsan (2007) also consider this variable. Kingdon (1994) also investigated this aspect in her study of U.P. Table 12 indicates that far more first-born children attend LFP schools as compared with children of subsequent birth ranks. This variable is used as an ordinal variable in the analysis.

**Table 12: Percentage distribution of children by school type and rank within family (primary age only)**

	Rank 1	Rank 2	Rank 3	Rank 4 & 5	Total Children
Government	50.2	59.2	81.7	80.0	273
Private	49.8	40.8	18.3	20.0	195
Total Children	241	147	60	20	468

#### Gender

The significance of the gender of the child is widely recognised and accepted in the literature, which documents that girls in poor households are less likely than boys to receive adequate general care (Chronic Poverty Research Centre, 2005: 21). Gender bias is clearly reflected in other studies through enrolments at LFP schools, which have many more boys enrolled than girls (Mehrotra & Panchamukhi, 2007). There is much work highlighting the problems that females face in India and U.P. specifically (for example, Dreze and Gazdar, 1996). Dreze and Saran (1995) reinforce the notion that girls in U.P. in particular have vastly reduced opportunities and rights relative to males, while Lerche and Jeffery (2003) highlight the son preference prevailing in U.P. The study area is in a section of the state with some of the highest levels of son preference and ‘the most masculine total sex ratios in the state’ (Lerche & Jeffery, 2003: 32).

Mehrotra and Panchamukhi (2007), De et al (2002), Majumdar (1999) and Srivastava (2006) examine the relationship between school type and gender. Table 13 indicates that a far higher percentage of boys in the sample are sent to LFP schools than is the case with girls; Kingdon (1996b) has found that being male is positively associated with schooling outcomes. In the analysis gender is represented using a dummy for girls, with boys as the reference category.

**Table 13: Percentage distribution of children by school type and gender**

	Male	Female	Total
Government	48.6	66.4	58.3
LFP	51.4	33.6	41.7
Total children	212	256	468

#### Children’s work

It is common for children in India to be expected to help their parents in a variety of types of work. In the study sample there were no children who engaged in paid work outside of the family; all child work was confined to the home and to helping at times with the wage-earning work of the family, such as during peak agricultural times.



It is hypothesised that children who are expected to do more work may be less likely to be sent to fee-paying schools (Alderman et al, 1996; Colclough et al, 2003), as indicated in Table 14. Kingdon (1996b) found that work had a negative effect on children’s achievement. Child work is represented using dummies with a reference category of those doing no work at all. The first dummy represents those doing domestic work, while the second is for those participating in the work of the family.

**Table 14: Percentage distribution of children by school type and work status<sup>10</sup>**

	No work	Domestic work	Helps with work of family
Government	54.5	62.9	68.8
LFP	45.5	37.1	31.3
Total Children	264	197	32

#### Parental motivation for educating the child

Parental motivation may indicate the level of priority the parents place on education. Dreze and Sen (1995a) discuss the motivations of the parents as an important factor in schooling decisions and outcomes for the child, as does Srivastava (2006). The three broad motivations for education provided by sampled parents included the child’s future job prospects, the child’s marriage prospects, or for the child’s own personal growth and development. Future marriage prospects was given as an answer for more girls than boys, a trend also noted by Srivastava (2006), Dreze and Sen (1995a) and the PROBE Team (1999).

The only reason for sending a child to school that appears linked with enrolment at LFPs is the goal of finding a good job (Table 15), with nearly 52 percent of these children (mostly boys) attending LFPs. Dummies are utilised once again with those sent to school in order to find a good job forming the reference category. The first dummy represents those educated for their personal growth and development; the second dummy those educated in order to attract a better spouse, while the last dummy represents those sent to school for any other reason.

**Table 15: Percentage distribution of children by school type and reasons for educating the child**

	For better job	For personal development	For better spouse
Government	48.5	61.1	57.6
LFP	51.5	38.9	42.4
Total Children	202	342	125

#### **4.2.4 The effects of parental perceptions of government schools**

A control variable for measuring parental perceptions of the quality of government schools is added into the model separately at the end because it is a view which holds for the entire family unit but is external to the family. Parental perceptions of the quality of the ‘default’

<sup>10</sup> Some children perform more than one type of work, meaning that the sum of the totals from the three columns in the Table is larger than the number of children in the sample.

government school option inform the ‘mental model’ (Srivastava, 2006) that parents hold, shaping their school choice decisions. Kingdon reaffirms that:

parents’ perceptions about the relative merits and costs of G [government], PA [private aided] and PUA [private unaided] schools have implications for their choice of school type (Kingdon, 1994: 105).

Kingdon (2005: 21) also states that ‘in the increase of private education, the breakdown of government schools is more decisive than parental ability to pay.’

In the present sample, the majority of families (84 percent) view government schools negatively and LFPs positively (77 percent). Srivastava (2008) notes in her qualitative work that:

household interviewees perceived differences between the state and private sectors as deficiencies in the former. They perceived these deficiencies mostly due to the general discourse on schooling in their local communities, and in some cases, through personal experience of both sectors (Srivastava, 2008: 7; echoed by Majumdar, 1999 and Tooley & Dixon 2007).

The variable is used as an ordinal variable in the analysis.

#### **4.3 How parental school choice is shaped: the analysis**

This section examines the causality between the independent variable, poverty, and school choice (coded 0 for government school and 1 for LFP school; the latter are not disaggregated as parents were largely unaware of recognition status), controlling for other variables outlined above; this is a binomial modelling exercise because the study is concerned with a dichotomous school choice. The selected method of data analysis is logit regression modelling, which is much-used in similar research. Kingdon (1994 & 1996b) has used logit regression in a similar way, and Dreze and Kingdon (2001) ‘employ the familiar binary logit’, to examine the parental decision to enrol or not to enrol their children. This method is also used by Bandopadhyaya and Roy (1998), Alderman et al (1996), Rose and Al-Samarrai (2001) and Mugisha et al (2008).

While the survey information was collected at the family unit level as this is the main unit of measurement (as in Alderman et al, 1996; Bandopadhyaya & Roy, 1998; Schagen & Shamsan, 2007), the family units were divided into separate observations for each individual child. There are 468 eligible child observations, of which 195 attend LFP schools (41.7%), and 273 attend government schools (58.3%). The software package STATA version 7 is used to fit a series of logit models with the aim that the final model will explain the maximum variance in terms of how parents choose schools. The starting point is an empty model and then the explanatory variable (poverty) is added, followed by control variables added in conceptual groups. This allows an examination at each step of what effect the new group of variables has on the relationships of poverty with the dependent variable, school choice. This approach also allows an analysis of the relationship between the new variables with the dependent variable. The result in this instance is a set of five models.

The 468 individual child-level observations are treated as individuals with certain relevant characteristics nested inside the group (family) unit. It is important to recognise this clustering

effect as usual regression analysis techniques assume absolute independence of each observation in the dataset (Long & Freese, 2006). The violation of this assumption of independence is taken into account through the clustering variable, which in this instance is the household number. Logit regression can be performed using the robust cluster command which adjusts (inflates) the standard error which would otherwise be under-estimated; it also reduces the significance, yielding reliable results (Kingdon, G. personal correspondence, 5 January 2008).

#### **4.3.1 Analysing school choice through the lens of asset poverty**

Table 16 presents the analysis of parental school choice, using the asset index as the explanatory variable. Quintiles of the asset index scores are represented in the model by four dummies, with the reference category being those families in the poorest quintile. This initial model indicates that as wealth increases so too does the likelihood of using LFP schools, in a largely linear pattern. From being slightly less poor (the second quintile) through to well-off (the fifth quintile) the strength of the coefficients increases steadily, and remains statistically significant. This result is similar to that found by Kingdon (1996b).

**Table 16: Analysis of school choice using the asset index**

		Model 1	Model 2	Model3	Model4	Model 5
Asset Index (ref.= quintile 1, poorest)	Quintile 2	1.447** (3.03)	0.917 (1.78)	0.885 (1.60)	0.850 (1.55)	0.728 (1.33)
	Quintile 3	2.169** (4.66)	1.839** (3.44)	1.983** (3.46)	1.960** (3.47)	2.055** (3.58)
	Quintile 4	2.593** (5.32)	1.772** (3.22)	1.902** (3.18)	1.889** (3.21)	2.022** (3.46)
	Quintile 5	3.012** (6.34)	2.251** (3.70)	2.136** (3.44)	2.078** (3.40)	2.366** (3.70)
Total children in the family			-0.408** (-4.05)	-0.407** (-3.92)	-0.275* (-2.33)	-0.178 (-1.40)
Total adults in the family			-0.100 (-0.77)	-0.093 (-0.69)	-0.049 (-0.33)	-0.066 (-0.41)
Caste (ref.= medium to high caste)	Scheduled Caste		-1.293** (-3.15)	-1.274** (-3.05)	-1.477** (-3.29)	-1.432** (-3.07)
Religion (ref.= Hindu)	Muslim or Christian		-0.918* (-2.52)	-0.876* (-2.35)	-0.943* (-2.34)	-0.912* (-2.29)
Family occupation (ref.= unskilled labour)	Farming		0.015 (0.04)	0.044 (0.11)	0.011 (0.03)	0.020 (0.05)
	Skilled work		1.789* (2.41)	1.636 (1.87)	1.368 (1.52)	1.222 (1.47)
Father's age (ref.= over 40)	Up to 30			0.064 (0.13)	0.139 (0.26)	-0.113 (-0.21)
	31-40			0.082 (0.20)	0.219 (0.47)	0.137 (0.31)
Mother's education (ref.= uneducated)	Some education			-0.601 (-1.46)	-0.560 (-1.32)	-0.572 (-1.31)
Father's education (ref.= uneducated)	Some/complete primary			-0.397 (-0.83)	-0.398 (-0.83)	-0.379 (-0.75)
	Some/complete upper primary			0.203 (0.49)	0.248 (0.57)	0.216 (0.50)
	Some/complete secondary/higher			0.896* (2.11)	0.934* (2.06)	0.979* (2.07)
Child's rank					-0.481** (-3.10)	-0.548** (-3.60)
Child's gender (ref.=male)					-0.789** (-3.14)	-0.833** (-3.21)
Child work (ref.= child does no work)	Child does domestic work				0.238 (0.74)	0.395 (1.18)
	Child helps in the work of the family				0.330 (0.43)	0.540 (0.66)
Reason for educating the child (ref.= to get good job)	Personal growth and development				-0.285 (-0.57)	-0.149 (-0.28)
	To get a better spouse				-0.228 (-0.23)	-0.376 (-0.37)
	Other/unclear reasons				0.273 (0.53)	0.350 (0.65)
Perception of government school						0.702** (3.35)
N		468	468	468	468	468
Pseudo R-square		0.1469	0.2560	0.2742	0.3090	0.3406

\*\* statistically significant at 1% level of significance

\* statistically significant at 5% level of significance

t-values are in parentheses

The rationale behind the order for addition of groups of control variables is to start with the general and to move to the specific: aspects of the family (model 2); aspects of parents (model 3); and children (model 4). Lastly the parental perceptions of government schools are added (model 5). The number of children is strongly and negatively correlated with LFP school choice, indicating that the more children there are, the less likely the family is to access LFP schools, as in Kingdon (1996b). However this effect weakens to insignificance by the final model. The number of adults in the family has a weak negative effect on school choice, but is insignificant.

Caste and religion are both strongly and negatively significant, meaning that to be Muslim or Christian and to be Scheduled Caste also reduce the chances of the family accessing LFP schools. This is consistent with Kingdon (1996b), Schagen and Shamsan (2007) and Dreze and Kingdon (2001). However this variable becomes statistically insignificant in the next model, consistent with Dreze and Kingdon (2001) and Kingdon (1994). The significance of the asset index remains strong, while the second poorest quintile's coefficient and level of significance have reduced.

Model 3 introduces parental characteristics; father's age is insignificant with almost no effect. With mother's education the direction of relationship is negative with the likelihood of choosing LFP schools, which is a counter-intuitive result, but not statistically significant. Regarding father's education, there is a statistically significant positive effect for those fathers with complete or partial secondary schooling or higher. The coefficients of the quintiles of asset index scores remain almost unchanged, and strongly statistically significant, although the second quintile has become insignificant even at the 10 percent level.

Model 4 moves on to introduce the child-level information, with the gender of the child proving highly significant with a negative direction, indicating that to be a girl significantly reduces the chances of attending LFP schools. This is again consistent with Dreze and Kingdon (2001) and Kingdon (1996b). For the child's rank in the household, the negative, significant coefficient indicates that the first child has a much greater chance of attending LFP schools, and these chances decrease as rank increases. The work of the child is insignificant with almost no effect at all, which is unsurprising in that child work was very limited in the sample households. The reasons for educating the child are also statistically insignificant. Yet again the strength of the asset index quintiles stays virtually unchanged.

The last model presents the effects of the addition of parents' perceptions of government schooling, as it is these perceptions that shape school choice. The variable is highly and positively significant, meaning that a very low opinion of government schools is related to LFP school enrolment. The strength of the coefficients and significance of the asset index quintiles remains extremely strong.

The enduring strength of the asset index with its very small amount of change from model to model indicates that it is the strongest determining factor in parental school choice, meaning that those who are not accessing LFP schools are not doing so because they cannot afford it, as reported by parents. The likelihood of a child in the second quintile accessing LFP schools is two times the chance of a poorest child, and for children in the third and fourth quintiles the likelihood increases to approximately 7.5 times. In the richest quintile the likelihood of a child attending LFP schools is 10.7 times that for a poorest child, which reinforces how important wealth is for accessing LFP schools.

### **4.3.2 The analysis of school choice using income as the poverty measure**

After having run the above models using the strongest measure of poverty according to the factor analysis, the model is run again with the log of income only (Table 17). The results of this model are virtually the same as with the asset index. Income is strongly significant throughout the five models, decreasing slightly in effect from the first model to the fifth, but remaining unequivocally statistically significant, with the strength of the coefficient changing very little throughout the process. There are small differences regarding two control variables: the number of children in the family in this case is significant and remains so to the end (as expected), with the strength of the coefficient and significance reducing slightly. Also the occupation of the family being skilled work is insignificant from the start of the process using income.

**Table 17: Analysis of school choice using the log of income**

		Model 1	Model 2	Model 3	Model 4	Model 5
Log of Income		1.272** (4.41)	1.222** (3.40)	1.182** (3.26)	1.236** (3.16)	1.112** (2.66)
Total children in the family			-0.497** (-4.55)	-0.483** (-4.41)	-0.344** (-2.87)	-0.295* (-2.37)
Total adults in the family			-0.137 (-0.89)	-0.142 (-0.90)	-0.089 (-0.54)	-0.079 (-0.44)
Caste (ref.= medium to high caste)	Scheduled Caste		-1.541** (-3.68)	-1.561** (-3.66)	-1.755** (-3.79)	-1.746** (-3.71)
Religion (ref.= Hindu)	Muslim or Christian		-0.836* (-2.40)	-0.840* (-2.26)	-0.911* (-2.28)	-0.887* (-2.24)
Family occupation (ref.= unskilled labour)	Farming		-0.266 (-0.57)	-0.269 (-0.56)	-0.338 (-0.68)	-0.135 (-0.27)
	Skilled work		0.689 (1.00)	0.609 (0.85)	0.322 (0.45)	0.291 (0.40)
Father's age (ref.= over 40)	Up to 30			-0.177 (-0.35)	-0.089 (-0.17)	-0.241 (-0.46)
	31-40			-0.097 (-0.23)	0.060 (0.13)	0.003 (0.01)
Mother's education (ref.= uneducated)	Some education			-0.577 (-1.38)	-0.571 (-1.33)	-0.543 (-1.24)
Father's education (ref.= uneducated)	Some/complete primary			0.041 (0.09)	0.015 (0.03)	0.026 (0.05)
	Some/complete upper primary			0.404 (1.01)	0.408 (0.96)	0.377 (0.89)
	Some/complete secondary/higher			0.887* (2.24)	0.874* (2.07)	0.933* (2.11)
Child's rank					-0.500** (-3.02)	-0.542** (-3.41)
Child's gender (ref.=male)					-0.743** (-3.15)	-0.775** (-3.30)
Child work (ref.= child does no work)	Child does domestic work				0.339 (1.05)	0.447 (1.38)
	Child helps in the work of the family				0.195 (0.24)	0.205 (0.25)
Reason for educating the child (ref.= to get good job)	Personal growth and development				-0.465 (-0.95)	-0.387 (-0.76)
	To get a better spouse				-0.604 (-0.73)	-0.703 (-0.81)
	Other/unclear reasons				0.156 (0.31)	0.222 (0.44)
Perception of government school						0.501* (2.31)
N		468	468	468	468	468
Pseudo R-square		0.1004	0.2376	0.2510	0.2900	0.3066

\*\* statistically significant at 1% level of significance

\* statistically significant at 5% level of significance

t-values are in parentheses

### **4.3.3 Analysing school choice through the lens of living standard poverty**

The same model is then run with the standard of living index as the measure of poverty (Table 18). The results of these models are virtually identical to the first set of models using the asset index. This highlights the robustness of poverty as an explanation of school choice, regardless of the measure of poverty being used. The standard of living is seen to be consistently significant across models, but ultimately only those in the top two quintiles on this index have a much improved chance of accessing LFP schools, casting the most negative light on the accessibility of LFP schools to the poor.



**Table 18: Analysis of school choice using the standard of living Index**

		Model 1	Model 2	Model 3	Model 4	Model 5
Standard of living Index (ref.= quintile 1, poorest)	Quintile 2	-0.182 (-0.41)	-0.561 (-1.15)	-0.432 (-0.88)	-0.441 (-0.85)	-0.270 (-0.54)
	Quintile 3	0.820* (2.00)	0.852* (2.04)	0.895* (2.05)	0.837 (1.80)	0.896 (1.87)
	Quintile 4	1.381** (3.07)	1.067* (2.22)	1.242* (2.55)	1.259* (2.55)	1.326** (2.64)
	Quintile 5	2.251** (4.86)	1.611** (3.28)	1.636** (3.36)	1.661** (3.29)	1.874** (3.51)
Total children in the family			-0.321** (-3.06)	-0.299** (-2.84)	-0.152 (-1.30)	-0.087 (-0.68)
Total adults in the family			-0.103 (-0.77)	-0.080 (-0.58)	-0.030 (-0.21)	-0.011 (-0.07)
Caste (ref.= medium to high caste)	Scheduled Caste		-1.787** (-4.26)	-1.793** (-4.30)	-1.977** (-4.31)	-1.941** (-4.18)
Religion (ref.= Hindu)	Muslim or Christian		-1.296** (-3.32)	-1.279** (-3.15)	-1.332** (-3.02)	-1.276** (-2.89)
Family occupation (ref.= unskilled labour)	Farming		0.430 (1.25)	0.433 (1.23)	0.399 (1.10)	0.501 (1.35)
	Skilled work		1.838** (2.91)	1.783* (2.51)	1.537* (2.08)	1.354 (1.87)
Father's age (ref.= over 40)	Up to 30			0.175 (0.34)	0.300 (0.55)	0.110 (0.20)
	31-40			0.162 (0.37)	0.328 (0.67)	0.291 (0.63)
Mother's education (ref.= uneducated)	Some education			-0.676 (-1.55)	-0.665 (-1.48)	-0.689 (-1.46)
Father's education (ref.= uneducated)	Some/complete primary			-0.120 (-0.24)	-0.122 (-0.24)	-0.061 (-0.12)
	Some/complete upper primary			0.371 (0.93)	0.421 (1.00)	0.432 (1.04)
	Some/complete secondary/higher			0.887* (2.08)	0.954* (2.04)	1.027* (2.13)
Child's rank					-0.541** (-3.80)	-0.592** (-4.16)
Child's gender (ref.=male)					-0.779** (-3.20)	-0.821** (-3.35)
Child work (ref.= child does no work)	Child does domestic work				0.231 (0.72)	0.360 (1.10)
	Child helps in the work of the family				0.034 (0.04)	0.105 (0.12)
Reason for educating the child (ref.= to get good job)	Personal growth and development				-0.377 (-0.69)	-0.268 (-0.47)
	To get a better spouse				-0.436 (-0.33)	-0.665 (-0.47)
	Other/unclear reasons				0.183 (0.32)	0.239 (0.41)
Perception of government school						0.600** (2.73)
N		468	468	468	468	468
Pseudo R-Square		0.1150	0.2616	0.2773	0.3142	0.3370

\*\* statistically significant at 1% level of significance

\* statistically significant at 5% level of significance

t-values are in parentheses

In the light of the similarity of all sets of models, it might be questioned whether or not it is necessary to use different measures of poverty. The different aspects of poverty might yield different results in different settings, which could be illuminating in determining in what aspects families are particularly deprived. However if wanting to select one measure of poverty from the above which would be the most useful on its own and fit for most purposes, the asset index from the present study would be relied upon due to the existing literature on the subject and because the factor analysis results indicate that this index explains the most about poverty.

#### **4.4 Conclusions**

In conclusion, the above models support the hypothesis that in the face of a near universal preference for LFP schooling (under current conditions in the government sector), the main determinant of school choice is poverty. To support these findings further, the next section explores in context the actual costs to families of sending children to school.

## **5. The bottom line: the full costs of attending government and private schools**

If LFP schooling is said to be unaffordable to the poor, the question of how much parents must pay automatically arises. This section quantifies and compares the full costs at government and LFP schools, and considers these figures as a proportion of rural earnings, taking into account family size. Crucially, the proportions of earnings at each wealth level that would have to be spent in order to access LFP schools are also discussed below.

### **5.1 The costs and subsidies at government and LFP schools**

The full costs to families at both school sectors are not easily compared on a line for line basis. Officially India has instituted a free primary education (FPE) policy however there is a 'development fee' (Rs1 per month) and a 'sports fee'<sup>11</sup> (Rs0.10 per month for classes one and two, and Rs0.20 per month for classes three through five<sup>12</sup>) at government schools (R. Govinda, interview, 23 February 2006; survey data, 2005-06). These fees are extremely low even viewed in context, manageable to virtually all poor families. Free textbooks are distributed at government schools, and neither the uniform policy nor any degree of clothing standard is enforced, leaving only stationery to be purchased by families. The total fees payable for one year (eleven months of payments) should therefore be Rs12.10 for classes 1-2 and Rs13.20 for classes 3-5, with the cost of stationery additional.

In reality parents reported paying much more to schools in illegal fees demanded by teachers, usually 2 rupees, but sometimes up to Rs20 per month. In some cases parents reported no monthly fee at all as teachers sometimes choose not to press the poorest families to pay, in order to maintain the highest possible enrolments, making up the short-fall (and more) through charging extra from other parents. There are incentives for teachers to do this: schools receive funds per attending child per day for the mid-day meal scheme, and teachers perceive a threat to their jobs if enrolments drop. Registration and examination fees, which are illegal at government schools, were also reported by parents, ranging between Rs2 and Rs40 per annum for registration, and between Rs3 and Rs50 per annum for examinations, with the most consistently reported amount being Rs10 for each respectively. Parents also reported paying illegal fees of Rs5 to Rs10 for the 'free' textbooks, however stationery is undoubtedly the largest single cost with a mode<sup>13</sup> cost of Rs100 per year (range: Rs30 to Rs150). Table 19 illustrates the full costs as reported by parents<sup>14</sup>. The parental perspective is relied upon here as figures were generally consistent across families for each school, and because of the clear incentives for teachers to under-report.

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<sup>11</sup> This is despite the fact that no sport takes place at sample schools, as reported by teachers.

<sup>12</sup> This information was received from government head teachers and confirmed by Dr. Govinda at NUEPA on 23 February 2006.

<sup>13</sup> The mode expenditure is presented here in order to show the most consistently reported level of costs.

<sup>14</sup> Parental reporting is relied upon here as it was generally consistent across families attending each school, and because of the incentives for teachers to under-report the costs.

**Table 19: Yearly cost of sending a child to government school**

	Tuition fee	Registration fee	Examination fees	Books cost	Stationery cost	Total spend per year
Mean	35.15	13.77	14.21	7.64	77.72	148.49
Mode	24.00	10	10	10	100	154.00

Note – Rs50 equated to US\$1 at the time of the fieldwork.

As with government schools, LFP head teachers and managers tended to under-report on costs, possibly because it is illegal in India to run a school for profit (see also Tooley & Dixon, 2006; Srivastava, 2007). As reported by parents, the mean costs of attending a recognised LFP school are slightly higher than attending an unrecognised school (Table 20) possibly due to the former's greater age (15 years on average as compared to 6 years) and the attendant status of having the government's 'stamp of approval'. It was also reported that parents of recognised school-going children spent more on books, stationery and uniform, leading to a year's education being Rs200 per year higher than at unrecognised schools, taking mean expenditures. Extra tuition which is so common across developing countries (Bray, 1996) and in urban parts of India, has not as yet caught on in this rural part of U.P.

**Table 20: Yearly cost of sending a child to LFP school**

		Tuition fee	Registration fee	Examination fees	Books cost	Stationery cost	Uniforms cost	Total spend per year
All LFPs	Mean	550.00	61.40	48.32	210.35	159.64	201.52	1,231.23
	Mode	480.00	50	30	200	150	150	1,060
Recog. LFPs	Mean	587.53	71.72	58.33	215.63	173.09	215.20	1,321.50
	Mode	480.00	100	60	200	100	150	1,090.00
Un-rec. LFPs	Mean	502.03	41.68	34.38	206.30	149.23	186.98	1,120.60
	Mode	480.00	10	30	200	150	150	1,020.00

## 5.2 Reducing the costs: concessions, scholarships and stipends

There are a number of different incentive schemes and concessions available at both government and LFP schools. At government schools textbooks, mentioned above, are distributed to all enrolled children, and this scheme was found to be operationalised fairly consistently. Uniforms are meant to be distributed free to girls, but the delivery was patchy at best. The mid-day meal scheme is also present in all of the sampled government schools, a measure designed to improve children's attendance and enrolment (Government of India, 1995; Dreze & Goyal, 2003). Lastly there is the government stipend scheme which entails the transfer to parents of Rs300 per enrolled child, per year. Illegal charging also exists in connection with the stipend, with parents receiving between Rs250 and Rs300, but usually closer to Rs275.

The stipend is also available in principle at any government-recognised LFP school. In the present sample, at six of the eight government-recognised LFP schools the stipend was available, with similar sums of Rs250-Rs275 being paid to parents after reported bribes were paid to government officials<sup>15</sup>. The distribution of the stipend at LFP schools appears to be

<sup>15</sup> LFP schools may be cutting more per child than the amount that must reportedly be paid to the government in bribes which in itself is entirely plausible, as a way of making extra profit. This is indicated by several

slower and less certain, as only 9 percent of LFP school children were reported to have received it, while the corresponding figure for government school children is 59 percent<sup>16</sup>.

LFP schools offer a discount of one child's monthly fee waived when three or more children are enrolled in the same school, while all other fees and costs still apply. Some schools' managers stated that they offer a number of fully free places at their schools for poor children (as in Tooley and Dixon, 2006); however this was not found to be the case in practice. Of the 58 families who reported having asked an LFP school for a concession, only ten families (or 17 percent) reported receiving a modest discount on the monthly fee rather than simply the three-for-two concession.

### **5.3 Family expenditure on education in context**

This section addresses the most crucial question: what proportion of a family's income must be spent in order to access LFP schools? As the average family size reduces as socioeconomic status increases, the education cost burden is the greatest for poorer families. Table 21 details the mean number of children (and primary aged children) per family according to quintiles of income<sup>17</sup>.

**Table 21: Mean number of children and primary aged children per family by income quintile**

	Total children	Primary aged children	Mean income	Mean income in US\$
Quintile 1 (poorest)	4.10	1.88	Rs7,049	140.98
Quintile 2	4.19	2.13	Rs9,802	196.04
Quintile 3	3.84	2.02	Rs13,404	268.08
Quintile 4	3.76	1.68	Rs18,797	375.94
Quintile 5 (richest)	3.79	1.79	Rs52,490	1,049.80

Multiplying the mean of two primary-aged children (in the lowest three income quintiles) by the mean cost of educating a child at LFP school (Rs1,231 per annum) indicates a cost of Rs2,462 per annum, with no discount available as three children are not enrolled. Figure 1 details the mean spending by families per child in the two different school sectors and differentiating between recognised and unrecognised LFP schools, by quintiles of income. Only 24 percent of the children in the poorest 2 quintiles of income manage to access LFP schools, half of which attend recognised LFP schools.

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recognised LFP schools keeping enrolment figures on paper that were approximately double the number of children actually attending the schools (this was confirmed by the teaching staff who stated that the head counts taken at the time of the visit represented the correct number of students).

<sup>16</sup> It should be noted that the survey took place across two terms, meaning that families using either school type may have received the stipend some time after being interviewed.

<sup>17</sup> Income is used here rather than the asset index scores because schooling must be paid for out of cash income.

**Figure 1: Spending per child per year by quintile of income in Indian Rupees p.a.**

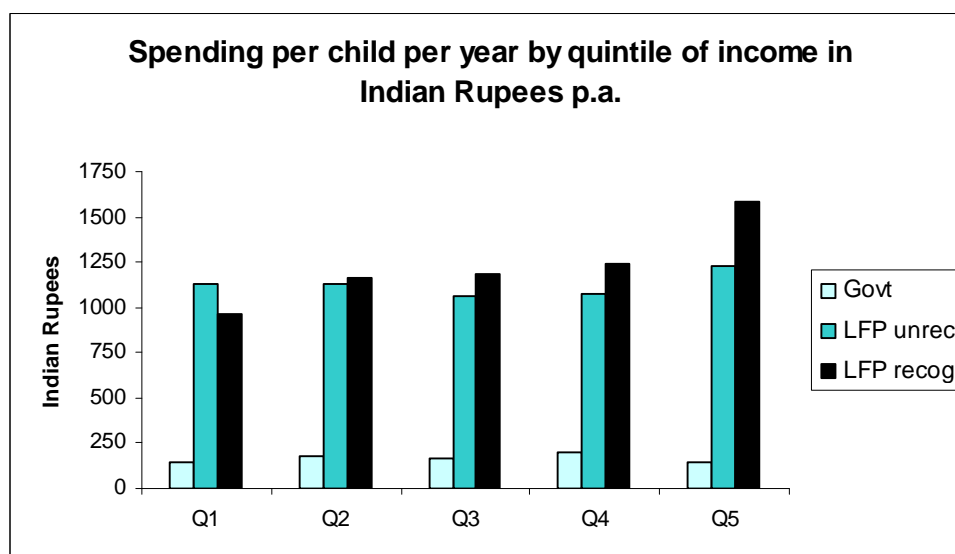


Table 22 illustrates the proportion of household income that must be dedicated to educating children at LFP (disaggregated) and government schools. The average number of primary aged children per family by income quintile has been utilised in the calculations for each income level. Also the average spending reported at each income level on each of the three school management types has been used as the basis of the calculation, taking into account that the poor access cheaper schools. The contents of the rows corresponding to quintiles 1 and 2 make striking reading: between 25 and 30 percent of total household income must be spent in order to access LFP schools, with the proportions in quintile 3 remaining high. Lewin (2007) considered 10% as a reasonable proportion of a poor household's income to be spent on total education expenditure, which means that only government schools are comfortably within reach for the poorest 60 percent. This figure is close to the over 58 percent of total sampled children who are attending government schools. It should be noted here that the government school column entirely discounts the existence of the stipend scheme; where this operates parents are approximately Rs100 in profit. This illustration also ignores the fact that in many families other children, older and younger, are also enrolled in school, and as children progress upwards in school, costs also escalate.

**Table 22: Percentage of income required to access each school type, by income quintiles and according to average family size and per child**

	Government % of income p.a. required:		Unrecognised LFP		Recognised LFP	
	Per family	Per child	Per family	Per child	Per family	Per child
Quintile 1	3.9	2.0	<b>30.0</b>	15.9	<b>25.6</b>	13.6
Quintile 2	3.8	1.8	<b>24.6</b>	11.6	<b>25.2</b>	11.8
Quintile 3	2.5	1.2	<b>16.1</b>	8.0	<b>19.6</b>	9.7
Quintile 4	1.8	1.0	9.6	5.7	12.0	7.1
Quintile 5	0.5	0.3	4.2	2.4	6.3	3.5

Despite the financial constraints faced by poor families, the majority would still prefer to send their children to LFP schools, and evidence shows that some manage to do so. The key may

lie in these families' numbers of children, as Table 23 shows that the poorest families accessing LFP schools tend to have fewer children than other poor families. Even so, no poor families reported LFP schooling as being affordable without 'cutting their bellies'.

**Table 23: Average numbers of children in the poorest families by school type**

	Mean number of primary-aged children per family		
	LFP families	Government families	Whole sample
Poorest income quintile	1.3	2.0	1.88
Second poorest quintile	1.56	2.3	2.13

#### **5.4. Conclusions**

This section has examined the issue of direct costs to families of educating a child at LFP and government schools in the context of family circumstances, neglected for the most part in the existing literature. It is evident from the above data that for the average family in the lower strata of income, these costs are unaffordable.

## 6. Conclusions

In conclusion, this study has demonstrated that there is a limit to the ability of a market-based education solution to serve the poor and supply the deficiencies of the government education system. Indeed when viewed from outside, most village households may appear poor, however when taken in context it becomes apparent that there is a distinction between those that can and cannot afford LFP schooling. The multivariate analysis indicates that only in the third to fourth quintiles of socioeconomic status (depending on the measure used) does a child's chance of attending LFP schooling significantly increase, which corresponds to the nearly 60 percent of children not accessing LFP schools in the sample. These findings are supported by the presentation of the costs of private schooling taken in the context of the size of families, with poorer families having more children. The proportion of cash income needed to send the average number of children to private schools is simply unmanageable, and it is further found that those poor families that do send their children to LFP schools tend to have significantly smaller than average family sizes.

Not only does the evidence demonstrate the unaffordability of even the lowest fee schools to the poorer half of rural society, but a follow-up look at the 'market' in primary education in the study area actually serves to undermine even the theoretical argument that competition between providers boosts standards and brings improvements in the educational conditions for the poor. Since the fieldwork for this study was conducted, four LFP sample schools (or 25% of the sample) have closed down, due to an insufficient population base and inadequate wealth in the area to support a range of options. Three more schools are finding the market extremely difficult and may close in the near future. These developments have eliminated competition between private providers in the villages, with parents being largely unwilling to send their children to schools outside of the village. That the argument of Friedman (1962) and Tooley (2004a) is an *urban argument* is demonstrated. The current conditions in the sample villages are such that private schools must work just hard enough to maintain standards higher than at government schools, meaning that this competition is not demanding enough to require an objectively high standard of education at LFP schools.

Lastly, and extremely importantly, this study has shown that the equity effects of the market in education are negative in that with the *exit* of all wealthier families more capable of exercising voice to the private sector, the government sector has become a ghettoised option of last resort for the poorest and most marginalised in society. Those accessing government schools, the choice of last resort, are not achieving meaningful access leading to real learning. All traditionally privileged groups in society are favoured by the market in education, leaving behind those of low caste or minority religion, the landless, girls, and children born later in families and children of larger families. In conclusion, it is argued that the potential for marketisation of primary education is limited to providing options to the upper half of society in the rural areas that are home to the majority of Indians, and that to raise the prospects of the poorest, the standards at government schools must be raised through increased accountability of teachers for the work that they do. Marketised options are neither sustainable in the context of remote rural villages, nor are they, most importantly, socially equitable.



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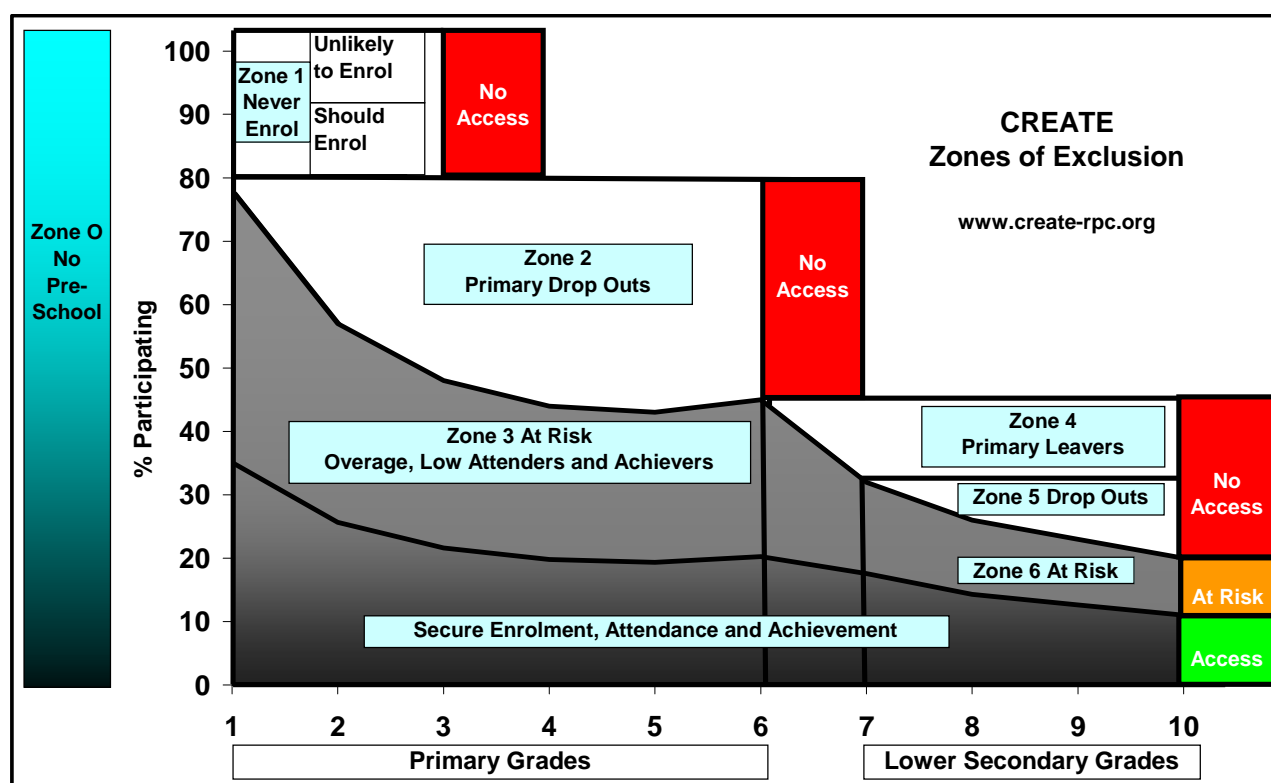
## **Appendices**





## Appendix 1 CREATE's zones of exclusion model

The Consortium for Research on Educational Access, Transitions and Equity considers access to education and vulnerability to drop out from a broader perspective than these crucial issues are usually considered from. The conceptual basis of the work is that access is not enough, but rather than children require sustained and *meaningful access* to education of good quality. This means that children must progress through school and must acquire real learning, and then must have access to post-primary education also. CREATE is particularly concerned with children aged 5-15 years.



Zone 1 refers to those children denied any access to education, while Zone 2 includes those children who begin their education but then drop out, before acquiring full primary education, often because of poor conditions, both pedagogical and physical, in the school. Zone 3 includes children at risk of dropping out, through silent exclusion, discrimination, and often inability to follow the curriculum. The fourth zone of exclusion includes those children excluded from starting their lower secondary schooling due to cost or through not completing their primary education cycle. Zone 5 refers to those who begin their secondary schooling but who drop out before completion, often because of the cost burden, while Zone 6, similarly to Zone 3, refers to those at risk of dropping out due to social exclusion, discrimination, and other factors. One of the underlying concepts of access in CREATE is that access is meaningless if what a child is accessing is of low quality. It is this area in which the present paper makes a contribution, as it examines access and equity in two types of primary schooling.



Consortium for Research on  
Educational Access, Transitions & Equity  
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### Report summary:

In recent years India has seen an explosion in low-fee private (LFP) schooling aimed at the poorer strata of society. This marketisation of primary education is a reaction to the well-documented failings of the government system. This paper looks at LFP schooling in one rural district of Uttar Pradesh, and compares government to low cost private schools in this area. It explores whether LFPs are affordable to the rural poor and marginalised by examining the key factors in parental decision making and ultimately discovering whether equity considerations are served.

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Dr. Joanna Härmä has a background in international human rights law and earned her doctorate in international education from the University of Sussex in January 2009. Her research interest is on low-fee private schooling for the poor, focusing particularly on rural areas of India. She is currently working on the Education Management Information System (EMIS) for the Education Sector Support Programme in Nigeria (ESSPIN), and also working on the issue of low-fee private schooling for the poor in Lagos.

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