Private schooling in India: Size, nature, and equity-effects

by
Geeta Gandhi Kingdon*

Abstract

Published educational statistics in India ignore 'unrecognised' private schools and include only the 'recognised' private schools, though all government-funded schools are included. Moreover, enrolments in government-funded schools are greatly over-reported in education data. The paper argues that, as a result, official education statistics are seriously skewed: they exaggerate the size of the free, government-funded elementary school sector and greatly understate the size of the private fee-charging elementary school sector. While it may be expedient for the state to under-enumerate fee-charging schools and exaggerate its own contribution to school education, the fast-growing role of unrecognised private elementary schools should not be ignored because of important equity-related reasons: a system where fee-levying institutions have a significant role in *elementary* education while *secondary* education is largely state-supported has perverse equity-effects. The paper also presents evidence to show that official enrolment statistics - on which analysts, policy-makers, and international studies rely, and which are used in parliamentary debates - are gravely inaccurate.

*London School of Economics

Acknowledgement: I would like to thank, without implicating in the final product, Robert Cassen, Jean Drèze, Haris Gazdar, and Barbara Harriss-White for useful comments on earlier drafts of this paper.

Keywords: Private schooling, Education data, Equity
Journal of Economic Literature Classification: I20, H42, H52

I Introduction

The desirability or otherwise of private education has long been a subject of debate in India and the recent case of Mohini Jain (Sathe 1992) against a private capitation-fee college has renewed interest in the issue. Yet, the nature, size, and equity-effects of private education are not well understood, and it is not known whether and to what extent this sector has expanded or shrunk over time at different levels of education.

It appears that at present there is no consensus on the size of the private school sector in India. On the one hand, prominent education economists believe that the private fee-levying (*ie* the Private UnAided or *PUA*) school sector in India is "infinitesimally" and "negligibly" small (Tilak 1990 p35, and Govinda & Varghese 1993, p51); on the other hand, Government of India (GOI 1993, p4) states "no doubt large numbers of private schools have been opened since independence" and that "there is an increasing incidence of the so-called english-medium [private] schools" (GOI 1985, p53). In this paper we explore which of the above two opposing views is correct and focus on the following questions: What do the official educational statistics tell us about the size of the private schooling sector and about the *relative* size of elementary and secondary private schooling? How reliable are these statistics? Is the private education sector expanding and at what rate?

In much of the existing literature in India, private schools are characterised as elite, high-fee schools that cater only to the children of the rich in urban areas. Yet, such a perception of the nature of private schools is not supported by primary survey evidence, which suggests economic and geographic heterogeniety in private schools. In this paper we probe this issue further and present some evidence that challenges the conventional portrayal of Indian private schools as elitist and mostly urban.

Knowledge of the nature and relative sizes of free and fee-charging schooling at different levels of education can shed light on the equity-effects of education. The mix of free/fee-charging institutions at different levels of education is one indication of how equitable the system of education is as a whole. For example, a system where (given

public resource scarcity) the provision of primary education is predominantly government-funded and free, though some fee-charging provision exists in secondary and higher education is likely, in principle, to be much more equitable than a system where fee-charging institutions have an important role in primary education and an insignificant one in secondary and higher education.

This paper examines evidence on the nature, size, and growth of fee-charging private education in India, with special reference to one state - Uttar Pradesh. Given inter-state variations in the structure and organisation of education in India[1], evidence from a single state will be illustrative but not necessarily representative. However, where possible, we present evidence both for Uttar Pradesh (UP) and for India as a whole, including occasionally for separate states. This enables us to observe the extent on inter-state variation in the role of fee-charging schools. A particular focus of the paper is on the relative size of private schooling at the elementary and secondary education levels and on the implications of this for educational equity.

The following section defines the concepts and terminology to be used in the paper. Section III analyses the nature of private education in India and section IV presents evidence on the size of the fee-charging sector in education in UP. Section V presents figures on the relative size of the private elementary and secondary education sectors. In section VI we examine the equity consequences of the prevailing mix of fee-charging and free schools in elementary and secondary education. The final section concludes.

[1] Education was until 1976 a state 'subject' and although since then it has been a joint state and centre 'subject', there are nevertheless regional diversities in the administrative structures of education that have evolved over the decades since independence and even before.

II Concepts, definitions, and terminology

In UP, as in most states, primary education refers to classes 1-5, junior to classes 6 to 8, elementary (or basic) to classes 1-8, and secondary to classes 9-12.

It is important to note the distinction between private aided (*PA*) and private unaided schools (*PUA*), even though in much of the educational debate in India the two are treated as a single category 'private'. *PA* schools are those which, though privately managed, are heavily regulated by the state government[2] and are almost entirely funded by the state: 95% or more of *PA* schools' total expenses are paid by the state exchequer (Tilak 1990, p34). Being primarily government-funded, *PA* schools have become semi-government schools[3]. Like government (*G*) schools, *PA* schools cannot recruit or dismiss their own staff; for example, in Uttar Pradesh, the UP Government Education Service Commission selects and appoints their staff. The state government pays the full salaries of all *PA* school staff at the same rates as for Government school teachers. Importantly, *PA* schools, like *G* schools, cannot charge any tuition fees even in secondary classes[4]. Thus, both *G* and *PA* schools are free schools and are state-supported.

By contrast, *PUA* schools operate autonomously and are entirely self-financed. They recruit, pay, and discipline their own staff and they do *de facto* charge tuition fees though in UP, as perhaps in other states, they are supposed *de jure* not to. In vital ways, therefore, *PA* schools differ from *PUA* schools despite sharing the appellation 'private'[5].

---

[2] The heavy regulation of *PA* schools started with the passing of the Salary Distribution Act 1971 in UP and similar acts in other states, for example the Direct Payment Agreement 1972 in Kerala (see Mathew 1990). These acts greatly centralised many aspects of the management of *PA* schools such as fixing the fee levels these schools could charge, taking over the salary payment of staff, and taking over the recruitment of staff.

[3] There is a degree of inter-state variation in the government regulation of *PA* schools. For example, in Tamil Nadu *PA* schools are less regulated than in many other states.

[4] As from 1990, education up to the secondary level has been made tuition-free in UP and in many other states. Before then, *G* and *PA* schools could charged prescribed nominal fees but they had to deposit the meagre fee revenues into the state government treasury. *PA* schools then got 15% of this fee revenue back for non-personnel costs. Since the abolition of fees, however, *PA* schools get back 15% of imputed fee revenues but, as before, this is a tiny sum since fee levels were very low, typically a maximum of Rs 8 per month for boys in secondary classes and nil for girls upto secondary classes.

[5] *PUA* schools become *PA* schools if they are brought under the Government grant-in-aid scheme. While teachers of *PUA* schools almost always want their schools to gain *PA* status since this ensures permanency

This paper is concerned with the size and growth of the *PUA* schools which are the truly 'private' schools. In the rest of this paper, *PUA* schools are referred to as private or *PUA* schools while *G* and *PA* schools, which are the free schools, are referred to as *GPA* or free schools.

A further crucial distinction should be noted for the purposes of understanding the issues in this paper, namely the difference between 'recognised' and 'unrecognised' *PUA* schools. State government recognition is an official stamp of approval but it requires certain conditions to be fulfilled[6]. While all *PUA secondary* schools must be recognised, *elementary* schools do not have to be recognised in many states. Indeed, as Dhingra (1991) points out, in many states, elementary schools do not even have to be registered, let alone be government-recognised.

The main reason for wanting recognition is to become eligible to apply for government grant-in-aid and to be able to issue valid Transfer Certificates to students leaving the school. However, few *PUA* schools want to apply for government grant-in-aid to become *PA* since it brings them under state regulation and removes the possibilities for private managers to charge fees and derive pecuniary benefit from their school[7].

Thus the main motivation for wanting government recognition is to be able to issue a valid Transfer Certificate (TC) to students leaving the school. The TC of a recognised school is required in order for a child to gain admission to another school. In practice, however, valid TCs are not indispensable for admission to a *junior* school but appear to be needed for admission into *secondary* schools. Consequently, *PUA* primary schools do not

---

and minimum salaries, the managers of *PUA* schools usually resist government aid in UP because they lose management control and the opportunity to charge fees and make profits.

[6]To be eligible for recognition in UP, a *PUA* school must be a registered society, have an owned rather than a rented building, employ only trained teachers, pay salaries to staff according to government prescribed norms, have classrooms of a specified minimum size and charge only government-set fee rates. It must also instruct in the official language of the state. A recent condition for recognition of a private school is that it must not be situated within 5 kilometers of a *G* school.

[7] While it is in the teachers' interest to gain *PA* status for the school (since they would then be paid *G* school salary rates), it appears that this conflict of interest between teachers and managers is usually resolved to the management's advantage since the latter can usually veto an application for government grant-in-aid.

have any important incentive to seek recognition but *PUA* junior schools do. Thus, it seems likely that many *PUA* primary schools would never apply for recognition but that most *PUA* junior schools would.

Given the stringent conditons for recognition as listed in footnote 6, it is likely that many applications for recognition are turned down. Drèze and Saran (1993, p 39) report that rural private schools found it difficult to obtain 'manyata' (recognition) in and around Palanpur, UP. In any case, conditions such as that the private school seeking recognition should not be situated within a 5 Km radius of an existing *G* school, preclude many *PUA* schools from even applying for government recognition. The fact that certain conditions are mutually impossible to fulfill (such as charging the government prescribed (nil) fees and paying teachers the high prescribed minimum salaries) would also serve as a discouragement to private school operators seeking recognition[8].

In conclusion, given the onerous conditions of recognition and the scant benefits thereof, there are few attractions to obtaining government recognition, particularly for primary schools.

III The nature of *PUA* schools

The general perception that *PUA* schools are only a relatively small proportion of all elementary schools in India gains support from notions imparted in the existing literature, such as that *PUA* schools charge high fees, are mainly an urban phenomenon, and cater only to the children of the elite. For example, Government of India (GOI 1993, p4) states that private schools "opened since independence are located mainly in big cities and towns only to cater to the needs of ever-rising ambitions of middle class parents who can afford to pay high fees for such types of schools". Similarly, education economist Tilak (1990, p37) says "private institutions practice exclusiveness through charging high

[8] In any case, many parents in rural Uttar Pradesh have developed mechanisms for overcoming the disadvantages of non-recognition by sending their children to such *PUA* schools but also, at the same

tuition fee and alarmingly large capitation fees or donations... The tuition fees in the private institutions are so high that few lower and middle class households can afford even to apply for admission in these schools". In a similar vein, Govinda (1995, p14) thinks that private primary schools in urban areas "are the preserve of children of wealthy parents who can pay high fees".

However, the observation that *PUA* schools cater only to the economic elite appears to be contradicted by recent research from different parts of India which suggests that private fee-charging education is extremely heterogenous, drawing its clientele from across the social spectrum. For example, Kingdon (1994) finds that in a sample of 10 recognised *PUA* schools in urban Lucknow in 1991, monthly tuition fee varied from Rupees 20 to Rupees 240 in different schools and that within the *PUA* school sector, schools differed very markedly in their level of resources and teacher salaries, and in the socio-economic background of their students.

Many researchers have found that *PUA* schools serve poor areas in India. For instance, based on his field study of education in Baroda slums, Jain (1988) observes that "the field of pre-primary education is replete with non-official enterprises" and that private operators charge between Rs 20 and Rs 50 per month as fees in slum areas of urban Baroda. Nautiyal (1993) notes that 9% of boys and 5% of girls enrolled in Delhi slums attended *PUA* schools. Based on their survey of schools in New Delhi, Chadha and Singh (1988) find similarly. They say "what is incredible are the absolute [low] levels of income at which demand for private schooling exists. It is incredible because government schools are virtually free". Nor is the phenomenon of private fee-charging schools confined to urban areas. According to Shiva Reddy (1991, p374), "even at the primary level many children from rural areas attend private schools in urban areas. Because of the deterioration in the quality of publicly financed schools, private (convent) schools are spreading even in remote areas". Drèze and Gazdar (1996) also find that in rural Uttar Pradesh, many parents send their children to study in *PUA* schools.

---

time, enrolling them in a government school simply in order to enable the child to obtain a valid TC (see Drèze and Gazdar 1996 who call this phenomenon 'implicit privatisation' of primary schooling in UP).

In short, despite contrary notions, it appears that *PUA* schools are more pervasive and more heterogeneous than thought hitherto, and that they serve children from all social strata and not only the elites.

IV The size of the private school sector

A central tenet of this section is the fact that unrecognised *PUA* schools are not included in educational statistics and that, consequently, published official statistics seriously under-estimate the role of fee-charging schools in elementary education. The Government of India (GOI 1993, p4) itself acknowledges "no doubt large numbers of private schools have been opened since independence but ... many such schools are unrecognised and are not covered under the existing system of collection of educational statistics". According to Dhingra (1991) since, in many states, registration and recognition of *PUA* schools is not mandatory, officials have *no way* of knowing their numbers.

It appears that the number of *PUA elementary* schools, and most particularly *PUA primary* schools, may be much greater than that recorded in official statistics because these statistics omit the mushrooming unrecognised schools. For example, Kingdon (1994) reports that discussions with persons who are knowledgeable in the field of education in the Lucknow district of UP suggested that there were several hundred *PUA* primary schools in urban Lucknow although government statistics reported only 42 recognised *PUA* primary schools (GOUP 1991, p472, table 54). Given the exacting conditions for and the scant rewards of recognition, it is not surprising that most *PUA* primary schools choose to remain unrecognised. This suggests that official statistics *hugely* understate the numbers of *PUA* primary schools.

However, even according to official statistics - which ignore the numerous non-recognised private schools - *PUA* schools have considerably more than a 'negligible' or 'infinitesimal' presence in school education. That is, although official statistics under-estimate *PUA* schools' role, the *recognised part* of the *PUA* education sector is significant

in its own right in UP (both urban and rural) and in urban India. Table 1 shows the percentage share of recognised *PUA* schools in all schools in 1978 and 1986 in UP and in India.

Table 1
Percentage share of recognised *PUA* schools in all schools by area and level

School level	UP (%)		India (%)	
	1978	1986	1978	1986
Rural				
Primary	1.9	2.9	0.8	1.0
Junior	24.6	31.6	3.3	5.0
Secondary	7.1	8.2	2.2	7.8
Urban				
Primary	21.1	34.4	9.2	16.6
Junior	33.0	51.9	11.9	24.4
Secondary	4.3	5.4	7.2	14.7
Rural + Urban				
Primary	3.7	6.8	1.6	2.6
Junior	25.9	35.5	4.7	8.6
Secondary	6.1	7.2	3.6	10.0

Source: Computed from NCERT (1982) tables 49 and 55, NCERT (1992) table 53 and UP Report of Fourth All India Education Survey (GOUP 1982).

Although the proportion of *PUA* schools has risen in both rural and urban areas, their size as well as growth in *urban* areas is particularly remarkable. Table 1 shows that in urban areas within a span of just 8 years, *PUA* primary schools grew from having a 9% share of all primary schools in urban India to having a 17% share. At the junior level the growth is even more impressive, taking *PUA* schools' share in all junior schools to nearly a quarter of all schools in urban India. In certain states the *PUA* sector in urban areas is larger than either the *G* or the *PA* sector. For example in urban UP, *PUA* junior schools represent 52% of all junior schools. The share of *PUA* primary schools (at 34% of all schools) and that of *PUA* secondary schools (at 15% in urban India) are not inconsequential either. If the rate of growth of *PUA* schools between 1978 and 1986 has continued then, a decade from 1986, the percentage share of *PUA* schools is likely to be much greater than that indicated in table 1.

Table 2a

Growth in enrolments by level and school-type in urban UP, 1978-1986

Level	School-type	1978	1986	Absolute increase	% share of the total increase
Primary	*G*	872731	1061216	188485	33.9
	PA	211409	160101	-51308	- 9.2
	PUA	393500	811903	418403	75.3
	Total increase			555580	100.0
Junior	*G*	217168	264017	46849	10.4
	PA	443411	560113	116702	25.9
	PUA	109724	396178	286454	63.7
	Total increase			450005	100.0
Secondary	*G*	158810	185734	26924	5.8
	PA	638723	1013250	374527	81.2
	PUA	19440	78971	59531	12.9
	Total increase			460982	100.0

Source: GOUP (1982, p598-599) table 128 and GOUP (1991, p780) table 137.

Another way of illustrating the impressive growth in the role of *PUA* schools is to compare the growth in enrolments in *PUA* and other school types over a period of time. Table 2a shows the growth in number of students in schools of different management-type between 1978 and 1986 in urban UP. It shows that, in terms of absolute numbers, enrolments in *PUA* primary schools rose by 418,403 and enrolments in *G* and *PA* primary schools rose by a much smaller 137,177 (188485-51308). That is, enrolment in recognised primary *PUA* schools grew three times as much as enrolment in *G* and *PA* schools. In other words, 75% of the total increase in primary enrolments between 1978 and 1986 was absorbed by *PUA* schools! Similarly, enrolment in junior recognised *PUA* schools grew by one and a half times more than the enrolment in junior *G* and *PA* schools. Thus, in junior education, 64% of the overall increase in pupils was accomodated by *PUA* schools! In other words, the role of *PUA* elementary schools grew very rapidly between 1978 and 1986, though it is noteworthy that the role of *PUA* secondary schools grew only a little; they absorbed only 13% of the overall increase in secondary enrolments over the period.

The equivalent figures for urban India (in table 2b) show that, in primary education, *PUA* enrolments grew twice as much as *G* school enrolments and thrice as

much as *PA* school enrolments. Consequently, 57% of the total increase in primary enrolments between 1978 and 1986 was absorbed by *PUA* schools! Again, as in urban UP, it is mainly in primary and junior education that the private fee charging sector is booming: the *PUA* sector did not dominate the growth in secondary level enrolments.

Table 2b
Growth in enrolments by level and school-type in urban India, 1978-1986

Level	School-type	1978	1986	Absolute increase	% share of the total increase
Primary	*G*	102,70,760	111,89,956	9,19,196	26.7
	PA	47,35,795	53,04,932	5,69,137	16.5
	PUA	16,63,969	36,17,791	19,53,822	56.8
	Total increase			34,42,155	100.0
Junior	*G*	31,73,594	42,72,930	10,99,336	43.2
	PA	33,36,413	38,74,078	5,37,665	21.1
	PUA	4,88,266	13,95,610	9,07,344	35.7
	Total increase			25,44,345	100.0
Secondary	*G*	18,08,870	26,79,760	8,70,890	34.3
	PA	26,87,164	39,06,889	12,19,725	48.0
	PUA	1,95,969	6,45,442	4,49,473	17.7
	Total increase			25,40,088	100.0

Source: NCERT (1982) Fourth All India Education Survey, Table 149, p838-841 and NCERT (1992) Fifth All India Education Survey, Table 170, p1086-1115.

Thus, by official figures, there has been a momentous growth of *PUA* elementary school enrolments. However, even so, these figures under-estimate the true growth of *PUA* elementary school enrolments which is actually larger. They under-estimate the growth and size of the *PUA* school sector not only because they relate merely to the recognised part of the *PUA* sector but also, very importantly, because they exaggerate the growth and size of *GPA* elementary enrolments due to the large scale over-reporting of student-numbers, as we show in the next section. If we took account of these two sources of under-statement of *PUA* school enrolments, the size of the *PUA* sector in elementary

education would show itself to be much larger than what is conventionally believed, as section IV(b) below attempts to show.

IV (a) Evidence on over-reporting of enrolments

In the published educational statistics, the relative roles of free (*GPA*) and fee-charging (*PUA*) schools in elementary education are skewed in favour of free schools not only because non-recognised *PUA* schools are excluded from the statistics but also importantly because the role of *GPA* schools is exaggerated by a large-scale over-reporting of their student numbers.

Heyneman (1980) reports from source documents that in 1961, departmental enrolment figures for children below 14 were 20% higher than the 1961 census enrolment figures for that age-group but that according to the 1971 census data, "the discrepancy was twice as high - 41%". It appears that over-reporting has worsened over time. The Director of elementary education at the Ministry of Human Resource Development in India, compares enrolment ratios in official statistics with census results (Dhingra 1991). She states that the 1981 census data showed only 47.2% of children in the age group 6-11 years as attending school as against a gross enrolment ratio of 80.5% collected by the internal educational information system, suggesting that in 1981 departmental enrolment figures were 71% higher than census figures! Even allowing for the fact that in their estimates of the gross enrolment ratio, departmental data include under- and over-aged children who are enrolled in the primary cycle, the discrepancy between departmental and census data is massive.

The above estimate of the extent of over-reporting of enrolments based on 1981 data is corroborated by a comparison of enrolment figures estimated in NSSO (1991, p39) based on 1986-87 (42nd round) National Sample Survey data and those in departmental data for 1986 (NCERT 1992, p 1086-1115). NSSO estimates that only 67,968 thousand students were enrolled in elementary education in 1986-87 in India but according to departmental data, 113,186 thousand students were enrolled in elementary education in India in 1986. Thus departmental enrolment figures are inflated by 67%. Other researchers have also recorded that enrolments in official documents in India are greatly

over-estimated due to large scale over-reporting, for example, Prasad (1987) and Tilak (1985, p6-7, 16). Dhingra (1991) notes that

"continuous over-reporting by schools has bloated the enrolment figures to such proportions that the system is no longer brave enough to explore the truth or face the lie. The differences between departmental data and the census or National Sample Survey data are conveniently ignored since in any case, there is no strong objection in any quarter to the perpetuation of this absurdity. Its main effect is on educational planning, which under these conditons, has ceased to be taken seriously."

There is a wealth of evidence of over-reported enrolments in micro-studies too. In their study of primary schools in five districts of Madhya Pradesh, Govinda and Varghese (1993, p128) state that "it is difficult to get accurate and reliable information from the school records as the enrolment figures given vary widely from the attendance figures". Drèze and Saran (1993, p41) find that in Palanpur in western UP, out of an enrolled 54 students in the *G* primary school, only 25 students (or 46.3%) were in school on the day of the survey visit in February 1993, though this may be partly due to low attendance. In Kingdon's (1994) data-collection too, some *GPA* schools reported enrolments in class 8 that were 4 times as high as the number of students in attendance on the day of the survey. Prasad (1987) found that in Andhra Pradesh, "actual attendance during the days of the investigation was between 20-30% of the impressive number of children found in the school records in most of the villages...however, the school records were manipulated to show over 60% attendance".

While there are no reasons for *PUA* schools to wilfully mis-report student numbers in the schools' returns, there are strong incentives for *G* and *PA* schools to exaggerate enrolments. Firstly, teachers are meant to be allocated to *GPA* elementary schools on the basis of a pupil-teacher ratio of 40:1. Secondly, *PA* schools' non-salary (admittedly tiny) grants are based on self-reported student numbers in the schools. Thirdly, school staff feel that if student numbers are truthfully reported to have dropped to unviable levels due to a lack of demand, the subsidy to the school would be withdrawn and they would lose employment or face a transfer to another school.

There are other motivations for government-funded schools to over-report enrolments. Dhingra (*op. cit*. p4) states that until 1985, "targets for elementary education were laid down in terms of additional enrolment. A system of annual target setting was devised ... whereby each state was given a precise target. The states in turn divided the figure among divisions, districts and blocks and the blocks among schools... the school head was given a target of enrolment that generally had no relationship to the size of his school or number of school-going children in the school catchment area, but represented a mark-up over his previous year's enrolment figure...". Referring to these 'enrolment drives', Dhingra (p11) states "considering the manner of target fixation and information collection, it is not surprising that enrolment data should be over-reported. The system is judged on the basis of additional enrolments achieved, and consequently conspires together to show that given targets are met". As Dhingra says, indeed one can sympathise with the cynics who claim that the system was designed to collect information that shows only progress. These explanations are similar to those in Prasad (1987) for the state of Andhra Pradesh.

Thus, the evidence on large-scale over-reporting of enrolments in elementary education is compelling and it is consistent with the incentives for over-reporting that teachers and school authorities face. However, we have not come across any evidence that there is over-reporting of enrolments in secondary education. This is because secondary education in India is supply constrained: most secondary schools are genuinely over-crowded, primarily because of the fewness of *GPA* secondary schools and also because there are far fewer *PUA* educational institutions at the secondary level than at elementary, as we show in section V.

The purpose of discussing the extent of over-reporting of *GPA* elementary school enrolments was to show that in official statistics, the enrolment share of *PUA* schools appears smaller than it is partly because the statistics greatly exaggerate the enrolments of *GPA* schools. However, as tables 1 and 2 showed, despite this source of under-statement of *PUA* schools and their enrolments, their role in elementary education is sizeable.

IV(b) A simple simulation

We have argued so far that there are two main sources of error in the officially collected data on school enrolments: one due to the exclusion of non-recognised *PUA* schools and secondly because of the over-reporting of enrolments in government-funded schools, namely *GPA* schools. While there is no easy way of taking into account errors due to the exclusion of non-recognised schools, it is possible to estimate the true relative size of the *GPA* and *PUA* sectors by correcting for the inflation in *GPA* enrolments and this section attempts to do that. It shows that just correcting for the over-statement of *GPA* enrolments would push up the enrolment share of recognised *PUA* primary schools in urban UP from 40% (in official statistics[9]) to 60%, and in urban India, from 18% to 27%. While these results are mere simulations, they are nevertheless suggestive.

The calculation is as follows: Given the discussion in section IV(a), we know that departmental enrolment figures are 71% higher than census figures. However, we also know that the discrepancy between census and deaprtmental primary enrolment data is partly due to the 'grossness' of the departmental data, *i.e.* due to including under- and over-aged children who are enrolled in primary classes (we call this the 'grossness' factor), and partly due to dishonest roll-inflation. Unfortunately, we do not know the net enrolment ratios and so have no reliable guide on how much of the discrepancy is due to the grossness factor. However, we can take a liberal estimate of the grossness factor (say 20%)[10] and a conservative estimate of the roll-inflation factor (71% - 20% = 51%).

The relative roles of government-funded and private schools can now be estimated as follows: In the absence of more disaggregated data, assume, rather crudely, that departmental primary enrolment data are inflated by the same percentage (51%) in all states and regions (urban and rural). For a given area, take the departmental primary

[9] Derived from table 2a; also see table 5.

[10] A 20% grossness factor can be justified on the following grounds: We stated earlier that in 1961 departmental elementary enrolment figures were 20% higher than the 1961 census based enrolment figures (Heyneman 1980). If we make the liberal assumption that in 1961 there were no incentives for school authorities to over-report enrolments, then the whole of the 20% discrepancy can be attributed to the grossness factor rather than the roll-inflation factor. We also make the reasonable assumption that, over the decades, the 20% figure has remained stable, that is, the proportion of under- and over-aged children who are enrolled in elementary education has remained the same.

enrolment figure and deflate it by 51% to obtain the true total enrolment, say x. True *GPA* enrolments can now be estimated by subtracting *PUA* enrolments from x (given the premise of the previous section that there is no roll-inflation in *PUA* schools).

Example: In 1986 in urban UP, there were 2,033,220 children enrolled in primary schools according to departmental data (calculated from table 2a). We deflate this figure by 51% to get the actual total enrolment of 1,346,503. From this, subtract *PUA* primary schools' enrolments (811,903, see table 2a). Thus, true *GPA* enrolment in primary schools in urban UP in 1986 is estimated to have been

$$1{,}346{,}503 - 811{,}903 = 534{,}600.$$

In other words, *GPA* primary enrolments constituted a mere 40% of all primary enrolments in urban UP in 1986. The majority, namely 60%, of the primary school-going children attended fee-paying private schools! Similar calculations for urban India would push up the enrolment share of *PUA* primary schools from 18% in official statistics (based on table 2a) to 27%, once the exaggeration in *GPA* enrolments is taken into account. If it were possible to take into account the enrolments in non-recognised *PUA* schools, the enrolment share of *PUA* primary schools would show itself to be even higher.

IV (c) Evidence from survey data

One way of overcoming the problem of inaccurate official statistics (which are based on school-returns) is to look at the results of household survey data. This avoids the problem of under-enumeration of *PUA* schools and of their enrolments because such data does not distinguish between recognised and non-recognised *PUA* schools when asking households what type of school a child attends, and because households have no incentive to over-report the number of children enrolled in free, *GPA* schools. The only national survey data that reports on the type of school attended by children is a 1994 household survey carried out by the National Council of Applied Economic Research (NCAER)[11]. The results of its findings are available for rural areas only but not yet for

[11] While the National Sample Survey 42nd Round (1986-87) on 'Participation in Education' asks children the type of school they attended, its report in Sarvekshana (NSSO 1993) unfortunately does not

urban areas. However, a 1995 survey of 1000 households carried out by the author in the Lucknow urban agglomeration[12] gives an estimate of school-types attended by children for an urban area of Uttar Pradesh. These figures are presented in table 3a which also shows the latest available official data on UP and India. Table 3b gives the equivalent figures for rural areas of major Indian states.

Unsurprisingly, tables 3a and 3b show some remarkable discrepancies between official data and independent survey data. For example, in rural Haryana, official statistics showed that a mere 0.2% of all elementary school children were studying in *PUA* schools while household response data shows 12.9% of children attending *PUA* schools. In rural India as a whole, while official data showed only 2% of elementary school-goers as attending *PUA* schools, household survey data show about 10% of children to be in *PUA* schools. In *urban* UP, the discrepancy is very large (table 3a), the percentages varying between 37% and 80%. While some of these discrepancies are almost certainly due to the growth of *PUA* schools in the period between 1987 and 1995, a good part can probably be attributed to the under-enumeration of *PUA* schools' enrolments in official statistics due to (i) omitting the non-recognised schools and (ii) the inflation in *GPA* school enrolments.

Table 3a shows that *PUA* schools have a very substantial presence in school education (27% enrolment share) in *rural* UP and that they teach 80% of all children enrolled in elementary education in the urban part of Lucknow district! While the situation in Lucknow may not be representative of that elsewhere in urban UP (for example, Lucknow is likely to a more prosperous district than many others in UP because it is the state capital), it is nevertheless highly suggestive: it is likely that fee-charging private schools teach the majority of the urban elementary-age population in UP.

present the overall proportion of children in government and private schools. The NCAER survey in rural areas sampled appoximately 35,000 households in 16 states.

[12] See Kingdon 1995 for description of the data collection.

Table 3a
Percentage share of *PUA* elementary (primary + junior) school enrolments in total elementary school enrolments

	UP		India	
	Official data (1986-87)	**Survey data (1994-95)**	**Official data (1986-87)**	**Survey data (1994-95)**
Rural	8.5	27.2	2.0	9.8
Urban	37.1	80.7*	16.9	Not available

Source: Official figures for UP compiled from GOUP (1991) table 137, p780 and for India from NCERT (1992) table 170, p1086-1115. The survey figures for rural UP and rural India are based on NCAER survey data reported in Shariff (1996). The urban UP survey figure is based on the findings of a random sample survey of 1000 households carried out by the author in Lucknow Urban Agglomeration in 1995. This data collection is described in Kingdon (1995).
* This figure is based on a sample survey of urban Lucknow only and not on urban UP as a whole.

Table 3b State-wise distribution of students aged 6-14 years by type of school, rural areas only

States	**Distribution based on official data (NCERT)**		**Distribution based on household survey data (NCAER)**	
	***GPA* schools (a)**	***PUA* schools (b)**	***GPA* schools (c)**	***PUA* schools (d)**
Haryana	99.8	**0.2**	87.1	**12.9**
Himachal Pradesh	99.5	**0.5**	95.2	**4.8**
Punjab	99.6	**0.5**	80.4	**19.6**
Uttar Pradesh	91.5	**8.5**	72.8	**27.2**
Bihar	99.0	**0.1**	91.3	**8.7**
Rajasthan	97.7	**2.4**	96.6	**3.4**
Madhya Pradesh	98.8	**1.2**	96.6	**3.4**
Orissa	98.6	**1.4**	95.9	**4.1**
West Bengal	100.0	**0.0**	99.0	**1.0**
Gujarat	99.9	**0.1**	98.0	**2.0**
Maharashtra	98.1	**1.9**	98.5	**1.5**
Andhra Pradesh	98.3	**1.7**	89.8	**10.2**
Karnataka	98.5	**1.5**	90.4	**9.6**
Kerala	98.8	**1.2**	88.0	**12.0**
Tamil Nadu	99.8	**0.2**	93.0	**7.0**
All India	97.9	**2.1**	90.2	**9.8**

Source: Shariff (1996), table 3, p24.

However, the case of UP cannot be generalised to India as a whole. Table 3b suggests considerable inter-state variation in the role of private schools. It shows that such schools have a much smaller proportionate role in India than in UP as well as Punjab, Haryana, and Kerala; however, even so, the share of *PUA* elementary schools at about 10% in *rural* India is not insignificant, and may be quite high in *urban* India if the extent of discrepancy between official and survey figures is as large for urban areas as for rural areas.

In sum then, far from being infinitesimally or negligibly small as sometimes claimed (see Govinda and Varghese 1993 p51 and Tilak 1990 p35), the share of the *PUA* sector in Indian education is substantial and has grown over time. Official estimates greatly understate the role of this sector by ignoring non-recognised *PUA* schools and by exaggerating the relative role of *GPA* schools.

IV (d) The private tuition industry

Another area of private enterprise in education that is not captured in official statistics is the private tuition and coaching 'industry'. Expenditure on private coaching appears to be a substantial proportion of total household educational spending in India. For example, GOUP (1992, p19) shows that in urban UP, on average, 23% of household educational expenditure (all fees, books, uniform, private tuition/coaching, and travel) of secondary and higher education students was on private tuition or coaching.

A good proportion of students appear to take private tuitions in urban areas. For example, in urban Lucknow in 1991, out of a sample of 928 students of class 8 in *G, PA* and *PUA* schools, 34% reported taking private tuition (Kingdon 1994). In a 1995 survey of 1000 households in urban Lucknow agglomeration, 39.3% of all children enrolled in secondary schools took private home tuition (survey described in Kingdon 1995). Chadha and Singh (1988, p3) report that in their sample of primary schools in New Delhi, 37% of all *G* school students and 28% of all *PUA* students took private tuition.

While the above survey-based evidence on the magnitude of private tuition-taking is suggestive, there are, as far as the author is aware, no hard figures on the size of the private tuition industry. The evidence for its spread is mainly incidental or anecdotal, coming from the preponderance of newspaper advertisements by private tutors and evening coaching colleges, and from interviews with parents[13].

The rapid increase in the incidence of tuition-taking documented by so many in India (see for example National Commission on Teachers 1986, p80; Muzammil 1992, p5; and GOI 1985, p30) shows that the well-off whose demand for fee-levying schooling in the mainstream education sector is frustrated, create their own surrogate or subsidiary private fee-paying education sector where they can dictate the quality of the service and which operates mainly in the evenings. The private tuition 'industry' in India has been the cause of concern because of its perceived detrimental effects on the main education system (National Commision on Teachers *ibid*, GOI *ibid*). Yet this subsidiary market in education as Muzammil (1992, p5) calls it, is growing in response to private demand.

IV(e) Causes of the growth of *PUA* schools

While we have discussed the size and impressive growth of the fee-charging private sector, little has been said about the causes of this growth. It is clear that government-funded *elementary* education is not supply-constrained; indeed most surveys suggest that such schools are under-utilised due to a lack of demand. Thus, lack of capacity in *GPA* schools is not a cause of the growth of *PUA* elementary schools. The two main other possible explanations of the growth of *PUA* schools are (a) the effect of rising incomes on the demand for private schooling, and (b) the effect of a breakdown in the functioning and quality of state-funded elementary schools. While appealing *a priori*,

[13] In my survey of 1000 households in urban Lucknow (described in Kingdon 1995), many parents of secondary school children reported that the children had to take out-of-school, privately paid tuition from their own regular school teachers because the teachers did very little teaching in the school itself but, instead, required their students to come to their homes in the evening for paid extra coaching. The teachers do this as a way of earning an income over and above their government-paid salaries. Parents feel obliged to send their children for such extra coaching because of the fear that, otherwise, the child might fall out of favour with the teacher who might then not award the child fair grades in the final practical examinations.

explanation (a) is not supported by evidence in India: for example, Uttar Pradesh has one of the lowest per capita incomes among all states in India (Drèze and Sen 1995, table A3) and yet the role of *PUA* schools is by far the greatest there among all states (see table 3b above). This would suggest that the final explanation, namely the poor functioning of state elementary schools, is the more plausible explanation of the growth of *PUA* elementary schools.

That government financed elementary schools in India are grotesquely under-resourced is well documented by many analysts and researchers, and this contributes to their lack of effectiveness. Another major reason for the poor functioning of state-funded schools is their lack of accountability. Government-paid teachers (that is, teachers of *G* and *PA* schools) have little incentive to do their job seriously since their appointment is permanent and since their salaries are not related to work performance. As Drèze and Saran (1993) report from Palanpur in UP, the teacher of the village school rarely took the trouble of turning up at all and even when a teacher was present in school, little teaching actually took place. Similar findings emerge from a number of field studies from different parts of India cited in Drèze and Sen (1995) and in the companion volume (Drèze and Sen, 1996, chapter by Drèze and Gazdar). This virtual breakdown in primary education as documented by many analysts, is ample cause for parental inconfidence in the publicly-financed education system.

Several accounts indicate that the exodus from government-financed elementary schools to private fee-charging schools reflects this breakdown of the free system. A report by NIEPA (1990, p17-18) notes that existing free educational facilities are being under-utilised. The World Bank (1989, p48) comments on the apparent lack of demand for state-funded basic education while enrolments in private schools rise. It notes that low utilisation of public educational facilities is partly a response to the perceived quality of services being offered. At the secondary level, the fewness of *PUA* options (due to tighter recognition rules and greater controls) means that inconfidence in *G* and *PA* secondary schools is gauged by the size and growth of the private tuition industry.

It appears that disenchanted parents abandon impoverished state-funded schools, bypassing the free public option for the costlier *PUA* schools and/or private tuition. While the GOI (1985, p53) calls the parents who do so "gullible"[14], the parents' behaviour appears to be a rational response to the failing public system of education.

V The relative role of private schools in elementary and secondary education

The discussion so far has sought to show that fee charging private education is pervasive in UP and in urban India, and that its role has grown rapidly relative to the growth in free schools. In this section, we consider the relative roles of elementary and secondary *PUA* schools.

Both Table 1 and Table 2 showed that in urban UP and to some extent in urban India, *PUA* schools have a smaller role in secondary education than in elementary. In other words, fee-charging schools have a prominent role in basic education and only a tiny role in secondary education. Fee-levying institutions are more scarce as one moves from elementary to secondary education[15]. Both tables 2a and 2b showed that according to official figures, the fastest growth in *PUA* enrolments has occurred in primary schools, followed by junior schools, and that enrolments in *PUA* secondary schools have grown but

[14]GOI (1985, p53) states that that "there is an increasing incidence of the establishment of the so called english medium schools which attract gullible parents, mainly because the municipal or government schools are so unattractive". While there may be some reason to doubt the 'english-medium' credentials of a good number of private schools that claim to provide english-medium education, it is not clear that the main parental motive for sending children to such schools rather than to government schools is their advertised medium of instruction.

[15]It appears that fee-levying educational institutions are even more scarce at the higher education level than at secondary. Shatrugna (1988) reports that in 1988 there were only 161 fee-charging colleges, which represents a tiny proportion of all higher education institutions in India. Shatrugna gives no source for the figure he cites. The extensive media coverage of the issues surrounding the capitation fee colleges (following the Supreme Court case of Mohini Jain, see Sathe 1992) appears to give an exaggerated sense of the role of these colleges - for in no such coverage have we come across any hard figures on their numbers or growth. In any case, the Supreme Court's ruling fixing maximum fee levels that can be charged in such institutions is likely to have curbed their growth by discouraging new entrepreneurs from investing in such colleges.

little in urban UP and urban India. This is partly due to stricter government regulations and recognition rules at the secondary level, which constitute a barrier to entry to private operators in the secondary school 'market'. It is also partly due to state government policy to bring *PUA* junior and secondary (but not primary) schools into the aided list, that is, to turn *PUA* junior and secondary schools into *PA* schools, a phenomenon whose equity effects we discuss later in the paper.

Table 4
***PUA* recognised schools as a percentage of all schools in urban areas, 1986**

School level	Uttar Pradesh		India	
	Number	Percentage	Number	Percentage
Primary schools	3171	34.4	8794	16.6
Junior schools	1750	51.9	6320	24.4
Secondary schools	119	5.4	3237	14.7

Source: Computed from NCERT (1992), Table 53, p400-411.
Note: *PUA* secondary schools affiliated to the ICSE and CBSE exam boards (which are all-India exam boards rather than state exam boards) appear not to be included in official statistics so that the figure of 119 is somewhat underestimated. Unrecognised *PUA* schools, which exist only at primary and junior level are also not included in official statistics so that their numbers above are also underestimates.

Table 5
Percentage share of recognised *PUA* schools and their enrolments by area and level, UP and India, 1986

School level	UP (%)		India (%)	
	***PUA* schools as a % of all schools**	***PUA* enrolments as a % of all enrolments**	***PUA* schools as a % of all schools**	***PUA* enrolments as a % of all enrolments**
Rural				
Primary	3	4	1	1
Junior	32	24	5	5
Secondary	8	3	8	4
Urban				
Primary	34	40	17	18
Junior	52	33	24	15
Secondary	5	6	15	9
Rural + Urban				
Primary	7	11	3	5
Junior	36	27	9	9
Secondary	7	5	10	6

Source: Computed from tables 53 and 170 of the Fifth All India Education Survey, NCERT (1992), and table 137 of the UP Report of Fifth All India Education Survey (GOUP 1991).

Table 4 shows that while there are plenty of *PUA* elementary schools in urban UP, there is a severe relative shortage of *PUA* schools at the secondary level: whereas in 1986 in urban UP there were 1750 *PUA* junior schools, there were only 119 *PUA* secondary schools. The same story emerges from table 5 which shows that while it is not the case in rural India as a whole, it is true in UP (both rural and urban) and urban India that the percentage share of enrolments of *PUA* schools is much greater in elementary than in secondary education, with *PUA* enrolments' percentage share in primary education constituting from about double (in urban India) to about six times their share in secondary education in urban UP.

The effect of the abundance of *PUA* elementary and the relative scarcity of *PUA* secondary schools can be seen in table 6. Out of an estimated 132,059 *PUA* students in class 8, only 36,450 or 27.6% could find places in a *PUA* class 9 in 1986 in urban UP, and the situation has not improved much since 1978.

Table 6
Recognised *PUA* enrolments in class 8 and 9 in urban UP, 1978 and 1986

Year	Enrolled in classes 6 to 8	Estimated to be enrolled in class 8	Enrolled in classes 9 to 10	Estimated to be enrolled in class 9	Number in class 9 as a % of number in class 8
1978	109724	32425	13510	7344	22.6
1986	396178	132059	72899	36450	27.6

Source: Columns 2 and 4 from GOUP (1991), Table 137, p780 and GOUP (1982), table 128, p598.
Note: The figures for enrolment in class 8 and class 9 in 1978 are actuals but those for 1986 are estimates. Column 3 is estimated by dividing column 2 figures by 3 since there are three years in the junior cycle. Similarly, column 5 is estimated by dividing column 4 figures by 2 since there are two years in the lower secondary (high school) cycle.

Finally, we can show the 'squeeze' that occurs in the availability of *PUA* schools at the secondary level by noting the percentage of *PUA* primary school pupils who are able to find admissions in *PUA* secondary schools. Table 7 shows that only 12.2% of students who chose and paid for *PUA* schooling at the primary level were admitted into a *PUA*

institution for their secondary schooling in urban UP, though the squeeze is less severe in urban India as a whole. There is adequate capacity in *PUA* secondary schools to accomodate only a fraction of the graduates of *PUA* elementary schools. If we consider that unrecognised *PUA* elementary schools'enrolments are not included while those of all *PUA* secondary schools are, the relative size of the *PUA* secondary sector *vis a vis* the *PUA* elementary sector is even smaller.

Table 7
***PUA* enrolments at different education levels in urban UP and India, 1986**

Region	Cycle	Cycle length	Total enrolled in cycle	Average Enrolment per year of cycle	Enrolment as a % of primary enrolment
Urban UP	Primary	5 years	811903	162381	100.0
	Junior	3 years	396178	132059	81.3
	Secondary	4 years	78971	19743	12.2
Urban India	Primary	5 years	3617791	723558	100.0
	Junior	3 years	1395610	465203	64.3
	Secondary	4 years	645442	161361	22.3

Source: Compiled from GOUP (1991, p780) table 137 and NCERT (1992, p1086-1115) table 170 .

VI Equity-effects of the schooling system

The previous section presented evidence on the size and role of *PUA elementary* schools and on the bottleneck in the availability of *PUA secondary* places in urban UP, and to some extent in India. In this section we assess the equity-effects of this phenomenon.

It is worth noting at the outset that since the *PUA* secondary school sector is much smaller than the *PUA* elementary sector, it is supply-constrained and rations its places by higher fees and entrance (ability) tests. It is therefore a high fee, elite sector with a much more privileged student-intake than the *PUA* elementary school sector.

The abundance of *PUA* elementary schools and the dearth of *PUA* secondary schools obliges many well-off students who are willing and able to pay - and who did pay for their schooling up to class 8 - to attend free *G* or *PA* secondary schools. Consequently, much of the scarce public educational resources in urban areas are spent on the many well-off students who have no choice but to partake of subsidies at post-elementary education levels. Thus, the mix of free *GPA* and fee-charging *PUA* schools across elementary and secondary levels is inequitable.

We stated earlier that apart from the stricter control and regulation of *PUA* secondary schools, one of the other main reasons for the relatively slow growth of *PUA* secondary schools was the government's policy to bring *PUA* junior and secondary schools into the aided list, that is, to make them grant-in-aid or *PA* schools[16]. The equity effects of this policy are unambiguously adverse: students who were able and willing to (and indeed did) pay for the full cost of their education in a *PUA* school suddenly become recipients of public subsidies when their school is made *PA*. No longer do they have to pay any fees, as the state now bears the total responsibility for salary payments *etc* in the school. In other words, meagre public educational resources are perversely allocated to the relatively well-off students.

Nor is this all. The formula for funding *PA* schools has adverse equity effects. Since *PA* schools - most of which are in the secondary school sector - get only their salary payments from the state government treasury and meagre imputed fee grants, they face an acute need for cash to cover at least the essential non-salary costs. As a result, most of them run unrecognised *PUA primary* sections to generate surpluses to cross-subsidise their government-funded, tuition-free, junior and secondary sections. Kingdon (1994,

[16] Between 1984 and 1991, 681 junior and 298 secondary *PUA* schools were made *PA* in UP (GOUP Shiksha Ki Pragati, various years). The policy of bringing *PUA* schools under the aided list is mainly due to teacher pressure: secondary school teachers, who have traditionally been the most strongly unionised and highly politicised group, apply pressure on the state to make schools *PA* since this assures them permanency and minimum salaries. Although *PUA* secondary schools - which are all necessarily recognised schools - are meant to pay their teachers the government-prescribed minimum salaries, in practice many *PUA* schools do not. Aggarwal (1991) finds similarly in his survey of *PUA* secondary schools in New Delhi. He reports (p117) that all *PUA* teachers in his survey expressed that they were not being paid their prescribed full salary and allowances that are paid to their *G* and *PA* school counterparts.

chapter 7) found that 8 out of 10 *PA* junior and secondary schools in a school survey of Lucknow city ran such unrecognised *PUA* primary sections in 1991. The schools are typically run in 2 shifts, so that all students share the same facilities but mainly the fee-paying primary section pupils pay for these facilities. Upon reaching class 6, the primary section fee-paying pupils enter the fully subsidised *PA* junior section where they pay no tuition fees. This implies that many students have to face a financial hurdle in order to access government educational subsidies: those who are financially able to pay for primary schooling are then able to enjoy publicly funded junior and secondary schooling.This is doubly inequitable because it targets the well-off for subsidy.

Since children of the poor are better represented in elementary education levels and relatively less well represented at the secondary and higher levels, it is regressive that fee-charging schools have a prominent role in elementary and a relatively much smaller role in post-elementary education. Equity considerations suggest that free, publicly funded education should take a much more substantial role in elementary education than is the case at present. In his book on educational finances in UP, Muzammil (1989, p152) also thinks it "against the equity norms that there exist institutions at lower levels which are run privately...and in that case almost [the] total cost is paid by students, whereas invariably all institutions of higher learning are heavily subsidised by the state".

VI Conclusions

This paper has presented evidence on an issue which is largely unexplored in India at present, namely the size, growth, and equity-effects of fee-charging schools in Indian education. It has also shown - from comparisons of enrolment rates from education-department data, Census, and National Sample Survey data - that enrolments in government-funded elementary schools are greatly exaggerated in official statistics. The paper has discussed the motivations for such roll-inflation and examined the effect of this overstatement for the relative roles of free and fee-charging schools in published data. It has also considered the role of the unrecognised schools. Finally, it analysed the equity-

effects of the mix of free and fee-charging schools at elementary and secondary levels. The main conclusions of the work follow.

The fact that unrecognised *PUA* schools are not required to be registered and cannot therefore be enumerated in official data has varied consequences. Firstly, the education departments do not know the real extent of fee-charging *PUA* involvement in elementary education, though anecdotal evidence and household surveys find it to be a large and growing sector. Secondly, coverage of education is understated if *PUA* unrecognised schools are ignored in official statistics. Finally, the published figures on the relative roles of free and fee-levying educational provision are skewed (magnified) in favour of *G* and *PA* schools. The role of the free school sector is exaggerated so that it appears that elementary education is largely state-supported, leading to a false sense of satisfaction with the status quo. While it may be expedient for the government to magnify its own role and underplay the role of fee-charging education, the contribution of *PUA* schools to the elementary education effort should not be ignored for important equity-related reasons.

The abundance of *PUA* elementary schools and the relative lack of *PUA* secondary schools in UP (rural and urban) and in urban India, is inequitable. It gives the well-off better chances of attaining primary education and it obliges a number of students to pass a financial hurdle in order to access junior and secondary education subsidies. Moreover, government subsidies to a large proportion of secondary schools but only to a smaller proportion of elementary schools represents an inequitable expenditure of scarce educational resources since children of the poor are better represented in elementary than in secondary education.

If fee-charging education is really much more widespread than that indicated by official statistics, and if *PUA* schools are plentiful in elementary but scarce in secondary education, as we have argued, then there are serious reasons to worry about the equity effects of the prevailing school education system. The sooner the true extent of fee-levying elementary education in India is recognised, the sooner can the task of taking equitable measures begin.

References

Aggarwal, I. P. (1991) *School Education*, Arya Book Depot, Delhi.

Chadha, R. and G. Singh (1988) "A pilot study on private educational spending in North Delhi", Unpublished typescript, New Delhi: World Bank Resident Mission.

Dhingra, Kiran (1991) *Improving the Information System for Planning the Quality of Primary Education: The Case of India*, IIEP Research and Studies Programme: Increasing and Improving the Quality of Basic Education, Monograph No. 5, International Institute for Educational Planning, Paris.

Drèze, J. and H. Gazdar (1996) "Uttar Pradesh: The Burden of Inertia", in Drèze, J. and A. Sen (1996) *Indian Development: Selected Regional Perspectives*, Oxford University Press, New Delhi and Oxford.

Drèze, J. and M. Saran (1993) "Primary Education and Economic Development in China and India: Overview and Two Case Studies", Discussion Paper No. 47, Development Economics Research Programme, STICERD, London School of Economics.

Drèze, J. and A. Sen (1995) *India: Social Opportunity and Economic Development,* Oxford University Press, New Delhi and Oxford.

Drèze, J. and A. Sen (1996) *Indian Development: Selected Regional Perspectives*, Oxford University Press, New Delhi and Oxford.

GOI (1985) *Challenge of Education: A Policy Perspective,* New Delhi: Ministry of Education, Government of India.

GOI (1993) *Education in India 1987-88 Volume II (S)*, New Delhi: Planning, Monitoring and Statistics Division, Department of Education, Ministry of Human Resource Development, Government of India.

GOUP (1982) *UP Report of the Fourth All India Education Survey*, Lucknow: Education Department, Government of UP.

GOUP (1991) *UP Report of the Fifth All India Education Survey* , Lucknow: Education Department, Government of UP.

GOUP (1992) *Persons in Post-Elementary and Higher Education in Uttar Pradesh 1980-81: Based on NSS 35th Round* , Lucknow: Education Department, Government of UP.

GOUP Shiksha Ki Pragati (Annual Issues) *Shiksha Ki Pragati*, Allahabad: Directorate of Education, UP Government.

Govinda, R. (1995) *Status of Primary Education of the Urban Poor in India: An Analytical Review*, IIEP Research Report No. 105, International Institute for Educational Planning, UNESCO, Paris.

Govinda, R. and N.V. Varghese (1993) *Quality of Primary Schooling in India: A Case Study of Madhya Pradesh*, Paris: International Institute for Educational Planning, and New Delhi: National Institute of Educational Planning and Administration (NIEPA).

Heyneman, Stephen (1980) "Investment in Indian Education: Uneconomic?", *World Development*, **8** :145-163.

Jain, S. C. (1988) "Non-official Initiatives for Catering to the Educational Needs of the Urban Poor: A Case Study of Baroda Slums", Unpublished typescript, Baroda: Baroda Citizens Council.

Kingdon, Geeta. G. (1994) "An Economic Evaluation of School Management-Types in Urban India: A Case Study of Uttar Pradesh", Unpublished D.Phil thesis, University of Oxford.

Kingdon, Geeta G. (1995) "Education of Females in India: Determinants and Economic Consequences - A Case Study of Urban Uttar Pradesh", Draft Report submitted to the McNamara Fellowships Office of the World Bank, Washington D.C., December 1995.

Kingdon, Geeta G. (1996) "The Quality and Efficiency of Private and Public Education: A Case-study of Urban India" *Oxford Bulletin of Economics and Statistics*, **58**, No.1: 57-82.

Mathew, E. T. (1990) "Financing College Education in the Private Sector in Kerala", *Economic and Political Weekly*, **25**, No. 17, 28th April, 1990.

Muzammil, Mohd. (1989) *Financing of Education*, New Delhi: Ashish Publishing House.

Muzammil, Mohd. (1992) "Market Theory in Education", *University News*, 13th January 1992.

National Commission on Teachers (1986) "The Teacher and Society: Volume I", *Report of the National Commission on Teachers 1983-85*, New Delhi: Government of India Press.

Nautiyal, K.C. (1993) "Basic Education in the Slums of Delhi: The Growing Menace of Urban Neglect", *Journal of Educational Planning and Administration*, **8**, No. 3: 453-73.

NCERT (1982) *Fourth All India Education Survey,* New Delhi: National Council for Educational Research and Training.

NCERT (1992) *Fifth All India Education Survey,* New Delhi: National Council for Educational Research and Training.

NIEPA (1990) "Development of Education in India: 1988-1990", National Report of India, New Delhi: National Institute for Educational Planning and Administration and Department of Education, Government of India.

NSSO (1991) "A Note on Participation in Education", *Sarvekshna* **14** No. 3, Issue No. 46, Jan-Mar: 31-40.

NSSO (1993) "Results on Participation in Education for Remaining Eight Major States", *Sarvekshna* **17** No. 1, Issue No. 56, July-Sept.

Prasad, K. V. Eswara (1987) "Wastage, Stagnation, and Inequality of Opportunity in Rural Primary Education: A Case Study of Andhra Pradesh", New Delhi: Ministry of Human Resource Development.

Sathe, S. P. (1992) "Supreme Court on Right to Education", *Economic and Political Weekly*, **27**, No. 35, 29th August.

Shariff, Abusaleh (1996) "Elementary Education in India: Differentials and Determinants", Paper presented to the Second Applied Development Economics Workshop at the Centre for Development Economics, Delhi School of Economics, January 1996.

Shatrugna, M. (1988) "Privatising Higher Education", *Economic and Political Weekly*, 10th December, 1988.

Shiva Reddy, B. (1991) "Financing of Education and Health in India", *Journal of Educational Planning and Administration*, **5**, No. 4, Oct : 361-381.

Tilak, J. B. G. (1985) "Analysis of Costs of Education in India", NIEPA Occasional Paper No. 10, National Institute of Educational Planning and Administration, New Delhi.

Tilak, J. B. G. (1990) "The Political Economy of Education in India", Special Studies in Comparative Education No. 24, Comparative Education Centre, Graduate School of Education, State University of New York at Buffalo.

World Bank (1989) "India: Recent Developments and Medium Term Issues" World Bank Country Study, Washington D.C.: World Bank.